

# Contract

between

**Coal India Limited,  
Kolkata**

And

**M/s. Caterpillar Inc.,  
USA**

And

**M/s. GMMCO Ltd.,  
Kolkata**

For

Supply, Installation and Commissioning of 16 nos. 850HP Crawler Dozers (with ripper attachment) of Caterpillar make, Model CAT D11 along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost Cap

**COAL INDIA LIMITED**

M. M. Division

1st Floor, Premises No. 4,

Plot No. AF-III, Action Area 1A,

New Town, Rajarhat,

Kolkata - 700 156

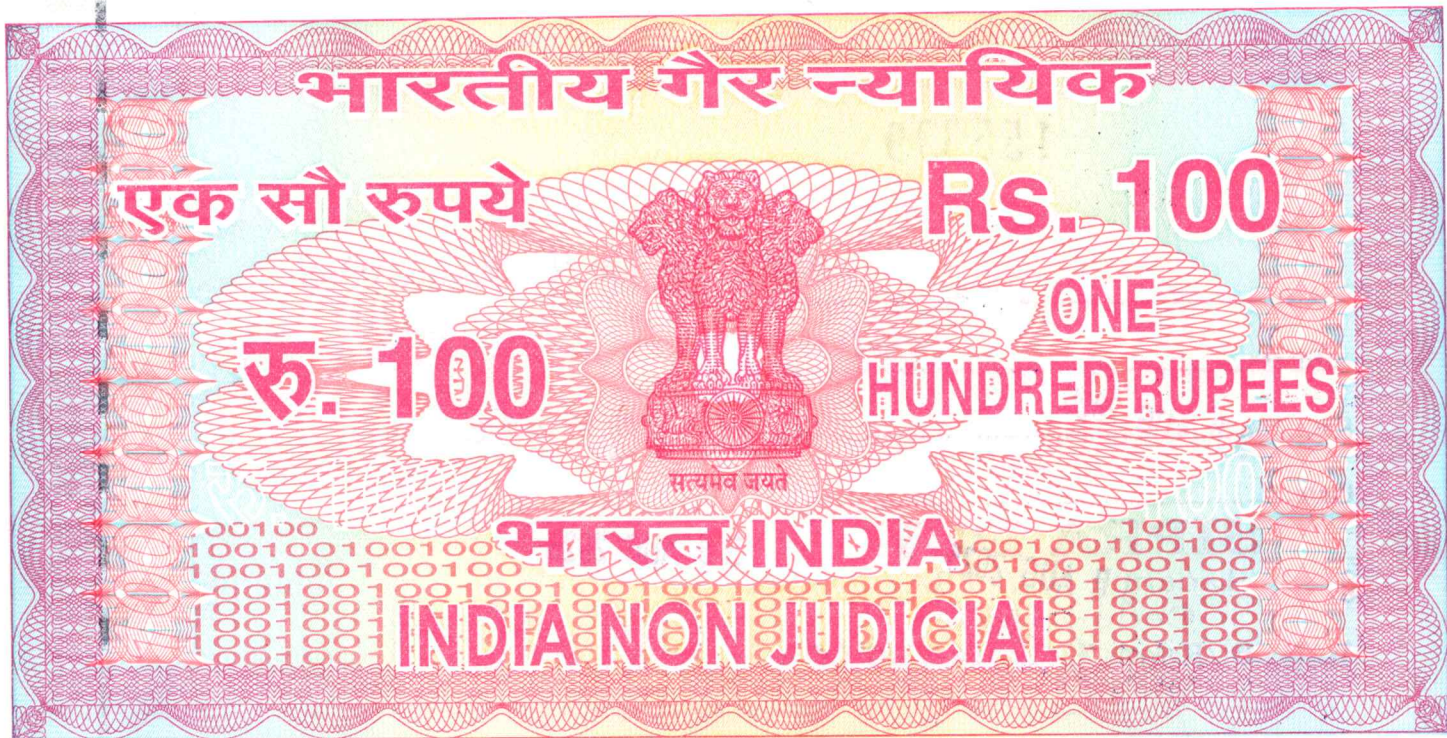
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পশ্চিমবঙ্গ পশ্চিম বঙ্গাল WEST BENGAL

AX 123254

Agreement

THIS AGREEMENT made the 01<sup>st</sup> day of September, 2025 among Coal India Limited, Coal Bhavan, Premises No. 04, Plot No. AF-III, Action Area 1A, New Town, Rajarhat, Kolkata – 700156, India (hereinafter referred to as the “Purchaser” which expression shall unless repugnant to the context or meaning thereof, includes its successors) **on the FIRST PART** and M/s Caterpillar Inc., 5205 N, O’Connor Blvd, Irving, TX 75039 (hereinafter referred to as “Manufacturer” which expression shall unless repugnant to the context or meaning thereof, includes its successors and permitted Assigns) **on the SECOND PART**, represented by M/s GMMCO Ltd., Birla Building, 9/1, R.N. Mukherjee Road, Kolkata – 700001, India (authorized Indian agent) (hereinafter referred to as the “Supplier” which expression shall unless repugnant to the context or meaning thereof, includes its successors and permitted Assigns) **on the THIRD PART**.

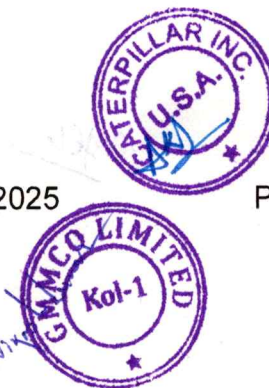
WHEREAS the Purchaser invited bids for certain Goods and Ancillary Services viz. Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 dated 12.06.2024 (Tender ID - 2024\_CILHQ\_310316\_1) for the Supply, Installation and Commissioning of 30 nos. of 850HP Crawler Dozers (16 nos with ripper attachment & 14 nos without ripper attachment) along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares and Consumables for a period of 5 years under Spares Cost Cap to the following projects of Coal India Limited (CIL) read with corrigendum published on 14.06.2024, 10.07.2024 and 24.07.2024:

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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COAL INDIA LIMITED  
M. M. Division  
1st Floor, Premises No. 4,  
Plot No. AF-III, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700 156

Amarash Sarkar



155809

Sold to Coal India Ltd

Address

AA-1A New Town,

Rs

30 AUG 2025

801-156

Date

SIPRA DEY

Licence No.: 18A

Code : 1070

1. N. S. Road, Kolkata-700 001

30 AUG 2025





**A. 850HP Dozer With Ripper:**

Sl. No	Project and Subsidiary	Qty (Nos.)	Duty
1	Gevra, SECL	3	PCD
2	Gevra, SECL	3	NCD
3	Dipka, SECL	6	NCD
4	Dudhichua NCL	1	NCD
5	Bina – Kakri Amalgamation NCL	1	NCD
6	Jayant, NCL	2	NCD

**B. 850HP Dozer Without Ripper:**

Sl. No.	Project and Subsidiary	Qty (Nos.)	Duty
1	Gevra, SECL	1	NCD
2	Nigahi, NCL	4	NCD
3	Bina-Kakri Amalgamation, NCL	1	NCD
4	Amlohri, NCL	1	NCD
5	Dudhichua, NCL	2	NCD
6	Krishnashila, NCL	1	NCD
7	Jayant, NCL	4	NCD

WHEREAS the Cover-II (Price-bid) of the Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 dated 12.06.2024 was opened and Reverse Auction was held on 22.11.2024 and the manufacturer has emerged L1 bidder for the following items of NIT:

NIT Item no.	Supply, Installation and Commissioning of 850HP Crawler Dozers with ripper / without ripper along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares and Consumables for a period of 5 years under Spares Cost Cap.
1	850HP Crawler Dozers with ripper for Gevra OCP, SECL, PCD
2	850HP Crawler Dozers with ripper for Gevra OCP, SECL, NCD
3	850HP Crawler Dozers with ripper for Dipka OCP, SECL, NCD
4	850HP Crawler Dozers with ripper for Dudhichua OCP, NCL, NCD
5	850HP Crawler Dozers with ripper for Bina Kakri Amalgamation OCP, NCL, NCD
6	850HP Crawler Dozers with ripper for Jayant OCP, NCL, NCD

The purchaser has accepted the Bid No. GMMCO/CIL/850HP/24-25 dated 22.07.2024 (BID ID - 1065113) based on the authorisation letter no. nil dated 22.07.2024 of the Manufacturer and Power of Attorney issued by the authorised Indian Agent to Mr. Vikas Kumar and the offer to be read with shortfall documents / letters / emails submitted by the authorised Indian agent of manufacturer on e-procurement portal of CIL / e-mail as under:

- GMMCO/D11/24-25/Price Break-Up dated 02.12.2024
- GMMCO/CIL/850HP/24-25 dated 05.12.2024
- GMMCO/CIL/850HP/24-25 dated 30.01.2025
- GMMCO/KOL/CIL 850/24-25 dated 13.02.2025
- GMMCO/CIL/850HP/24-25 dated 26.02.2025

COAL INDIA LIMITED

M. M. Division

1st Floor, Premises No. 4,  
Plot No. AF-III, Action Area 1A,

New Town, Rajarhat,

Kolkata - 700 156

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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Amarash Sarkar

Mingla  
01/09/2025



- GMMCO/CIL/850HP/24-25 dated 31.03.2025
- GMMCO/KOL/CIL 850/24-25 dated 07.04.2025
- GMMCO/KOL/CIL 850/24-25 dated 28.04.2025
- Email dated 30.05.2025

Whereas the Manufacturer has agreed sum of **US\$ 13,12,118.00 per equipment (US\$ Thirteen lakh twelve thousand one hundred and eighteen Only) (FOB Value)** for supply, installation and commissioning of 16 Nos. 850HP Crawler Dozers (**Model CAT D-11**) with Ripper attachment. This works out to **Rs.15,96,67,764.84** per equipment (Rupees Fifteen Crore ninety-six lakhs sixty-seven thousand seven hundred and sixty-four and paise eighty-four only) on **CIP basis** in Indian Rupees.

The total value of Consumable Spares & Consumables for 12 Months of warranty period from the date of commissioning of equipment and thereafter spares and consumables for a period of 05 years under Spares Cost Cap for the said equipment shall be as under:

- a. **NIT Item 1 - 850HP Crawler Dozers with ripper for Gevra OCP, SECL under PCD (3 nos) & NIT Item 2 - 850HP Crawler Dozers with ripper for Gevra OCP, SECL under NCD (3 nos)**

Description	Value (Rs)
CIP Price of Fleet inclusive of GST (3nos.)	47,90,03,294.51
Grand Total for spares and consumables for 6 years inclusive of GST for fleet	85,86,88,774.56
Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet	1,33,76,92,069.07

- b. **NIT Item 3 - 850HP Crawler Dozers with ripper for Dipka OCP, SECL under NCD (6 nos)**

Description	Value (Rs)
CIP Price of Fleet inclusive of GST (6 nos.)	95,80,06,589.01
Grand Total for spares and consumables for 6 years inclusive of GST for fleet	1,71,86,45,615.12
Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet	2,67,66,52,204.13

- c. **NIT Item 4 - 850HP Crawler Dozers with ripper for Dudhichua OCP, NCL under NCD (1 no) & Item 5 - 850HP Crawler Dozers with ripper for Bina Kakri Amalgamation, NCL under NCD (1 no)**

Description	Value (Rs)
CIP Price of Fleet inclusive of GST (1no.)	15,96,67,764.84
Grand Total for spares and consumables for 6 years inclusive of GST for fleet	28,21,16,463.96
Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet	44,17,84,228.80



d. NIT Item 6 - 850HP Crawler Dozers with ripper for Jayant OCP, NCL under NCD  
(2 nos)

Description	Value (Rs)
CIP Price of Fleet inclusive of GST (2nos.)	31,93,35,529.67
Grand Total for spares and consumables for 6 years inclusive of GST for fleet	56,42,32,926.92
Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet	88,35,68,456.59

The grand total contract value shall be for all the six projects (a, b, c, d above) shall be **Rs.7,11,91,73,256.46 (Rupees Seven Hundred and Eleven Crore Ninety-One Lakh Seventy-Three Thousand Two hundred and Fifty-Six and Paise Forty-six only)** on CIP basis (hereinafter "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement, words and expressions, shall have the same meaning as are respectively assigned to them in the conditions of contract referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement viz.
  - a. The Techno-Commercial Bid and Price-bid and subsequent letters / documents submitted by you as mentioned above.
  - b. The General Conditions of Contract (GCC)
  - c. The Special Conditions of Contract (SCC)
  - d. The Schedule of Requirements (SoR) including Delivery Schedule
  - e. The Technical Specifications
  - f. The Price Schedule
  - g. The Purchaser's Notification of Award (NoA)
  - h. The Integrity Pact (IP)
3. In consideration of the payments to be made by the Purchaser to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in all respects in conformity with the provisions of the Contract.
4. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.
5. Particulars of the Equipment to be supplied under this contract to each project provided in the Price Schedule.





6. **The Contract Price:**

The Contract Price shall be **Rs.7,11,91,73,256.46 (Rupees Seven Hundred and Eleven Crore Ninety-One Lakh Seventy-Three Thousand Two hundred and Fifty-Six and Paise Forty-six only)** on CIP basis calculated as per the exchange rate of 1USD=Rs.85.03 on the date of opening of price bid i.e. 22.11.2024 and applicable statutory Customs Duty, GST and other taxes and levies based on the offer dated 22.07.2024 of the Supplier.

7. **Price Basis**

The contract is on CIP Basis (Final Place of destination) for Equipment and on FOR Destination basis for spares and consumables to be supplied during warranty period and thereafter during 05 years from the date of commissioning under Spares Cost Cap.

8. **Statutory Duties, Taxes and Other Levies**

Statutory Duties, Taxes and Other Levies like Basic Customs Duty (BCD) under PCD / NCD, Social Welfare Surcharge on Basic Customs Duty, IGST, GST on Marine Freight, GST on Indian Agency Commission, GST on Port Charges, Clearing, forwarding and incidental charges, GST on Inland Transportation Charges & GST on Inland Insurance charges for delivery upto Final Place of Destination, GST on Erection and Commissioning charges, GST on all items sourced in INR required for fitting in the equipment during commissioning of the equipment, GST on spares and consumables for 06 years of operation as indicated in the Price Schedule, based on your offer dated 22.07.2024, shall be payable.

If there is any statutory change in the above elements within the contractual delivery period, the same shall be admissible and will be paid based on documentary evidence. However, no upward revision in the rates of the above duties, taxes and other levies beyond original delivery period shall be admissible unless the delay is due to any lapse on the part of the purchaser.

CIL will pay Customs Duty applicable to imported Goods directly to Customs Authorities in accordance with the conditions of contract.

9. **Agency Commission**

Indian Agency Commission @ 4.00% (Four percent) of FOB value of the equipment is included in the FOB price of the equipment mentioned in the Contract. Indian Agency commission along with GST as legally leviable in India shall be payable by the Purchaser (respective subsidiary Companies i.e. SECL/NCL) to M/s. GMMCO Ltd. in INR. The total value of the Indian Agency Commission to be paid in INR shall be equivalent of USD 50,466.08 (US Dollar Fifty Thousand four hundred and sixty six and paise eight Only) exclusive of applicable GST @ 18%.

10. **Execution of Contract**

The contract is concluded among the Purchaser, the Manufacturer and the Supplier for supply, installation and commissioning of 16 no. of 850HP Crawler Dozers (Model

COAL INDIA LIMITED

M. M. Divison

1st Floor, Premises No. 4,  
Plot No. AF-III, Action Area 1A,  
New Town, Rajarhat.

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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**CAT D-11)** with Ripper attachment along with Consumable Spares & Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares and Consumables for a period of 05 years under Spares Cost Cap.

The Equipment shall be supplied by the Manufacturer - Caterpillar Inc., 100 Tractor Drive, East Peoria, IL 61611, USA in US Dollar.

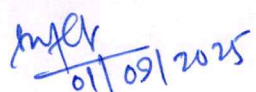
The items sourced in INR required for fitting in the equipment during commissioning of the equipment, Consumable Spares and Consumables for 12 months of warranty period and thereafter Spares and Consumables for a period of 05 years of operation will be supplied by M/s GMMCO Ltd. in INR.

A Letter of Credit shall be established by SECL/NCL on M/s Caterpillar S.A.R.L, Singapore Branch, 7 Tractor Road, Singapore - 627968 for the net CIF Amount for Equipment after deducting Indian Agency Commission for Equipment in US Dollar for a total value of **USD 12,61,652.00** (US Dollar Twelve Lakhs sixty one thousand six hundred and fifty two Only). Payment for foreign currency, INR, Indian Agency Commission and Customs Duty etc. shall be made as per provisions contained in SCC of the Contract.

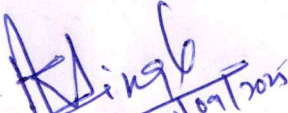
IN WITNESS whereof the Parties hereto have caused this Agreement to be executed the day and year first above written.

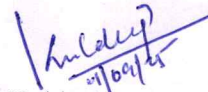
Signed, sealed and Delivered by:

For the Purchaser


  
S.M. Alli  
Executive Director(MM)  
Coal India Ltd., Kolkata


Witnesses

  
Avinash Kumar  
General Manager (MM)  
Coal India Ltd., Kolkata


  
P. Kuldeep  
Senior Manager (MM)  
Coal India Ltd., Kolkata

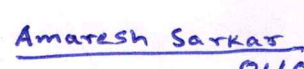
For the Manufacturer

  
Arup Kumar Das  
Commercial Mining Manager  
Caterpillar Inc

  
Chinmoy Adak  
Sales Representative  
Caterpillar Inc

For the Supplier

  
Vikash Kumar  
General Manager  
GMMCO Ltd

  
Amaresh Sarkar  
Manager (Marketing)  
GMMCO Ltd





10/01/2025

10/01/25

10/01/25

10/01/25



## General Conditions of Contract (GCC)

## General Conditions of Contract (GCC)

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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*[Signature]*

*[Signature]*

Amarish Sarkar



## General Conditions of Contract (GCC)

### 1. Definitions

In the interpretation of the contract and the general and special conditions governing it, unless the context otherwise requires, the following terms shall be interpreted as indicated below:

- a) "The Contract" means the agreement entered into between the Purchaser and the Supplier including all attachments and appendices thereto and all documents incorporated by reference therein including Invitation to tender, Instructions to tenderers, Acceptance of tender, Particulars and the General and Special Conditions specified in the acceptance of tender;
- b) "Contract Price" means the price payable to the Supplier under the Contract for the full and proper performance of its contractual obligations;
- c) "Goods" means all of the equipment, plant, machinery, and/or other materials which the Supplier is required to supply to the Purchaser under the Contract;
- d) "Services" means those Services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental Services, such as installation, commissioning, provision of technical assistance, training and other such obligations of the Supplier covered under the Contract;
- e) "GCC" means the Conditions of Contract contained in this section;
- f) "SCC" means the Special Conditions of Contract;
- g) "Purchaser" means the organization purchasing goods and services, i.e., Coal India Limited or its subsidiaries or areas falling under various subsidiaries of Coal India Limited;
- h) "Purchaser's country" is India;
- i) "Supplier/Contractor" means the individual, firm or company with whom the contract has been concluded for supplying the Goods and Services under the Contract. The Supplier/Contractor shall be deemed to include its successors (approved by the purchaser), representatives, heirs, executors, administrators and permitted;
- j) "CIL" means Coal India Limited or the Subsidiary Company of CIL or areas falling under various subsidiaries of CIL where Goods are deployed/ used;
- k) "Year" means the Calendar Year.
- l) "Chairman" means the Chairman of Coal India Limited.
- m) "Chairman-cum-Managing Director" means Chairman-cum-Managing Director of any of the Subsidiary Companies of Coal India Limited, presently Central Coalfields Limited, Eastern Coalfields Limited, Western Coalfields Limited, Bharat Coking Coal Limited, Central Mine Planning & Design Institute Limited, South Eastern Coalfields Limited, Northern Coalfields Limited and Mahanadi Coalfields Limited.
- n) "Drawing" means the drawing and plans specified in or annexed to the schedule or specifications.
- o) "Inspector" means any person nominated by or on behalf of the purchaser to inspect supplies, stores or work under the contract or his duly authorized agent.
- p) "Progress Officer" means any person nominated by or on behalf of the Purchaser to visit supplier's works to ascertain position of deliveries of Goods ordered.
- q) "Materials" shall mean anything used in the manufacture or fabrication of the stores.
- r) "Stores" means the goods specified in the Supply Order or schedule which the



## General Conditions of Contract (GCC)

supplier/contractor has agreed to supply under contract.

- s) "Test" means such test or tests as are prescribed by the specifications or considered necessary by the Inspector or any agency acting under direction of the Inspector.
- t) "Site" mean the place or places named in the "Supply Order" or such other place or places at which any work has to be carried out as may be approved by the purchaser.
- u) Words denoting the persons shall include any company or association or body of individuals whether incorporated or not.
- v) Words in singular include the plural and vice-versa.
- w) Words denoting the masculine gender shall be taken to include the feminine gender.
- x) "Writing" shall include any manuscript, typewritten or printed statement under or over signature or seal as the case may be.
- y) "Unit" and "Quantity" means the unit and quantity specified in the schedule.
- z) "Purchase Order" or "Supply Order" or "Order" or "Contract" means an order for supply of stores and includes an order for performance. The terms "Supply Order", "Purchase Order", "Order" and "Contract" are interchangeable.
- aa) "Particulars" shall mean the following:
  - i) Specifications;
  - ii) Drawing;
  - iii) Sealed pattern denoting a pattern sealed and signed by the Inspector;
  - iv) Certified or sealed sample denoting a copy of the sealed pattern or sample sealed by the purchaser for guidance of the Inspector;
  - v) Trade pattern denoting a standard of the ISI or other standardizing authority or Coal India Ltd. and/ or any of its subsidiary companies or a general standard of the industry and obtainable in the open market;
  - vi) Proprietary make denoting the product of an individual manufacturer;
  - vii) Any other details governing the construction, manufacture and/or supply as existing in the contract.
- bb) Terms and expressions not defined herein shall have the meanings assigned to them in the Indian Sale of Goods Act, 1930 or the Indian Contract, 1872 or the General Clauses Act, 1897, as amended, as the case may be.

### 2. Application

These Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

### 3. Standards

The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications. Such standards shall be the latest issued by the concerned institution.

### 4. Use of Contract Documents and Information

- 4.1 The Supplier shall not, without the Purchaser's prior written consent, disclose the Contract, or any provision thereof, or any specification, plan, drawing, pattern, sample or information furnished by or on behalf of the Purchaser in connection therewith, to any person other than a person employed by the Supplier in the performance of the Contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.
- 4.2 The Supplier shall not, without the Purchaser's prior written consent, make use of any document or information enumerated in sub-clause 4.1 above, except for purposes of performing the Contract.
- 4.3 Any document, other than the Contract itself, enumerated in sub-clause 4.1 above shall remain



## General Conditions of Contract (GCC)

the property of the Purchaser and shall be returned (in all copies) to the Purchaser on completion of the Supplier's performance under the Contract if so required by the Purchaser.

### 5. Patent Rights

The Supplier shall indemnify the Purchaser against all third-party claims of infringement of patent, trademark or industrial design rights arising from use of the Goods or any part thereof in the Purchaser's country.

### 6. Security Deposit – refer clause no.1 of SCC

### 7. Performance Bank Guarantee

7.1 Wherever applicable, the Supplier shall be required to furnish a Performance Guarantee equivalent to 10% value of the total landed value of the contract including all taxes, duties and other costs and charges. In case of Contracts for procurement of Capital Goods along with Warranty Spares & Consumables (if applicable) and additional Spares & Consumables / AMC / CMC for more than one year, the Performance Guarantee shall be for 10% of equipment landed value along with maximum annual landed value of Spares & Consumables.

7.2 The Performance Guarantee shall be in the form of a Bank Guarantee issued by a RBI scheduled bank in India in the prescribed format on a non-judicial stamp paper.

7.3 The Performance Bank Guarantee (PBG) shall be in the same currency (ies) in which contract has been signed. In case of multi-currency contract, separate PBG in respective currency for required value shall be submitted.

7.4 If the contract is for procurement of equipment, the PBG (s) may be submitted equipment wise also. For this purpose, the value of each equipment will be worked out by dividing the total value of contract for a particular item of NIT, worked out as per provisions contained in clause-7 above, by the number of equipment ordered for that particular item of the NIT.

7.5 The PBG (s) shall remain valid till 3 months after the completion of warranty period.

7.6 The PBG shall be submitted sufficiently in advance (say 3-4 weeks) to enable its verification from the issuing bank, before submission of the invoice for 80% payment of the particular goods/equipment(s).

7.7 The release of the Performance Bank guarantee(s) after above indicated period, shall be subject to satisfactory performance of the equipment/ items during the warranty period and fulfillment of contractual obligations failing which, action for further extension or encashment of PBG, as deemed suitable shall be taken. The PBG / converted SDBG shall be released with the approval of HOD (MM) of the concerned subsidiary after expiry of validity period upon receipt of:

- a) 'No Claim Certificate' from the HOD of User department; and
- b) 'No Claim / Dispute Certificate' from the Supplier as per format provided as **Annexure-4**.

7.8 In case of procurement of equipment, if the successful tenderer which does not have the After Sales Service Support facilities in India like Depot/ Warehouse for supply of spare parts, Workshop facilities for servicing and repair of assemblies, sub-assemblies and equipment, availability of trained technical manpower etc., training facilities for providing training to CIL's personnel, wherever required, additional Performance Bank Guarantee for the 30% value of the total landed value of the contract including all taxes, duties and other costs and charges shall have to be submitted. This 30% PBG will be released after establishment of After Sales Service Support facilities in India subject to confirmation of the same by concerned Head of Technical Department. However, the supplier shall have to submit PBG for 10% of the total contract value to be kept valid for the remaining period of the contract plus 3 months processing period before release of 30% PBG. This 10% PBG will be released after satisfactory performance of all equipment/ items and fulfillment of contractual obligations including warranty obligations.



## General Conditions of Contract (GCC)

7.9 The PBG will be submitted through Structured Financial Management System (SFMS).

### 8. Inspections and Tests

- 81 The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Contract Specifications at no extra cost to the Purchaser. Generally, the Goods shall be of the best quality and workmanship and comply with the contract or supply order in all respect. The Technical Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing, of the identity of the inspector(s). The Purchaser reserves the right, at the Purchaser's cost, to depute its own inspector(s) and/or to engage any other third party inspecting agency, to conduct inspections and tests pursuant to the Contract. Sufficient time, atleast 30 days in advance will be given for inspection.
- 82 The inspections and tests may be conducted on the premises of the Supplier, at point of delivery and/or at the Goods' final destination. If conducted on the premises of the Supplier, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser. However, any drawing and proprietary information provided for this purpose shall remain in control of the supplier. The inspector shall have full and free access at the supplier's works for the purpose of carrying out inspection. The Inspector shall have the right to put all the stores or materials forming part of the same or any part thereof to such tests as he may think fit and proper. The supplier shall not be entitled to object, on any ground whatsoever, to the method of testing adopted by the Inspector. Unless otherwise provided for in the contract, all stores/materials expended in test will be to supplier's account. In the event of Goods found acceptable by the Inspector during inspection, he shall furnish the supplier with necessary copies of Inspection notes for attaching to the supplier's bill.
- 83 Should any inspected or tested Goods fail to conform to the Specifications, including acceptance tests and periodic tests to verify guaranteed performance, the Purchaser may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet Specification requirements free of cost to the Purchaser within thirty days of such rejection. Replaced or altered goods shall be subjected to repeated inspection or tests to demonstrate conformity with the Specifications. In the event that replacement or alteration is not done within thirty day period as aforesaid, or, replaced or altered goods fail to demonstrate conformity with the Specifications in repeated inspections or tests as aforesaid, the Purchaser reserves the right to terminate the Contract in part or in whole and the Supplier shall repay forthwith to the Purchaser all monies paid including all costs incurred in the inspection and tests, in respect of Goods and Services associated therewith, for which the termination is applicable and, subsequently remove the same from the Purchaser's Site at the Supplier's cost.
- 84 Any Goods rejected at a place other than the premises of the supplier, shall be removed by the supplier within 14 days of the date of receipt of intimation of such rejection. The Inspector may call upon the supplier to remove what he considers to be dangerous, infected or perishable Goods, within 48 hours of the receipt of such intimation. The rejected stores shall under all circumstances lie at the risk of the supplier from the moment of rejection and if such stores are not removed by the supplier within the above mentioned period, the Inspector/Purchaser may either return the same to the supplier at the supplier's risk and cost (a public tariff rate) by such mode of transport as the Purchaser or Inspector may select or dispose of such stores at the supplier's risk on his account and retain in such portion of the proceeds as may be necessary to cover any expense incurred in connection with such disposal. The purchaser shall also be entitled to recover handling and storage charges for the period during which the rejected stores are not removed.



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85 The Purchaser's right to inspect, test and where necessary, reject the Goods after the Goods' arrival in the Purchaser's country shall in no way be limited or waived by reason of the Goods having previously been inspected, tested and passed by the Purchaser or its representative prior to the Goods' shipment from the Supplier's premises.

86 Nothing in this clause shall in any way relieve the Supplier of any warranty or other obligations under this Contract.

### 9. Packing and Marking

9.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the Goods' final destination and the absence of heavy handling facilities at all points in transit.

9.2 All packing cases, containers, packing and other similar materials shall be supplied free by the Supplier and these shall not be returned unless otherwise specified in the Contract/Purchase order.

9.3 The packing, marking and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, specified in the contract and in any subsequent instructions ordered by the Purchaser. Packages will be stamped with identification marks both outside the packages as well as on the contents inside. Packages containing articles liable to be broken by rough handling like glass or machinery made of cast iron will be marked with cautionary works like 'Fragile' 'Handle with care'.

9.4 The marking of the Goods must comply with the requirements of the law relating to Merchandise Mark, in force in India.

9.5 Packing instructions: The Supplier will be required to make separate packages for each consignee. Each package will be marked on three sides with proper paint with the following:

- i. Project;
- ii. Contract No;
- iii. Country of origin of Goods;
- iv. Supplier's name;
- v. Packing list Reference Number;
- vi. The gross weight, net weight and cubic measurement;
- vii. Consignee Name and Address;

9.6 A complete list of contents in each package called the packing list will be prepared and one copy of the packing list shall be inserted inside the package.

### 10. Delivery and Documents

10.1 The delivery period stipulated in the Contract/Purchase Order shall be deemed to be the essence of the contract and delivery of the Goods must be completed within the specified period.

10.2 Delivery of the Goods shall be made by the Supplier in accordance with the terms specified in the Schedule of Requirements. The delivery of Goods shall be deemed to take place on delivery of the Goods in accordance with the terms of the contract after approval of Goods by the Inspector.

10.3 For purposes of the Contract, "EXW", "FOB", "FCA", "CFR", "CIF", "CIP" and other trade terms used to describe the obligations of the Parties shall have the meanings assigned to them by the prevailing edition of Incoterms on the date of tender opening, published by the International



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Chamber of Commerce, Paris.

**10.4** The details of shipping documents to be furnished by the Supplier are specified below:

**(a) For Imported Goods:**

Within forty eight (48) hours of shipment, the Supplier shall notify the Purchaser, Port Consignee and Ultimate Consignee by fax and email, full details of the shipment including Contract number, description of Goods, quantity, the vessel, the bill of lading number and date, port of loading, date of shipment, port of discharge, etc. The Supplier shall deliver by express courier service the following documents to the Purchaser, with a copy to the Port Consignee and Ultimate Consignee:

- i. Supplier's shipping invoice showing Contract Number, Goods description, quantity, unit price, total amount and GST number of ultimate consignee;
- ii. Clean on-board bill of lading indicating the Importer-Exporter Code (IEC) of the concerned Subsidiary Company of CIL and non-negotiable bill of lading;
- iii. Packing list identifying contents of each package;
- iv. Manufacturer's/Supplier's warranty /guarantee certificate;
- v. Manufacturer's Test & Inspection certificate;
- vi. Certificate of Country of Origin issued by the Chamber of Commerce of Manufacturer's Country;
- vii. Documentary evidence of marine freight & marine insurance.

The above documents shall be sent by supplier well in advance, so that the same are received by the Purchaser at least one (1) week before arrival of the Goods at the port or place of arrival and, if not received, the Supplier will be responsible for any consequent expenses.

**(b) For Domestic Goods from within India:**

Upon dispatch of the Goods to the consignee, the Supplier shall notify the Purchaser and Ultimate Consignee and deliver by express courier service the following documents to the Purchaser with a copy to the Ultimate Consignee:

- i. Supplier's invoice showing Contract Number, Goods description, quantity, unit price, total amount;
- ii. Railway receipt/ Transporter's consignment note /acknowledgement of receipt of Goods from the consignee(s);
- iii. Manufacturer's/Supplier's warranty / guarantee certificate;
- iv. Manufacturer's Test & Inspection certificate;

The above documents shall be provided by the supplier at the time of arrival of the Goods at the consignee's end. In case of delay, the Supplier will be responsible for any consequent expenses.

**11. Insurance**

**11.1** Wherever necessary, the goods supplied under the contract, shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, delivery, storage and erection and commissioning at site (wherever applicable) in the manner specified in the contract. The insurance is to be done for coverage on "all risks" basis including war risks and strike clauses. The amount to be covered under insurance should be 110% of the invoice value to take care of the overall expenditure to be incurred by the purchaser for receiving the goods at the destination.

**11.2** Where delivery of imported goods is required by the purchaser on CIF/CIP basis, the supplier



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shall arrange and pay for marine/air insurance, making the purchaser as the beneficiary. Where delivery is on FCA/ FOB/ CFR basis, marine/air insurance shall be the responsibility of the purchaser.

- 11.3 In case of domestic supplies on Free Delivery at site/FOR Destination basis, the supplier has to arrange insurance at its cost. For Ex-works and FOR station of dispatch contracts, it is the responsibility of the purchaser to arrange for insurance.
- 11.4 Where the delivery of the Goods is on CIP Basis, the supplier shall deliver the goods at the named place of destination at its own risks and costs. CIL has no obligation to the supplier for arranging insurance. However, CIL will provide the supplier upon request, with necessary information for obtaining insurance.
- 11.5 Where the delivery of the Goods is on FOR destination Basis, the supplier shall deliver the goods at the FOR destination site at its own risks and costs. CIL has no obligation to the supplier for arranging insurance. However, CIL will provide the supplier upon request, with necessary information for obtaining insurance”.

### 12. Transportation

- 12.1 In case of FOB (Port of Shipment) contracts, the purchaser has to arrange transportation its own cost and risk.
- 12.2 In case of CIF (Port of Destination) contracts, transport of the goods to the port of destination in the Purchaser's country, as shall be specified in the contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. In case of inland transportation of goods, the same is to be done through registered common carriers only.
- 12.3 In case of CIP (Final Place of Destination) contracts, transport of the goods to the port of destination and further to the named place of Final Destination in the Purchaser's country, as shall be specified in the contract, shall be arranged and paid for by the Supplier, and the cost thereof shall be included in the Contract Price. In case of inland transportation of goods, the same is to be done through registered common carriers only.
- 12.4 In case of FOR Destination contracts, transport of goods to the Destination site shall be arranged and paid for by the supplier and the cost thereof shall be included in the contract price. Transportation of goods is to be done through registered common carriers only.

### 13. Warranty

- 13.1 The Supplier warrants that the Goods supplied under the Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied under this Contract shall have no defect arising from design, materials or workmanship or from any act or omission of the Supplier that may develop under normal use of the supplied Goods in the conditions prevailing in the purchaser's country.
- 13.2 This warranty shall remain valid for twelve (12) months from the date of Commissioning of the equipment. However, in case of other Goods, warranty shall remain valid for eighteen (18) months from the date of receipt and acceptance of materials at consignee's end or twelve (12) months from the date of its use / fitment / commissioning, whichever is earlier.
- 13.3 The Purchaser shall promptly notify the Supplier in writing of any claims arising under this warranty. The Supplier shall, within thirty days, repair or replace the defective Goods or parts thereof, free of cost at the ultimate destination. The Supplier shall take over the replaced parts/Goods at the time of their replacement. No claim whatsoever shall lie on the Purchaser for the replaced parts/Goods thereafter.



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- 13.4 If the Supplier, having been notified, fails to remedy the defect(s) within thirty days, the Purchaser may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.
- 13.5 For the goods whose life is less than twelve (12) months, the warranty period will depend on the nature of the item under procurement and shall accordingly be specified in SCC.
- 14. Payment**
- 14.1 Specific payment terms may be stipulated in the NIT and the resultant contracts depending on the nature of goods to be procured, as per provisions contained in Chapter-22.
- 14.2 **Payment for Indian Agency Commission – SCC Clause 8.4**
- 15. Changes in Order**  
The Purchaser may at any time, by a written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:
- a) drawings, designs or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
  - b) the method of shipment or packing;
  - c) the place of delivery; and/or
  - d) the place of Services to be provided by the Supplier.
- 16. Contract Amendments**  
Subject to relevant clause of GCC, no variation in or modification of the terms of the Contract/ Purchase Order shall be made except by written amendment issued against the Contract/ Purchase Order.
- 17. Assignment**  
The Supplier shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Purchaser's prior written consent. However, the consent of the Purchaser shall not relieve the supplier from any obligation, duty or responsibility under the contract.
- 18. Subcontracts**  
The Supplier shall notify the Purchaser in writing of all subcontracts awarded by it to discharge the works under this Contract. Such notification, in the original bid or later, shall not relieve the Supplier of any liability or obligation under the Contract and the supplier will be solely responsible for all obligations under the contract.
- 19. Delays in the Supplier's Performance**
- 19.1 Delivery of the Goods and performance of Services shall be made by the Supplier in accordance with the time schedule prescribed by the Purchaser in the Schedule of Requirements.
- 19.2 If at any time during performance of the Contract, the Supplier or its Subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, by way of an amendment to the Contract/ Purchase Order.
- 19.3 Except as provided under Force Majeure clause, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages, unless an extension of time is agreed upon pursuant to relevant clause without the application of liquidated damages.



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### 20. Liquidated Damages

20.1 In the event of failure to deliver or dispatch the equipment/stores within the stipulated date/period in accordance with the terms and conditions and the specifications mentioned in the supply order and in the event of breach of any of the terms and conditions mentioned in the supply order, the Purchaser shall have the right:

- (a) To recover from the successful bidder as agreed liquidated damages, a sum not less than 0.5% (Half Percent) of the price of any equipment/ stores which the successful tenderer has not been able to supply as aforesaid for each week or part of a week during which the delivery of such stores may be in arrears limited to 10% (Ten Percent) of the total contract value, or
- (b) To purchase elsewhere after due notice to the successful tenderer on the account and at the risk of the defaulting supplier, the equipment/stores not supplied or others of similar description without cancelling the supply order in respect of the consignment not yet due for supply, or
- (c) To cancel the supply order or a portion thereof, and if so desired to purchase the equipment/ stores at the risk and cost of the defaulting supplier and also,
- (d) To extend the period of delivery with or without penalty as may be considered fit and proper. The penalty, if imposed, shall not be more than the agreed liquidated damages referred to in clause (a) above.
- (e) To forfeit the security deposit fully or in part.
- (f) Whenever under this contract any sum of money is recoverable from and payable by the supplier, the Purchaser shall be entitled to recover such sum by appropriating in part or in whole by deducting any sum or which at any time thereafter may become due to the successful tenderer in this or any other contract. If this sum is not sufficient to recover the full amount recoverable, the successful tenderer shall pay the Purchaser the remaining balance on demand. The supplier shall not be entitled to any gain on any such purchase.

20.2 For the purpose of the calculation of the liquidated damages amount, the basic FOR Destination price shall be considered. For direct imports, the CIP price at Final Place of destination will be considered. Taxes and duties shall not be taken into account for calculation of LD. However, when prices indicated in the order are inclusive of taxes and duties, such prices will be taken for calculation of LD.

### 21. Termination for Default and breach of contract

21.1 The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:

- (a) If the supplier fails to deliver any or all of the stores within the time period(s) specified in the contract, or any extension thereof granted by the Purchaser; or
- (b) If the supplier fails to perform any other obligation under the contract within the period specified in the contract or any extension thereof granted by the purchaser; or
- (c) If the Supplier, in the judgment of the Purchaser, has violated Code of Integrity for Public Procurement in competing for or in executing the Contract.

### 21.2 Code of Integrity for Public Procurement (CIPP):

The supplier shall observe the highest standard of ethics while competing for and during execution of contracts.

The following practices would amount to violation of CIPP:



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- i. "Corrupt Practice" means making offers, solicitation or acceptance of bribe, rewards or gifts or any material benefit, in exchange for an unfair advantage in the procurement process or to otherwise influence the procurement process or contract execution;
- ii. "Fraudulent Practice" means any omission or misrepresentation that may mislead or attempt to mislead so that financial or other benefits may be obtained or an obligation avoided. This includes making false declaration or providing false information for participation in a tender process or to secure a contract or in the execution of a contract;
- iii. "Anti-competitive Practice" means any collusion, bid rigging or anti-competitive arrangement, or any other practice coming under the purview of The Competition Act 2002, between two or more bidders, with or without the knowledge of the Purchaser, that may impair the transparency, fairness and the progress of the procurement process or to establish bid prices at artificial, non-competitive levels;
- iv. "Coercive Practice" means harming or threatening to harm, directly or indirectly, at any stage, persons or their property to influence their participation in the procurement process or affect the execution of a contract;
- v. "Conflict of interest" means participation by a bidding firm or any of its affiliates that are either involved in the consultancy contract to which this procurement is linked; or if they are part of more than one bid in the procurement; or if the bidding firm or their personnel have relationships or financial or business transactions with any official of Procuring Entity who are directly or indirectly related to tender or execution process of contract; or improper use of information obtained by the (prospective) bidder from the Procuring Entity with an intent to gain unfair advantage in the procurement process or for personal gain; and
- vi. "Obstructive practice" means materially impede the Procuring Entity's investigation into allegations of one or more of the above mentioned prohibited practices either by deliberately destroying, falsifying, altering; or by concealing of evidence material to the investigation; or by making false statements to investigators and/or by threatening, harassing or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or by impeding the Procuring Entity's rights of audit or access to information.

### 22. Force Majeure

- 22.1 Force Majeure means an event beyond the control of the supplier and not involving the supplier's fault or negligence and which is not foreseeable. Such events may include, but are not restricted to, acts of the purchaser either in its sovereign or contractual capacity, wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, freight embargoes and act of God.
- 22.2 If there is delay in performance or other failures by the supplier to perform its obligation under the contract due to an event of a Force Majeure and the contract is governed by Force Majeure Clause, the supplier shall not be held responsible for such delays/failures.
- 22.3 In such a situation, the supplier shall promptly notify the purchaser in writing of such conditions and the cause thereof, duly certified by the local Chamber of Commerce or Statutory authorities, the beginning and end of the causes of the delay, within twenty one days of occurrence and cessation of such Force Majeure Conditions. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
- 22.4 If the performance in whole or in part or any obligation under this contract is prevented or delayed



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- by any reason of Force Majeure for a period exceeding sixty days, either party may at its option terminate the contract without any financial repercussion on either side.
- 22.5 For delays arising out of Force Majeure, the supplier will not claim extension in completion date for a period exceeding the period of delay attributable to the causes of Force Majeure.
- 22.6 There may be a Force Majeure situation affecting the purchaser also. In such a situation, the purchaser is to take up with the supplier on similar lines as above for further necessary action.
- 22.7 The contract shall be governed by the following Force Majeure Clause:  
*"If at any time, during the continuance of this contract, the performance in whole or in part by either party of any obligation under this contract shall be prevented or delayed by reason of any wars or revolutions, hostility, acts of public enemy, civil commotion, sabotage, fires, floods, explosions, epidemics, quarantine restrictions, strikes, lockouts, freight embargoes or act of God (hereinafter referred to "events") provided, notice of the happening of any such event is given by either party to the other within 21 days from the date of occurrence thereof, neither party shall by reason of such event, be entitled to terminate this contract nor shall either party have any claim for damages against the other in respect of such non-performance or delay in performance, and deliveries under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. PROVIDED FURTHER that if the performance in whole or part or any obligation under this contract is prevented or delayed by reason of any such event for a period exceeding 60 days, either party may at its option terminate the contract provided also that if the contract is terminated under this clause, the purchaser shall be at liberty to take over from the contractor at a price to be fixed by the CIL/Subsidiary Company, which shall be final, all unused, undamaged and acceptable materials, bought out components and stores in course of manufacture in the possession of the contractor at the time of such termination or such portion thereof as the purchaser may deem fit excepting such materials, bought out components and stores as the contractor may wish the concurrence of the purchaser elect to retain."*
23. **Termination for Insolvency**  
The Purchaser may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Purchaser.
24. **Termination for Convenience**  
24.1 The Purchaser, by written notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the Supplier under the Contract is terminated, and the date upon which such termination becomes effective.  
24.2 The Goods that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:  
a) to have any portion completed and delivered at the Contract terms and prices; and/or  
b) to cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.
25. **Governing Language**  
The Contract shall be written in English language. All correspondence and other documents pertaining to the Contract which are exchanged by the Parties shall be written in the same language.
26. **Taxes and Duties**



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- 26.1 A foreign Supplier shall be entirely responsible for all taxes, duties, license fees and other such levies imposed outside the Purchaser's country. The foreign supplier shall also be responsible for all taxes & duties in Purchaser's country legally applicable during execution of the contract other than those which are to be paid by purchaser, as specified in as per relevant clause of NIT.
- 26.2 A Domestic Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until the execution of the contract, other than those which are to be paid by purchaser, as specified in as per relevant clause of NIT.
- 27. Limitation of Liabilities**  
Except in cases of criminal negligence or wilful misconduct;
- 27.1 Notwithstanding anything herein to the contrary, no party shall be liable for any indirect, special, punitive, consequential or exemplary damages, whether foreseeable or not, arising out of or in relation to this contract, loss of goodwill or profits, lost business however characterized, any/ or from any other remote cause whatsoever.
- 27.2 The supplier shall not be liable to the purchaser for any losses, claims, damages, costs or expenses whatsoever arising out of or in connection with this contract in excess of the contract value of the goods and services supplied hereunder which caused such losses, claims, damages, costs or expenses.
- 27.3 However, the limitation of liability of the supplier indicated above shall not apply to Liquidated damages.
- 28. Settlement of commercial disputes in case of contracts with Public Sector Enterprises/ Govt. Dept.(s) - Not Applicable.**
- 29. Progress Reports**
- 29.1 The Supplier shall from time to time render such reports concerning the progress of the contract and/or supply of the stores in such form as may be required by the Purchaser.
- 29.2 The submission, receipt and acceptance of such reports shall not prejudice the right of the Purchaser under the contract nor shall operate as an estoppel against the Purchaser merely by reason of the fact that he has not taken notice of or objected to any information contained in such report.
- 30. Provisions of CIL's Purchase Manual**  
The provisions of CIL's Purchase Manual and its subsequent amendments (Available on CIL's website, [www.coalindia.in](http://www.coalindia.in)) shall also be applicable, if not specified otherwise in this Bid document.
- 31. Applicable Law**  
The Contract shall be governed by the laws of the Republic of India, unless otherwise specified in the bid document.
- 32. Jurisdiction of Courts**
- 32.1 Irrespective of the place of delivery, the place of performance or place of payment under the contract, the contract shall be deemed to have been made at the place from where the acceptance of tender or supply order has been issued.
- 32.2 The courts of the place from where the acceptance of tender has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract.
- 33. Notices**
- 33.1 Any notice given by one Party to the other pursuant to this Contract shall be sent to the other Party in writing or facsimile to be confirmed in writing, to the other Party's address. For the purpose of all notices, the following shall be the addresses of the Purchaser and the Supplier:



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**Purchaser:**

Executive Director (MM),  
Coal India Limited,  
Coal Bhawan, Premises No. 04,  
Plot No. AF-II, Action Area 1A,  
New Town, Rajarhat,  
Kolkata – 700 156, West Bengal, India  
Fax No.: +9133 – 2324 4115  
Phone: +9133 – 2324 4127  
Email: [edmm.cil@coalindia.in](mailto:edmm.cil@coalindia.in) / [gmmmm.cil@coalindia.in](mailto:gmmmm.cil@coalindia.in)

**Supplier:**

M/s GMMCO Ltd., Birla Building,  
9/1, R.N. Mukherjee Road,  
Kolkata – 700001  
Email : [vikaskumar@gmmcoindia.com](mailto:vikaskumar@gmmcoindia.com)  
Phone: 9424611063, 033-22107441

**Manufacturer:**

M/s Caterpillar Inc., 5205 N,  
O'Connor Blvd, Irving,  
TX 75039  
Phone: (309) 675-2545  
Email: [das\\_arup\\_kumar@cat.com](mailto:das_arup_kumar@cat.com)

- 33.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.
- 33.3 In case of change in address, the Supplier shall immediately notify the same to the Purchaser in writing. The supplier shall be solely responsible for the consequences of omission to notify the change of address to the Purchaser.



**Special Conditions of Contract (SCC)**

**Special Conditions of Contract (SCC)**

*[Signature]*

*[Signature]*

*[Signature]*

Amaravesh Sarkar

*[Signature]*

*[Signature]*

*[Signature]*



## Special Conditions of Contract (SCC)

The following Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions contained herein shall prevail over those in the General Conditions of Contract. The corresponding Clause number of the General Conditions is indicated in parentheses. Further, there are some additional clauses in SCC.

### 1. Security Deposit (GCC clause -6)

- 1.1 The supplier has deposited security money in two separate bank guarantees in terms of the NIT provisions for 5 % (Five percent) value of the total landed value of the contract including all taxes, duties and other cost and charges as detailed below:-

#### A. Security Deposit in \$:

- Bank Guarantee No. OGT0015250007868 dated 28.07.2025 for \$15,02,226.00 (USD Fifteen Lakhs Two Thousand Two Hundred and Twenty Six Only) valid till 31.03.2027 from IndusInd Bank Mumbai. The same has been confirmed by the bank through SFMS.

A copy of Bank Guarantee is enclosed as **Annexure-1 (a)**.

#### B. Security Deposit in Indian Rupees:

Bank Guarantee No. 0999925BG0Y01799 dated 16.07.2025 for Rs.6,03,89,327.00 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven Only) valid till 31.03.2027 from SBI Chennai. The same has been confirmed by the bank through SFMS.

A copy of Bank Guarantee is enclosed as **Annexure-1 (b)**.

- 1.2 The SDBG shall remain valid upto 3 months after the supply and commissioning of all the equipment. The SDBG will be released within 30 days after successful commissioning of all the equipment covered in the contract and on receipt of confirmation of Performance Bank Guarantee(s) for all the equipment covered in the contract, as detailed in clause-2 below. The Bank Guarantee for Security Deposit shall be extended till the Performance Bank Guarantee (s) are submitted by the firm, failing which Security Deposit will be forfeited.
- 1.3 Subject to force majeure conditions, if the Manufacturer/Supplier fails to extend the Bank Guarantee for Security Deposit, suitably as required, the same shall also be recorded as unsatisfactory performance for future dealings apart from taking any other penal action as may be deemed fit by CIL.
- 1.4 Security Deposit may be converted into Performance Bank Guarantee (PBG) at the option of the supplier by increasing its value / validity accordingly. Also, the format needs to be modified to take into account the Contract no. and date instead of the NoA no. and date. At the time of conversion of Security Deposit into PBG, it should be ensured that the amount of PBG should not be less than the amount prescribed under Clause-2.1 below. Wherever Security Deposit is converted into PBG, the operation of such SDBG/Performance BG shall be guided by Performance Bank Guarantee Clause mentioned below.

### 2. Performance Bank Guarantee (PBG) (GCC Clause 7)

- 2.1 The supplier shall be required to furnish a Performance Guarantee equivalent to 10% value



## Special Conditions of Contract (SCC)

of the total landed value of the Equipment along with maximum annual landed value of spares and consumables of the contract including all taxes, duties and other costs and charges without considering Input Tax Credit subsidiary-wise. The PBG will be required to be submitted subsidiaries wise to Paying Authority of concerned subsidiary.

- 2.2 The Performance Guarantee shall be deposited through RTGS/NEFT/IMPS/e-BG/other digital modes or in the form of a Bank Guarantee issued by a RBI scheduled bank in India in the format attached on a non-judicial stamp paper.
- 2.3 The Performance Bank Guarantee (PBG) shall be in the same currency (ies) in which contract has been signed. In case of multi-currency contract, separate PBG in respective currency for required value shall be submitted.

Total value of PBG in US Dollar shall be for **USD 30,04,454.00** (US Dollar Thirty lakh Four Thousand Four Hundred and Fifty Four only) and total value of PBG in INR shall be for Rs 12,07,78,656.00 (Rupees Twelve Crore Seven Lakhs Seventy Eight Thousand Six Hundred and Fifty Six only).

- 2.4 The Performance Bank Guarantee (s) may be submitted equipment wise to the concerned subsidiary where the equipment will be supplied. For this purpose, the value of each equipment will be worked out by dividing the total value of PBG, by the number of equipment ordered.

Sl. No.	Project and Subsidiary	Qty (Nos.)	PBG for equipment in USD (per fleet)	PBG for equipment in USD (per equipment)	PBG for spares & consumables in INR (per fleet)	PBG for spares & consumables in INR (per equipment)
1	Gevra, SECL	3	5,63,335.00	1,87,779.00	2,27,74,608.00	75,91,536.00
2	Gevra, SECL	3	5,63,335.00	1,87,779.00	2,27,74,608.00	75,91,536.00
3	Dipka, SECL	6	11,26,669.00	1,87,779.00	4,53,72,341.00	75,62,057.00
4	Dudhichua NCL	1	1,87,779.00	1,87,779.00	74,64,275.00	74,64,275.00
5	Bina - Kakri Amalgamation NCL	1	1,87,779.00	1,87,779.00	74,64,275.00	74,64,275.00
6	Jayant, NCL	2	3,75,557.00	1,87,779.00	1,49,28,549.00	74,64,275.00
	Total	16	<b>30,04,454.00</b>		<b>12,07,78,656.00</b>	

- 2.5 The PBG (s) shall remain valid till 3 months after the completion of the contractual period of all the equipment covered in the contract.

The initial period of validity of the PBG(s) may be for 50% of the contract period (3 years for dozers) or 5 years, whichever is lower, with the provision for timely action for the extension/ renewal/ replacement of the initial PBG for the balance 50% of the contract period (3 years) plus 3 months after the completion of the contractual period of all the equipment covered in the contract or till balance contract period of all the equipment covered in the contract plus 3 months, whichever is lower.

This extension / renewal / replacement of initial PBG / extended PBG should take place 45 days prior to the expiry of the initial/ extended validity failing which CIL/Subsidiary shall be entitled to encash the PBG after giving 15 days' notice to the supplier and hold the amount as security for performance of the supplier's obligations under the agreement till



## Special Conditions of Contract (SCC)

completion of the contract period. The PBG shall be encashed at least 7 days prior to expiry.

- 2.6 The PBG shall be submitted to the Paying Authority, sufficiently in advance (say 3-4 weeks) to enable its verification before submission of the invoice for 80% payment of the particular equipment(s)

OR

in case the Supplier desires to convert SDBG into PBG at its option, extension of validity of SDBG for the requisite period as mentioned at Clause 2.5 above and suitable changes in format, is to be submitted before submission of the invoice for 80% payment of the first equipment of the contract

OR

in lieu of PBG, a letter be submitted sufficiently in advance (say 3-4 weeks) to the Paying Authority to deduct PBG value as per stipulation in clause 2.1 from the invoice for 80% payment of the particular equipment (s) which may be kept as PBG for that particular equipment(s).

- 2.7 The PBG issued by Issuing bank on behalf of the bidder in favour of "concerned subsidiary where the equipment will be supplied" shall be in paper form (Stamp Paper) as well as issued under "Structured Financial Messaging System". The details of beneficiary Bank for issue of BG through SFMS Platform will be provided by the concerned subsidiary. The date of SFMS confirmation to Paying Authority shall be deemed to be the date of receipt of the BG. Original copy of the PBG issued by the Issuing Bank shall be sent by the issuing bank to concerned subsidiary.

However, if the original copy of the BG is handed over to the supplier by the Issuing bank, the issuing bank shall send an e-mail from their corporate e-mail id (on the date of handing over) directly to corporate e-mail id of the order placing authority that they have handed over the original copy of the BG to the supplier for handing over to the beneficiary, attaching a scanned copy of the SDBG.

- 2.8 The release of the Performance Bank Guarantee(s) / converted SDBG after above indicated period, shall be subject to satisfactory performance of the equipment during 8 years period from the date of commissioning of the equipment and fulfillment of contractual obligations failing which, action for further extension or encashment of PBG / converted SDBG, as deemed suitable shall be taken. Release of PBG for each equipment may be done separately on satisfactory performance of the respective equipment as above. In case of converted SDBG, the release will be done only after satisfactory performance of all the equipment covered in the Contract or in case of unsatisfactory performance of some equipment, or on receipt of the Claim amount to be recovered from the Supplier, with suitable deductions for unsatisfactory performance of equipment, if any, from the converted SDBG.

The Performance Bank Guarantee shall be released with the approval of concerned subsidiary's HOD(MM) after expiry of validity period and on receipt of:

- 'No Claim Certificate' from the HOD of User department; and
- 'No Claim / Dispute Certificate' from the Supplier as per format provided as

### Annexure-4.

Whenever deductions towards unsatisfactory performance of equipment or non-achievement of guaranteed availability in a particular year(s) are made within the tenure of the PBG/converted SDBG during the contract period, the amount deducted from the PBG/converted SDBG should be replenished within a month in order to ensure that the



## Special Conditions of Contract (SCC)

original value of the PBG/converted SDBG remains the same throughout the contract period.

- 2.9 You shall submit the copy of SFMS Message as sent by the issuing Bank branch along with original Bank guarantee.

### 3. Inspection and Test (GCC Clause 8)

- 3.1 Pursuant to Clause 8.1 of the GCC, details of specific inspections and/or tests to be carried out at the Supplier's works and/or at the Site(s) are given in Section VI, Technical Specifications.

- 3.2 Clause 8.3 of the GCC is modified to read as follows:

"Should any inspected or tested Goods fail to conform to the Specifications, including acceptance tests and periodic tests to verify guaranteed performance, the Purchaser may reject the Goods, and the Supplier shall either replace the rejected Goods or make alterations necessary to meet Specification requirements free of cost to the Purchaser within sixty (60) days of such rejection. Replaced or altered goods shall be subjected to repeated inspection or tests to demonstrate conformity with the Specifications. In the event that replacement or alteration is not done within sixty day period as aforesaid, or, replaced or altered goods fail to demonstrate conformity with the Specifications in repeated inspections or tests as aforesaid, the Purchaser reserves the right to terminate the Contract in part or in whole and the Supplier shall repay forthwith to the Purchaser all monies paid in respect of Goods, and Services associated therewith, for which the termination is applicable and, subsequently remove the same from the Purchaser's Site at the Supplier's cost".

- 3.3 The following Clause is added as Clause 8.7 to the GCC:

"The Purchaser or its nominated representative shall have the right to conduct inspections or tests as set out in this Clause at any reasonable time. The Purchaser reserves the right, at the Purchaser's cost, to depute its own inspector(s) and/or to engage any other third party inspecting agency, other than the one recommended by the Supplier, to conduct inspections and tests pursuant to the Contract".

### 4. Incidental Services

The following Services, shall be provided by the Supplier:

(a) **Erection, Testing and Commissioning**

Erection, testing and commissioning of the Equipment as detailed in the Schedule of Requirements and the Technical Specifications.

The supplier shall be responsible for the erection and commissioning within 30 days from the receipt of equipment at site.

The purchaser will provide necessary cranes, electricity and fuel required for testing only. All other erection tools & tackles including manpower will be arranged by the supplier. Any substantial delay in providing cranes from purchaser side will be recorded jointly for calculation purpose of erection & commissioning time in the Hindrance register in the format (**Annexure – 5**).

If the supplier fails to commission the equipment within the specified period as mentioned above, Liquidated damages will be recovered @ 0.5% of the landed price of the equipment along with accessories per week or part thereof for the delayed period subject to a maximum of 5% of the landed price of equipment along with



## Special Conditions of Contract (SCC)

accessories.

**(b) Tools**

Supplier have furnished tools required for assembly and maintenance of the supplied Goods as detailed in the Schedule of Requirements and the Technical Specifications.

**(c) Manuals**

Furnishing of detailed operating, repair, maintenance and spare parts manuals as detailed in the Technical Specifications.

**(d) Training**

Training of the Purchaser's personnel as detailed in the Schedule of Requirements and the Technical Specifications. The cost of such Services shall be included in the Contract Price.

The Supplier shall be responsible for arranging and the cost of all necessary tickets, visas, permits, foreign exchange and any other matter or facility for visits of the Supplier's personnel for the purposes of Erection, Testing and Commissioning the Equipment and/or Training of the Purchaser's personnel - the Purchaser shall have no responsibility in this regard except in respect of issuance of letters supporting visa applications as may reasonably be requested by the Supplier. The Supplier shall be responsible for paying taxes, if any, including personal income tax and surcharge on income tax, for which it or its personnel may become liable.

For visit of Purchaser's personnel to manufacturer's works/venue of training, the Purchaser shall arrange all necessary tickets, conveyance, lodging and boarding and any other matter or facility for visits of Purchaser's personnel.

**5. Insurance (GCC Clause-11)**

Pursuant upon Clause-11.1, GCC, the insurance coverage of the goods will be upto successful erection and commissioning of the equipment at site.

**6. Transportation (GCC Clause-12)**

Add the following paragraph to the Clause-12.3, GCC:

"Marine Freight and Marine Insurance Charges shall be paid at actuals against documentary evidence subject to the ceiling of quoted amount. Inland Freight charges and Inland Insurance charges shall be paid at actuals against documentary evidence but not beyond the rate/ price quoted under these heads."

**7. Warranty (GCC Clause-13)**

The "thirty days" mentioned in Clauses-13.3 and 13.4 of the GCC shall stand replaced by "sixty days".

For the purpose of Clause 13.5 of the GCC, "For the goods whose life is less than twelve (12) months, the warranty period will depend on the nature of the item under procurement" and the parts manufacturer's or supplier's guarantee /warranty certificate shall suffice.

**8. Payment (GCC Clause 14)**

8.1 Pursuant to Clause-14.1 of the GCC, the payment terms are as follows:

*[Handwritten signatures and initials in blue ink]*



## Special Conditions of Contract (SCC)

8.2 Payment shall be made in the currency or currencies specified in the contract in the following manner:

**8.2.1 For Payment of equipment in Indian Rupees: (NOT Applicable)**

**8.2.2 For Payment of consumable spares and consumables for first 12 months of warranty period in Indian Rupees:**

100% value of the consumable spares and consumables and 100% taxes and duties and other charges shall be made within 21 days of receipt and acceptance of materials at consignee's end.

**8.2.3 For Payment of spares and consumables for 5 years after the warranty period of 12 months in Indian Rupees under Spares Cost Cap:**

100% value of the spares and consumables and 100% taxes and duties and other charges shall be made within 21 days after receipt and acceptance of materials at consignee's end.

**8.2.4 Submission of Documents for Payment for equipment in Indian Rupees: (NOT Applicable)**

**8.2.5 Submission of Documents for Payment in Indian Rupees for consumable spares and consumables during warranty period.**

For payment for consumable spares and consumables in Indian Rupees, the supplier will submit the following documents along with bills to the paying authority:

- a. Two copies of the Supplier's invoice, Pre-Receipted and Stamped showing Contract Number, Goods description, quantity, unit price, total amount and GST No. of Ultimate Consignee.
- b. Copy of Receipted Challan/ Consignment Note of all the consignments.
- c. Equipment Manufacturer's / Supplier's Warranty / Guarantee Certificate as per GCC Clause-13.2 & 13.5.
- d. The following Lowest Price Certificate as per SCC clause - 9.3 :  
"We certify that prices for the items supplied are the lowest and not higher than as applicable to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization and it will be our responsibility to inform the Purchaser in case items are supplied at a lower price".
- e. The following Price Fall Certificate as per SCC Clause- 9.3 "  
"We certify that we have not offered to supply / supplied the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization during the currency of the Contract".
- f. Any other document(s) required as per contract.

**8.2.6 Submission of Documents for Payment in Indian Rupees for spares and consumables during 2<sup>nd</sup> year to 6<sup>th</sup> year of operation under Spares Cost Cap:**

For payment for Spares and consumables under Spares Cost Cap in Indian Rupees, the supplier will submit the following documents along with bills to the paying authority:

- a. Two copies of the Supplier's invoice, Pre-Receipted and Stamped showing Contract Number, Goods description, quantity, unit price, total amount and GST No. of



## Special Conditions of Contract (SCC)

- Ultimate Consignee.
- b. Copy of Receipted Challan/ Consignment Note of all the consignments.
  - c. Equipment Manufacturer's / Supplier's Warranty / Guarantee Certificate as per GCC Clause-13.2 & 13.5.
  - d. The following Lowest Price Certificate as per SCC clause - 9.3 :  
"We certify that prices for the items supplied are the lowest and not higher than as applicable to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization and it will be our responsibility to inform the Purchaser in case items are supplied at a lower price".
  - e. The following Price Fall Certificate as per SCC Clause- 9.3  
"We certify that we have not offered to supply / supplied the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization during the currency of the Contract".
  - f. Certificate that the spares and consumables being supplied during the ...th year of operation and for which payment is being sought, has not crossed the cumulative Spares Cost Cap value of the ...th year of operation of the Machine Sr. No.....
  - g. Any other document(s) required as per contract.

### 8.3.1 For Payment of equipment in foreign Currency

- i) An unconfirmed, irrevocable letter of credit will be established for net CIF value after deducting Indian Agency Commission, if any from the CIF value.
- ii) 80% payment of the net CIF value will be made through unconfirmed, irrevocable letter of credit against submission of:
  - A. shipping documents;
  - B. Self-attested copy of acceptance letter of the PBG as per Clause 2, SCC, Sec-IV by the concerned subsidiary **OR** Self-attested copy of acceptance letter of the extended SDBG as per Clause 1.11, SCC, Sec-IV by CIL or letter for deduction of equivalent amount from their bills.
  - C. Copy of Receipted Challan/ Consignment Note of all the consignments.
- iii) Balance 20% of the net CIF value will also be paid through same unconfirmed irrevocable, letter of credit against submission of successful commissioning certificate, signed by the concerned officials of the Project and counter-signed by the Area General Manager and HOD of Excavation Deptt. of the subsidiary company, where the equipment has been deployed.
- iv) The Marine freight and Marine Insurance charges shall be paid at actuals subject to ceiling of the quoted amounts.

All bank charges incidental to opening of letter of credit in purchaser's country shall be borne by purchaser and all charges in the seller's country shall be borne by the beneficiary.

The letter of credit shall not be confirmed. In case the bidder insists for confirmation of the letter of credit, the cost of confirmation shall be borne by the bidder.

L/C shall be opened by the paying authority of the concerned subsidiary.

L/C shall allow partial shipment and trans-shipment



## Special Conditions of Contract (SCC)

### INR Component of Equipment

80% payment of the INR component of CIP value of the equipment but excluding erection and commissioning charges and 100% taxes and duties shall be made within 21 days after receipt and acceptance of equipment at site at the consignee's end and submission of either (a) Performance Bank Guarantee having validity till 3 months after the completion of 6 years from the date of commissioning of all the equipment covered in the contract or initial validity of 50% of Contract period (3 years for dozers) or 5 years, whichever is lower ; or (b) Copy of validity extension of SDBG, in case SDBG is converted into PBG at the option of the supplier, till 3 months after the completion of 6 years from the date of commissioning of all the equipment covered in the contract or initial validity of 50% of Contract period (3 years for dozers) or 5 years, whichever is lower . In case of non-submission of PBG or converted SDBG, payment may be made after deducting equivalent amount as PBG on specific request of the Supplier.

Balance 20% of the INR component of CIP value including 100% erection and commissioning charges shall be made after successful completion of erection, testing, commissioning and final acceptance of the equipment (along with the accessories) upon presentation of successful commissioning certificate, signed by the concerned officials of the Project and counter-signed by the Area General Manager and HOD of Excavation Deptt. of the subsidiary company, where the equipment has been deployed.

The Inland freight charges and Inland Insurance charges shall be paid at actual against documentary evidence subject to ceiling of the quoted rate/price quoted under these heads.

### **8.3.2 For Payment of consumable spares and consumables for first 12 months of warranty period in foreign Currency: (NOT APPLICABLE)**

### **8.3.3 Submission of Documents for Payment in foreign Currency for equipment**

#### For 80% Payment:

For Payment for equipment in foreign Currency, the supplier will submit the following documents along with bills to the bank for negotiating L/C:

- a. Two (2) copies of the Supplier's shipping invoice showing Contract Number, Goods description, quantity, unit price, total amount and GST No. of Ultimate Consignee.
- b. Two (2) copies of the clean on-board bill of lading and four (4) copies of non-negotiable bill of lading. Importer Exporter Code (IEC) of concerned subsidiary Co. should be mentioned in Bill of Lading.
- c. Two (2) copies of packing list identifying contents of each package.
- d. Equipment Manufacturer's Warranty /Guarantee Certificate as per Technical Specification Clause-C.9 .
- e. Manufacturer's Test & Inspection Certificate
- f. The following Lowest Price Certificate as per SCC clause - 9.3 :  
"We certify that prices for the items supplied are the lowest and not higher than as applicable to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization and it will be our responsibility to inform the Purchaser in case items are supplied at a lower price".
- g. The following Price Fall Certificate as per SCC Clause- 9.3 "  
"We certify that we have not offered to supply / supplied the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private



## Special Conditions of Contract (SCC)

- organization during the currency of the Contract”.
- h. Certificate of Country of Origin issued by the Chamber of Commerce of Manufacturer's Country.
  - i. Self-attested copy of acceptance letter of the PBG as per Clause 2, SCC, Sec-IV by the concerned subsidiary  
**OR**  
Self-attested copy of acceptance letter of the extended SDBG as per Clause 1.11, SCC Sec-IV by CIL or self-attested letter for deduction of equivalent amount from their bills.
  - j. A certificate that no commission is payable by the principal supplier to any agent, broker or any other intermediary against this contract other than -----% of FOB value of the contract to M/s. -----(Indian Agent).
  - k. Copy of Goods Consignment Note supported by Challans of all the consignments, duly receipted by consignee, with the certificate from supplier that all the consignments for commissioning of complete equipment have been delivered
  - l. Copy of Certificate of Insurance.
  - m. Documentary evidence for Marine freight and marine Insurance.
  - n. Any other document(s) required as per contract

### For 20% Payment:

- a) Self-attested copy of commissioning certificate, signed by the concerned officials of the Project and counter-signed by the Area General Manager and HOD of Excavation Deptt. of the subsidiary company, where the equipment has been deployed.

### **8.3.4 Submission of Documents for Payment in foreign Currency for consumable spares and consumables during warranty period(NOT APPLICABLE)**

### **8.4 Payment for Indian Agency Commission (GCC Clause-14.2)**

The Clause-14.2, GCC is modified and the following is also added:

Indian Agency commission (@ 4% (four percent) of FOB value of the Equipment is included in the FOB Price as per Price Schedule), for equipment shall be paid in equivalent Indian Rupees within twenty-one days of submission of bills, after installation and commissioning of the equipment on submission of the following documents:

- (A) Copy of foreign principal's invoice.
- (B) Copy of bill of lading.
- (C) Self-attested copy of certificate from State Bank of India regarding Bill Selling exchange rate ruling on the date of bill of lading (in case of bank holiday on date of bill of lading, Bill Selling exchange rate on next working day shall be considered) or self-attested downloaded sheet from SBI portal containing Bill Selling exchange rate ruling on the date of bill of lading (in case of bank holiday on date of bill of lading, Bill Selling exchange rate on next working day shall be considered).
- (D) Self-attested copy of commissioning certificate of the equipment signed by the concerned officials of the Project and counter-signed by the Area General Manager and HOD of Excavation Dept. of the subsidiary company, where the equipment has been deployed.

Paying Authority shall verify the self-attested downloaded sheet of SBI containing the Bill Selling Exchange rate from the SBI portal/website and after verification, make payment.



## Special Conditions of Contract (SCC)

Indian Agency Commission, if any, for consumable spares and consumables for 1<sup>st</sup> year of operation from the date of commissioning of the equipment shall be paid in equivalent Indian Rupees on receipt and acceptance of the same at consignee's end. Paying Authority shall obtain confirmation of receipt and acceptance of the same from the consignee before release of Indian Agency Commission. The payment shall be made within twenty one days of submission of bills along with following documents:

- (A) Copy of foreign principal's invoice.
- (B) Copy of bill of lading.
- (C) Certificate from State Bank of India regarding Bill Selling exchange rate ruling on the date of bill of lading (in case of bank holiday on Date of bill of lading, Bill selling exchange rate on next working day shall be considered) or self attested downloaded sheet of SBI portal containing Bill Selling exchange rate ruling of the date of bill of lading (in case of bank holiday on date of bill of lading, Bill Selling exchange rate on next working day shall be considered).

Paying Authority shall verify the self attested downloaded sheet of SBI containing the Bill Selling Exchange rate from the SBI portal/website and after verification, make payment.

### 8.5 Paying Authority

The Paying Authority shall be General Manager (Finance), of the concerned subsidiary.

The payments will be made by the Paying Authority to the manufacturer and / or Indian agent shall be per the Bank Details for Electronic Payment [Annexure-7]. The same is enclosed.

This is against Budget Certification as under:-

#### SECL:

##### BC under capital head

No.	Unit Area	Head	Year	Amount (Rs)
318	GM Office (Gevra)	P&E HEMM	2025-26	99,96,48,572.00
26.06.2025	GM Office (Gevra)		2025-27	16,66,08,095.00
	GM Office (Dipka)		2025-26	66,64,32,381.00
	GM Office (Dipka)		2025-27	33,32,16,191.00
	SECL8651			
	SECL8651			
	SECL8851			
	SECL8851			
Commitment Item	4100			216,59,05,239.70

##### BC under revenue head

SECL/GM(F)/CONS.HEMM SPARE/ BC/AREAS OF SECL/2026-27 to 2031-32/50/03 for Rs.36027.12 lakhs dated 27.06.2025

#### NCL:

##### Capital budget:



## Special Conditions of Contract (SCC)

Capital Budget/BC of Rs.81,33,17,387.24 (Rupees Eighty-One Crore Thirty-Three Lakh(s) Seventeen Thousand Three Hundred Eighty-Seven and Paise Twenty-Four Only) vide ref. no. NCL/HQ/C&B/Capital/ HEMM/2025-26/02 dt 28.06.2025.

FC for total value of Rs.81,33,17,387.24 (Rupees Eighty-One Crore Thirty-Three Lakh(s) Seventeen Thousand Three Hundred Eighty-Seven and Paise Twenty-Four Only) is given vide ref. no. NCL/HQ/FC/2025-26/ Capital/HEMM/02 dt. 28.06.2025.

### Revenue Budget:

Budget/BC of Rs.11,29,32,023.88 (Rupees Eleven Crore Twenty-Nine Lakh(s) Thirty-Two Thousand Twenty-Three and Paise Eighty-Eight Only) from Centralised HEMM Spares budget is kept at HQ, vide ref. no. NCL/HQ/BC/2025-26/Centralised HEMM Spares/86 dt 28.06.2025.

FC for Rs.11,29,32,023.88 (Rupees Eleven Crore Twenty-Nine Lakh(s) Thirty-Two Thousand Twenty-Three and Paise Eighty-Eight Only) is given vide ref. no. NCL/HQ/FC/2025-26/Centralised HEMM Spares/ 78 dt 28.06.2025.

The budget for the subsequent years will be provided by NCL after the communication of the Revenue Budget for the respective years by GM(Excv)-HOD, NCL

### 9 Prices

9.1 Prices stated in the contract shall remain firm and fixed throughout the period of the Contract.

### 9.2 Lowest Price Certificate

The Supplier shall submit a certificate that prices for the items supplied are the lowest and not higher than as applicable to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization and it will be our responsibility to inform the Purchaser in case items are supplied at a lower price.

### 9.3 Price Fall Clause

If the contract holder reduces its price or sells or even offers to sell the contracted goods or services following conditions of sale similar to those of the contract, at a price lower than the contract price, to any person or organization during the currency of the contract, the contract price will be automatically reduced with effect from that date for all the subsequent supplies under the contract and the contract be amended accordingly.

The provisions of price fall clause will however not apply to the following:

- i) Export/Deemed Export by the supplier;
- ii) Sale of goods or services as original equipment prices lower than the price charged for normal replacement;
- iii) Sale of goods such as drugs, which have expiry date;
- iv) Sale of goods or services at lower price on or after the date of completion of sale/placement of order of goods or services by the authority concerned, under the existing



## Special Conditions of Contract (SCC)

or previous Rate Contracts as also under any previous contracts entered into with the Central or State Government Departments including new undertakings (excluding joint sector companies and or private parties) and bodies

Note:

- a. The currency of contract will mean the period till completion of supply.
- b. It shall be responsibility of the supplier to inform the purchaser of offer to supply / supply of the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization during the currency of the contract.
- d. The supplier shall submit a certificate along with the bill(s) that it has not offered to supply / supplied the ordered / similar item(s) at a lower rate to any Organization / Ministry / Department of the Govt. of India or Coal India Ltd. and/or its Subsidiaries or other PSU or any other private organization.

### 10. Taxes and Duties (GCC Clause-26)

#### 10.1 The following sub-clause is added to Clause-26, GCC:

**Applicability of GST on Liquidated damages, EMD and/or Security Deposit forfeiture:** GST shall not be applicable on Liquidated damages, EMD and/or Security Deposit forfeiture

### 11. Changes in Order (GCC Clause 15)

The Purchaser may at any time, by a written order given to the Supplier, make changes within the general scope of the Contract in any one or more of the following:

- a) the place of delivery; and/or
- b) the place of Services to be provided by the Supplier.

### 12. Provisions of CIL's Purchase Manual (GCC Clause 30)

The provisions of CIL's Purchase Manual and its subsequent amendments (Available on CIL's website, [www.coalindia.in](http://www.coalindia.in)) prevailing on the date of opening of tender shall also be applicable, if not specified otherwise in this Contract.



## Schedule of Requirements

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## Schedule of Requirements

### Part I

Sl. No	Brief Description of Goods & Services	Quantity	Expected Delivery schedule at Site																																
1	850 HP Crawler Dozer with Ripper Model : CAT D11 [Engine Net Power: 850 HP (634 Kw) @ 1800 rpm]	16 Nos.	<p>At least 03 (three) machines within 10 (ten) months from the date of signing of Contract and thereafter at least 03 (three) machines per month.</p> <p><b>Project wise Allocation:</b> <b><u>Machine with Ripper</u></b></p> <p>(i) Gevra OCP, SECL – 6 nos. (ii) Dipka OCP, SECL – 6 nos. (iii) Dudhichua OCP, NCL – 1 no. (iv) Bina-Kakri Amalgamation OCP, NCL–1 no. (v) Jayant OCP, NCL – 2 no.</p> <p><b><u>Project wise Priority Allocation:</u></b></p> <table><tr><td>1<sup>st</sup> Dozer</td><td>Gevra OCP, SECL</td></tr><tr><td>2<sup>nd</sup> Dozer</td><td>Gevra OCP, SECL</td></tr><tr><td>3<sup>rd</sup> Dozer</td><td>Gevra OCP, SECL</td></tr><tr><td>4<sup>th</sup> Dozer</td><td>Jayant OCP, NCL</td></tr><tr><td>5<sup>th</sup> Dozer</td><td>Bina-Kakri Amalgamation OCP, NCL</td></tr><tr><td>6<sup>th</sup> Dozer</td><td>Dudhichua OCP, NCL</td></tr><tr><td>7<sup>th</sup> Dozer</td><td>Gevra OCP, SECL</td></tr><tr><td>8<sup>th</sup> Dozer</td><td>Gevra OCP, SECL</td></tr><tr><td>9<sup>th</sup> Dozer</td><td>Dipka OCP, SECL</td></tr><tr><td>10<sup>th</sup> Dozer</td><td>Gevra OCP, SECL</td></tr><tr><td>11<sup>th</sup> Dozer</td><td>Dipka OCP, SECL</td></tr><tr><td>12<sup>th</sup> Dozer</td><td>Dipka OCP, SECL</td></tr><tr><td>13<sup>th</sup> Dozer</td><td>Dipka OCP, SECL</td></tr><tr><td>14<sup>th</sup> Dozer</td><td>Dipka OCP, SECL</td></tr><tr><td>15<sup>th</sup> Dozer</td><td>Dipka OCP, SECL</td></tr><tr><td>16<sup>th</sup> Dozer</td><td>Jayant OCP, NCL</td></tr></table> <p>Adjustment to the excess supplies, if any, made against the above delivery schedule is admissible in case of subsequent short supplies.</p>	1 <sup>st</sup> Dozer	Gevra OCP, SECL	2 <sup>nd</sup> Dozer	Gevra OCP, SECL	3 <sup>rd</sup> Dozer	Gevra OCP, SECL	4 <sup>th</sup> Dozer	Jayant OCP, NCL	5 <sup>th</sup> Dozer	Bina-Kakri Amalgamation OCP, NCL	6 <sup>th</sup> Dozer	Dudhichua OCP, NCL	7 <sup>th</sup> Dozer	Gevra OCP, SECL	8 <sup>th</sup> Dozer	Gevra OCP, SECL	9 <sup>th</sup> Dozer	Dipka OCP, SECL	10 <sup>th</sup> Dozer	Gevra OCP, SECL	11 <sup>th</sup> Dozer	Dipka OCP, SECL	12 <sup>th</sup> Dozer	Dipka OCP, SECL	13 <sup>th</sup> Dozer	Dipka OCP, SECL	14 <sup>th</sup> Dozer	Dipka OCP, SECL	15 <sup>th</sup> Dozer	Dipka OCP, SECL	16 <sup>th</sup> Dozer	Jayant OCP, NCL
1 <sup>st</sup> Dozer	Gevra OCP, SECL																																		
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15 <sup>th</sup> Dozer	Dipka OCP, SECL																																		
16 <sup>th</sup> Dozer	Jayant OCP, NCL																																		
2	AFDSS and other commissioning requirements as per Annexure – 6g of the NIT (contract), if any, and Ancillary Equipment for each equipment of Item 1 (above), as specified in Technical Specifications, Section-VI.	In accordance with item 1	Delivery to be made along with the Machine.																																
3	Provision of spare parts; - Operational, Maintenance and Standby/Contingency spare parts, consumable items, wear materials, maintenance tools, special	06 (1 + 5) years	<p>To comply with the terms of part C.6 of Technical Specifications, Section VI and in consideration of Items 1 and 2 above.</p> <p>The delivery of spare parts and consumables should be made as follows:</p>																																

*myel*

*mpb*

*hndup*

*A. Sankar*

*hndup*

*hndup*

*hndup*



tools in accordance with Part C.6 of the Technical Specification, Section-VI.  The cost of Spare Parts requirement shall be quoted separately for each project		<p>a) Consumable spares and consumables required for first 12 months of warranty period– to be supplied in two lots within six months from the date of commissioning of the first equipment. No consumable spares and consumables of warranty period will be accepted after completion of 12 months of warranty period.</p> <p>b) Spares and consumables required from 2<sup>nd</sup> to 6<sup>th</sup> year of operation from the date of commissioning of the equipment for the project – To be supplied as per requirement of the user under Spares Cost Cap.</p>
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The quantities of equipment allocated to the mine projects are as follows:

Sl. No.	Name of Project	Company	Consignee Address	Total Requirement	
Machine with Ripper				Under NCD	Under PCD
1	Gevra, OCP	South Eastern Coalfields Ltd.	Depot Officer, Regional Stores, Gevra Area, South Eastern Coalfields Limited, P.O. Gevra, Distt. Korba, Chattisgarh, India, Pin- 495452	03	03
2	Dipka, OCP	South Eastern Coalfields Ltd.	Depot Officer, Regional Stores, Dipka Area, South Eastern Coalfields Limited, P.O. Dipka, Distt. Korba, Chattisgarh, India, Pin- 495452	06	-
3	Dudhichua, OCP	Northern Coalfields Ltd	Depot Officer, Regional Stores, Dudhichua Project, Northern Coalfields Ltd., P.O. – Khadia, Sonbhadra, Uttar Pradesh (India) Pin- 231222	01	
4	Bina-Kakri Amalgamation , OCP	Northern Coalfields Ltd.	Depot Officer, Regional Stores, Bina Project, Northern Coalfields Ltd., P.O. – Sonbhadra Dist. Sonbhadra, Uttar Pradesh (India) Pin- 231220	01	
5	Jayant, OCP	Northern Coalfields Ltd.	Depot Officer, Regional Stores, Jayant Project, Northern Coalfields Ltd., P.O. – Jayant Colliery, Dist. Sidhi Madhya Pradesh (India) Pin - 486890	02	
Total				13	03

#### Delivery Terms

#### Note:

- Price for the equipment along with accessories and Spares & Consumables for the projects shown under NCD heading should be quoted with Normal Custom Duty (NCD).
- Price for the equipment along with accessories and Spares & Consumables for the projects shown under PCD heading should be quoted with Project Concessional Duty (PCD) applicable for the imported contents, as per extant customs rules and regulations.



3. As on date the Basic Customs Duty (BCD) for both NCD & PCD is 7.5% for the tendered equipment. Bidders should ascertain at their end the applicable BCD while submitting their offer.

**Delivery Terms**

A) **In case of Import Contract:** On CIP (Final Place of Destination) basis.

B) **In case of Indigenous portion of Contract:** On FOR Destination basis / Free Delivery at Site basis.

**Delivery Schedule:** Delivery schedule as indicated above, shall reckon from the date of Contract. However, in case of order for equipment under PCD on Indigenous manufactures, delivery period will be counted from the date of intimation to the supplier that the project registration with Customs has been completed subject to furnishing of all the documents or compliance of all requirements of Customs by the Supplier required for registration of project. In case of direct import, delivery shall not be linked with issue of PCD certificate.

**Port Consignee:**

The Purchaser's Port Consignee shall be:

**General Manager (MM),  
Coal India Ltd., Coal Bhavan,  
Premises No.4, Plot No. AF-III, Action Area 1 A,  
New Town , Kolkata 700 156, West Bengal, India.  
Ph: +91 33 23246640  
Fax: +91 33 23246000  
e-mail id: [edmm.cil@coalindia.in](mailto:edmm.cil@coalindia.in) / [gmmm.cil@coalindia.in](mailto:gmmm.cil@coalindia.in)**

All activities to clear goods through Customs and transport to Final Place of Destination will be undertaken by the Supplier at its cost. The Purchaser will pay Customs Duties only applicable to imported goods.

**Country of Origin for the equipment:** USA.

**Name of the Port of Shipment / Loading:** Port of Los Angeles, California / Port of New Jersey and New York / Port of Long Beach, California/Port of Savannah / Port of Houston, Texas / Port of Virginia / Northwest Sea Port -Seattle-Tacoma / Port of Charleston, South Carolina / Port of Oakland, California / Port of Miami, Florida / Jacksonville / Baltimore.

**Name of the Port of Arrival in India:** Chennai / Kochi / Ennore / Kolkata / Kandla / Mangalore / Mormugao/Mumbai / JNPT (Nhava Sheva) / Paradip/Tuticorin / Vishakapatnam.

**Final Place of Destination / FOR Destination / Ultimate Consignee**

The Projects indicated above is the Final Place of Destination / FOR Destination for the purpose of delivery. The consignee mentioned therein is the ultimate consignee.

**Part II**

Sl. No.	Brief Description of Services	Period/Quantum
1	Training of Purchaser's Personnel at Project Site / Manufacturer's Training Facility available in India	Please refer to Schedule of Requirements of Services later in this Section and to the Technical Specifications (Section VI).
2	Assembly and erection of equipment at Site in accordance with the Technical Specification and Conditions of Contract.	As given in Annexure – 6(n)

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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### Schedule of Requirements of Services

The Supplier's scope of the Contract will include the following

- I. Type test on each equipment included in the technical specification and offered in the bid.
- II. Providing Services of Supplier's qualified engineer(s)/personnel and manpower (skilled/semi-skilled/non skilled) for:
  - A. Unloading, transportation to site, storage at site and/or
  - B. Transportation from storage to erection site, installation, testing and commissioning.
- III. Training of Purchaser's Personnel:

The Purchaser's estimates of the minimum training requirements within warranty period, (in terms of Purchaser's personnel, periods and locations) are given in the following table. These estimates relate to each equipment as specified in Part I

**Table - A**

Name of the Project: - Dipka OCP, SECL (Under NCD)

**Fleet Size: - 6 nos.**

Type of Personnel	At Manufacturer's training facilities available in India					At Site				
	No.	Period		Total		No.	Period		Total	
Mech Engineer	1	1	Week	1	Week	1	1	Week	1	Week
Mech Supervisor	2	1	Week	2	Weeks	1	1	Week	1	Week
Elec Supervisor	-	-	Week	-	Week	-	-	Week	-	Week
Mech Fitter	-	-	Week	-	Week	6	1	Week	6	Weeks
Electrician	-	-	Week	-	Week	3	1	Week	3	Weeks
Operator	-	-	Week	-	Week	21	1	Week	21	Weeks
<b>Total</b>	<b>3</b>			<b>3</b>	<b>Weeks</b>	<b>32</b>			<b>32</b>	<b>Weeks</b>

**Table - B**

Name of the Project:- (i) Gevra OCP, SECL ( Under PCD)  
(ii) Gevra OCP, SECL (Under NCD)

**Fleet Size: - 3 nos.**

Type of Personnel	At Manufacturer's training facilities available in India					At Site				
	No.	Period		Total		No.	Period		Total	
Mech Engineer	1	1	Week	1	Week	1	1	Week	1	Week
Mech Supervisor	2	1	Week	2	Weeks	1	1	Week	1	Week
Elec Supervisor	-	-	Week	-	Week	-	-	Week	-	Week
Mech Fitter	-	-	Week	-	Week	3	1	Week	3	Weeks
Electrician	-	-	Week	-	Week	2	1	Week	2	Weeks
Operator	-	-	Week	-	Week	11	1	Week	11	Weeks
<b>Total</b>	<b>3</b>			<b>3</b>	<b>Weeks</b>	<b>18</b>			<b>18</b>	<b>Weeks</b>



**Table – C**

Name of the Project:- Jayant OCP, NCL (Under NCD)

Fleet Size:- 2 nos.

Type of Personnel	At Manufacturer's training facilities available in India					At Site				
	No.	Period		Total		No.	Period		Total	
Mech Engineer	1	1	Week	1	Week	1	1	Week	1	Week
Mech Supervisor	1	1	Week	1	Week	1	1	Week	1	Week
Elec Supervisor	-	-	Week	-	Week	-	-	Week	-	Week
Mech Fitter	-	-	Week	-	Week	2	1	Week	2	Weeks
Electrician	-	-	Week	-	Week	1	1	Week	1	Week
Operator	-	-	Week	-	Week	7	1	Week	7	Weeks
<b>Total</b>	<b>2</b>			<b>2</b>	<b>Weeks</b>	<b>12</b>			<b>12</b>	<b>Weeks</b>

**Table – D**

Name of the Project:- (i) Bina-Kakri Amalgamation OCP, NCL (Under NCD)

(ii) Dudhichua OCP, NCL (Under NCD)

Fleet Size: - 1 no.

Type of Personnel	At Manufacturer's training facilities available in India					At Site				
	No.	Period		Total		No.	Period		Total	
Mech Engineer	1	1	Week	1	Week	1	1	Week	1	Week
Mech Supervisor	1	1	Week	1	Week	1	1	Week	1	Week
Elec Supervisor	-	-	Week	-	Week	-	-	Week	-	Week
Mech Fitter	-	-	Week	-	Week	2	1	Week	2	Weeks
Electrician	-	-	Week	-	Week	1	1	Week	1	Week
Operator	-	-	Week	-	Week	4	1	Week	4	Weeks
<b>Total</b>	<b>2</b>			<b>2</b>	<b>Weeks</b>	<b>9</b>			<b>9</b>	<b>Weeks</b>

**Definitions:**

Mech. Engineer-

Graduate Engineer having basic knowledge of the equipment

Elect./Mech. Supervisor -

Diploma Holder Engineer having basic knowledge of the equipment

Mech Fitters/Electricians/Operators-

Un-skilled, semi-skilled and skilled.

**Note:- The training shall be completed in batches within warranty period from the date of commissioning of first equipment in the respective project.**

**IV. Provision of additional training within the contract period after completion of warranty period.**

- The Supplier will impart training to the CIL personnel, in addition to the contractual training provision, after completion of warranty period but at any time within the contract period.
- The additional training will be as per requirement of the user and shall cover the training scope same as per the mandatory training (within warranty period) of the contract.
- The training will be on chargeable basis and additional payment to the supplier will be made at the same rates which have been indicated for mandatory training (indicated in the Price Schedule).



## Technical Specifications

AS/nyb

Subdeep

myr

Vinod Kumar

A. Suresh

AKS

AKS



**Technical Specifications**  
**Preface - Instructions to Bidders**

**Introduction**

These Technical Specifications identify the technical requirements of the Goods and Services which are the subject of this tender.

The Technical Specifications are presented in four parts as follows:

- A. Scope of Supply
- B. Specific Project Requirements
- C. General Requirements
  - 1) Geography and Climatic Conditions
  - 2) Goods (Equipment and Machinery)
  - 3) Services
  - 4) Standards
  - 5) Supplier's Responsibility
  - 6) Spare Parts Provisions
  - 7) Availability Provisions
  - 8) Deemed Breakdown
  - 9) Composite Warranty / Guarantee
  - 10) Quality Assurance
- D. Equipment Specifications



## Part A

### **Scope of Supply**

#### **A.1 Equipment Package**

The Supplier is required to provide a complete package of equipment for the supply of Caterpillar Make 850 HP Crawler Dozer, Model- CAT D11 (**Engine Net Power 850 HP (634 KW) @ 1800 rpm**) with Ripper Attachment to opencast (surface) coal mining projects as per the Technical Specifications provided in Part D.

The supplier is required to supply the equipment along with accessories, consumables, training, installation, commissioning and testing at the coal mining project.

The package also includes Consumable Spares and Consumables including oils, greases, lubricants and GETs for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 5 years under Spares Cost Cap.

The Scope and Phasing of supply for the 850 HP Crawler Dozer (**Engine Net Power 850 HP (634 KW) @ 1800 rpm**) with Ripper Attachment is given in Schedule of requirement.

#### **A.2 Supplementary Items**

The equipment shall be provided with a comprehensive tool kit which shall include any special tools required for erection and commissioning of equipment.

#### **Detail given in Annexure – 6(a)**

#### **A.3 Information and Drawings**

At least one month before the scheduled installation date, the Supplier shall provide not less than:

- (a) Suitably illustrated copies of Operating, Repair and Maintenance Manuals for each type/model of equipment and accessories, written in English language, substantially bound in book form;

One hard copy along with soft/digital copy to each project site; and

Soft/digital copy of the same to the General Manager (Excv.)/HOD, Subsidiary Hqrs. and General Manager (EED), Coal India.

- (b) Suitably illustrated copies of detailed Spares Parts Manuals for each type/model of equipment and accessories, written in English language, substantially bound in book form;

One hard copy along with soft/digital copy to each project site; and

Soft/digital copy of the same to the General Manager (Excv.)/HOD, Subsidiary Hqrs., General Manager (EED), CIL; General Manager (MM)/HOD subsidiary Hqrs and General Manager (MM)/HOD, CIL.

In addition to the Equipment drawings, where appropriate the Supplier shall supply detailed relevant drawings (in the same number of copies) illustrating erection/assembly site(s), foundation and accommodation requirements for such items as drive motors, switch installations etc.

#### **A.4 Erection/Assembly, Commissioning and Performance Testing:**

The Supplier will provide the Services of Specialist Technicians (refer Part – C.3) and required manpower (skilled/semi-skilled/unskilled) to undertake the installation/erection/assembly, commissioning and performance testing of the Equipment and accessories supplied.



The technicians will remain at site following commissioning and train all necessary personnel to make them conversant with the maintenance and operation of the equipment.

Specialist Technicians are required to remain on the site following commissioning and train all necessary personnel to make them conversant with the maintenance and operation of the equipment. This activity may take more than a month. However the period of stay of Specialist Technicians may be restricted to 6 months from the date of commissioning.

## **A.5 Training:**

### **A.5.1 Compulsory Training**

The training shall be completed in batches within warranty period from the date of commissioning of the equipment in the respective project. The supplier in consultation with the project in-charge / HOD [Excavation] of the respective site shall make available experienced personnel to conduct training of engineers, supervisors, technicians and operation personnel for specified period as mentioned in table given in 'Schedule of Requirement of Services' from the date of issue of acceptance certificate of the equipment. The training shall cover the following:

- a) Training on simulator module by the bidder at their works/suitable location in India/suitable end user's location is mandatory.
- b) Equipment system, safety and risk assessment.
- c) Equipment operation and maintenance.
- d) Trouble shooting, localization of fault and their remedies covering:
  - 1. Electrical and electronics
  - 2. Mechanical
  - 3. Hydraulic system
  - 4. Lubrication system
  - 5. Pneumatic system etc.
- e) Training on maintenance of OEM bought out systems, e.g., engine, transmission, hydraulic aggregates / system, electrical drives system etc., by the manufacturer of the system.
- f) Training on Digital system of the equipment including OBD (on board display) and communication port data management, Health and productivity management system of the equipment.

Comprehensive training manuals with clear illustration shall be provided to each participant in English language. The training courses shall be conducted in both English and Hindi language.

Details of purchaser's estimates of the minimum training programme required for total fleet of equipment in a particular project is described in Schedule of Requirement.

### **A.5.2 Additional training within the contract period after completion of warranty period**

- (a) Supplier have given an undertaking in their bid to impart training to the CIL personnel at any time within the contract period after completion of warranty, in addition to the compulsory training as per provision of clause A.5.1.
- (b) The additional training will be as per requirement of the user and the scope of training will be same as per the compulsory training provision of clause A.5.1.
- (c) The training will be on chargeable basis and additional payment to the supplier will be made at same rate what individual supplier will be charged for compulsory training.



## **Part B**

### **Specific Site Requirements**

#### **B.1 Project Specific Requirements**

The equipment shall be suitable for use at the specific site projects under the conditions detailed below.

##### **B.1.1 GEVRA OCP, SECL**

The Gevra Opencast Project is owned by the South Eastern Coalfields Limited, a wholly owned subsidiary of Coal India Limited (the "Purchaser"). The mine is located partly in the Korba District of Chattisgarh. The nearest rail head is Gevra Road station on Champa – Gevra Road branch line of the South Eastern Railway Network.

##### **Geological Conditions**

Lateritic soil and sub soil, fine to coarse sandstone, sandy shale and carbonaceous shale.

##### **Water Supply**

Hasdeo river is the main source of water supply which is approximately 10 Km from mine site.

##### **B.1.2 DIPKA OCP, SECL**

The Dipka Opencast Project is owned by the South Eastern Coalfields Limited, a wholly owned subsidiary of Coal India Limited (the "Purchaser"). The mine is located partly in the Korba District of Chhattisgarh. The nearest rail head is Gevra Road station on Champa – Gevra Road branch line of the South Eastern Railway Network.

##### **Geological Conditions**

The area is covered with thick soil. The type of overburden is mainly shale and sand stone.

##### **Power Supply**

The Project will receive at 33 KV, and distributed at 6.6/3.3 KV.

##### **Mine Water Quality**

PH 7.6 to 8.4 .

##### **Water Supply**

Hasdeo river is the main source of water supply

##### **B.1.3 JAYANT OCP, NCL**

The Jayant Opencast Project is owned by the Northern Coalfields Limited, a wholly owned subsidiary of Coal India Limited (the "Purchaser"). The mine is located in the Singrauli District of Madhya Pradesh approximately 08 km from Singrauli railway station.

##### **Geological Conditions**

Soil, Sandstone and Shale.

##### **Power Supply**

One 132/33 kV Sub- station will be source of supply.

##### **Mine Water Quality**

PH 7.1;

Temp-28.5 degree Centigrade.

Total Suspended Solid 25(mg/ ltr)

Total Dissolved Solid 300 (mg/ ltr)

*AS*

*Amulya*

*Amulya*

*Vijesh Kumar*

*A. Sankar*

*AS*

*AS*



Dissolved Oxygen 6.4  
Biological Oxygen Demand 5  
Chemical Oxygen Demand 14; Fe- 0.12

**Water Supply**

Linked to the IWSS (integrated water supply scheme) of the Singrauli Coalfields.

**B.1.4 BINA-KAKRI Amalgation OCP, NCL**

The Bina Opencast Project is owned by the Northern Coalfields Limited, a wholly owned subsidiary of Coal India Limited (the "Purchaser"). The mine (Marrak Block) is located 10Km south-east of Singrauli (Morwa) town and is situated in Sonebhadra District of UP. The singrauli and near Krishnashila Railway station on Sograuli-Obra and Shaktinagar Karaila Rail links of East-Central Railway are located at a distance of 11Km North-West and 3Km east Of Bina OCP. The project is connected with all weather metalled road to Shaktinagar and Renukut.

**Geological Conditions**

A total of 6 series of formation have been recognised on broad lithic characteristics within the Gondwana rocks of Singrauli Coalfields. In ascending order they are: Talchir, Barakar, Barren Measure, RaniGanj, Panchet and Mahadeva. The Barakar & Raniganj are the main coal bearing formations of the area.

**B.1.5 DUDHICHUA OCP**

The Dudhichua Opencast Project is owned by the Northern Coalfields Limited, a wholly owned subsidiary of Coal India Limited (the "Purchaser"). The mine is located partly in the Sidhi District of Madhya Pradesh and partly in the Sonebhadra District of Uttar Pradesh approximately 14 km from Singrauli railway station.

**Geological Conditions**

Soil & Sub soil, Sandstone and Shale.

**Power Supply**

The Project will receive power at 132/33 kV through the Morwa Sub- station of the MPEB..

**Mine Water Quality**

PH 7.72

Total Suspended Solid 100(mg/ ltr)

**Water Supply**

Linked to the IWSS (integrated water supply scheme) of the Singrauli coal fields



## Part C

### **General Requirements**

#### **C.1 Geography and Climatic Conditions**

Elevation:-

The natural surface varies from 100 to 1000 m above mean sea level.

Climate:-

The climate of the coal mines, where the equipment will be deployed, is sub-tropical to tropical, dusty, with a hot and humid atmosphere. Monsoon rains occur in the period from June to October.

Ambient Conditions:-

Relative Humidity - Maximum 98%

Temperature - Minimum 0° C

Maximum 50° C

Rainfall:- The mean annual rainfall is 1,000mm – 1,200mm, 90 to 95 % of which may fall in rainy season from June to October.

Wind:- April to September - South to South Westerly

October to March - North Westerly

Speed:- - 8 km per hr average

- 100 km per hr maximum

#### **C.2 Goods (Equipment and Machinery)**

Detailed specifications of the Equipment to be supplied are given in **Part D** of this section.

In general, all items shall be:

- New, unused, of the current design [incorporating latest proven features] and not likely to be discontinued or become obsolete during the lifetime of the equipment.
- Designed and constructed to handle without overload and for the working hours stated, the maximum volumes/rates specified;
- Designed to facilitate ready access, cleaning, inspection, maintenance and repair of component parts;
- Designed to facilitate rapid changeover of consumable items.

The supplier shall ensure that suitable latest technology available worldwide as on date shall be adopted in the quoted model of equipment and shall not be discontinued during life time of equipment. However, in case, technical up-gradation is unavoidable the same may be adopted in the supplied model of equipment with due clearance of Head of Excavation department of Subsidiary Co. Supplier shall not seek any technical modification / up-gradation at the cost of buyer before completion of 05 years from the date of completion of guaranteed availability contract period of the equipment except, when any modification / up-gradation is required for compliance of any statutory guideline issued from regulatory body of Govt. of India, DGMS, State Authority etc.

*[Handwritten signatures and initials in blue ink]*



The component parts of all items shall, wherever possible, be selected from the standard ranges of reputable manufacturers.

The Equipment and accessories shall be physically robust and where necessary capable of dismantling for transportation and ready re-assembly using simple tools. All Equipment items provided shall be designed to be compatible within the proposed overall Scope of Supply.

Electrical Equipment shall provide all protection devices, controls and interfaces for the Equipment to operate safely and efficiently.

All workmanship and materials shall be of first class quality in every respect.

All parts and surfaces, which are exposed to corrosive environment, shall be suitably protected to prevent any effects of corrosion or erosion.

### **C.3 Services**

The supplier shall be responsible for the erection, testing and commissioning of the equipment at site for which the supplier shall depute qualified and competent Engineer(s) and specialist technicians.

### **C.4 Standards**

The design, supply, erection, testing and commissioning of all Equipment under this Contract shall in all respects comply with the requirement of this specification and with the appropriate current Indian standards and codes, or relevant Standards issued by the Indian/International Standards Organization or any other equivalent international standards, which corresponds to specific IS/ISO indicated in the technical specification. Such equivalent international standards are to be supported by documentary evidence certifying that offered standards are identical to the corresponding IS/ISO.

The equipment shall comply with requirements of the statutory government authorities, including Director General of Mines Safety (DGMS) having jurisdiction over the equipment and its use.

The system of units for all measurements shall be the Système International (d'unités) (S.I.)

### **C.5 Suppliers Responsibility**

The Purchaser requires that the Supplier shall accept responsibility for the provision of complete operable and compatible Equipment and systems within the Scope of Supply. This document identifies only the major items required for the installation and the Supplier shall ensure that the total supply includes all necessary Equipment for it to function effectively, safely and efficiently. Any additional items the Supplier considers necessary to ensure compliance with such a requirement shall be identified and included.

If the Supplier observes that this Specification document contains any anomalies, ambiguities, flaws, errors or omissions, the Supplier shall immediately bring these to the attention of the Purchaser in the Pre-Bid Conference.

The Supplier shall be responsible for the erection, testing and commissioning of the Equipment and ensure that it meets the requirements as specified. The commissioning and setting to work of the whole Equipment Supply package shall be carried out by the Supplier in conjunction with the Purchaser's nominated personnel.

### **C.6 Spare Parts Provisions**

#### **C.6.1.a. Availability of Spare Parts**



All items and Equipment proposed shall be of current design and manufacture. The Supplier shall warrant that sufficient spares and servicing facilities will be available to maintain the Equipment in use throughout its life.

#### **C.6.1.b Bought-out assemblies and sub-assemblies**

**Detail are given in Annexure – 6(b)**

#### **C.6.2 Provision of Spare Parts**

C.6.2.1 Within the Contract Price, the Purchaser shall agree to purchase all Operational, maintenance and standby/contingency spare parts, consumable items, wear materials, maintenance tools and special tools (hereinafter collectively referred to as "Spare Parts", unless the context requires otherwise) in accordance with the Supplier's recommendations for 06 years from the date of issue of the Commissioning Certificate. Similarly, within the Contract Price, the Purchaser shall also agree to purchase consumable items (hereinafter referred to as "Consumables") in accordance with the Supplier's recommendations for 06 years from the date of issue of the Commissioning Certificate. The schedule of supply of spares and consumables shall be as indicated in Schedule of Requirement. In addition, the Supplier shall provide Spare Parts and Consumables for Commissioning.

Consumables shall include items such as oils, lubricants and fluids.

The supplier shall submit a separate schedule showing consumable spares and consumables proposed to be supplied by them in the 1<sup>st</sup> (twelve) months period for each equipment from the date of commissioning of equipment as per 'Schedule of Requirement' to comply with the provisions herein contained.

Management and storage of spares and consumables from 2<sup>nd</sup> year of operation from the date of commissioning onwards (i.e. after completion of warranty period) till completion of contract period will be under the scope of the supplier. The Spares Cost Cap shall be project-wise wise for dozers. The modalities of operation of Spares Cost cap model shall be as follows:

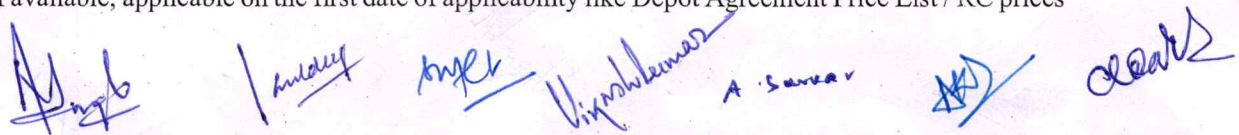
- i) Reconditioned/Repaired/Refurbished spares/assemblies/sub-assemblies will not be supplied under Spares Cost Cap.

However, only Major Assemblies can be repaired and reused/ or kept as float for use in other machines. Repair will be done based on joint inspection of the User & Supplier. The list of major assemblies which can be repaired and reused are as follows:

- a) Engine Assembly
- b) Transmission
- c) Torque-Converter
- d) Final Drive
- e) Blade Assembly
- f) Under Carriage

- ii) The Spares Cost Cap shall be in Indian Rupees (INR) only and exclusive of estimated GST. Estimated GST shall also be indicated separately. The Spare Parts Stores/facility to be operated by the Supplier shall be GST registered storage facility or else the supplier will have to get the Stores/facility registered with GST authorities at least before commencement of Spares Cost Cap in the 2<sup>nd</sup> year of operation of the first equipment commissioned.

- iii) The supplier shall submit the comprehensive Price List at least 6 months prior to the 2<sup>nd</sup> year of operation of the first equipment commissioned (in hard copy duly signed as well as in soft copy), covering all the spares and consumables and assemblies / sub-assemblies etc. required during lifetime of the equipment to CIL. CIL will examine the same with respect to any other Price List, if available, applicable on the first date of applicability like Depot Agreement Price List / RC prices





etc. and after its approval, circulate the approved Price List to the concerned subsidiary HQ and mines/projects. This list may be different from the Depot Agreement price list to the extent that the Price List under Spares Cost Cap will be comprehensive one including all bought out items, oils and lubricants etc. whereas the Depot Agreement Price List normally excludes these items. The approved Price List will be valid at least for a period of one year from its applicable date. If any item appears in this Price List as well as in the Depot Agreement Price List / RC price list / any other approved Price List of the same firm for other equipment, the lowest price will be applicable against all such lists. The time period for such circulation of approved Price List shall be about 3 months prior to the 2<sup>nd</sup> year of operation of the first equipment commissioned. In case of delay in circulation of the approved Price List, the Supplier may continue to supply the items as per the Price List submitted to CIL but these provisional rates will be regularized subsequently when the approved Price List is circulated by CIL.

- iv) For subsequent years during the contract period, the supplier may continue with the same approved Price List or submit the next Price List (in hard copy duly signed as well as in soft copy) which may include items with alternate part nos., if any. However, no new item shall be included. If a new Price List is submitted, it should be submitted at least 6 months prior to the applicable year of operation of the first equipment commissioned to CIL along with the statement of increase / decrease in item-wise prices from the previous approved price list with proper justification for increase in prices. CIL shall examine the same especially in relation to the increase with the previous year etc. and after its approval, circulate the approved Price List to the concerned subsidiary HQ and mines/projects. The time period for circulation of approved Price List shall be approximately within 3 months after receipt of the new Price List. In case of delay in circulation of the approved Price List, the Supplier may continue to supply the items as per the previous approved Price List in operation but these provisional rates will be regularized subsequently when the approved Price List is circulated by CIL.

Further, if for the compliance of any statutory, regulatory or environmental regulation or guidelines from DGMS or other institutions / GOI, the new parts for compliance of such regulations may be included in the price list with documentary evidence related to implementation of such guidelines. Otherwise, no items will be included.

- v) For items, which are not covered in the approved Price List(s), but need to be supplied, the supplier shall supply the same free of cost during the complete period of contract.
- vi) The Supplier will assess the requirement of spares and consumables for the particular year of operation and submit the list of spares and consumables including quantity to the Excavation Engineer In-Charge of the Mine/Project, 3 months in advance of the respective year of operation. The Excavation Engineer In-Charge, after verifying that the same is in order, shall send the same to the Excavation Engineer In-Charge of the Area. The Area, shall proceed to place an Open Provisional Purchase Order, based on the prices as per available Price List, through the Area Purchase Cell on the Supplier within the Spares Cost Cap Value of the particular year. For placing the Open Provisional Purchase Order by the Area Purchase Cell, no formal approval is required. If any item is not appearing in the Price List, it will be supplied on FOC basis.
- vii) Once the Open Provisional Purchase Order is placed by the concerned Area Purchase Cell, it is the responsibility of the Supplier to ensure that these spares and consumables are made available to the mine / project as and when required.
- viii) Fortnightly Inspection Report(s) regarding the health of the equipment including all safety features etc. will be prepared jointly by the Supplier and the Excavation Engineer-In-Charge of the Mine/Project for short term and long term planning for requirement of spares and consumables and these joint Inspection Reports will be the basis for assessment and confirmation of requirement of spares and consumables under Spares Cost Cap.



- ix) Based on the requirement generated as per the fortnightly Inspection Report(s), the Area Excavation Engineer-in-Charge will send to the Area Purchase Cell, the complete details of those spares and consumables against the Open Provisional Purchase Order, which are required for the month/quarter depending on the nature of equipment. The Area Purchase Cell shall thereafter proceed to place Formal Order on the Supplier within 10 days with the concurrence of Area Finance and approval of Area GM. In case the items are not covered in the Open Provisional Purchase Order but the prices are indicated in the approved Price List, the same may also be taken into consideration as long as the limit for Spares Cost Cap is not exceeded. The delivery of the spares and consumables to the Regional/Area Stores shall be made thereafter within 15 days. The materials shall be routed through Regional/Area Stores of the concerned Area (not unit stores / charged off stores). The procedure for acceptance of materials, lifting of materials from Stores, use in the machine and payment to be made shall be as follows:
- a) The supplier will supply the requisitioned spares and consumables along with copies of GST Invoices, delivery challans etc. to the Consignee duly indicating part no. description, quantity etc.
  - b) The Regional/Area Stores will enter the receipt of the items in the concerned register and arrange for inspection of the items by the concerned Area Engineer(s) or his authorized representative(s). On acceptance of the material, the Stores Receipt Voucher (SRV) will be raised by the Regional/Area Stores. The materials will then be moved from the Receipt Section to the Issue Section.
  - c) Based on requisition from the concerned Mine/Project Engineer(s), the Regional/Area Stores will issue the materials and complete the paper formalities for issue of the items.
  - d) Once the materials have been issued, the concerned Mine/Project shall keep record of the same when the material is used on the machine. All concerned details shall be recorded in a register (which may be in electronic form) to be maintained by the Excavation Engineer In-charge of the Mine/Project.
  - e) The Regional/Area Stores after issuance of SRV, shall send a copy of the SRV and other related documents like invoices, guarantee/warranty certificate etc. to the Area Finance dept. for payment purposes. A copy of the same will also be sent to the concerned Area Excavation Dept. for maintaining the records in respect of Spares Cost Cap value.
  - f) The Finance dept. at the Area will then verify the documents and thereafter send the same to the Paying Authority of the concerned subsidiary for payment. Once the payment is made, the Excavation dept. at the subsidiary / area / mine /project will be informed so that the equivalent amount may be reduced from Spares Cost Cap value for the particular year.
  - x) The unutilized Spares Cost Cap value for each year will be carried forward to the subsequent year till completion of contract. However, the unutilized value of Spares Cost Cap, if any, at the end of the contract, will lapse.
  - xi) In case of total value of spares and consumables for a particular year exceeding the Spares Cost Cap of a particular year, the additional spares and consumables shall have to be supplied on FOC basis. The procedure for accounting and maintenance of records to be followed for FOC supplies will also be the same as above.
  - xii) The supplier shall stock & maintain sufficient inventory of spares and consumables, required for all kinds of maintenance and repairs of equipment during complete contract period.
  - xiii) The payment during the relevant year of operation shall be made as per the prevailing approved price list for Spares Cost Cap only. The payment by the Paying Authority of the concerned subsidiary shall be made within 21 days of receipt and acceptance of materials at Regional/Area Stores and after receipt of documents stipulated in the SCC.



xiv) Statement of consumption of spares and consumables with quantity and value for each month of the respective year of the Spares Cost Cap, shall be signed by the Mine/Project Excavation Engineer-In-Charge and the concerned representative of the Supplier. It shall be maintained by the Mine/Project and a copy of the same shall be sent to Excavation Engineer-In-Charge of the Area and Subsidiary HQ. The annual report of the consumption shall be maintained by the Excavation Engineer-In-charge of the Subsidiary HQ.

C.6.2.2 In the event that the spare parts and consumables, as recommended by the Supplier, in any way fall short of actual requirements during the period for which they are said to be adequate, the supplier shall provide such additional spare parts and consumables as are necessary at the final destination. Such additional spare parts and consumables shall be provided by the Supplier to the Purchaser beyond the Spares Cost Cap value free of all cost and shall be transported to Site by air freight internationally and by air, rail or fast road transport within India.

C.6.2.3 In the event that the spare parts, Insurance items and consumables, as recommended by the Supplier, are in excess of actual requirements, the Purchaser will require the Supplier to repossess or repatriate or otherwise dispose of such excess spare parts and consumables in exchange for payment to the Purchaser of the Contract landed Price (with taxes and duties) of the spare parts and Consumables concerned.

The Purchaser shall notify the Supplier, in writing of its requirements under this Clause within thirty (30) days of completion of the contract period referred to in Clause C.6.2.1 hereof.

C.6.2.4. In the event that operation of the equipment is inhibited or frustrated as a direct result of lack of spare parts and consumables, pursuant to Clause C.6.2.2 hereof, then the period referred to in Clause C.6.2.1 hereof shall be extended by a period of not less than the period during which operation as aforesaid was inhibited or frustrated.

C.6.2.5. The supplier shall not be liable for the supply of additional spare parts and consumables, nor to extend the period referred to in Clause C.6.2.1 hereof, if and to the extent that, additional Spare Parts and Consumables are required by reason of unforeseen accidents, negligence or misuse on the part of the Purchaser or actual working hour exceeds the total expected hours as mentioned in clause C.6.2.6.

C.6.2.6 The assessment of the Supplier of the spare parts requirements shall be based upon the expected working hours per year as defined in the individual Equipment Specifications included in the Technical Specifications.

In accordance with the provisions of clause D.7, Part - D of the technical specifications the expected working hours per annum from 1<sup>st</sup> year to 3<sup>rd</sup> year are 5000 (five thousand) hours and from 4<sup>th</sup> year to 6<sup>th</sup> year are 4500 (four thousand five hundred) hours for 850HP Crawler Dozer. The expected average working hours per annum as indicated are only approximate hours and may vary  $\pm$  500 hours.

Total duration of contract will be 6 years for Crawler Dozers irrespective of working hours.

In case, actual average working hours of the fleet of the project exceeds  $31,500 [(5500 \times 3) + (5000 \times 3)] = 31,500$  hours during the tenure of 6 years (72 months) of contract period, then spares and consumables items, if additionally required and agreed by the purchaser, will be procured by the Purchaser from the Supplier.

### C.6.3. Emergency Spare Parts

C.6.3.1. Emergency spare parts required by the Purchaser to repair breakdowns shall be dispatched to the site by the Supplier by the fastest, practicable means as directed from time to time by the Purchaser.

C.6.3.2. For the purpose of Clause C.6.2.6, "Emergency Spare Parts" shall mean those spare parts or components required by the Purchaser to repair any item of Equipment supplied pursuant to the Contract in the event of a breakdown not attributable to a failure covered by guarantee or a failure of the Supplier to provide adequate Spare Parts or Consumables.



C.6.3.3 Payment in respect of the supply and delivery of such Emergency Spare Parts shall be made promptly, retrospectively, by the Purchaser, in a manner consistent with the terms of payment described in the contract.

#### C.6.3.4 Lifetime Spare Parts

The Supplier undertakes and guarantees to produce and maintain stocks, to be available for purchase by the Purchaser under separate agreement, of all Spare Parts and Consumables as may be required for maintenance and repair of the Equipment throughout its working life. In the event that the Supplier wishes to terminate production of such Spare Parts, the Supplier shall:

- (a) give not less than six months' notice in writing of its intention to terminate production in order to permit the Purchaser reasonable time in which to procure needed requirements; and
- (b) immediately following termination, provide to the Purchaser at no cost, manufacturing drawings, material specifications and all necessary permissions to facilitate manufacture of the Spare Parts elsewhere.
- (c) any change in part number or superseded part number should be informed to the HOD of Excavation department / MM department of subsidiary hqrs. and the project site wherever the equipment is operating.

In any event, the Supplier shall not seek to terminate manufacture of spare parts for a period of not less than 15 (fifteen) years from taking over or the life time of the equipment whichever is later.

#### C.6.4 Oils, Lubricants and Fluids

The detailed schedule of all necessary oils, lubricants, fluids for the operation and maintenance of Equipment are given in Annexure - 6(c).

First Fill of OEM recommended Oil and Greases or its equivalent available in India is to be supplied by the Supplier at their cost.

#### C.6.5 General

C.6.5.1 Nothing in this Clause C.6 shall relieve the Supplier of any Guarantee, Availability, Performance or other obligations or liabilities under this Contract.

#### C 7 Guaranteed Availability Provisions:

Equipment	Minimum Annual Guaranteed Percentage Availability	
	1 <sup>st</sup> to 4 <sup>th</sup> year	5 <sup>th</sup> to 6 <sup>th</sup> year
Caterpillar Make, Model- CAT D11, Crawler Mounted Dozer (with Ripper attachment) Engine Net Power 850 HP (634 KW) @ 1800rpm	80%	79%

#### C.7.1 Introduction

C.7.1.1 The Supplier shall guarantee that the Equipment supplied pursuant to this Contract shall be available for use by the Purchaser and shall meet the performance criteria specifications at the level and in accordance with the terms and conditions of the Availability Guarantee herein contained.

C.7.1.2 Where Equipment supplied under the Contract fails to meet the criteria of the Availability Guarantee, the Supplier shall, at its own cost, provide suitably qualified and experienced personnel



at Site to demonstrate to the Purchaser's satisfaction that the required level of availability can be achieved and maintained.

**C.7.1.3** The Supplier shall provide the Services of such personnel at Site within seven (7) days of notification by the Purchaser that the availability criteria have not been met in any one (1) month.

## **C.7.2 Guarantee**

**C.7.2.1** The Supplier shall guarantee that the Equipment supplied pursuant to the Contract shall be available to the Purchaser at the level hereinafter defined to perform to criteria of not less than that defined in the Technical Specifications incorporated in the Contract.

**C.7.2.2** The Supplier shall guarantee that the Equipment shall be available to perform its duty to minimum criteria and to the minimum availability percentage level as defined in the individual Equipment specifications included in the Technical Specifications.

The method of assessment applied shall be as follows:

Method of Assessment:

The following calculation shall determine the availability of the Equipment:

$$\% \text{ Availability} = \frac{\text{Scheduled Available Time} - \text{Downtime}}{\text{Scheduled Available Time}} \times 100$$

Scheduled Available Time shall equate to 24 hours daily.

Downtime:-

Downtime shall mean all hours of work lost due to mechanical, electrical or other failure, including:

- a) Routine servicing and maintenance in accordance with the manufacturer's published recommendations, including :

Changing oils, oil filters and air filters; lubrication; changing identified consumable or wear parts.

- b) Planned preventative maintenance programs;

It shall not however include:

- I. Damage due to abusive use or incorrect operation methods by the purchaser;
- II. Accidents;
- III. Strikes or stoppage of work by the Purchaser's personnel;
- IV. Natural disaster;
- v. Lack of Spare Parts not attributable to a failure of the Supplier.

**Note – For (I) & (II), a joint inspection report will be prepared with supplier within 3 days from the date of occurrence of incident and repairing works will be done in consultation with supplier.**

Downtime shall also specifically include all hours lost due to failures determined to be guarantee failures.

The Supplier shall provide a schedule of maintenance required to carry out (a) and (b) above for the contract period of operation and shall state the number of hours required to carry out each



maintenance task. The time stated shall, with the agreement of the Purchaser, form the basis of the assessment of the availability.

This schedule of tasks and time will be reviewed periodically by the Purchaser and the Supplier, jointly, to monitor the practicality of the schedule.

The Purchaser will assist the Supplier, without relieving the Supplier of any other obligations under the Contract, to achieve the guaranteed availability by:

1. Providing normal and proper maintenance, including preventative maintenance in accordance with the Supplier's standard/published recommendations, and making all necessary repairs using only spare parts provided by the Supplier in accordance with the requirements specified in part C6.
2. Providing co-operation to all Suppliers' authorized representatives, complying with all reasonable procedural suggestions to improve efficiency of machine operation or reduce downtime.
3. Where appropriate, providing and maintaining such conditions as:
  - Proper Electrical Supply
  - Terrain Area
  - Bench Preparation
  - Reasonable Floor Conditions
4. Providing all Suppliers' authorized representatives access at all reasonable times to the machine service and repair facilities.
5. Maintaining a logbook for each shift wherein the working hours, breakdown hours, maintenance hours, idle hours, etc. shall be recorded. This record will be available for examination and signature by the Supplier's representative.

Any downtime on Purchaser's account shall not be considered for availability calculation.

Any substantial delay in providing Manpower/ Crane from buyer's side will be recorded jointly for calculation purpose.

Hindrance register has to be maintained in this regard. Hindrance register format is provided in the Contract. Monthly status to be intimated to the GM (Excv) of the subsidiary for monitoring purpose.

### **C.7.3 Effect and Duration of Guarantee**

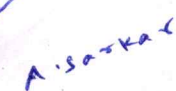
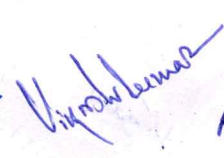
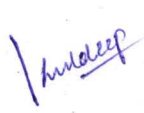
**C.7.3.1** This Guarantee shall become effective on the day on which the Equipment is commissioned at the Site. Commissioning shall be evidenced by the issue of the Purchaser's Acceptance Certificate.

**C.7.3.2** This guarantee shall remain effective for the entire contract period from the date of commissioning irrespective of the hours operated by the Equipment during the period of the guarantee.

### **C.7.3.3 Compensation for not achieving Guaranteed Availability**

In the event that Equipment fails to achieve the Availability herein provided, measured over each twelve (12) month period, the Supplier shall be liable for and pay to the Purchaser, as liquidated damages, a sum equal to as indicated hereunder for each equipment against the PBG/ extended SDBG / bills submitted by the bidder as per clause-2 of SCC

- a. 1% of the delivered landed price of the equipment including the Spares Cost Cap for the year in which the machine could not achieve guaranteed availability for reduction in every percentage or part thereof from the Guaranteed Availability for the first 5%.





- b. 10% of the delivered landed price of the equipment including the Spares Cost Cap for the year in which the machine could not achieve guaranteed availability for reduction beyond 5% from the guaranteed availability.

**Note:** Whenever deductions for unsatisfactory performance of equipment are made within the tenure of the PBG/extended SDBG/amount held back as PBG, the amount deducted, from the PBG/extended SDBG/amount held back as PBG, should be replenished within a month in order to ensure that the original value, of the PBG/extended SDBG/amount held back as PBG, remains the same.

#### **C.8 Deemed Breakdown**

When the supplier is unable to supply the replacement of a failed part during the contract period, and if the machine is commissioned by using the spares from the stock of the project, the period after 21 days till the supplier replaces the part shall be treated as 'deemed breakdown' (the credit for keeping machine available shall not be given to the supplier.)

The supplier shall not in any way be allowed to take out spare parts from other equipment, which are under breakdown and covered within the scope of this contract. However, CIL, in the interest of work, reserves the right to advise the supplier to commission the breakdown equipment covered under this contract by taking out spare parts from other breakdown equipment. Nevertheless, during this period also, the equipment shall be treated as 'deemed breakdown' till the supplier replaces the spare parts.

#### **C.9 Composite-warranty/guarantee**

The supplier shall warrant that the equipment supplied under this contract is:

- a) In accordance with the contract specifications.
- b) The equipment shall have no defects arising out of design, material or workmanship & the complete equipment shall be warranted for 12 months from the date of commissioning. Any defect arising observed on this account will have to be attended immediately.
- c) The supplier must ensure that there is no major breakdown due to manufacturing / design defects during the warranty period. In case such breakdown occurs, the purchaser reserves the right to extend the warranty period suitably.

The warranty shall cover for total equipment so that comprehensive responsibility lies only with the equipment supplier although components may be supplied by different suppliers to the bidder.

#### **C.10 Quality Assurance**

C.10.1 The Supplier should furnish in detail its quality assurance plan for various stages of manufacture. The quality assurance plan shall be of the manufacturing plant where the bidder proposes to manufacture the equipment. The Quality Assurance plan shall comply with an internationally recognized quality assurance standard such as ISO 9000:2015 or its equivalent.

C.10.2 The Supplier shall provide facilities to Purchaser or their authorized representatives for progress inspection during manufacture at his works and furnish all test data available in this regard for quality control, both for bought-out items and his own manufactured items.

C.10.3 The Purchaser or its authorized representative, when so required by him, shall also be provided with samples of "bought-out" materials for the purposes of undertaking independent tests, which independent tests shall be at the expense of the Purchaser.

**Details are given in Annexure- 6(d)**



## Part D – EQUIPMENT SPECIFICATIONS

### **Equipment Specification of a Crawler mounted 850 HP Dozer with Ripper Attachment (ENGINE NET POWER 850 HP (634 KW) @ L800 RPM) MAKE - CATERPILLAR, MODEL – D11**

#### **D.1 Scope of Specification:**

This specification is intended to cover the technical requirements for the design, manufacture, testing, delivery, on-site erection and commissioning of a self-propelled, Crawler mounted 850 HP dozer with Ripper Attachment, Make- Caterpillar, Model- D11 [Engine Net Power Range 850 HP (634KW) @ 1800 rpm].

#### **D.2 References:**

The following Indian/International Standards as per latest amendment are referred to in, and form part of, the Specification. The superseded or equivalent standards, if any, to any of the following IS/ISO standards if offered are to be supported by documentary evidence in form of copies of the equivalent standards certifying that offered standards are identical to the corresponding IS/ISO standards of NIT.

IS/ISO Ref.	Description
IS/ISO 2867	Earth-moving machinery - Access System
IS/ISO 3449	Earth-moving machinery - Falling-object protective structures - Laboratory tests and performance requirements.
IS/ISO 3457	Earth-moving machinery - Guards and shields - Definitions and Specifications
IS/ISO 3471	Earth-moving machinery - Roll-over protective structures - laboratory tests and performance requirements
IS/ISO 6014	Earth-moving machinery - Determination of ground speed
IS/ISO 6405 : Part 1	Earth-moving machinery - Symbols for operator controls and other displays - Part I : Common symbols
IS/ISO 6405 : Part 2	Earth-moving machinery - Symbols for operator controls and other displays - Part II : Specific symbols for machines equipment and accessories
IS/ISO 6747	Earth-moving machinery, Tractors – Dozers, Terminology and commercial specifications
ISO 50 : Part 1	Earth-moving machinery – Operation and maintenance –Contents & Formats
ISO 750-2	Earth-moving machinery – Operation and maintenance – Operator's Manual-Part 2. List of references
ISO 7095	Earth-moving machinery - Crawler tractors and crawler loaders - Operator's controls
ISO 7129	Earth-moving machinery - Tractors with dozer, grader, tractor scrapers - Cutting edges - Principal shapes and basic dimensions
ISO 7464	Earth-moving machinery - Method of test for the measurement of drawbar pull
IS 12645/ISO 9246	Earth-moving machinery - Crawler and wheel tractor dozer blades - Volumetric ratings
IS/ISO 9249	Earth-moving machinery - Engine test code - Net power
Other IS/ISO standards mentioned in the specification of individual system of the equipment	

#### **D.3 Design Criteria:**

The dozer shall be capable of continuous operation for protracted periods on a system of 3 shifts each of 8 hours duration per day throughout the year in hard, highly abrasive blasted sandstone/ rock having average density after blasting of 1800kg/m<sup>3</sup>.



The dozer shall have the following minimum range of drawbar pull, measured according to ISO 7464:

- a. 350 kN to 700 kN at 1 km/h speed
- b. 390 kN to 880 kN at zero speed

#### D.4 Technical Requirements:

##### D.4.1 Engine:

The dozer shall be powered by a Caterpillar make, Model - C32 ACERT direct injection 4-stroke turbo charged diesel engine of net power ranging from **850 HP (634 KW) @ 1800 rpm** according to IS/ISO 9249.

The engine shall be provided with 24V electric starting, dry type 2-stage air cleaner with dust evacuator and dust level indicator and 2-stage fuel filter with water separator.

The engine shall have a water jacket cooling system, thermo-statically controlled, using an engine driven water pump, with the cooling water re-circulated through a heavy-duty radiator. The system shall be capable of providing sufficient cooling to allow the dozer to continuously operate at full rated output at the maximum ambient temperature. The radiator cap shall be fastened with body with the help of suitable chain/locking arrangement.

The moving parts of the engine shall be lubricated by an engine driven oil pump with full flow oil filtration and cooling.

The engine shall be provided with a heavy-duty pan guard / suitable protection as per manufacturer design.

The engine is to be fuel efficient having fully integrated electronically controlled monitoring system & real-time self-diagnostic features with built in protections. The Engine electronic control module should be fully integrated with all systems of power train for all operating conditions and be capable to monitor operator's and sensors inputs for optimum engine performance & reduced emissions level. All engine vital parameter data shall be integrated with On Board Display (OBD) system of operator's cabin.

The engine shall be environment friendly with minimum BS IV / EPA Tier-II or equivalent / higher standard certified. However, if any Engine emission norms higher than BS IV / EPA Tier-II are applicable as per regulations at the time of last date of bid submission, the same shall be considered. Certificate for EPA Tier II emissions standards from engine manufacturer is enclosed as **Annexure – 6(e)**.

A suitable electronic tool (laptop) loaded with compatible software and all related accessories shall be provided project wise **(1 no. laptop for a fleet of 5 nos. or part thereof)** along with special tools for retrieval and analysis of the recorded critical parameters of self-diagnostic features, real time monitoring and equipment health-monitoring systems fitted with the equipment. Readable reports downloaded from each equipment will be provided.

Compatible Software loaded in electronic tool (Laptop) should be warranted for entire contract period or more.

##### Note:

- (i) *The laptop along with software is within the scope of supply. Hence, it will be the property of purchaser after acceptance of the equipment.*
- (ii) *In case of any hardware problem of the laptop during the contract period, the supplier shall have to replace the same at free of cost along with the software.*



#### **D.4.2 Drive System:**

Power transmission from the engine to the crawler drive sprocket is through conventional means i.e. torque flow transmission, differential, final drive, steering and brakes. A dynamically balance propel shaft with universal joints at both ends should be utilized for transmission of power. Adequate means should be provided to prevent damage to other components in the event of failure of universal joints.

**Details are given in Annexure – 6(f)**

**Conventional Drive System:** Following are provided in the offered equipment:

#### **D.4.3 Transmission:**

Equipment is fitted with Caterpillar make torque-flow transmission consisting of single stage torque converter (Stator Clutch Torque Divider), planetary gear drives and hydraulically operated multiple disc type clutches equipped with suitable valves for developing 3 forward speed and 3 reverse speed.

Heavy-duty removable belly guard is designed such that it does not allow accumulation of dirt.

#### **D.4.4 Differential:**

Equipment is fitted with Caterpillar make Planetary Model, heavy-duty differential with high quality spiral bevel gear and pinions.

#### **D.4.5 Final Drive:**

Equipment is fitted with Double reduction Planetary Gear system from differential to drive axle.

#### **D.4.6 Steering:**

Independent track steering by means of hydraulically actuated oil cooled multiple disc Steering Clutches and Spring Applied, Hydraulically Released Multiple wet Disc Brakes are provided. These are held in engagement by springs and disengaged hydraulically.

#### **D.4.7 Hoses:**

The offered equipment is fitted with Fire resistant/ fire retarder hydraulic hoses in place of ordinary hoses to decrease the chance of fire. All the sleeves and conduits in which cable/wire are laid shall be of fire resistant /fire retarder type.

#### **D.4.8 Alternative Drive System:**

In the case of any other alternative type of drive, the system must be clearly defined and illustrated. The advantages and disadvantages compared with a conventional system must be adequately described to allow proper evaluation.

#### **D.4.9 Undercarriage:**

The undercarriage shall be heavy duty rugged designed suitably, suspended with oscillating type equalizer bar and pivot shaft to reduce shock loads transmitted to the dozer. Track frames and load rollers shall be of sufficient strength to withstand the high loads, which may occur due to uneven ground conditions. They are welded construction and stress relieved as required. The sprocket is segmented bolt-on type. Lifetime lubricated idler and rollers, and a reliable track tensioning arrangement are provided. Extreme service single grouser shoes of 710 mm width is provided.

#### **D.4.10 Dozer Attachment:**

The Dozer shall be fitted with hydraulically controlled Semi –U tilt dozer attachment. The dozer blade is heavy-duty type with steel wear plates and heavy-duty end bits. Heavy duty hardened steel wear resistant cutting edges, which comply with ISO 7129 is provided.



#### **D.4.11 Fuel tank:**

The fuel tank has sufficient capacity for 16 hours operation without refuelling, and is provided with a level indicator and a lockable-hinged cap. Construction of the tank is such that it provides for easy accumulation and drainage of water with minimum loss of fuel. Fuel Tank is provided with Fast Fill System also.

#### **D.4.12 Operator's Station:**

A suitable Operator's Station is provided on the equipment as per Gazette notification issued by Chief Inspector of Mines vide F.No. Z-20045/01/2018/S&T (HQ) Dhanbad, the 1<sup>st</sup> October, 2018 with subsequent amendments.

##### **D.4.12.1 Operator's Cabin:**

A fully insulated, high-visibility, rigidly mounted, sound-suppressed, vibration-suppressed, air conditioned, operator's cab with tinted safety glass should be so positioned to facilitate a clear and unrestricted view of the travel & work areas of the machine necessary for its intended use. The performance criteria shall be in accordance with IS/ISO 5006. The sound level inside the cab shall be below 85 dB while the equipment is operating, and with the door closed. All operating controls, all monitoring, working signals and emergency switch to stop the engine should be conveniently located in consoles within easy reach of the operator and shall comply with IS/ISO 6405 Part-1, IS/ISO 6405 Part-2, IS 11252/ISO 6682 & IS/ISO 10968. The operator's cab is provided with an emergency exit in addition to primary access path to the cabin.

**Alternative opening (Emergency Exit):** An alternative opening is provided on a side other than that of the primary opening. A window panel or another door is acceptable if they are easy to open or remove without the use of keys or tools. Latches may be used if they can be opened from the inside without the use of keys or tools. The breaking of a suitable size of glass pane is considered to represent a suitable alternative opening, provided that the necessary pane hammer, immediately accessible to the operator, is provided and stored in the cab. When the window panel is used as an emergency exit, it bears an appropriate marking.

Doors, Windows and flaps are securely held in their intended operating positions. Doors are retained at their intended operating positions by a positive engagement device. The front window is fitted with motorized wind screen wipers and washers. The tank of the window washers are easily accessible.

Pipes and hoses that contain fluids at pressures exceeding 5MPa or temperatures above 60°C located inside the cab shall be suitably guarded.

##### **D.4.12.2 Operator's Protective Structures:**

Dozer is equipped with a roll-over protective structure (ROPS). The ROPS complies with IS/ISO 3471. Further, it is fitted with FOPS, when they are intended for applications where there is a risk of falling objects. The fitted FOPS is in accordance with IS/ISO 3449.

##### **D.4.12.3 Operator's Seats:**

The Operator's Station is fitted with an ergonomically designed adjustable seat that supports the operator in a position that allows the operator to control the machine under the intended operating conditions. The seat and its suspension are so designed to reduce vibration transmitted to the operator to the lowest level that can be reasonably achieved.

Seat Belt for operator with reminder shall be provided as per DGMS circular no. DGMS (Tech) Circular No. 06 of 2020 Dhanbad dated 27.02.2020 with subsequent amendments.

##### **D.4.12.4 Operator's Controls and Indicators:**

The controls have suitable design and construction and arranged so that they are able to be operated with ease from the operator's seat and within the operator's force limits. Controls are laid out and designed to allow easy and safe operation based on the principle that a given direction of movement of any control produces a



consistent and expected effect. The surfaces of frequently used pedals shall be fitted with skid resistant type materials.

Controls that can cause a hazard due to inadvertent activation shall be so arranged, deactivated or guarded as to minimize the risk — particularly while the operator is getting into or out of the operator's station. The deactivation device are either be self-acting or act by compulsory actuation of the relevant device.

A device/system is provided to release the residual pressure in each hydraulic and pneumatic circuits which can cause a risk.

#### **D.4.12.5 Starting and Stopping System:**

Dozer is equipped with a starting and stopping device (e.g. key). The starting system has provision for protection against unauthorized use. The starting and Stopping system are designed such that movement of the machine, is not possible, while starting or stopping the engine, without activating the controls. (E.g. Transmission Neutral-Engine Start safety arrangement.)

#### **D.4.13 Gauges and indicators/ Electronic Display:**

The following are provided:

- a. Water temperature gauge
- b. Engine oil pressure gauge / indicator
- c. Fuel capacity gauge
- d. Engine tachometer
- e. Engine hour-meter

#### **D.4.14 Warning Alarms / Lights/Indicator:**

The following warning alarms are provided:

- a. Coolant level and temperature
- b. Engine oil pressure
- c. Converter oil temperature
- d. Front warning horn
- e. Reversing –DGMS complied Audio Visual Alarm.
- f. Warning alarms in case of failure of automatic lubrication system.

#### **D.4.15 Engine Electrical System:**

The dozer is provided with the following:

- a. 24V DC electrical system with suitable rated alternator of Caterpillar make
- b. 24 V Electrical starter motor of Caterpillar make
- c. High capacity maintenance free batteries of Caterpillar make.
- d. Battery isolation switch / Relay

#### **D.4.16 Lighting:**

Adequate lighting is provided for safe nightshift operation. The lighting system includes the following:

- a. 4 nos. LED headlights
- b. 2 nos. rear working LED lights
- c. 4 nos. ROPS mounted working lights (2-front and 2-rear)
- d. Cabin dome light

Headlights and rear working lights are identical in type and size and fitted in steel protective enclosures.

#### **D.4.17 Guards and shields:**

Adequate guards and shields, which comply with IS/ISO 3457, are provided throughout the dozer.



#### **D.4.18 Automatic Fire Detection and Suppression System (AFDSS):**

An automatic fire detection and suppression system manufactured in India by Southern Electronics/ Automation Control/ Ansul (Maco) will be provided on the equipment complying DGMS (Tech) Circular No. 06 of 2020 dated 27.02.2020 with subsequent amendments.

- Automatic fire detection and suppression system suitable for fire class A, B & C will be provided in the fire prone zone of the dozer.
- Supplier have submitted a schematic drawing indicating Plan of the system with relative position of items to be protected from fire.
- Fire detection and suppression of fire will be either total liquid flooding or dry chemical powder base spray through nozzle strategically through an actuation cartridge, located to the targets, or combination of the two.
- Fire suppression agent used in neighborhood of electrical appliances will be clean and shall not damage electrical / electronic component.
- Fire suppression system will be non-hazardous & safe for human and environment friendly. It should have quick cleanup and environmental sustainability.
- The sensor will send the signal to the control unit integrated with a LED and/or alarm indicator to show the status of the detector.
- The system will operate only in active fire area to supply adequate quantity of fire suppressing agent for effective firefighting and to avoid re-ignition and suitably designed to extinguish the fire as per class of fire (A, B & C) of that location.
- The system will be actuated automatically by detection of fire and control unit to be installed within the Operator's cabin for automatic system operation.
- The system will also have provision of actuating manually.
- The system will provide facility for self-checking /testing/inspection without operating.
- The data regarding health & event are logged in the system with date & time in memory having capacity to store data of at least 15days, which can be downloaded to PC/ Laptop in latter stage.
- The system will be capable for efficient operation in the extreme mining conditions with dust, dirt, water & vibrations.

The high pressure storage vessels and hoses, if used with fire- fighting and fire suppression systems, will confirm to the requirements stipulated in the relevant Indian standards.

The Supplier submitted a Certificate as an undertaking that, a valid Test Certificate (valid as on the date of commissioning of the equipment at site) shall be submitted at the time of supply of equipment along with other documents, for AFDSS including materials and chemicals used in fire suppression system from any Government or Government approved Laboratory in compliance with relevant Indian Standards as per DGMS (Approval) Circular No. 02 dated 08th July 2013 with subsequent amendments.

**Note: Periodical refilling shall be done by the supplier.**

**Detail given in Annexure - 6(g)**

#### **D.4.19 Fire Extinguisher:**

A fire extinguisher manufactured in India by Kanex/Gunnebo/Automation Control/ Southern Electronics/ Ansul(Maco) will be provided on the dozer, suitably mounted in heavy-duty bracket for ease of removal. The extinguisher is dry powder (cartridge type) with a minimum capacity of 5 kg and complies with Indian Standard IS: 15683 with latest amendment.

The Supplier submitted a Certificate as an undertaking that, a valid Test Certificate (valid as on the date of commissioning of the equipment at site) shall be submitted at the time of supply of equipment along with other documents, for Fire Extinguisher including Materials and Chemicals to be used in fire extinguisher from any Government or Government approved Laboratory in compliance with relevant Indian Standards as per DGMS Circular No. DGMS (Approval) CircularNo.02 dtd. 08<sup>th</sup> July 2013 with subsequent amendments. .

**Note: Periodical refilling shall be done by the supplier.**



**Detail given in Annexure - 6(h)**

**D.4.20 Safety Features:**

All safety features & devices as per Govt. Of India Gazette notification no. Z 20045/01/2018/S&T (HQ) dated 01.10.2018, DGMS Circular No. DGMS (Tech) Circular No. 06 of 2020 Dhanbad dated 27.02.2020 and subsequent amendments, if any, including following shall be provided in the equipment. The Supplier submitted a Certificate as an undertaking in this regard that all safety features and devices are incorporated in the equipment.

- a. Roll over protection.
- b. Turbocharger guard.
- c. Fire resistant /fire retarder hydraulic hoses and wiring near hot zone.
- d. Seat belt for operator -Seat belt reminder should also be provided to alert operator for using the seat belt

**Detail given in Annexure 6(i)**

**D.4.21 Lubrication system**

A Caterpillar (Factory installed) centralized microprocessor/micro control /PLC based electrically operated, automatic lubrication system as per design of the manufacturer is provided to service all lubrication points on the machine, including those points where use of high viscosity lubricants is required.

The lubrication system is fully monitored to ensure adequate lubricant flow is maintained to all points of major parts. The monitoring system, wherever necessary, be interlocked with the relevant control circuits to prevent damage due to lack of lubrication at any point. Alarms and indications for failure of lubrication system is provided and shall be repeated in the OBD of operator's cab.

All lubrication lines and injectors/feed points are protected from damage. Location of all injectors/feed points are such that these can be conveniently inspected and repaired. The lubrication lines to the remote points should be properly guided. Flexible lines are only used where there is relative movement between parts and for final connection to movable components. Preferably steel piping is used for long runs and terminate in steel junction blocks or rigidly mounted bulk head connectors to prevent disturbance to steel piping when flexible hoses are replaced.

Fire/heat resistant/ retardant hydraulic hoses are provided in lubrication system. The vent valve on the top of hydraulic tank, can be removed without any tool. Lubricants recommended are of reputed make with Indian equivalent, if available.

Suitable motorized and manual Transfer Pumps as per design of the manufacturer to prevent contamination and mixing of different grade of lubricants will be provided.

**Detail given in Annexure 6(j)**

**D.5 Ancillary equipment and other requirements: Front pull hook**

**D.6 Health Monitoring System (HMS)**

The equipment shall be provided with suitable licensed, on-line, real time, monitoring interface facility, compatible for GPS / GPRS-based transfer of equipment performance data (commonly known as HMS) to third party equipment management system.

The system shall have OBD Self-diagnostic & error alarm features and should capture the parameters of HMS module and other parameters not covered by HMS of the equipment to monitor the following items:

- i. Working hour, idle hour, based on the duration of a shift for which the equipment is switched on for operation
- ii. Engine oil pressure & temperature



- iii. Engine RPM
- iv. Coolant level and temperature
- v. Fuel level and fuel consumption rate
- vi. Hyd. oil temperature & pressure
- vii. Engine electrical system - Battery voltage
- viii. Tyre pressure (tyre mounted machines)
- ix. Fault codes along with details
- x. Transmission/Gear Box vital parameters
- xi. Air/Hydraulic system vital parameters
- xii. All drive motors/ Transformer vital parameters (If applicable)
- xiii. Other Health monitoring parameters as applicable.

This system shall have suitable memory capacity to store above measured data in batch form for at least one month period and shall have suitable port to download these data to a laptop / data storage system.

Alert audio messages to be given to Dozer Operators for the following events:

- a. In the case of operator exceeds pre-defined maximum speed.
- b. In the event of any equipment travelling in opposite direction falls in line.
- c. Fire warning to operator and to control room in case of catching fire.

The supplier shall provide the following:

- A. There has to be one integrated single online port for capturing all the vital data.
- B. The equipment should have a suitable licensed, on line, real time, monitoring interface facility compatible for GPS based transfer of equipment data to third party equipment management system.
- C. The real time interface telemetry port will be provided in the equipment
- D. All the data shall be available in the individual form through single port and its communication protocol must be as per global standards.
- E. There shall be no additional requirement of any data converter for data capturing like Analog to Digital and vice-versa etc.
- F. There shall be integrated on board data management system as explained at point no.3 as above.
- G. The system should have an On Board Display Self-diagnostic & error alarm features.
- H. Permission to third party for interfacing, data collection through online port.
- I. Signing of Non-disclosure agreement to protect intellectual property right on either side.
- J. To provide full technical support to third party vendor for interpretation and defining parameters for individual alarm to monitor equipment vital data.
- K. The HEMM equipment supplier should provide access to data as required by end user without any financial implication to third party.

This interface facility shall be made available till the working life of equipment.

However, the supplier shall provide this interface facility during the contract period as a part of contract cost.

To ensure the satisfactory operation of above system, a tripartite agreement shall be signed by the user, supplier and the service provider / System Integrator.

#### Details given in Annexure - 6(k)

#### D.7 Performance Guarantee:

In accordance with the provisions of clause C 6.2.6 of the technical specifications the expected working hours per annum from 1<sup>st</sup> year to 3<sup>rd</sup> year are 5000 (five thousand) hours and from 4<sup>th</sup> year to 6<sup>th</sup> year are 4500 (four thousand five hundred) hours. The expected working hours per annum as indicated are only approximate hours and may vary +/- 500 hours.

In case, actual average working hours of the fleet of the project exceeds  $31,500 [(5500 \times 3) + (5000 \times 3)] = 31,500$  hours during the tenure of 6 years (72 months) of contract period, then spares & consumables items, if additionally required and agreed by the Purchaser, will be procured by the Purchaser from the Supplier.

In accordance with the provisions of clauses C 7.2.2 and C 7.3.2 of the technical specifications the

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supplier shall guarantee that the availability of each equipment shall not be less than 80% (eighty percent) annually for a period of 1<sup>st</sup> year to 4<sup>th</sup> year of operation and 79% (seventy nine percent) annually for a period of 5<sup>th</sup> year to 6<sup>th</sup> year of operation from date of commissioning.

During contract period of 6 Years (72 Months), a period of 07 (Seven) days per year shall be allowed to equipment supplier in consultation with project Excavation head, from 5<sup>th</sup> year to 6<sup>th</sup> year for each machine for planned maintenance of equipment. This down time [maximum period of 07 (Seven) days] arising due to such maintenance of the equipment shall be treated as out of schedule for annual availability calculation in the relevant year. This period of 07 (Seven) days shall be provided once only in each applicable year and not in a staggered or partial manner. In case of any spillover of maintenance job(s) beyond such 07 (Seven) days period shall be treated as breakdown hours.

#### **D.8 Expected life of major assemblies:**

**Detail given in Annexure –6(l)**

#### **D.9 Information to be provided by the supplier:**

The supplier shall furnish the following information.

##### **D.9.1 General:**

The information in the above format should be self-certified.

- a) Details of D11 Tool Kit to be provided with each machine along with the D11 Special Tool (Project-wise) and 1no. Laptop for a fleet upto 5 equipment or part thereof.

**Detail given in Annexure – 6(m)**

- b) **Details of erection programmes given in Annexure – 6(n)**

##### **D.9.2 Technical Details:**

- i) Detailed technical descriptions and specifications of the dozer are given in **Annexure – 6(o)**.
- ii) Layout drawings and detailed descriptions of all machinery including method of power transmission, mounting details and method of alignment are given in **Annexure – 6(p)**.
- iii) Latest engine performance curves showing net power, net torque and specified fuel consumption of the installed engine, measured according to IS/ISO 9249 are given in **Annexure – 6(q)**.
- iv) Maximum travel speed determined according to IS/ISO 6014 – **Detail given in Annexure – 6(r)**
- v) Calculation of volumetric rating of dozer blade in accordance with IS 12645/ISO 9246.

**Detail given in Annexure – 6(s)**

- vi) Dozing Production Curves, showing the following.
  - a. Production with offered blade at 30m distance.
  - b. Production with offered blade at 60m distance.

**Detail given in Annexure – 6(t)**

- vii) Detail technical description of Automatic fire detection and suppression System with Layout/Sketch are given in **Annexure – 6(g)**.
- viii) Detail technical description of Automatic lubricating System with Layout/Sketch are given in **Annexure – 6(j)**.
- ix) Comprehensive commercial literature specifications, the content of which must comply with IS/ISO 6747 are given in **Annexure –6(u)**
- x) Details of major bought-out assemblies and sub-assemblies including manufacturer's name with address, type, model etc given in **Annexure – 6(b)**.
- xi) Detailed list of instrumentation monitoring and alarm systems given in **Annexure – 6(k)**
- xii) Operation and maintenance manual will be provided at the time of commissioning of the machine.- Undertaking by the Supplier in **Annexure – 6(v)**



### D.9.3 Dimensions, Weight and Performance Details:

#### D.9.3.1 Dimensions:

- |  |   |
|--|---|
| a) Maximum overall length with and without blade (m) | With Blade – 8.579 m<br>Without Blade - 6.160 m |
| b) Maximum overall width, with and without blade (m) | With Blade - 5.584 m<br>Without Blade - 3.782 m |
| c) Maximum overall height (m)                        | 4.723 m   |
| d) Drawbar height (m)                                | 0.942 m   |

#### D.9.3.2 Machine weights:

- |   |   |
|---|---|
| a) Shipping weights of individual components (kg)   | Detailed in <b>Annexure -6(w)</b>               |
| b) Total Operating weight (kg)                      | 101612 Kg                                       |
| c) Operating weight excluding dozer attachment (kg) | 74543 Kg (Excluding Blade & Ripper Attachment.) |

#### D.9.3.3 Engine:

- |                                |   |
|--------------------------------|---|
| a) Manufacturer and Model      | Manufacturer - Caterpillar<br>Model - C32 ACERT |
| b) Number of cylinders         | 12  |
| c) Bore (mm)                   | 145 mm  |
| d) Stroke (mm)                 | 162 mm  |
| e) Displacement (litre)        | 32.1 Ltr  |
| f) Net power at ..... rpm (kw) | 634 kW @ 1800 rpm                               |
| g) Maximum Torque (nm)         | 4748 Nm @ 1200 rpm                              |

#### D.9.3.4 Transmission:

- |   |                          |
|---|--------------------------|
| a) Make and Model                             | Make - Caterpillar       |
| Model - Planetary Power Shift                 |                          |
| b) Number of gear speeds, forward and reverse | Forward - 3, Reverse - 3 |
| c) Travel speeds, forward and reverse (Km/h)  | 3 - Forward - 12.2 Km/h  |
| 3 - Reverse - 14.7 Km/h                       |                          |

#### D.9.3.5 Differential:

- |                   |                    |
|-------------------|--------------------|
| a) Make and Model | Make - Caterpillar |
| Model - Planetary |                    |
| b) Type           | Bevel to Pinion    |
| c) Ratio          | 1 : 1.2173         |

#### D.9.3.6 Final Drive:

- |          |                                     |
|----------|-------------------------------------|
| a. Type  | Double Reduction Planetary Gear Set |
| b. Ratio | Final Drive - 1 : 22.3              |

#### D.9.3.7 Steering and braking:

- |  |   |
|--|---|
| a) Type  | Multiple wet Disc Steering Clutch & Multiple wet Disc Brake |
| b) Actuating System                            | Steering - Hydraulically actuated                           |
| Brake - Spring Applied, Hydraulically Released |   |



**D.9.3.8 Undercarriage:**

Undercarriage overall width (m)  
4.379 m (With Trunion)

3.782 m (Without Trunion)

- b) Crawler track height (m) 2.61 m  
 c) Crawler effective length (m) 4.444 m  
 d) Crawler width (m) 0.710 m  
 Crawler shoes, total number 41 Nos per track, Total - 82 Nos.  
 f) Ground contact area (sq.m) 6.3 sq. m  
 g) Ground bearing pressure (kpa) 162 kpa  
 Load rollers, diameter and number per crawler (m) 8 x 287 mm, 8 x 277 mm, 0.55 m  
 i) Driving Sprocket diameter (m) 1.17 m  
 j) Idler roller diameter (m) 0.932 m

**D.9.3.9 Hydraulic System:**

- a) Make, Model, Number, flow rates and operating pressures of pumps:

Make & model - Caterpillar,  
 Variable displacement pump - 670 L/min  
 @ 1800 rpm & 6895 Kpa

- b) Make, model, number, piston diameters and stroke lengths of cylinders

MAKE & MADEL - CATERPILLAR				
		Qty/Tractor	Bore Dia. (mm)	Stroke (mm)
Blade Lift Cylinder		2	168.9	1760
Blade Tilt Cylinder		2	Blade Tilt (Extended Pitch) Left - 279.6 mm Blade Tilt (Extended Pitch) Right - 254 mm	400
Ripper Shank Cylinder		2	179	830
Ripper Lift Cylinder		2	234	615
Pin Puller Cylinder		1	101.10	139

- c) Relief valve operating pressures (kpa) Dozer Relief Valve Setting - 28500 kPa  
 Tilt Cylinder Relief Valve Setting - 26700 kPa  
 Ripper (Lift) Relief Valve Setting - 28500 kPa  
 Ripper (Pitch) relief Valve Setting - 28500 kPa
- d) Oil quantity in system and tank (ltrs) Hydraulic Oil in system - 445 Litre  
 Hydraulic Oil in Tank - 160 Litre
- e) Filtration system type Full Flow Filtration System, Implement return filter,  
 charge filter and case drain screen

**D.9.3.10 Dozer attachment:**

- a) Maximum digging depth (m) 0.858 m  
 b) Ground clearance at full lift (m) 1.669 m  
 c) Maximum tilt adjustment (m) 1.700 m  
 d) Maximum pitch adjustment (m) 1.424 m, 58.9"



#### D.9.3.11 Electrical System

- a) Starter: make and model CAT Make
- b) Starter control: make and model CAT Make
- c) Alternator: make and model CAT Make, 150 Amp
- d) Batteries: numbers, voltage and no. of plates/AH rating 4 x 4, 200 Amp Hour, 12 V
- e) Lighting details
  - a. 4 nos. Headlights (including 2 on Cylinders)
  - b. 2 nos. Rear Working Lights
  - c. 4 nos. ROPS mounted working lights (2 front & 2 rear)
    - d. Cabin Dome Light
    - e. Fuel Tank
    - f. On cylinders

#### D.9.3.12 General

- a) Details, number and location of fire extinguishers:  
DGMS Approved Fire Extinguisher, 1 no. fire extinguisher will be placed in a convenient location on the side of the cabin for easy removal.
- b) Make, Model and Operating range of all gauges/ indicators Make & Model - Caterpillar  
Operating Range - Digital 0 to 999
- c) Make, Model of all warning alarms Make & Model - Caterpillar



### Equipment Acceptance

The Equipment ordered will be finally accepted subject to the Supplier demonstrating to the Purchaser or its authorised representative (may be third party) that the equipment, or assembly or sub-assembly (selected at random by the Purchaser) when tested, meets the Performance Data provided by the Supplier in accordance with the requirements of clause D.9. In case if testing facility for a particular parameter is not available at site, the Equipment ordered will finally be accepted subject to submission of Manufacturer's certified test copy for that parameter of performance data provided by the supplier in accordance with the requirements of clause D.9. A detrimental deviation of up to 2½% will be accepted.

1	Specific Fuel Consumption as per IS/ISO 9249	To be tested at manufacturers Works. Minimum of 3 (three) readings at full load to be averaged. Details of test and relevant photographs of the testing procedure to be provided.
2	Engine Net Power & RPM	To be tested at manufacturers Works. Details of test and relevant photographs of the testing procedure to be provided. To be tested at Works
3	Drawbar Pull at 1 km/h	To be tested at manufacturers Works. Details of test and relevant photographs of the testing procedure to be provided. To be tested at Works
4	Production with offered blade at 30 m distance	To be tested at manufacturers Works. Details of test and relevant photographs of the testing procedure to be provided. To be tested at manufacturer's works / site.
5	Production with offered blade at 60 m distance	To be tested at manufacturers Works. Details of test and relevant photographs of the testing procedure to be provided. To be tested at manufacturer's works / site.

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**PRICE SCHEDULE**

Amber

A. Sarkar

Vijay Kumar

Amber

Amber

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1. The Prices shall be as under:

a. Equipment (For all projects):

Sl no.	Description	Currency	Breakup Value
1	FOB Price (per equipment) inclusive of Indian agency commission	USD	13,12,118.00
2	Indian Agency Commission @ 4% inclusive. in FOB Price		4%
3	Indian Agency Commission incl. in FOB Price	USD	50,466.08
4	Marine Freight Charges upto Port of Entry in India	USD	35,000.00
5	Marine Insurance Charges	USD	2,500.00
6	CIF Price at Port of Entry in India	USD	13,49,618.00
7	Assessable Value	USD	13,49,618.00
8	Basic Customs Duty (BCD) on Assessable CIF Value @ 7.5%	USD	1,01,221.35
9	Social Welfare Surcharge (SWS) on BCD @ 10%	USD	10,122.14
10	IGST @ 18%	USD	2,62,973.07
11	Total Customs Duty	USD	3,74,316.55
12	GST on marine freight @ 5%	USD	1,750.00
13	GST on Indian Agency Commission @ 18%	USD	9,083.89
14	Total CIF Value incl. GST on Marine Freight + Ind. Agency Commission (Exchange Rate USD 1 = Rs 85.03)	Rs.	11,56,79,224.53
15	Total Customs Duty (Exchange Rate USD 1 = Rs 85.03)	Rs.	3,18,28,136.44
16	Port charges, clearing forwarding charges and other incidental charges.	Rs.	18,77,364.00
17	GST on Port charges, clearing forwarding charges and other incidental charges @ 18%	Rs.	3,37,925.52
18	Inland Transportation for delivery upto Final Place of Destination	Rs.	18,50,000.00
19	GST on Inland Transportation for delivery upto Final Place of Destination @ 18%	Rs.	3,33,000.00
20	Inland Insurance for delivery upto Final Place of Destination	Rs.	-
21	GST on Inland Insurance upto Final Place of Destination @ 18%	Rs.	-
22	Errction & Commissioning Charges	Rs.	47,75,000.00
23	GST on Errction & Commissioning @ 18%	Rs.	8,59,500.00

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24	Total Price of all Items sourced in INR required for fitting in the equipment during commissioning of the equipment	Rs.	18,03,063.00
25	Total GST applicable of all Items sourced in INR required for fitting in the equipment during commissioning of the equipment	Rs.	3,24,551.34
26	CIP Price per Equipment with GST	Rs.	15,96,67,764.84

b. Project wise details of Total package of Equipment (fleet) along with Consumable Spares and Consumables for warranty period of one year and Spares & Consumables for post warranty period of 5 years under Spares Cost Cap are as under:

NIT Item 1 - 850HP Crawler Dozers with ripper for Gevra OCP, SECL under PCD (Fleet - 3 nos)		
&		
NIT Item 2 - 850HP Crawler Dozers with ripper for Gevra OCP, SECL under NCD (Fleet - 3 nos)		
Description	Value (Rs)	
CIP Price of Fleet inclusive of GST (Fleet - 3nos.)	47,90,03,294.51	
1 <sup>st</sup> year spares and consumables per equipment	82,12,314.00	
GST on 1 <sup>st</sup> year spares and consumables per equipment	14,78,216.52	
Total 1st year Spares and consumables inclusive of GST for fleet	2,90,71,591.56	
2nd year Spares and consumables for fleet	10,79,66,364.00	
GST on 2nd year spares and consumables for fleet	2,07,07,949.00	
Total 2nd year Spares and consumables inclusive of GST for fleet	12,86,74,313.00	
3rd year Spares and consumables for fleet	11,27,20,253.00	
GST on 3rd year spares and consumables for fleet	2,21,94,618.00	
Total 3rd year Spares and consumables inclusive of GST for fleet	13,49,14,871.00	
4th year Spares and consumables for fleet	18,89,06,830.00	
GST on 4th year spares and consumables for fleet	3,88,39,244.00	
Total 4th year Spares and consumables inclusive of GST for fleet	22,77,46,074.00	
5th year Spares and consumables for fleet	17,92,31,220.00	



GST on 5th year spares and consumables for fleet	3,50,03,857.00
Total 5th year Spares and consumables inclusive of GST for fleet	21,42,35,077.00
6th year Spares and consumables for fleet	10,32,77,702.00
GST on 6th year spares and consumables for fleet	2,07,69,146.00
Total 6th year Spares and consumables inclusive of GST for fleet	12,40,46,848.00
Grand Total for spares and consumables for 6 years inclusive of GST for fleet	85,86,88,774.56
Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet	1,33,76,92,069.07

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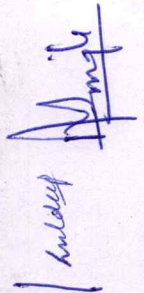
NIT Item 3 - 850HP Crawler Dozers with ripper for Dipka OCP, SECL under NCD (Fleet - 6 nos)	
Description	Value (Rs)
CIP Price of Fleet inclusive of GST (6 nos.)	95,80,06,589.01
1 <sup>st</sup> year spares and consumables per equipment	82,12,314.00
GST on 1 <sup>st</sup> year spares and consumables per equipment	14,78,216.52
Total 1 <sup>st</sup> year Spares and consumables inclusive of GST for fleet	5,81,43,183.12
2 <sup>nd</sup> year Spares and consumables for fleet	21,59,32,727.00
GST on 2 <sup>nd</sup> year spares and consumables for fleet	4,14,15,897.00
Total 2 <sup>nd</sup> year Spares and consumables inclusive of GST for fleet	25,73,48,624.00
3 <sup>rd</sup> year Spares and consumables for fleet	22,79,77,735.00
GST on 3 <sup>rd</sup> year spares and consumables for fleet	4,48,88,816.00
Total 3 <sup>rd</sup> year Spares and consumables inclusive of GST for fleet	27,28,66,551.00
4 <sup>th</sup> year Spares and consumables for fleet	37,63,46,556.00
GST on 4 <sup>th</sup> year spares and consumables for fleet	7,73,76,852.00
Total 4 <sup>th</sup> year Spares and consumables inclusive of GST for fleet	45,37,23,408.00
5 <sup>th</sup> year Spares and consumables for fleet	35,84,62,439.00
GST on 5 <sup>th</sup> year spares and consumables for fleet	7,00,07,714.00
Total 5 <sup>th</sup> year Spares and consumables inclusive of GST for fleet	42,84,70,153.00
6 <sup>th</sup> year Spares and consumables for fleet	20,65,55,404.00
GST on 6 <sup>th</sup> year spares and consumables for fleet	4,15,38,292.00
Total 6 <sup>th</sup> year Spares and consumables inclusive of GST for fleet	24,80,93,696.00
Grand Total for spares and consumables for 6 years inclusive of GST for fleet	1,71,86,45,615.12
Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet	2,67,66,52,204.13

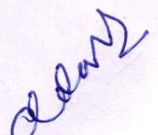


NIT Item 4 - 850HP Crawler Dozers with ripper for Dudhichua OCP, NCL under NCD (Fleet - 1 no)		
N/T Item 5 - 850HP Crawler Dozers with ripper for Bina Kakri Amalgamation, NCL under NCD (Fleet - 1 no)		
Description	Value (Rs)	
CIP Price of Fleet inclusive of GST (1no.)	15,96,67,764.84	
1 <sup>st</sup> year spares and consumables per equipment	90,53,722.00	
GST on 1 <sup>st</sup> year spares and consumables per equipment	16,29,669.96	
Total 1st year Spares and consumables inclusive of GST for fleet	1,06,83,391.96	
2nd year Spares and consumables for fleet	3,63,25,205.00	
GST on 2nd year spares and consumables for fleet	69,67,174.00	
Total 2nd year Spares and consumables inclusive of GST for fleet	4,32,92,379.00	
3rd year Spares and consumables for fleet	3,78,12,304.00	
GST on 3rd year spares and consumables for fleet	74,45,243.00	
Total 3rd year Spares and consumables inclusive of GST for fleet	4,52,57,547.00	
4th year Spares and consumables for fleet	6,19,13,355.00	
GST on 4th year spares and consumables for fleet	1,27,29,386.00	
Total 4th year Spares and consumables inclusive of GST for fleet	7,46,42,741.00	
5th year Spares and consumables for fleet	5,75,48,747.00	
GST on 5th year spares and consumables for fleet	1,12,39,270.00	
Total 5th year Spares and consumables inclusive of GST for fleet	6,87,88,017.00	
6th year Spares and consumables for fleet	3,28,46,880.00	
GST on 6th year spares and consumables for fleet	66,05,508.00	
Total 6th year Spares and consumables inclusive of GST for fleet	3,94,52,388.00	
<b>Grand Total for spares and consumables for 6 years inclusive of GST for fleet</b>	<b>28,21,16,463.96</b>	
<b>Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet</b>	<b>44,17,84,228.80</b>	











NIT Item 6 - 850HP Crawler Dozers with ripper for Jayant OCP, NCL under NCD (Fleet - 2 nos)	
Description	Value (Rs)
C.I.P Price of Fleet inclusive of GST (2nos.)	31,93,35,529.67
1 <sup>st</sup> year spares and consumables per equipment	90,53,722.00
GST on 1 <sup>st</sup> year spares and consumables per equipment	16,29,669.96
Total 1st year Spares and consumables inclusive of GST for fleet	2,13,66,783.92
2nd year Spares and consumables for fleet	7,26,50,409.00
GST on 2nd year spares and consumables for fleet	1,39,34,349.00
Total 2nd year Spares and consumables inclusive of GST for fleet	8,65,84,758.00
3rd year Spares and consumables for fleet	7,56,24,607.00
GST on 3rd year spares and consumables for fleet	1,48,90,485.00
Total 3rd year Spares and consumables inclusive of GST for fleet	9,05,15,092.00
4th year Spares and consumables for fleet	12,38,26,712.00
GST on 4th year spares and consumables for fleet	2,54,58,772.00
Total 4th year Spares and consumables inclusive of GST for fleet	14,92,85,484.00
5th year Spares and consumables for fleet	11,50,97,493.00
GST on 5th year spares and consumables for fleet	2,24,78,540.00
Total 5th year Spares and consumables inclusive of GST for fleet	13,75,76,033.00
6th year Spares and consumables for fleet	6,56,93,761.00
GST on 6th year spares and consumables for fleet	1,32,11,015.00
Total 6th year Spares and consumables inclusive of GST for fleet	7,89,04,776.00
<b>Grand Total for spares and consumables for 6 years inclusive of GST for fleet</b>	<b>56,42,32,926.92</b>
<b>Grand Total for equipment and Spares and Consumables for 6 years inclusive of GST per fleet</b>	<b>88,35,68,456.59</b>

The Total Value for award of the Contract including GST for all the six projects shall be Rs.7,11,91,73,256.46 (Rupees Seven Hundred and Eleven Crore Ninety-One Lakh Seventy-Three Thousand Two hundred and Fifty-Six and Paise Forty-six only).

NB: The cost cap value shall be payable at actuals subject to the maximum rate / amount mentioned above.



Price For items sourced indigenously in INR for fitment in the equipment during commissioning of the equipment (For all projects)															
Unit Values (in Rs.)															
Sl. No.	Item Description with Make, Model & Part No.(if applicable)	(UOM)	FOR Destination Price	GST		Landed Price	Input Tax credit Amount	Price after deducting Input Tax credit (in Rs.)	Quantity of items required per equipment	Total FOR Destination Price of all items sourced indigenously for fitment in the equipment during commissioning of the equipment	Total GST Amount of all items sourced indigenously for fitment in the equipment during commissioning of the equipment	Total Landed Price for all items sourced indigenously in INR for fitment in the equipment during commissioning of the equipment without deducting Input Tax credit (in Rs.)	Total Net Landed Price for items sourced indigenously in INR for fitment in the equipment during commissioning of the equipment after deducting Input Tax credit (in Rs.)		
				Rate	Amount										
1	2	3	4	5	6=4*5	7=4+6	8=6	9=7-8	10	11=4*10	12=6*10	13=7*10	14=9*10		
1	AFDSS	NO	6,63,063	18%	119351.34	782414.34	119351.34	663063.00	1.00	663063.00	119351.34	782414.34	663063.00		
2	COMPREHENSIVE TOOL KIT	NO	1,25,000	18%	22500.00	147500.00	22500.00	125000.00	1.00	125000.00	22500.00	147500.00	125000.00		
3	5 KG FIRE EXTINGUISHER	NO	20,000	18%	3600.00	23600.00	3600.00	20000.00	1.00	20000.00	3600.00	23600.00	20000.00		
4	PROXIMITY WARNING DEVICE	NO	4,65,000	18%	83700.00	548700.00	83700.00	465000.00	1.00	465000.00	83700.00	548700.00	465000.00		
5	REAR VISION CAMERA	NO	2,85,000	18%	51300.00	336300.00	51300.00	285000.00	1.00	285000.00	51300.00	336300.00	285000.00		
6	DRIVER FATIGUE MONITORING	NO	1,45,000	18%	26100.00	171100.00	26100.00	145000.00	1.00	145000.00	26100.00	171100.00	145000.00		
7	AUDIO VISUAL ALARM	NO	17,500	18%	3150.00	20650.00	3150.00	17500.00	1.00	17500.00	3150.00	20650.00	17500.00		
8	AUTO DIPPER	NO	22,500	18%	4050.00	26550.00	4050.00	22500.00	1.00	22500.00	4050.00	26550.00	22500.00		
9	SEAT BELT REMINDER	NO	15,000	18%	2700.00	17700.00	2700.00	15000.00	1.00	15000.00	2700.00	17700.00	15000.00		
10	BLINDSPOT MIRROR	NO	45,000	18%	8100.00	53100.00	8100.00	45000.00	1.00	45000.00	8100.00	53100.00	45000.00		
										1803063.00	324551.34				
										Z1	Z2				

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Price For Consumable Spares & Consumables for first 12 months of warranty period from the date of commissioning of Equipment quoted in INR (Gevra Project -SECL for 3 Machines With Ripper under PCD)															
Sl. No.	Item Description with part no. (if any)	(UOM)	Unit Values (in Rs.)					Landed Price	Input Tax credit Amount	Net Landed Price after deducting Input Tax credit	Quantity of Consumable Spares & Consumables Quoted per equipment of the Project	Total FOR Destination Price per equipment	Total GST Amount per equipment	Total Landed Price for Consumables Spares & Consumables for first 12 months of warranty period per equipment without deducting Input Tax credit (in Rs.)	Total Net Landed Price for Consumables Spares & Consumables for first 12 months of warranty period after deducting Input Tax credit (in Rs.)
			FOR Destination Price	Rate	Amount	GST									
2															
Consumables Spares (Per Equipment)															
Description		Part No.													
1	1R1808	Filter-Engine Oil	No	6,115.00	18%	1100.70	7215.70	1100.70	2392.56	1100.70	22.00	134530.00	158745.40	134530.00	
2	4227587	Filter-Fuel - Secondary	No	13,292.00	18%	2392.56	15684.56	2392.56	1966.90	2392.56	22.00	292424.00	345060.32	292424.00	
3	4385385	Filter AS-Water Sep & Fuel	No	8,705.00	18%	1566.90	10271.90	1566.90	8705.00	1566.90	11.00	95755.00	112990.90	95755.00	
4	1063973	Filter Element AS-Air (Secondary)	No	6,335.00	18%	1140.30	7475.30	1140.30	6335.00	1140.30	22.00	139370.00	164456.60	139370.00	
5	1327168	Filter Element AS-Air (Primary)	No	24,714.00	18%	4448.52	29162.52	4448.52	24714.00	4448.52	10.00	247140.00	291625.20	247140.00	
6	2492337	Filter Element AS-Hydraulic Oil	No	11,340.00	18%	2041.20	13381.20	2041.20	11340.00	2041.20	22.00	249480.00	294386.40	249480.00	
7	5F6222	Seal-O-Ring	No	1,418.00	18%	255.24	1673.24	255.24	1418.00	255.24	11.00	15598.00	18405.64	15598.00	
8	1704822	Seal-O-Ring	No	6,577.00	18%	1183.86	7760.86	1183.86	6577.00	1183.86	2.00	13154.00	15521.72	13154.00	
9	5H6733	Seal-O-Ring	No	1,186.00	18%	213.48	1399.48	213.48	1186.00	213.48	5.00	5930.00	6997.40	5930.00	
10	2H6124	Seal-O-Ring	No	1,305.00	18%	234.90	1539.90	234.90	1305.00	234.90	5.00	6525.00	7699.50	6525.00	
11	3891079	Filter Element AS-Oil (Hydraulic)	No	9,624.00	18%	1732.32	11356.32	1732.32	9624.00	1732.32	2.00	19248.00	22712.64	19248.00	
12	0951671	Seal-O-Ring	No	663.00	18%	119.34	782.34	119.34	663.00	119.34	2.00	1326.00	1564.68	1326.00	
13	3440004	Filter Element-Oil (Power Train Primary)	No	15,391.00	18%	2770.38	18161.38	2770.38	15391.00	2770.38	5.00	76955.00	90806.90	76955.00	
14	1261815	Dryer AS-Refrigerant (In-Line)	No	10,159.00	18%	1828.62	11987.62	1828.62	10159.00	1828.62	2.00	20318.00	23975.24	20318.00	
15	3200562	Filter Element AS-Air (Primary)	No	12,831.00	18%	2309.58	15140.58	2309.58	12831.00	2309.58	1.00	12831.00	15140.58	12831.00	
16	2310167	Filter Element AS-Air (Primary)	No	5,012.00	18%	902.16	5914.16	902.16	5012.00	902.16	5.00	25060.00	29570.80	25060.00	
17	3468243	Filter Element-Cab Air	No	5,210.00	18%	937.80	6147.80	937.80	5210.00	937.80	5.00	26050.00	30739.00	26050.00	
18	9W4494	Edge-Cutting	No	1,38,800.00	18%	24984.00	163784.00	24984.00	138800.00	24984.00	4.00	555200.00	655136.00	555200.00	
19	9W4495	Edge-Cutting	No	1,49,182.00	18%	26852.76	176034.76	26852.76	149182.00	26852.76	4.00	596728.00	704139.04	596728.00	
20	8E4545	Bit-End	No	2,06,889.00	18%	37240.02	244129.02	37240.02	206889.00	37240.02	5.00	1034445.00	1220645.10	1034445.00	
21	8E4546	Bit-End	No	2,06,889.00	18%	37240.02	244129.02	37240.02	206889.00	37240.02	5.00	1034445.00	1220645.10	1034445.00	
22	5P8823	Bolt-Plow	No	2,095.00	18%	377.10	2472.10	377.10	2095.00	377.10	216.00	452520.00	533973.60	452520.00	
23	3K9770	Nut-Full	No	1,035.00	18%	186.30	1221.30	186.30	1035.00	186.30	216.00	223560.00	263800.80	223560.00	
24	4K0684	Washer-Hard	No	606.00	18%	109.08	715.08	109.08	606.00	109.08	216.00	130896.00	154457.28	130896.00	
25	3572712	Tip GP-Ripper	No	79,517.00	18%	14313.06	93830.06	14313.06	79517.00	14313.06	8.00	636136.00	750640.48	636136.00	
26	352546	Kit-Pin(Ripper Tip)	No	8,332.00	18%	1499.76	9831.76	1499.76	8332.00	1499.76	16.00	133312.00	157308.16	133312.00	
27	3313560	Protector GP-Shank Pin	No	3,35,070.00	18%	60312.60	395382.60	60312.60	335070.00	60312.60	1.00	335070.00	395382.60	335070.00	
28	3532860	Pin	No	10,108.00	18%	1819.44	11927.44	1819.44	10108.00	1819.44	1.00	10108.00	11927.44	10108.00	
29	6020406	SEGMENT-SPROCKET	No	1,10,424.00	18%	19976.32	130300.32	19876.32	110424.00	19876.32	2.00	220848.00	260600.64	220848.00	
30	6020406	SEGMENT-SPROCKET	No	1,32,560.00	18%	23860.80	156420.80	23860.80	132560.00	23860.80	6.00	795360.00	938524.80	795360.00	
31	3S1356	NUT - FULL	No	890.00	18%	160.20	1050.20	160.20	890.00	160.20	64.00	56960.00	67212.80	56960.00	
32	3S1349	WASHER HARD	No	185.00	18%	33.30	218.30	33.30	185.00	33.30	64.00	11840.00	13971.20	11840.00	
33	7T1243	BOLT	No	1,419.00	18%	255.42	1674.42	255.42	1419.00	255.42	64.00	90816.00	107162.88	90816.00	
34	KSNDEO	Engine Oil Barrel	No	64,047.00	18%	11528.46	75575.46	11528.46	64047.00	11528.46	8.00	512376.00	604603.68	512376.00	
35	KSNDDT030	Powertrain Oil Barrel	No								5.00		FREE OF COST		
36	KSNHYD010	Hydraulic Oil Barrel	No								2.00		FREE OF COST		
37	KSNFDAO60	Final drive oil Barrel	No								1.00		FREE OF COST		
38	KSNDDT050	Recoil frame oil Barrel	No								1.00		FREE OF COST		
39	KSNGREASE	Grease Barrel	No								3.00		FREE OF COST		
											8212314.00	1478216.52			
											8212314.00	1478216.52			

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**Details of Training Charges**  
(Gevra Project - SECL for 3 Machines With Ripper under PCD)

1 Sl. No.	2 Type of Personnel	3 At Manufacturer's Training Facility				4 At Site				10 Rate per Man per Week	11 Total Charges (5x6)+(9x10)
		No.	Period (Week)	Total Man Weeks (3x4)	Rate per Man per Week	No.	Period (Week)	Total Man Weeks (7x8)	Rate per Man per Week		
					Rs.				Rs.		
1	Mech Engineer	1	1	1	5000	1	1	1	2500	7500	
2	Mech Supervisor	2	1	2	5000	1	1	1	2500	12500	
3	Elec Supervisor	0	0	0	5000	0	0	0	2500	0	
4	Mech Fitter	0	0	0	5000	3	1	3	2500	7500	
5	Electrician	0	0	0	5000	2	1	2	2500	5000	
6	Operator	0	0	0	5000	11	1	11	2500	27500	
		3				18				60000	

*Amal* *Amal*







**Details of Training Charges**  
(Gevra Project -SECL for 3 Machines With Ripper under NCD)

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	Type of Personnel	At Manufacturer's Training Facility			At Site			Total Charges		
		No.	Period (Week)	Total Man Weeks (3x4)	Rate per Man per Week	No.	Period (Week)	Total Man Weeks (7x8)	Rate per Man per Week	(5x6)+(9x10)
					Rs.				Rs.	Rs.
1	Mech Engineer	1	1	1	5000	1	1	1	2500	7500
2	Mech Supervisor	2	1	2	5000	1	1	1	2500	12500
3	Elec Supervisor	0	0	0	5000	0	0	0	2500	0
4	Mech Fitter	0	0	0	5000	3	1	3	2500	7500
5	Electrician	0	0	0	5000	2	1	2	2500	5000
6	Operator	0	0	0	5000	11	1	11	2500	27500
		3				18				<b>60000</b>

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*M. S. K. K. K.*

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Price For Consumable Spares & Consumables for first 12 months of warranty period from the date of commissioning of Equipment quoted in INR (Dipka Project -SECL for 6 Machines With Ripper under NCD)														
Sl. No.	Item Description with part no.(if any)	Unit of Measurement (UOM)	FOR Destination Price	Unit Values (in Rs.)					Quantity of Consumable Spares & Consumables Quoted per equipment of the Project	Total FOR Destination Price per equipment	Total GST Amount per equipment	Total Landed Price for Consumables Spares & Consumables for first 12 months of warranty period per equipment without deducting Input Tax credit (in Rs.)	Total Net Landed Price for Consumables Spares & Consumables for first 12 months of warranty period per equipment after deducting Input Tax credit (in Rs.)	
				GST		Landed Price	Input Tax credit Amount	Net Landed Price after deducting Input Tax credit						
				Rate	Amount									
	Consumables Spares (Per Equipment)	2	3	4	5	6=4*5	7=4+6	8=6	9=7-8	10	11=4*10	12=6*10	13=7*10	14=9*10
	Description	Part No.												
1	1R1808 Filter-Engine Oil	No	6115.00	18%	1100.70	7215.70	1100.70	6115.00	22.00	134530.00	24215.40	158745.40		134530.00
2	4227587 Filter-Fuel - Secondary	No	13292.00	18%	2392.56	15684.56	2392.56	13292.00	22.00	292424.00	52636.32	345060.32		292424.00
3	4385385 Filter AS-Water Sep & Fuel	No	8705.00	18%	1566.90	10271.90	1566.90	8705.00	11.00	95755.00	17235.90	112990.90		95755.00
4	1063973 Filter Element AS-Air (Secondary)	No	6335.00	18%	1140.30	7475.30	1140.30	6335.00	22.00	139370.00	25086.60	164456.60		139370.00
5	1327168 Filter Element AS-Air (Primary)	No	24714.00	18%	4448.52	29162.52	4448.52	24714.00	10.00	247140.00	44485.20	291625.20		247140.00
6	2492337 Filter Element AS-Hydraulic Oil	No	11340.00	18%	2041.20	13381.20	2041.20	11340.00	22.00	249480.00	44906.40	294386.40		249480.00
7	5F6222 Seat-O-Ring	No	1418.00	18%	255.24	1673.24	255.24	1418.00	11.00	15598.00	2807.64	18405.64		15598.00
8	1704822 Seat-O-Ring	No	6577.00	18%	1183.86	7760.86	1183.86	6577.00	2.00	13154.00	2367.72	15521.72		13154.00
9	5H6733 Seat-O-Ring	No	1186.00	18%	213.48	1399.48	213.48	1186.00	5.00	5930.00	1067.40	6997.40		5930.00
10	2H6124 Seat-O-Ring	No	1305.00	18%	234.90	1539.90	234.90	1305.00	5.00	6525.00	1174.50	7699.50		6525.00
11	3891079 Filter Element AS-Oil (Hydraulic)	No	9624.00	18%	1732.32	11356.32	1732.32	9624.00	2.00	19248.00	3464.64	22712.64		19248.00
12	0951671 Seat-O-Ring	No	663.00	18%	119.34	782.34	119.34	663.00	2.00	1326.00	238.68	1564.68		1326.00
13	3440004 Filter Element-Oil (Power Train Primary)	No	15391.00	18%	2770.38	18161.38	2770.38	15391.00	5.00	76955.00	13851.90	90806.90		76955.00
14	1261815 High Efficiency)	No	10159.00	18%	1828.62	11987.62	1828.62	10159.00	2.00	20318.00	3657.24	23975.24		20318.00
15	3200562 Dryer AS-Refrigerant (In-Line)	No	12831.00	18%	2309.58	15140.58	2309.58	12831.00	1.00	12831.00	2309.58	15140.58		12831.00
16	2310167 Filter Element AS-Air (Primary)	No	5012.00	18%	902.16	5914.16	902.16	5012.00	5.00	25060.00	4510.80	29570.80		25060.00
17	3468243 Filter Element-Cab Air	No	5210.00	18%	937.80	6147.80	937.80	5210.00	5.00	26050.00	4689.00	30739.00		26050.00
18	9W4494 Edge-Cutting	No	13890.00	18%	2494.00	16378.00	2494.00	13890.00	4.00	55200.00	9993.60	65136.00		55200.00
19	9W4495 Edge-Cutting	No	14918.00	18%	2685.27	17603.76	2685.27	14918.00	4.00	596728.00	107411.04	704139.04		596728.00
20	8E-545 Bit-End	No	206889.00	18%	37240.02	244129.02	37240.02	206889.00	5.00	1034445.00	186200.10	1220645.10		1034445.00
21	8E-4546 Bit-End	No	206889.00	18%	37240.02	244129.02	37240.02	206889.00	5.00	1034445.00	186200.10	1220645.10		1034445.00
22	5P8823 Bolt-Plow	No	2095.00	18%	377.10	2472.10	377.10	2095.00	216.00	452520.00	81453.60	533973.60		452520.00
23	3K9770 Nut-Full	No	1035.00	18%	186.30	1221.30	186.30	1035.00	216.00	223560.00	40240.80	263800.80		223560.00
24	4K0684 Washer-Hard	No	606.00	18%	109.08	715.08	109.08	606.00	216.00	130896.00	23561.28	154457.28		130896.00
25	3572712 Tip GP-Ripper	No	79517.00	18%	14313.06	93830.06	14313.06	79517.00	8.00	636136.00	114504.48	750640.48		636136.00
26	3572712 Kit-Pin(Ripper Tip)	No	8332.00	18%	1499.76	9831.76	1499.76	8332.00	16.00	133312.00	23996.16	157308.16		133312.00
27	3313560 Protector GP-Shank	No	335070.00	18%	60312.60	395382.60	60312.60	335070.00	1.00	335070.00	60312.60	395382.60		335070.00
28	3532600 Pin	No	10708.00	18%	1819.44	12527.44	1819.44	10708.00	1.00	10708.00	1819.44	12527.44		10708.00
29	6020405 SEGMENT-SPROCKET	No	110424.00	18%	19876.32	130299.32	19876.32	110424.00	2.00	220848.00	39752.64	260600.64		220848.00
30	6020406 SEGMENT-SPROCKET	No	132560.00	18%	23860.80	156420.80	23860.80	132560.00	6.00	795360.00	143164.80	938524.80		795360.00
31	3S1356 NUT - FULL	No	890.00	18%	160.20	1050.20	160.20	890.00	64.00	59960.00	10252.80	67212.80		59960.00
32	3S1349 WASHER HARD	No	185.00	18%	33.30	218.30	33.30	185.00	64.00	11840.00	13971.20	13971.20		11840.00
33	7T1243 BOLT	No	1419.00	18%	255.42	1674.42	255.42	1419.00	64.00	90816.00	16346.88	107162.88		90816.00
34	KSND00 Engine Oil Barrel	No	64047.00	18%	11528.46	75575.46	11528.46	64047.00	8.00	512376.00	92227.88	604603.88		512376.00
35	KSNDT030 Powertrain Oil Barrel	No							5.00					FREE OF COST
36	KSNDY0010 Hydraulic Oil Barrel	No							2.00					FREE OF COST
37	KSNDFA060 Final drive oil Barrel	No							1.00					FREE OF COST
38	KSNDT050 Recoil frame oil Barrel	No							1.00					FREE OF COST
39	KSNGREASE Grease Barrel	No							3.00					FREE OF COST
										8212314.00	1478216.52			
										8212314.00	1478216.52			
										X1	X2			

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A. Sankar

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**Details of Training Charges**  
(Dipka Project -SECL for 6 Machines With Ripper under NCD)

1 Sl. No.	2 Type of Personnel	3 At Manufacturer's Training Facility			4 At Site			10 Rate per Man per Week	11 Total Charges (5x6)+(9x10)
		No.	Period (Week)	Total Man Weeks (3x4)	No.	Period (Week)	Total Man Weeks (7x8)		
								Rs.	Rs.
1	Mech Engineer	1	1	1	1	1	1	2500	7500
2	Mech Supervisor	2	1	2	1	1	1	2500	12500
3	Elec Supervisor	0	0	0	0	0	0	2500	0
4	Mech Fitter	0	0	0	6	1	6	2500	15000
5	Electrician	0	0	0	3	1	3	2500	7500
6	Operator	0	0	0	21	1	21	2500	52500
		3			32				<b>95000</b>

*mgl*

*U. Singh*

*A. Sarma*

*SK*

*Q. Das*

*Indrap*  
*A. Singh*



Price For Consumable Spares & Consumables for first 12 months of warranty period from the date of commissioning of Equipment quoted in INR (Dudhichua Project -NCL for 1 Machine With Ripper under NCD)														
Sl. No.	Item Description with part no.(if any)	Unit of Measure ment (UOM)	FOR Destination Price	Unit Values (in Rs.)				Net Landed Price after deducting Input Tax credit	Quantity of Consumabl e Spares & Consumabl es Quoted per equipment of the Project	Total FOR Destination Price per equipment	Total Landed Price for Consumables Spares & Consumables for first 12 months of warranty period per equipment without deducting Input Tax credit (in Rs.)	Total Net Landed Price for Consumables Spares & Consumables for first 12 months of warranty period per equipment after deducting Input Tax credit (in Rs.)		
				GST			Input Tax credit Amount							
				Rate	Amount	Landed Price								
2			3	4	5	6=4*5	7=4+6	8=6	9=7-8	10	11=4*10	12=6*10	13=7*10	14=9*10
Consumables Spares (Per Equipment)														
Description Part No.														
1	1R1808	No	6115.00	18%	1100.70	7215.70	1100.70	6115.00	20.00	122300.00	22014.00	144314.00	122300.00	
2	4227587	No	13292.00	18%	2392.56	15684.56	2392.56	13292.00	20.00	265840.00	47851.20	313691.20	265840.00	
3	4385385	No	8705.00	18%	1566.90	10271.90	1566.90	8705.00	10.00	87050.00	15669.00	102719.00	87050.00	
4	10363973	No	6335.00	18%	1140.30	7475.30	1140.30	6335.00	20.00	126700.00	22806.00	149506.00	126700.00	
5	1327168	No	24714.00	18%	4448.52	29162.52	4448.52	24714.00	10.00	247140.00	44485.20	291625.20	247140.00	
6	2492337	No	11340.00	18%	2041.20	13381.20	2041.20	11340.00	20.00	226800.00	40824.00	267624.00	226800.00	
7	5F6222	No	1418.00	18%	255.24	1673.24	255.24	1418.00	10.00	14180.00	2552.40	16732.40	14180.00	
8	1704822	No	6577.00	18%	1183.86	7760.86	1183.86	6577.00	2.00	13154.00	2367.72	15521.72	13154.00	
9	5H6733	No	1186.00	18%	213.48	1399.48	213.48	1186.00	5.00	5930.00	1067.40	6997.40	5930.00	
10	2H6124	No	1305.00	18%	234.90	1539.90	234.90	1305.00	5.00	6525.00	1174.50	7699.50	6525.00	
11	3891079	No	9624.00	18%	1732.32	11356.32	1732.32	9624.00	2.00	19248.00	3464.64	22712.64	19248.00	
12	0951671	No	663.00	18%	119.34	782.34	119.34	663.00	2.00	1326.00	238.68	1564.68	1326.00	
13	3440004	No	15391.00	18%	2770.38	18161.38	2770.38	15391.00	5.00	76955.00	13851.90	90806.90	76955.00	
14	1261815	No	10159.00	18%	1828.62	11987.62	1828.62	10159.00	2.00	20318.00	3657.24	23975.24	20318.00	
15	3200562	No	12831.00	18%	2309.58	15140.58	2309.58	12831.00	1.00	12831.00	2309.58	15140.58	12831.00	
16	2310167	No	5012.00	18%	902.16	5914.16	902.16	5012.00	5.00	25060.00	4510.80	29570.80	25060.00	
17	3468243	No	5210.00	18%	937.80	6147.80	937.80	5210.00	5.00	26050.00	4689.00	30739.00	26050.00	
18	9W4494	No	13890.00	18%	2498.40	163784.00	24984.00	13890.00	6.00	83280.00	14990.00	982704.00	83280.00	
19	9W4495	No	14918.00	18%	2685.26	176034.76	26852.76	14918.00	6.00	89509.20	161176.56	1056208.56	89509.20	
20	8E4545	No	206889.00	18%	37240.02	244129.02	37240.02	206889.00	6.00	1241334.00	223440.12	1464774.12	1241334.00	
21	8E4546	No	206889.00	18%	37240.02	244129.02	37240.02	206889.00	6.00	1241334.00	223440.12	1464774.12	1241334.00	
22	5P8823	No	2095.00	18%	377.10	2472.10	377.10	2095.00	216.00	452520.00	81453.60	533973.60	452520.00	
23	3K9770	No	1035.00	18%	186.30	1221.30	186.30	1035.00	216.00	223560.00	40240.80	263800.80	223560.00	
24	4K0684	No	606.00	18%	109.08	715.08	109.08	606.00	216.00	130896.00	23561.28	154457.28	130896.00	
25	3527212	No	79517.00	18%	14313.06	93830.06	14313.06	79517.00	8.00	636136.00	114504.48	750640.48	636136.00	
26	3532546	No	8332.00	18%	1499.76	9831.76	1499.76	8332.00	16.00	133312.00	23996.16	157308.16	133312.00	
27	3313560	No	335070.00	18%	60312.60	395382.60	60312.60	335070.00	1.00	335070.00	60312.60	395382.60	335070.00	
28	3532600	No	10108.00	18%	1819.44	11927.44	1819.44	10108.00	1.00	10108.00	1819.44	11927.44	10108.00	
29	6020405	No	110424.00	18%	19876.32	130300.32	19876.32	110424.00	2.00	220848.00	397552.64	260600.64	220848.00	
30	6020406	No	132560.00	18%	23860.80	156420.80	23860.80	132560.00	6.00	795360.00	143164.80	938524.80	795360.00	
31	3S1356	No	890.00	18%	160.20	1050.20	160.20	890.00	64.00	59960.00	10252.80	6712.80	59960.00	
32	3S1349	No	185.00	18%	33.30	218.30	33.30	185.00	64.00	11840.00	2131.20	13971.20	11840.00	
33	711243	No	1419.00	18%	255.42	1674.42	255.42	1419.00	64.00	90816.00	16346.88	107162.88	90816.00	
34	KSND030	No	64047.00	18%	11528.46	75575.46	11528.46	64047.00	7.00	448329.00	80699.22	529028.22	448329.00	
35	KSNTD030	No							5.00				FREE OF COST	
36	KSNNHYD010	No							2.00				FREE OF COST	
37	KSNNFDAO080	No							1.00				FREE OF COST	
38	KSNTD050	No							1.00				FREE OF COST	
39	KSNGREASE	No							3.00				FREE OF COST	
										9053722.00	1629669.96			
										9053722.00	1629669.96	X2		

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A. Sankar

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**Details of Training Charges**  
(Dudhichua Project -NCL for 1 Machine With Ripper under NCD)

1 Sl. No.	2 Type of Personnel	3 At Manufacturer's Training Facility			4 At Site			10 Rate per Man per Week	11 Total Charges (5x6)+(9x10)
		No.	Period (Week)	Total Man Weeks (3x4)	No.	Period (Week)	Total Man Weeks (7x8)		
								Rs.	Rs.
1	Mech Engineer	1	1	1	1	1	1	2500	7500
2	Mech Supervisor	2	1	2	1	1	1	2500	12500
3	Elec Supervisor	0	0	0	0	0	0	2500	0
4	Mech Fitter	0	0	0	3	1	3	2500	7500
5	Electrician	0	0	0	2	1	2	2500	5000
6	Operator	0	0	0	11	1	11	2500	27500
		3			18				<b>60000</b>

*mer*

*Harsh Kumar*

*A. S. Sanyal*

*SK*

*aditya*

*1*  
*Harsh*  
*Aditya*







**Details of Training Charges**  
(Bina Khakri/Amalgamation Project -NCL for 1 Machine With Ripper under NCD)

1 Sl. No.	2 Type of Personnel	3 At Manufacturer's Training Facility			4 At Site			10 Rate per Man per Week	11 Total Charges (5x6)+(9x10)
		No.	Period (Week)	Total Man Weeks (3x4)	No.	Period (Week)	Total Man Weeks (7x8)		
1	Mech Engineer	1	1	1	1	1	1	Rs. 2500	Rs. 7500
2	Mech Supervisor	1	1	1	1	1	1	2500	7500
3	Elec Supervisor	0	0	0	0	0	0	2500	0
4	Mech Fitter	0	0	0	2	1	2	2500	5000
5	Electrician	0	0	0	1	1	1	2500	2500
6	Operator	0	0	0	7	1	7	2500	17500
		2			12				<b>40000</b>

*super*

*Khushi Kumar*

*A. Sankar*

*AKJ*

*Aditya*

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Price For Consumable Spares & Consumables for first 12 months of warranty period from the date of commissioning of Equipment quoted in INR (Jayant Project -NCL for 2 Machine With Ripper under NCD)															
Sl. No.	Item Description with part no. (if any)	Unit of Measurement (UOM)	FOR Destination Price	GST				Landed Price	Input Tax credit Amount	Net Landed Price after deducting Input Tax credit	Quantity of Consumable Spares & Consumables Quoted per equipment of the Project	Total FOR Destination Price per equipment	Total GST Amount per equipment	Total Landed Price for Consumables Spares & Consumables for first 12 months of warranty period per equipment without deducting Input Tax credit (in Rs.)	Total Net Landed Price for Consumables Spares & Consumables for first 12 months of warranty period per equipment after deducting Input Tax credit (in Rs.)
				Rate	Amount	6=4*5	7=4+6								
Consumables Spares (Per Equipment)															
	Description														
1	1R1808	No	6115.00	18%	1100.70	7215.70	1100.70	6115.00			20.00	122300.00	22014.00	144314.00	122300.00
2	4227587	No	13292.00	18%	2392.56	15684.56	2392.56	13292.00			20.00	265840.00	47851.20	313691.20	265840.00
3	34385385	No	8705.00	18%	1566.90	10271.90	1566.90	8705.00			10.00	87050.00	15669.00	102719.00	87050.00
4	1063973	No	6335.00	18%	1140.30	7475.30	1140.30	6335.00			20.00	126700.00	22806.00	149506.00	126700.00
5	1327168	No	24714.00	18%	4448.52	29162.52	4448.52	24714.00			10.00	247140.00	44846.20	291625.20	247140.00
6	2492337	No	11340.00	18%	2041.20	13381.20	2041.20	11340.00			20.00	226800.00	40824.00	267624.00	226800.00
7	5F6222	No	1418.00	18%	255.24	1673.24	255.24	1418.00			10.00	14180.00	2552.40	16732.40	14180.00
8	1704822	No	6577.00	18%	1183.86	7760.86	1183.86	6577.00			2.00	13154.00	2367.72	15521.72	13154.00
9	5H6733	No	1186.00	18%	213.48	1399.48	213.48	1186.00			5.00	5930.00	1067.40	6997.40	5930.00
10	2H6124	No	1305.00	18%	234.90	1539.90	234.90	1305.00			5.00	6525.00	1174.50	7699.50	6525.00
11	3891079	No	9624.00	18%	1732.32	11356.32	1732.32	9624.00			2.00	19248.00	3464.64	22712.64	19248.00
12	0951671	No	663.00	18%	119.34	782.34	119.34	663.00			2.00	1326.00	238.68	1564.68	1326.00
13	3440004	No	15391.00	18%	2770.38	18161.38	2770.38	15391.00			5.00	76955.00	13851.90	90806.90	76955.00
14	1261815	No	10159.00	18%	1828.62	11987.62	1828.62	10159.00			2.00	20318.00	3657.24	23975.24	20318.00
15	3200562	No	12831.00	18%	2309.58	15140.58	2309.58	12831.00			1.00	12831.00	2309.58	15140.58	12831.00
16	2310167	No	5012.00	18%	902.16	5914.16	902.16	5012.00			5.00	25060.00	4510.80	29570.80	25060.00
17	3468243	No	5210.00	18%	937.80	6147.80	937.80	5210.00			5.00	26050.00	4689.00	30739.00	26050.00
18	9W4494	No	13880.00	18%	24984.00	163784.00	24984.00	13880.00			6.00	832800.00	149904.00	982704.00	832800.00
19	9W4495	No	149182.00	18%	26852.76	176034.76	26852.76	149182.00			6.00	895092.00	161116.56	1056208.56	895092.00
20	8E4545	No	206889.00	18%	37240.02	244129.02	37240.02	206889.00			6.00	1241334.00	223440.12	1464774.12	1241334.00
21	8E4546	No	206889.00	18%	37240.02	244129.02	37240.02	206889.00			6.00	1241334.00	223440.12	1464774.12	1241334.00
22	5P8823	No	2095.00	18%	377.10	2472.10	377.10	2095.00			216.00	452520.00	81453.60	533973.60	452520.00
23	3K9770	No	1035.00	18%	186.30	1221.30	186.30	1035.00			216.00	223560.00	40240.80	263800.80	223560.00
24	4K0684	No	606.00	18%	109.08	715.08	109.08	606.00			216.00	130896.00	23561.28	154457.28	130896.00
25	3572712	No	79517.00	18%	14313.06	93830.06	14313.06	79517.00			8.00	636136.00	114504.48	750640.48	636136.00
26	3532546	No	8332.00	18%	1499.76	9831.76	1499.76	8332.00			16.00	133312.00	23996.16	157308.16	133312.00
27	3313560	No	335070.00	18%	60312.60	395382.60	60312.60	335070.00			1.00	335070.00	60312.60	395382.60	335070.00
28	3532600	No	10108.00	18%	1819.44	11927.44	1819.44	10108.00			1.00	10108.00	1819.44	11927.44	10108.00
29	6020405	No	110424.00	18%	19876.32	130300.32	19876.32	110424.00			2.00	220848.00	39752.64	260600.64	220848.00
30	6020406	No	132560.00	18%	23860.80	156420.80	23860.80	132560.00			6.00	795360.00	143164.80	938524.80	795360.00
31	351356	No	890.00	18%	160.20	1050.20	160.20	890.00			64.00	56960.00	10252.80	67212.80	56960.00
32	351349	No	185.00	18%	33.30	218.30	33.30	185.00			64.00	11840.00	2131.20	13971.20	11840.00
33	711243	No	1419.00	18%	255.42	1674.42	255.42	1419.00			64.00	90816.00	16346.88	107162.88	90816.00
34	KSNDKO	No	64047.00	18%	11528.46	75575.46	11528.46	64047.00			7.00	448329.00	80699.22	529028.22	448329.00
35	KSNTD030	No									5.00			FREE OF COST	
36	KSNDH010	No									2.00			FREE OF COST	
37	KSNDH060	No									1.00			FREE OF COST	
38	KSNTD050	No									1.00			FREE OF COST	
39	KSNGREASE	No									3.00			FREE OF COST	
												X1	X2		
												9053722.00	1629669.96		
												9053722.00	1629669.96		

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**Details of Training Charges**  
(Jayant Project -NCL for 2 Machine With Ripper under NCD)

1 Sl. No.	2 Type of Personnel	3 At Manufacturer's Training Facility			4 At Site			10 Rate per Man per Week	11 Total Charges (5x6)+(9x10)
		No.	Period (Week)	Total Man Weeks (3x4)	No.	Period (Week)	Total Man Weeks (7x8)		
								Rs.	Rs.
1	Mech Engineer	1	1	1	1	1	1	2500	7500
2	Mech Supervisor	2	1	2	1	1	1	2500	12500
3	Elec Supervisor	0	0	0	0	0	0	2500	0
4	Mech Fitter	0	0	0	6	1	6	2500	15000
5	Electrician	0	0	0	3	1	3	2500	7500
6	Operator	0	0	0	21	1	21	2500	52500
		3			32				<b>95000</b>



**Notification Of Award**

**Notification**

**of**

**Award**

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*

*A. Sarker*



## कोल इंडिया लिमिटेड

(एक महारत्न कंपनी)

(भारत सरकार उपक्रम)

सामग्री प्रबंधन विभाग

'कोल भवन', प्रीमिसेस नं.04- मार

प्लॉट सं.-ए.एफ-३, एक्शन एरिया-१ए

न्यू टाउन, राजरहाट,

कोलकाता - ७००१५६

वेबसाइट : [www.coalindia.in](http://www.coalindia.in)

ईमेल: [gmmm.cil@coalindia.in](mailto:gmmm.cil@coalindia.in)



5 DECADES OF UNEARTHING ENERGY

## COAL INDIA LIMITED

(A MAHARATNA COMPANY)

(A Govt of India Undertaking)

Materials Management Division,

'Coal Bhawan', Premises No.04-MAR,

Plot No-AF-III, Action Area 1A,

New Town, Rajarhat,

Kolkata-700156

Website: [www.coalindia.in](http://www.coalindia.in)

E mail: [gmmm.cil@coalindia.in](mailto:gmmm.cil@coalindia.in)

Ref: CIL/C2D/850HP Crawler Dozer/R-153/ 202

Date: 30.06.2025

To:

M/s GMMCO Ltd.

11<sup>th</sup> Floor, Birla Building,

9/1, R.N. Mukherjee Road,

Kolkata – 700001

e-mail: [vikaskumar@gmmcoindia.com](mailto:vikaskumar@gmmcoindia.com)

PCC: Speed Post

### Notification of Award

**Subject:** Supply, Installation and Commissioning of 16 nos. 850HP Crawler Dozers with Ripper along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost Cap for various projects of SECL & NCL.

#### Reference:

1. Our Global e-Tender no. CIL/C2D/850HP Dozers/R-153/2024-25/395 dated 12.06.2024 Cover-I opened on 13.08.2024 and Cover-II (Price Bid) opened on & Reverse Auction on 21.11.2024
2. Your e-offer no. GMMCO/CIL/850HP/24-25 dated 22.07.2024 having BID ID 1065113 and subsequent correspondences and subsequent correspondences on CIL's e-procurement portal
3. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/472 dated 18.09.2024
4. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/621 dated 04.12.2024
5. Your letter no. GMMCO/CIL/850HP/24-25 dated 05.12.2024
6. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/780 dated 06.02.2025
7. Your letter no. GMMCO/CIL/850HP/24-25 dated 30.01.2025
8. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/828 dated 26.02.2025
9. Your letter no. GMMCO/CIL/850HP/24-25 dated 26.02.2025
10. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/906 dated 28.03.2025
11. Your letter no. GMMCO/CIL/850HP/24-25 dated 31.03.2025
12. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/50 dated 25.04.2025
13. Your letter no. GMMCO/CIL/850HP/24-25 dated 28.04.2025
14. Our email dated 30.05.2025
15. Your email dated 30.05.2025

Dear Sir,

With reference to the above and in terms of the Clause-32 of Section-II – Instructions to Bidders (ITB) of the Tender Document, Notification of Award is hereby issued to you confirming acceptance of your offer for Supply, Installation and Commissioning of 16 no. of 850HP Crawler Dozer with

Page 1 of 7

*[Handwritten signatures and initials]*

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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Ripper along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost Cap on CIP (Final Place of Destination) basis for the following projects:

Item no.	Project	Qty
1	Gevra OCP, SECL under PCD	3
2	Gevra OCP, SECL under NCD	3
3	Dipka OCP, SECL under NCD	6
4	Dudhichua OCP, NCL under NCD	1
5	Bina Khakri Amalgamation OCP, NCL NCD	1
6	Jayant OCP, NCL under NCD	2

The terms and conditions shall be as per Tender Document. The salient terms are as mentioned hereunder:

1. A tripartite contract shall be concluded by CIL with you and your principal, M/s Caterpillar Inc., USA, after receipt of Security Deposit as detailed in Clause – 7 below.
2. The contract shall be issued on CIP (Final Place of Destination) basis.

**3. Currency:**

- a) The equipment will be supplied by M/s Caterpillar Inc., USA in US Dollar (\$).
- b) **INR components of equipment** - Port Handling, Clearing & Forwarding, Inland Transportation, Inland Insurance and Erection & Commissioning will be carried out by you for which payment will be made to you in INR. The indigenously sourced items required for fitment in the equipment during its commissioning, the consumable spares and consumables for 12 months of warranty period and thereafter spares and consumables for a period of 05 years under Spares Cost Cap will be supplied by you in Indian Rupees (INR).
- c) Payment in USD and INR shall be made as per relevant clauses of SCC – Section IV of the Tender Document.

**4. The Prices shall be as under:**

**a. Equipment (For all projects):**

Sl no.	Description	Currency	Breakup Value
1	FOB Price (per equipment) inclusive of Indian agency commission	USD	13,12,118.00
2	Indian Agency Commission @ 4% inclusive. in FOB Price		4%
3	Indian Agency Commission incl. in FOB Price	USD	50,466.08
4	Marine Freight Charges upto Port of Entry in India	USD	35,000.00
5	Marine Insurance Charges	USD	2,500.00
6	CIF Price at Port of Entry in India	USD	13,49,618.00
7	Assessable Value	USD	13,49,618.00
8	Basic Customs Duty (BCD) on Assessable CIF Value @ 7.5%	USD	1,01,221.35



9	Social Welfare Surcharge (SWS) on BCD @ 10%	USD	10,122.14
10	IGST @ 18%	USD	2,62,973.07
11	Total Customs Duty	USD	3,74,316.55
12	GST on marine freight @ 5%	USD	1,750.00
13	GST on Indian Agency Commission @ 18%	USD	9,083.89
14	Total CIF Value incl. GST on Marine Freight + Ind. Agency Commission (Exchange Rate USD 1 = Rs 85.03)	Rs.	11,56,79,224.53
15	Total Customs Duty (Exchange Rate USD 1 = Rs 85.03)	Rs.	3,18,28,136.44
16	Port charges,clearing forwarding charges and other incidental charges.	Rs.	18,77,364.00
17	GST on Port charges,clearing forwarding charges and other incidental charges @ 18%	Rs.	3,37,925.52
18	Inland Transportation for delivery upto Final Place of Destination	Rs.	18,50,000.00
19	GST on Inland Transportation for delivery upto Final Place of Destination @ 18%	Rs.	3,33,000.00
20	Inland Insurance for delivery upto Final Place of Destination	Rs.	-
21	GST on Inland Insurance upto Final Place of Destination @ 18%	Rs.	-
22	Errection & Commissioning Charges	Rs.	47,75,000.00
23	GST on Errection & Commissioning @ 18%	Rs.	8,59,500.00
24	Total Price of all Items sourced in INR required for fitting in the equipment during commissioning of the equipment	Rs.	18,03,063.00
25	Total GST applicable of all Items sourced in INR required for fitting in the equipment during commissioning of the equipment	Rs.	3,24,551.34
26	CIP Price per Equipment with GST	Rs.	15,96,67,764.84

b. Project wise details of Total package of Equipment (fleet) along with Consumable Spares and Consumables for warranty period of one year and Spares & Consumables for post warranty period of 5 years under Spares Cost Cap are as under:

i. For Item 1 - 850HP Crawler Dozers with ripper for Gevra OCP, SECL under PCD (3 nos) & Item 2 - 850HP Crawler Dozers with ripper for Gevra OCP, SECL under NCD (3 nos)

Description	Currency	Value
CIP Price of Fleet with GST	Rs.	47,90,03,294.51
Total 1st yr Spares and consumables including GST for fleet	Rs	2,90,71,591.56
Total 2nd yr Spares and consumables including GST for fleet	Rs	12,86,74,313.00
Total 3rd yr Spares and consumables including GST for fleet	Rs	13,49,14,871.00
Total 4th yr Spares and consumables including GST for fleet	Rs	22,77,46,074.00
Total 5th yr Spares and consumables including GST for fleet	Rs	21,42,35,077.00
Total 6th yr Spares and consumables including GST for fleet	Rs	12,40,46,848.00
Grand Total for spares and consumables for 6 years with GST for fleet	Rs	85,86,88,774.56
Grand Total for equipment and Spares and Consumables for 6 years incl. GST per fleet	Rs	1,33,76,92,069.07



ii. For Item 3 - 850HP Crawler Dozers with ripper for Dipka OCP, SECL under NCD (6 nos)

Description	Currency	Value
CIP Price of Fleet with GST	Rs.	95,80,06,589.01
Total 1st yr Spares and consumables including GST for fleet	Rs	5,81,43,183.12
Total 2nd yr Spares and consumables including GST for fleet	Rs	25,73,48,624.00
Total 3rd yr Spares and consumables including GST for fleet	Rs	27,28,66,551.00
Total 4th yr Spares and consumables including GST for fleet	Rs	45,37,23,408.00
Total 5th yr Spares and consumables including GST for fleet	Rs	42,84,70,153.00
Total 6th yr Spares and consumables including GST for fleet	Rs	24,80,93,696.00
Grand Total for spares and consumables for 6 years with GST for fleet	Rs	1,71,86,45,615.12
Grand Total for equipment and Spares and Consumables for 6 years incl. GST per fleet	Rs	2,67,66,52,204.13

iii. For Item 4 - 850HP Crawler Dozers with ripper for Dudhichua OCP, NCL under NCD (1 no) & Item 5 - 850HP Crawler Dozers with ripper for Bina Kakri Amalgamation, NCL under NCD (1 no)

Description	Currency	Value
CIP Price of Fleet with GST	Rs.	15,96,67,764.84
Total 1st yr Spares and consumables including GST for fleet	Rs	1,06,83,391.96
Total 2nd yr Spares and consumables including GST for fleet	Rs	4,32,92,379.00
Total 3rd yr Spares and consumables including GST for fleet	Rs	4,52,57,547.00
Total 4th yr Spares and consumables including GST for fleet	Rs	7,46,42,741.00
Total 5th yr Spares and consumables including GST for fleet	Rs	6,87,88,017.00
Total 6th yr Spares and consumables including GST for fleet	Rs	3,94,52,388.00
Grand Total for spares and consumables for 6 years with GST for fleet	Rs	28,21,16,463.96
Grand Total for equipment and Spares and Consumables for 6 years incl. GST per fleet	Rs	44,17,84,228.80

iv. Item 6 - 850HP Crawler Dozers with ripper for Jayant OCP, NCL under NCD (2 nos)

Description	Currency	Value
CIP Price of Fleet with GST	Rs.	31,93,35,529.67
Total 1st yr Spares and consumables including GST for fleet	Rs	2,13,66,783.92
Total 2nd yr Spares and consumables including GST for fleet	Rs	8,65,84,758.00
Total 3rd yr Spares and consumables including GST for fleet	Rs	9,05,15,092.00
Total 4th yr Spares and consumables including GST for fleet	Rs	14,92,85,484.00
Total 5th yr Spares and consumables including GST for fleet	Rs	13,75,76,033.00
Total 6th yr Spares and consumables including GST for fleet	Rs	7,89,04,776.00
Grand Total for spares and consumables for 6 years with GST for fleet	Rs	56,42,32,926.92
Grand Total for equipment and Spares and Consumables for 6 years incl. GST per fleet	Rs	88,35,68,456.59



The Total Value for award of the Contract including GST for all the six projects shall be Rs.7,11,91,73,256.46 (Rupees Seven Hundred and Eleven Crore Ninety-One Lakh Seventy-Three Thousand Two hundred and Fifty-Six and Paisa Forty-six only).

NB: The cost cap value shall be payable at actuals subject to the maximum rate / amount mentioned above.

5. Letter of Credit for the foreign currency component of the equipment will be opened in the name of M/s Caterpillar S.A.R.L, Singapore for CIF value less Agency Commission.
6. Indian Agency Commission @ 4% (four percent) of FOB value of the Equipment is included in the FOB Price indicated above. It shall be payable to you in INR only as per clause-8.5, SCC, Section-IV of Tender Document.

7. **Security Deposit:**

You are requested to arrange to furnish the following Security Deposit as per Clause-34 of ITB, Section-II and Clause-1 of SCC, Section-IV of the NIT, within 30 days from the date of Notification of Award:

A. **Security Deposit for Equipment quoted in US\$:** For **US\$ 15,02,226.00 (Fifteen Lakhs Two Thousand Two hundred and twenty-Six only)** in the form of RTGS/NEFT/IMPS/e-BG or in the form of a Bank Guarantee as per format enclosed as Annexure-10, Sample Forms, Section-VII of the tender document, from a RBI Scheduled Bank in India (on a non-judicial stamp paper). The Security Deposit Bank Guarantee should be valid upto 3 months after the supply and commissioning of all the equipment covered in the contract.

B. **Security Deposit for Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost cap quoted in INR:** For **Rs.6,03,89,327.00 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven only)** in the form of in the form of RTGS/NEFT/IMPS/e-BG or in the form of a Bank Guarantee as per format enclosed as Annexure-10, Sample Forms, Sec.-VII of the tender document, from a RBI Scheduled Bank in India (on a non-judicial stamp paper). The Security Deposit Bank Guarantee should be valid upto 3 months after the supply and commissioning of all the equipment covered in the contract.

In case the SDBGs are not submitted within 30 days from the date of NoA, a penalty equivalent to 0.5% (half percent) of SD amount for delay of each week or part thereof (period of delay is to be calculated from the 31st day from the date of NoA to the date of receipt of full SD shall be levied and paid by you along with the SDBG.

Subject to force majeure conditions, failure to comply above requirement of Security Deposit and requirement of ITB clause-33 and 34.1 within a reasonable time (not exceeding 90 days from date of NoA) shall constitute sufficient ground for the annulment of the award and forfeiture of EMD.



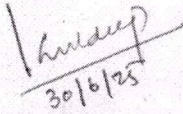
8. **Signing of Contract:**

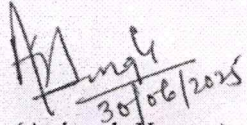
As per Clause-33, ITB, Section-II, the agreement shall be signed within 15 days of receipt of draft copy of agreement. You are requested to intimate the names and designation of the persons who will sign the agreement on your behalf along with the names and designation of witnesses. The authorized representatives of M/s Komatsu Ltd., Japan will also be signatories to the contract agreement and the Integrity Pact.

This Notification of Award will be binding on you until a formal contract is signed as per Clause-32.2 of ITB, Section-II of the Tender Document.

You are requested to confirm receipt of this Notification of Award within 7 days of its issue and arrange to furnish the above Security Deposit(s).

Yours faithfully,  
For & on Behalf of Coal India Limited

  
(P. Kuldeep)  
Sr. Manager (MM)

  
(Avinash Kumar)  
General Manager (MM)

**Copy to:**

- M/s Caterpillar Inc., 5205 N.O'Connor Blvd., Irving, TX 75039 **(By Airmail)** – This has reference to their Manufacturer's Authorization letter no. nil dated 22.07.2024 authorizing their Indian Agent, M/s GMMCO Ltd. to submit the bid and sign the contract against the above referred tender.
- Dir(Tech), CIL / ED(E&E), CIL / GM(E&E), CIL / GM(Fin) I/c, CIL
- Dir(Tech) P&P, SECL, GM(Excv)-HOD, SECL, GM(Fin), SECL, GM(MM)-HOD, SECL
- Dir(Tech) P&P, NCL, GM(Excv)-HOD, NCL, GM(Fin), NCL, GM(MM)-HOD, NCL

**BC details:**

**SECL:**

**BC under capital head**

No.	Unit Area	Head	Year	Amount (Rs)
318	GM Office (Gevra)	P&E HEMM	2025-26	99,96,48,572.00
26.06.2025	GM Office (Gevra)		2025-27	16,66,08,095.00
	GM Office (Dipka)		2025-26	66,64,32,381.00
	GM Office (Dipka)		2025-27	33,32,16,191.00
	SECL8651			
	SECL8651			
	SECL8851			



	SECL8851			
Commitment Item	4100			216,59,05,239.70

**BC under revenue head**

SECL/GM(F)/CONS.HEMM SPARE/ BC/AREAS OF SECL/2026-27 to 2031-32/50/03  
for Rs.36027.12 lakhs dated 27.06.2025

**NCL:**

**Capital budget:**

Capital Budget/BC of Rs.81,33,17,387.24 (Rupees Eighty-One Crore Thirty-Three Lakh(s) Seventeen Thousand Three Hundred Eighty-Seven and Paise Twenty-Four Only) vide ref. no. NCL/HQ/C&B/Capital/ HEMM/2025-26/02 dt 28.06.2025.

FC for total value of Rs.81,33,17,387.24 (Rupees Eighty-One Crore Thirty-Three Lakh(s) Seventeen Thousand Three Hundred Eighty-Seven and Paise Twenty-Four Only) is given vide ref. no. NCL/HQ/FC/2025-26/ Capital/HEMM/02 dt. 28.06.2025.

**Revenue Budget:**

Budget/BC of Rs.11,29,32,023.88 (Rupees Eleven Crore Twenty-Nine Lakh(s) Thirty-Two Thousand Twenty-Three and Paise Eighty-Eight Only) from Centralised HEMM Spares budget is kept at HQ, vide ref. no. NCL/HQ/BC/2025-26/Centralised HEMM Spares/86 dt 28.06.2025.

FC for Rs.11,29,32,023.88 (Rupees Eleven Crore Twenty-Nine Lakh(s) Thirty-Two Thousand Twenty-Three and Paise Eighty-Eight Only) is given vide ref. no. NCL/HQ/FC/2025-26/Centralised HEMM Spares/ 78 dt 28.06.2025.

The budget for the subsequent years will be provided by NCL after the communication of the Revenue Budget for the respective years by GM(Excv)-HOD, NCL

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## कोल इंडिया लिमिटेड

(एक महारत कंपनी)

(भारत सरकार उपक्रम)

सामग्री प्रबंधन विभाग

'कोल भवन', प्रीमिसेस नं.04- मार

प्लॉट सं.-ए.एफ-३, एक्शन एरिया-१ए

न्यू टाउन, राजरहाट,

कोलकाता - ७००१५६

वेबसाइट : [www.coalindia.in](http://www.coalindia.in)

ईमेल: [gmmmm.cil@coalindia.in](mailto:gmmmm.cil@coalindia.in)



5 DECADES OF UNEARTHING ENERGY

## COAL INDIA LIMITED

(A MAHARATNA COMPANY)

(A Govt of India Undertaking)

Materials Management Division,

'Coal Bhawan', Premises No.04-MAR,

Plot No-AF-III, Action Area 1A,

New Town, Rajarhat,

Kolkata-700156

Website: [www.coalindia.in](http://www.coalindia.in)

E mail: [gmmmm.cil@coalindia.in](mailto:gmmmm.cil@coalindia.in)

Ref: CIL/C2D/850HP Crawler Dozer/R-153/A-1060

Date: 26.08.2025

To:

M/s GMMCO Ltd.

11<sup>th</sup> Floor, Birla Building,

9/1, R.N. Mukherjee Road,

Kolkata – 700001

e-mail: [vikaskumar@gmmcoindia.com](mailto:vikaskumar@gmmcoindia.com)

### Notification of Award - Amendment

**Subject:** Supply, Installation and Commissioning of 16 nos. 850HP Crawler Dozers with Ripper along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost Cap for various projects of SECL & NCL.

#### Reference:

1. Our Global e-Tender no. CIL/C2D/850HP Dozers/R-153/2024-25/395 dated 12.06.2024 Cover-I opened on 13.08.2024 and Cover-II (Price Bid) opened on & Reverse Auction on 21.11.2024
2. Your e-offer no. GMMCO/CIL/850HP/24-25 dated 22.07.2024 having BID ID 1065113 and subsequent correspondences and subsequent correspondences on CIL's e-procurement portal
3. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/472 dated 18.09.2024
4. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/621 dated 04.12.2024
5. Your letter no. GMMCO/CIL/850HP/24-25 dated 05.12.2024
6. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/780 dated 06.02.2025
7. Your letter no. GMMCO/CIL/850HP/24-25 dated 30.01.2025
8. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/828 dated 26.02.2025
9. Your letter no. GMMCO/CIL/850HP/24-25 dated 26.02.2025
10. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/906 dated 28.03.2025
11. Your letter no. GMMCO/CIL/850HP/24-25 dated 31.03.2025
12. Our letter no. CIL/C2D/850HP Dozers/R-153/2024-25/50 dated 25.04.2025
13. Your letter no. GMMCO/CIL/850HP/24-25 dated 28.04.2025
14. Our email dated 30.05.2025
15. Your email dated 30.05.2025
16. NoA issued vide CIL/C2D/850HP Crawler Dozer/R-153/202 dated 30.06.2025

Dear Sir,

With reference to the above Clause -8 – “Signing of Contract” may be read as under in place of existing entry:

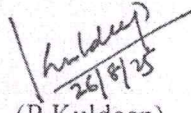
Page 1 of 2

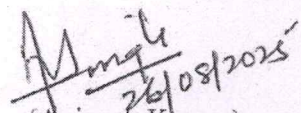


As per Clause-33, ITB, Section-II, the agreement shall be signed within 15 days of receipt of draft copy of agreement. You are requested to intimate the names and designation of the persons who will sign the agreement on your behalf along with the names and designation of witnesses. The authorized representatives of M/s Caterpillar Inc., USA will also be signatories to the contract agreement and the Integrity Pact.

This Notification of Award will be binding on you until a formal contract is signed as per Clause-32.2 of ITB, Section-II of the Tender Document.

Yours faithfully,  
For & on Behalf of Coal India Limited


  
(P. Kuldeep)  
Sr. Manager (MM)

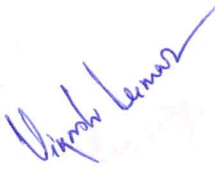
  
(Avinash Kumar)  
General Manager (MM)

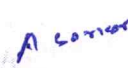
**Copy to:**

- M/s Caterpillar Inc., 5205 N.O'Connor Blvd., Irving, TX 75039 (**By Airmail**) – This has reference to their Manufacturer's Authorization letter no. nil dated 22.07.2024 authorizing their Indian Agent, M/s GMMCO Ltd. to submit the bid and sign the contract against the above referred tender.



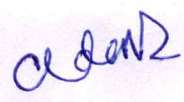














## Integrity Pact

# INTEGRITY PACT

*[Signature]*  
*[Signature]*

*[Signature]*

*A. Samsar*  
*[Signature]*

*[Signature]* *[Signature]*



## Integrity Pact

### INTEGRITY PACT

#### General

This Agreement (hereinafter called the Integrity Pact) is made on 1<sup>st</sup> day of the month of September, 2025, between, on one hand, Coal India Limited/Subsidiary Cos. acting through Shri S.M.Alli, Executive Director (MM)-HOD, (hereinafter called the "BUYER / Principal", which expression shall mean and include, unless the context otherwise requires, his successors in office and assigns) of the First Part and M/s. GMMCO Ltd., Kolkata represented by Shri Vikas Kumar, General Manager and M/s Caterpillar Inc., USA represented by Shri Arup Kumar Das, Commercial Mining Manager (hereinafter called the "BIDDER/Seller/Contractor" which expression shall mean and include, unless the context otherwise requires, his successors and permitted assigns) of the Second Part.

WHEREAS the BUYER proposes to procure 850 HP Crawler Dozers with Ripper along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 5 years under Spares Cost Cap and the BIDDER/Seller is willing to offer/has offered the stores and

WHEREAS the BIDDER is a private company/~~public company/Government undertaking/partnership/registered export agency~~, constituted in accordance with the relevant law in the matter and the BUYER is a Central Public Sector Unit.

NOW, THEREFORE,

To avoid all forms of corruption by following a system that is fair, transparent and free from any influence/prejudiced dealings prior to, during and subsequent to the currency of the contract to be entered into with a view to :-

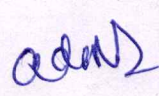
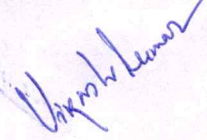
Enabling the BUYER to obtain the desired said stores/equipment at a competitive price in conformity with the defined specifications by avoiding the high cost and the distortionary impact of corruption on public procurement, and

Enabling BIDDERS to abstain from bribing or indulging in any corrupt practice in order to secure the contract by providing assurance to them that their competitors will also abstain from bribing and other corrupt practices and the BUYER will commit to prevent corruption, in any form, by its officials by following transparent procedures.

The parties hereto hereby agree to enter into this Integrity Pact and agree as follows:

#### **Section 1 – Commitments of the Principal**

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-



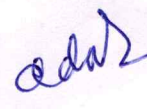
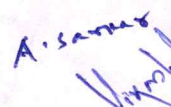


## Integrity Pact

- a. No employee of the Principal, personally or through family members, will in connection with the tender for , or the execution of a contract, demand ; take a promise for or accept, for self or third person, any material or immaterial benefit which the person is not legally entitled to.
  - b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) confidential / additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
  - c. Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/ PC Act, or if there be a substantive suspicion in this regard, the Principal will inform the Chief Vigilance Officer and in addition can initiate disciplinary actions.

## Section 2 - Commitments of the Bidder(s)/ Contractor(s)

- (1) The Bidder(s) / Contractor(s) commit themselves to take all measures necessary to prevent corruption. The Bidder(s) / Contractor(s) commit themselves to observe the following principles during participation in the tender process and during the contract execution.
  - a. The Bidder(s) / Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/ she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract.
  - b. The Bidder(s) / Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non- submission of bids or any other actions to restrict competitiveness or to introduce cartelisation in the bidding process.
  - c. The Bidder(s) / Contractor(s) will not commit any offence under the relevant IPC/ PC Act; further the Bidder(s) / Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship, regarding plans, technical proposals and business details, including information contained or transmitted electronically.
  - d. The Bidder(s) / Contractors(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India , if any, Similarly the Bidder(s) /Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any.





## Integrity Pact

Further details as mentioned in the "Guidelines on Indian Agents of Foreign Suppliers" shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/ representative have to be in Indian Rupees only. *The guidelines and terms and conditions for India agents of foreign supplier shall be as per the provisions mentioned in the NIT.*

- e. The Bidder(s) / Contractor(s) will, when presenting their bid, disclose any and all payments made, is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
  - f. Bidder(s) / Contractor(s) who have signed the Integrity Pact shall not approach the Courts while representing the matter to IEMs and shall wait for their decision in the matter.
- (2) The Bidder(s) / Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

### Section 3 - Disqualification from tender process and exclusion from future contracts

If the Bidder, before contract award, has committed a transgression through a violation of Section 2 or in any other form such as to put his reliability or credibility as Bidder into question, the Principal is entitled to disqualify the Bidder from the tender process or to terminate the contract, if already signed, for such reason.

- (1) If the Bidder / Contractor / Supplier has committed a transgression through a violation of Section 2 such as to put his reliability or credibility into question, the Principal is also entitled to exclude the Bidder / Contractor / Supplier from future contract award processes. The imposition and duration of the exclusion will be determined by the severity of the transgression. The severity will be determined by the circumstances of the case. In particular the number of transgressions, the position of the transgressors within the company hierarchy of the Bidder and the amount of the damage. The exclusion will be imposed for a minimum of 6 months and maximum of 3 years.
- (2) A transgression is considered to have occurred if the Principal, after due consideration of available facts and evidences within his / her knowledge concludes that there is a reasonable ground to suspect violation of any commitment listed under Section 2 i.e "Commitments of Bidder(s) / Contractor(s).
- (3) The Bidder accepts and undertakes to respect and uphold the Principal's absolute right to resort to and impose such exclusion and further accepts and undertakes not to challenge or question such exclusion on any ground, including the lack of any hearing before the decision to resort to such exclusion is taken. This undertaking is given freely and after obtaining independent legal advice.
- (4) If the Bidder / Contractor / Supplier can prove that he has restored / recouped the damage caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion prematurely."



## **Integrity Pact**

### **Section 4 - Compensation for Damages**

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit/ Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank Guarantee.

### **Section 5 - Previous transgression**

- (1) The Bidder declares that no previous transgressions occurred in the last three years with any other Company in any country conforming to the anti-corruption approach or with any Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or action can be taken as per the procedure mentioned in "Guidelines on Banning of business dealings".

### **Section 6 - Equal treatment of all Bidders / Contractors / Subcontractors**

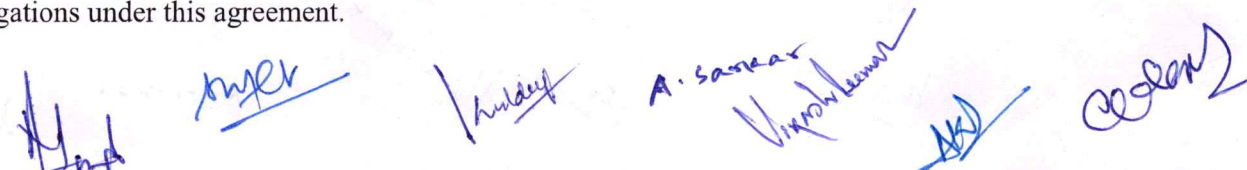
- (1) In case of Sub-contracting, the Principal Contractor shall take the responsibility of the adoption of Integrity Pact by the Sub-contractor.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

### **Section 7 - Criminal charges against violating Bidder(s) / Contractor(s) / Subcontractor(s)**

If the Principal obtains knowledge of conduct of a Bidder, Contractor or Subcontractor, or of an employee or a representative or an associate of a Bidder, Contractor or Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to the Chief Vigilance Officer.

### **Section 8 - Independent External Monitor**

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact after approval by Central Vigilance Commission. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.

  
CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025



## Integrity Pact

- (2) The Monitor is not subject to instructions by the representatives of the parties and performs his/ her functions neutrally and independently. The Monitor would have access to all Contract documents, whenever required. It will be obligatory for him / her to treat the information and documents of the Bidders/Contractors as confidential.

He/ she reports to the Chairman, Coal India Limited / CMD, Subsidiary Companies

- (3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by the Contractor. The Contractor will also grant the Monitor, upon his/ her request and demonstration of a valid interest, unrestricted and unconditional access to their project documentation. The same is applicable to Sub-contractors.
- (4) The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s) / Sub-contractor(s) with confidentiality. The Monitor has also signed declarations on 'Non-Disclosure of Confidential Information ' and of 'Absence of Conflict of Interest'. In case of any conflict of interest arising at a later date, the IEM shall inform Chairman, Coal India Limited / CMD, Subsidiary Companies and recuse himself / herself from that case.
- (5) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (6) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he/ she will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (7) The Monitor will submit a written report to the Chairman, Coal India Limited / CMD, Subsidiary Companies within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- (8) If the Monitor has reported to the Chairman, Coal India Limited / CMD, Subsidiary Companies, a substantiated suspicion of an offence under relevant IPC/ PC Act, and the Chairman, Coal India Limited / CMD, Subsidiary Companies has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (9) The word 'Monitor' would include both singular and plural.



## **Integrity Pact**

### **Section 9 - Pact Duration**

This Pact begins when both parties have legally signed it. It expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded. Any violation of the same would entail disqualification of the bidders and exclusion from future business dealings.

If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by Chairman Coal India Limited / CMD, Subsidiary Companies.

### **Section 10 - Other provisions**

- (1) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (2) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (3) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (4) Issues like Warranty / Guarantee etc. shall be outside the purview of IEMs.
- (5) In the event of any contradiction between the Integrity Pact and its Annexure, the Clause in the Integrity Pact will prevail.

### **Section 11- Facilitation of Investigation**

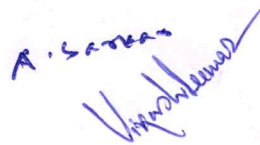
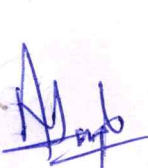
In case of any allegation of violation of any provisions of this Pact or payment of commission, the BUYER or its agencies shall be entitled to examine all the documents including the Books of Accounts of the BIDDER and the BIDDER shall provide necessary information and documents in English and shall extend all possible help for the purpose of such examination.

### **Section 12- Law and Place of Jurisdiction**

This Pact is subject to Indian Law. The place of performance and jurisdiction is the seat of the BUYER.

### **Section 13 - Other Legal Actions.**

The actions stipulated in this Integrity Pact are without prejudice to any other legal action that may follow in accordance with the provisions of the extant law in force relating to any civil or criminal proceedings.

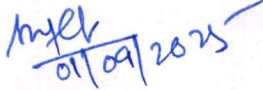





## Integrity Pact

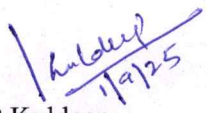
The parties hereby sign this Integrity Pact at Kolkata on 01.09.2025.

### For the Buyer/Purchaser

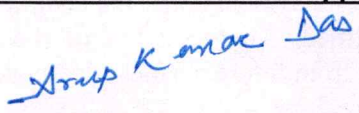
  
S.M. Alli  
Executive Director (MM)

### Witnesses

  
Avinash Kumar  
General Manager (MM)  
Coal India Ltd., Kolkata

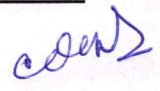
  
P. Kuldeep  
Sr. Manager (MM)  
Coal India Ltd., Kolkata

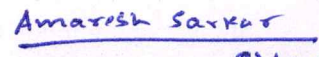
### For the Manufacturer/Supplier

  
Arup Kumar Das  
Commercial Mining Manager  
Caterpillar Inc

Vikas Kumar  
General Manager  
GMMCO Ltd

### Witnesses

  
Chinmoy Adak  
Sales Representative  
Caterpillar Inc,

  
Amaresh Sarkar  
Manager (Marketing)  
GMMCO Ltd, Kolkata



Annexure(s)

## **Annexure(s)**

*Super*

*[Signature]*

*[Signature]*

*A. Sankar*

*[Signature]*

*[Signature]*

*[Signature]*



**Gmmco****CAT****Gmmco Limited**

CK Birla Group  
11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

GMMCO/CIL/850 DOZER/SDBG

July 23, 2025.

General Manager (MM)  
Coal India Limited, Coal Bhavan  
Materials Management Division  
Level 1 (1<sup>st</sup> Floor)  
Premises No. 04, Plot No. AF-III  
Action Area 1A, New Town  
Rajarhat, Kolkata-700156

C 2D/205  
कोयल इण्डिया लिमिटेड  
COAL INDIA LIMITED  
DATE: 25/07/2025  
RECEIVED  
स.एम. विभाग / MM Division

GMMCO/MM) *[Signature]*  
25/7/25

Kind Attn : Mr. Avinash Kumar

Sub: Submission of Security Deposit in INR Portion.

Ref: Notification of Award No. CIL/C2D/850 HP Crawler Dozer/R-153/202 dated 30.06.2025 in favour of GMMCO Limited for Supply, Installation and Commissioning of 16 nos. of 850 HP Crawler Dozer with Ripper along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost Cap.

With reference to the Notification of Award as mentioned above and as per Clause - 34 of "ITB", Section - II, We are submitting herewith SDBG in original in INR Portion as details given below:-

1. Security Deposit Bank Guarantee for Consumable Spares and Consumables Portion in INR issued by Sate Bank of India under Reference No 0999925BG0Y01799 dated 16.7.2025 in original:-

Sl No	Bank Guarantee No.	Date of Issue of SDBG	Applicant	Amount (In INR)	Expiry Date	Claim Within	Issued Bank
1.	0999925BG0Y01799	16.7.2025	GMMCO Limited	60389327.00	31.3.2027	31.03.2027	SBI

With reference to SDBG in USD Portion is in process and we expect the same to reach at our end shortly. Accordingly we will arrange onward submission.

Thanking you

Yours faithfully  
For GMMCO Limited

*[Signature]*

Vikash Kumar  
General Manager

CC : Mr. P. Kuldeep  
Sr. Manager (MM)  
CIL, Kolkata.

A. Sankar

✓ Encl:- PBG in original *[Signature]*

*[Signature]*

Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in  
(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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*[Signature]*

*[Signature]*

*[Signature]*





## Eximbills Enterprise SWIFT

View RAW

Main Reference NO: 0999925BG0Y01799 Transaction Reference NO: 0999925BG0Y01799  
 Unit Code: 09999 Operator: VDE0064  
 Module Name: BGIF Function Name: Issue\_After\_RegBG  
 Transaction Date: 16-07-2025 Transaction Time: 15:29:13  
 Event Time: 4 Release by: 7458053  
 Release Date: 16-07-2025 Release Time: 15:32:29

MT760COV AckFlag :Waiting for Ack/Nak NotifyFlag :

<b>B1:</b>	<b>Outgoing SWIFT Header 1</b>
	F01SBIN000999950000000000
<b>B2:</b>	<b>Receiver's BIC Code</b>
	I760ICIC00000006N
<b>7020:</b>	<b>Transaction Reference Number (Issuing Bank Guarantee Number)</b>
	0999925BG0Y01799
<b>7022:</b>	<b>Guarantee Form Number</b>
	OTH DOMST BANKS
<b>7024:</b>	<b>Type of Bank Guarantee : Performance, Financial, Others</b>
	PERFORMANCE
<b>7025:</b>	<b>Amount of Guarantee Currency Code Amount</b>
	INR60389327,00
<b>7026:</b>	<b>Guarantee Validity Guarantee From Date Guarantee To Date</b>
	2025071620270331
<b>7027:</b>	<b>Guarantee Effective Date</b>
	20250716
<b>7029:</b>	<b>End date for lodgement of claim</b>
	20270331
<b>7030:</b>	<b>Place of lodgement of claim</b>
	C A G BRANCH CHENNAI
<b>7031:</b>	<b>Issuing Branch IFSC</b>
	SBIN0009999
<b>7032:</b>	<b>Issuing branch name and address</b>
	C A G BRANCH CHENNAI SIGAPI ACHI BUILDING,18/3,R.L.ROAD EGMORE,CHENNAI 600008 CHENNAI, TAMIL NADU, INDIA
<b>7033:</b>	<b>Name of applicant and his details</b>
	GMMCO LIMITED NO. 6, GST ROAD ST THOMAS MOUNT CHENNAI
<b>7034:</b>	<b>Name of Counter party and his details</b>
	COAL INDIA LIMITED MATERIALS MANAGEMENT DIVISION PREMISES NO. 04, ACTION AREA 1A NEW TOWN, RAJARHAT KOLKATA 700156

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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7035:	Counter party IFSC
	ICIC0000006
7036:	Counter party branch name and address
	ICICI BANK LTD KOLKATA - R N MUKHERJEE (RETAI 22, R N MUKHERJEE ROAD, KOLKAT
7037:	Sender to Receiver Information
	UNDERLYING CONTRACT NO 850HP CRAWLER DOZER R 153 202 BG AMOUNT INR 60389327.00 EXPIRY DATE 31-03-2027 CLAIM DATE 31-03-2027
7039:	Reference/Description of the underlined contract
	850HP CRAWLER DOZER R 153 202
7040:	Stamp Duty Electronically Paid (Y/N)
	N
7048:	e-Bank Guarantee to be held in Demat Form(Y/N)
	N
20Z:	Transaction Reference Number
	NON-REGULAR





Security Deposit Bank Guarantee

Beneficiary:

Coal India Limited  
Materials Management Division  
Premises No. 04, Action Area - 1A  
New Town, Rajarhat  
Kolkata - 700 156.

Applicant :

Gmmco Limited  
Birla Building  
9/1, R. N. Mukherjee Road  
Kolkata - 700 001.



Re : Bank Guarantee in respect of Notification of Award No. CIL/C2D/850 HP Crawler Dozer/R-153/202 Dated 30.06.2025 between Coal India Limited, Materials Management Division, Premises No. - 04, Action Area - 1A, New Town, Rajarhat, Kolkata - 700 156 and GMMCO Limited, Birla Building, 9/1, R. N. Mukherjee Road, Kolkata - 700 001.

Messrs Gmmco Limited a Company having its office at Birla Building, 9/1, R. N. Mukherjee Road, Kolkata - 700 001 hereinafter called the Contractor has received the Notification of Award No. CIL/C2D/850 HP Crawler Dozer/R-153/202 Dated 30.06.2025 hereinafter called the said Agreement with Coal India Limited, Materials Management Division, Premises No. - 04, Action Area - 1A, New Town, Rajarhat, Kolkata - 700 156 (Name of the Purchaser Company) (hereinafter called 'the Company') to supply, Installation and Commissioning of 16 Nos. 850 HP Crawler Dozers with Ripper alongwith Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost Cap (Final Place of destination basis) amounting to Rs. 7,11,91,73,256.46 (Rupees Seven Hundred and Eleven Crore Ninety One Lakh Seventy Three Thousand Two Hundred and Fifty Six and Paise Forty Six Only) on the terms and conditions contained in the said Notification of Award..

The State Bank of India a Banking Corporation constituted under the State Bank of India Act 1955, and having its Central Office at State Bank Bhavan, Madame Cama Road, Nariman Point, Mumbai 400021 and a Branch Office amongst other places at Corporate Accounts Group Branch, 3rd Floor, Sigappi Achi Building, Rukmini Lakshmi Pathy Road, Egmore, Chennai - 600008. has at the request of the Contractor agreed to give the guarantee as hereinafter contained.

We State Bank of India, CAG Chennai Branch, 18/3 Rukmini Lakshmi Pathy Road, 3rd Floor, Sigapi Achi Building, Egmore, Chennai - 600 008 and having its Corporate Centre at Nariman Point, Mumbai 400021 do hereby unconditionally agree with the Company that if the Contractor shall in any way fail to observe or perform the terms and conditions of the said Agreement or shall commit any breach of its obligations thereunder, the Bank shall on demand and without any objection or demur pay to the Company, the said sum of Rs. 6,03,89,327 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven Only) or any portion thereof without requiring the Company to have recourse to any legal remedy that may be available to it to compel the Bank to pay the same or calling on the Company to compel such payment by the Contractor.

Any such demand shall be conclusive as regards the liability of the Contractor to the Company and as regards the amount payable by the Bank under this guarantee. The Bank shall not be entitled to withhold payment on the ground that the Contractor has disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or legal proceeding is pending between the Company and the Contractor regarding the claim.

We, the Bank, further agree that the guarantee shall come into force from the date hereof and shall remain in full force and effect till the period that will be taken for the performance of the said Agreement which is likely to be the 31st day of March 2027 but if the period of Agreement is

0999925BG0Y01799

2025-07-16

For STATE BANK OF INDIA

For STATE BANK OF INDIA

Manager - Client Services  
CAG Branch, Chennai - 600 008.  
K. ANITHA, SS No: K14895

Chief Manager  
Client Services Division  
CAG Branch, Chennai  
S. VEERANJANEYULU  
SS No.8643

1 / 2

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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extended either pursuant to the provisions in the said Agreement or by mutual agreement between the Contractor and the Company, the Bank may renew the period of the guarantee failing which it shall pay to the Company the said sum of Rs. 6,03,89,327 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven Only), or such lesser amount out of the said sum of Rs. 6,03,89,327 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven Only) as may be due to the Company and as the Company may demand. This guarantee shall remain in force until the dues of the Company in respect of the said sum of Rs. 6,03,89,327 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven Only) are fully satisfied and the Company certifies that the Agreement has been fully carried out by the contractor and discharges the guarantee.

The Bank further agrees with the Company that the Company shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend the time for performance of the said Agreement from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forbear to enforce any of the terms and conditions relating to the said Agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to the contractor or through any forbearance, act or omission on the part of the Company or any indulgence by the Company to the contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provisions have the effect of relieving or discharging the Guarantor.

The Bank further agrees that in case this guarantee is required for a longer period and it is not extended by the Bank beyond the period specified above, the Bank shall pay to the Company the said sum of Rs. 6,03,89,327 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven Only) or such lesser sum as may then be due to the Company and as the Company may require.

Notwithstanding anything contained herein above:

- (i) Our liability under this Bank Guarantee shall not exceed INR. 6,03,89,327 (Rupees Six Crores Three Lakhs Eighty Nine Thousand Three Hundred and Twenty Seven Only)
- (ii) This Bank Guarantee shall be valid up to 31st day of March 2027 and
- (iii) We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only & only if we receive a written claim or demand on or before 31st day of March 2027.

The Bank has under its constitution power to give this guarantee and Chief Manager, Inland Trade and Manager Inland Trade, who have signed it on behalf of the Bank has authority to do so.

For STATE BANK OF INDIA

Manager - Client Services  
CAG Branch, Chennai - 600 008,  
K. ANITHA, SS No: K14895

For STATE BANK OF INDIA

Chief Manager  
Client Services Division  
CAG Branch, Chennai  
S. VEERANJANEYULU  
SS No.8643

0999925BG0Y01799

2025-07-16



**Gmmco****CAT****Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

GMMCO/CIL/850 DOZER/SDBG

July 29, 2025.

General Manager (MM)  
Coal India Limited, Coal Bhavan  
Materials Management Division  
Level 1 (1<sup>st</sup> Floor)  
Premises No. 04, Plot No. AF-III  
Action Area 1A, New Town  
Rajarhat, Kolkata-700156C2D/214  
कोल इंडिया लिमिटेड  
COAL INDIA LIMITED  
DATE: 29/07/2025  
RECEIVED  
एम.एम. विभाग / MM Division

Kind Attn : Mr. Avinash Kumar

Sub: Submission of Security Deposit in USD Portion.

Ref: Notification of Award No. CIL/C2D/850 HP Crawler Dozer/R-153/202 dated 30.06.2025 in favour of GMMCO Limited for Supply, Installation and Commissioning of 16 nos. of 850 HP Crawler Dozer with Ripper along with Consumable Spares and Consumables for 12 months of warranty period from the date of commissioning of the equipment and thereafter Spares & Consumables for a period of 05 years under Spares Cost Cap.

With reference to the Notification of Award as mentioned above and as per Clause - 34 of "ITB", Section - II, We are submitting herewith SDBG in original in USD Portion as details given below:-

1. Security Deposit Bank Guarantee in USD issued by IndusInd Bank under Reference No OGT0015250007868 Dated 28.7.2025 in original:-

Sl No	Bank Guarantee No.	Date of Issue of SDBG	Applicant	Amount (In USD)	Expiry Date	Claim Within	Issued Bank
1.	OGT0015250007868	28.7.2025	Caterpillar Inc	1502226.00	31.3.2027	31.03.2027	IndusInd

Thanking you

Yours faithfully  
For GMMCO LimitedVikash Kumar  
General ManagerCC : Mr. P. Kuldeep  
Sr. Manager (MM)  
CIL, Kolkata.Gmmco  
Kuldeep  
29/07/2025Sylke  
29/7/25

Sylke

Kuldeep

A. Sena

Aditya

Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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WOOD STREET BRANCH, SAVITRI TOWERS,  
3A, UPPER WOOD STREET  
KOLKATA 700017

Kolkata

SWIFT Code: INDBINBBCAP/INDB0000015

To

COAL INDIA LIMITED  
MATERIALS MANAGEMENT DIVISION,  
PREMISES NO.4, ACTION AREA 1A,  
NEW TOWN, RAJARHAT,  
Kolkata,  
West Bengal,  
700156  
INDIA

Date: Jul 28, 2025

Dear Sir/Madam,

At the request of WACHOVIA BANK/WELLS FARGO .We have issued guarantee as per following details.

Bank Guarantee No. & Date of Issue	OGT0015250007868 Jul 28, 2025
Amount	USD 1502226.00
Expiry Date	Mar 31, 2027
Claim Date	Mar 31, 2027

We confirm that the officials who have signed the above bank guarantee are authorized to sign the same on behalf of IndusInd Bank Ltd. You may verify the genuineness of issuance of said Bank Guarantee by writing to Head, Bank Guarantee Operations, at the following address

IndusInd Bank Limited  
CGMO Central Processing Centre  
PNA House, 3rd Floor, Plot No.57 & 57/1,  
Street No.17, Near ESI Hospital, MIDC,  
Andheri (East), Mumbai - 400 093.  
Mail ID: opsguarantee@indusind.com  
Tel No 022 61098390 / 022 61098478



Claims, if any under this Guarantee to be lodged only with the Issuing Branch as per the terms of the Bank Guarantee.

THIS IS A COMPUTER GENERATED ADVICE. NO SIGNATURE REQUIRED

Please note that this advice provides details of the transaction handled by us on your behalf including details of charges / GST deducted (if applicable). In case you have registered your GSTIN details with us, you will receive a separate GST invoice (if applicable) on your registered mail id. We request you to ensure that your GSTIN details have been submitted to us and that your email id is registered with us to receive the GST invoice.

In case you wish to register your GSTIN details with us, please send an email to GSTC@indusind.com from your registered mail id. **CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025** IndusInd Bank Page 114 of 227

*[Handwritten signatures and initials]*





पश्चिमबङ्ग पश्चिम बंगाल WEST BENGAL

AU 908093

BG NUMBER: OGT0015250007868

DATE:-28/07/2025

SECURITY DEPOSIT BANK GUARANTEE

TO,  
 COAL INDIA LIMITED  
 MATERIALS MANAGEMENT DIVISION  
 PREMISES NO.- 4, ACTION AREA - 1A,  
 NEW TOWN, RAJARHAT, KOLKATA - 700156.

For IndusInd Bank Limited

Palash Majumder, AVP  
 Corp & Global Mkt. Ops  
 SS No. 8153

For IndusInd Bank Limited

Antanil Ghosh CM  
 Corp & Global Mkt. Ops  
 SS NO. 22280

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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06 MAY 2025

SL No. 1303 Date

Name

Address

Vendor Sig



TAPAN KUMAR DAS  
Alipore Police Court  
Kolkata-700027

A. SARKAR

myr

andey

AD

Cham

myr

Van





# IndusInd Bank

SR No. GTEE/ 0176405

BG NUMBER: OGT0015250007868

DATE:-28/07/2025

**APPLICANT (COMPANY)**

CATERPILLAR INC. 5205 N. O'CONNOR BLVD.,  
SUITE 100 IRVING, TX 75039 DEERFIELD, ILLINOIS 60015.

RE: BANK GUARANTEE IN RESPECT OF NOTIFICATION AWARD NO. CIL/C2D/850 HP CRAWLER DOZER/R- 153/202 DATED 30.06.2025 BETWEEN COAL INDIA LIMITED, MATERIALS MANAGEMENT DIVISION, PREMISES NO. - 04, ACTION AREA - 1A, NEW TOWN, RAJARHAT, KOLKATA - 700 156 AND GMMCO LIMITED BIRLA BUILDING, 9/1, R.N. MUKHERJEE ROAD, KOLKATA - 700 001, AUTHORIZED INDIAN DEALER / AGENT OF M/S. CATERPILLAR INC., 5205 N. O'CONNOR BLVD, IRVING, TX 75039.

MESSERS CATERPILLAR INC. A COMPANY / FIRM HAVING ITS OFFICE AT 5205 N. O'CONNOR BLVD., IRVING, TX 75039 HEREINAFTER CALLED THE CONTRACTOR HAS RECEIVED THE NOTIFICATION OF AWARD NO. CIL/C2D/850 HP CRAWLER DOZER/R-153/202 DATED 30.06.2025 HEREINAFTER CALLED THE SAID AGREEMENT WITH COAL INDIA LIMITED, MATERIALS MANAGEMENT DIVISION, PREMISES NO. - 04, ACTION AREA - 1A, NEW TOWN, RAJARHAT, KOLKATA - 700 156 (NAME OF THE PURCHASER COMPANY) (HEREINAFTER CALLED "THE COMPANY") TO SUPPLY, INSTALLATION AND COMMISSIONING OF 16 NOS. 850 HP CRAWLER DOZERS WITH RIPPER ALONG WITH CONSUMABLE SPARES AND CONSUMABLES FOR 12 MONTHS OF WARRANTY PERIOD FROM THE DATE OF COMMISSIONING OF THE EQUIPMENT AND THEREAFTER SPARES & CONSUMABLES FOR A PERIOD OF 05 YEARS UNDER SPARES COST CAP (FINAL PLACE OF DESTINATION BASIS) AMOUNTING TO RS. 7,11,91,73,256.46 (RUPEES SEVEN HUNDRED AND ELEVEN CRORE NINETY ONE LAKH SEVENTY THREE THOUSAND TWO HUNDRED AND FIFTY SIX AND PAISA FORTY SIX ONLY) ON THE TERMS AND CONDITIONS CONTAINED IN THE SAID NOTIFICATION OF AWARD.

WE INDUSIND BANK LIMITED, A BANKING COMPANY INCORPORATED AND REGISTERED UNDER COMPANIES ACT 1956 AND HAVING LICENSE TO CARRY ON BANKING BUSINESS UNDER THE BANKING REGULATION ACT, 1949 HAVING ITS REGISTERED OFFICE AT 2401, GENERAL THIMMAYYA ROAD, CANTONMENT, PUNE- 411001 AND ITS CORPORATE OFFICE AT 8TH FLOOR, TOWER-1, ONE INDIA BULLS CENTRE, 841, S.B.MARG, ELPHISTONE ROAD, MUMBAI - 400 013 AND ITS ONE OF BRANCH OFFICE AT SAVITRI TOWERS, 3A, UPPER WOOD STREET, KOLKATA - 700 017 HAS AT THE REQUEST OF THE CONTRACTOR AGREED TO GIVE THE GUARANTEE AS HEREINAFTER CONTAINED.

WE INDUSIND BANK LIMITED DO HEREBY UNCONDITIONALLY AGREE WITH THE COMPANY THAT IF THE CONTRACTOR SHALL IN ANY WAY FAIL TO OBSERVE OR PERFORM THE TERMS AND CONDITIONS OF THE SAID AGREEMENT OR SHALL COMMIT ANY BREACH OF ITS OBLIGATIONS THEREUNDER, THE BANK SHALL ON RECEIPT OF A WRITTEN DEMAND MADE ON OR BEFORE 31/03/2027 (THE "CLAIM DATE") AND WITHOUT ANY OBJECTION OR DEMUR PAY TO THE COMPANY, THE SAID SUM OF USD 15,02,226 (USD FIFTEEN LAKHS TWO THOUSAND TWO HUNDRED AND TWENTY SIX ONLY) OR ANY PORTION THEREOF WITHOUT REQUIRING THE

For IndusInd Bank Limited

Palash Majumder, AVP  
Corp & Global Mkt. Ops  
SS No. 8153

For IndusInd Bank Limited

Antanil Ghosh CM  
Corp & Global Mkt. Ops  
SS NO. 22280

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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# IndusInd Bank

SR No. GTEE/ 0176406

BG NUMBER: OGT0015250007868

DATE:-28/07/2025

COMPANY TO HAVE RECOURSE TO ANY LEGAL REMEDY THAT MAY BE AVAILABLE TO IT TO COMPEL THE BANK TO PAY THE SAME OR CALLING ON THE COMPANY TO COMPEL SUCH PAYMENT BY THE CONTRACTOR.

ANY SUCH DEMAND SHALL BE CONCLUSIVE AS REGARDS THE LIABILITY OF THE CONTRACTOR TO THE COMPANY AND AS REGARDS THE AMOUNT PAYABLE BY THE BANK UNDER THIS GUARANTEE. THE BANK SHALL NOT BE ENTITLED TO WITHHOLD PAYMENT ON THE GROUND THAT THE CONTRACTOR HAS DISPUTED ITS LIABILITY TO PAY OR HAS DISPUTED THE QUANTUM OF THE AMOUNT OR THAT ANY ARBITRATION PROCEEDING OR LEGAL PROCEEDING IS PENDING BETWEEN THE COMPANY AND THE CONTRACTOR REGARDING THE CLAIM.

WE, THE BANK, FURTHER AGREE THAT THE GUARANTEE SHALL COME INTO FORCE FROM THE DATE HEREOF AND SHALL REMAIN IN FULL FORCE AND EFFECT TILL THE PERIOD THAT WILL BE TAKEN FOR THE PERFORMANCE OF THE SAID AGREEMENT WHICH IS LIKELY TO BE THE 31ST DAY OF MARCH 2027 BUT IF THE PERIOD OF AGREEMENT IS EXTENDED EITHER PURSUANT TO THE PROVISIONS IN THE SAID AGREEMENT OR BY MUTUAL AGREEMENT BETWEEN THE CONTRACTOR AND THE COMPANY, THE BANK SHALL RENEW THE PERIOD OF THE GUARANTEE FAILING WHICH IT SHALL PAY TO THE COMPANY THE SAID SUM OF USD 15,02,226 (USD FIFTEEN LAKHS TWO THOUSAND TWO HUNDRED AND TWENTY SIX ONLY) OR SUCH LESSER AMOUNT OUT OF THE SAID SUM OF USD 15,02,226 (USD FIFTEEN LAKHS TWO THOUSAND TWO HUNDRED AND TWENTY SIX ONLY) AS MAY BE DUE TO THE COMPANY AND AS THE COMPANY MAY DEMAND. THIS GUARANTEE SHALL REMAIN IN FORCE UNTIL THE DUES OF THE COMPANY IN RESPECT OF THE SAID SUM OF USD 15,02,226 (USD FIFTEEN LAKHS TWO THOUSAND TWO HUNDRED AND TWENTY SIX ONLY) ARE FULLY SATISFIED AND THE COMPANY CERTIFIES THAT THE AGREEMENT HAS BEEN FULLY CARRIED OUT BY THE CONTRACTOR AND DISCHARGES THE GUARANTEE. OR UNTIL 31ST DAY OF MARCH 2027 (THE "EXPIRY DATE"), WHICHEVER IS EARLIER.

THE BANK FURTHER AGREES WITH THE COMPANY THAT THE COMPANY SHALL HAVE THE FULLEST LIBERTY WITHOUT THE CONSENT OF THE BANK AND WITHOUT AFFECTING IN ANYWAY THE OBLIGATIONS HEREUNDER TO VARY ANY OF THE TERMS AND CONDITIONS OF THE SAID AGREEMENT OR TO EXTEND THE TIME FOR PERFORMANCE OF THE SAID AGREEMENT FROM TIME TO TIME OR TO POSTPONE FOR ANY TIME OR FROM TIME TO TIME ANY OF THE POWERS EXERCISABLE BY THE COMPANY AGAINST THE CONTRACTOR AND TO FORBEAR TO ENFORCE ANY OF THE TERMS AND CONDITIONS RELATING TO THE SAID AGREEMENT AND THE BANK SHALL NOT BE RELIEVED FROM ITS LIABILITY BY REASON OF SUCH FAILURE OR EXTENSION BEING GRANTED TO THE CONTRACTOR OR THROUGH ANY FORBEARANCE, ACT OR OMISSION ON THE PART OF THE COMPANY OR ANY INDULGENCE BY THE COMPANY TO THE CONTRACTOR OR ANY OTHER MATTER OR THING WHATSOEVER WHICH UNDER THE LAW RELATING TO SURETIES WOULD BUT FOR THIS PROVISIONS HAVE THE EFFECT OF RELIEVING OR DISCHARGING THE GUARANTOR.

For IndusInd Bank Limited

Palash Majumder, AVP  
Corp & Global Mkt. Ops  
SS No. 8153

For IndusInd Bank Limited

Antanil Ghosh CM  
Corp & Global Mkt. Ops  
SS NO. 22280



CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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# IndusInd Bank

SR No. GTEE/ 0176407

BG NUMBER: OGT0015250007868

DATE:-28/07/2025

THE BANK FURTHER AGREES THAT IN CASE THIS GUARANTEE IS REQUIRED FOR A LONGER PERIOD AND IT IS NOT EXTENDED BY THE BANK BEYOND THE PERIOD SPECIFIED ABOVE, THE BANK SHALL PAY TO THE COMPANY THE SAID SUM OF USD 15,02,226 (USD FIFTEEN LAKHS TWO THOUSAND TWO HUNDRED AND TWENTY SIX ONLY) OR SUCH LESSER SUM AS MAY THEN BE DUE TO THE COMPANY AND AS THE COMPANY MAY REQUIRE.

NOTWITHSTANDING ANYTHING HEREIN CONTAINED THE LIABILITY OF THE BANK UNDER THIS GUARANTEE IS RESTRICTED TO USD 15,02,226 (USD FIFTEEN LAKHS TWO THOUSAND TWO HUNDRED AND TWENTY SIX ONLY). THE GUARANTEE SHALL REMAIN IN FORCE TILL THE 31ST DAY OF MARCH 2027 AND UNLESS THE GUARANTEE IS RENEWED OR A CLAIM IS PREFERRED AGAINST THE BANK WITHIN THE VALIDITY PERIOD AND/OR THE CLAIM PERIOD FROM THE SAID DATE, ALL RIGHTS OF THE COMPANY UNDER THIS GUARANTEE SHALL CEASE AND THE BANK SHALL BE RELEASED AND DISCHARGED FROM ALL LIABILITY HEREUNDER EXCEPT AS PROVIDED IN THE PRECEDING CLAUSE.



THE BANK HAS UNDER ITS CONSTITUTION POWER TO GIVE THIS GUARANTEE AND Palash Majumder & Antanil Ghosh (NAME OF THE PERSON(S) WHO HAVE SIGNED IT ON BEHALF OF THE BANK HAS AUTHORITY TO DO SO.

DATED THIS 28<sup>TH</sup> DAY OF JULY 2025.

DATE: 28/07/2025

PLACE: WOOD STREET

AUTHORIZED SIGNATORIES:

SIGNATURE: \_\_\_\_\_

NAME: \_\_\_\_\_

SIGNATURE CODE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_

NAME: \_\_\_\_\_

SIGNATURE CODE: \_\_\_\_\_

For IndusInd Bank Limited

Palash Majumder, AVP  
Corp & Global Mkt. Ops  
SS No. 8153

For IndusInd Bank Limited

Antanil Ghosh CM  
Corp & Global Mkt. Ops  
SS NO. 22260



*myer*

*Indus*

*A. Sankar*

*Indus*

*Antanil*



Annexure-2Performance Bank Guarantee Format

..... (Name & address of the concerned subsidiary  
 ..... Company / Purchaser Company)

**Re: Bank Guarantee in respect of Agreement / Contract vide no. .... dated ..... between Coal India Ltd. on behalf of ..... (Name of concerned subsidiary Company) and ..... (Name of Supplier Company) {applicable for CIL Contracts}**

Messers .....a Company / Firm having its office at No. .... (hereinafter called 'the Contractor') has entered into the Agreement / Contract / Purchase Order vide no ..... dated ..... (hereinafter called 'the said Agreement') with Coal India Limited, Kolkata on behalf of ..... / Purchaser Company (Name of the concerned subsidiary Company) (hereinafter called 'the Company') to supply ..... stores/ materials amounting to Rs. ....on the terms and conditions contained in the said Agreement.

The..... (Name of the Bank) (hereinafter called 'the Bank') having its office at..... has at the request of the Contractor agreed to give the guarantee as hereinafter contained.

We.....(Name of the Bank) do hereby unconditionally agree with the Company that if the Contractor shall in any way fail to observe or perform the terms and conditions of the said Agreement or shall commit any breach of its obligations thereunder, the Bank shall on demand and without any objection or demur pay to the Company, the said sum of Rs..... or any portion thereof without requiring the Company to have recourse to any legal remedy that may be available to it to compel the Bank to pay the same or calling on the Company to compel such payment by the Contractor.

Any such demand shall be conclusive as regards the liability of the Contractor to the Company and as regards the amount payable by the Bank under this guarantee. The Bank shall not be entitled to withhold payment on the ground that the Contractor has disputed its liability to pay or has disputed the quantum of the amount or that any arbitration proceeding or legal proceeding is pending between the Company and the Contractor regarding the claim.

We, the Bank, further agree that the guarantee shall come into force from the date hereof and shall remain in full force and effect till the period that will be taken for the performance of the said Agreement which is likely to be the ..... day of..... but if the period of Agreement is extended either pursuant to the provisions in the said Agreement or by mutual agreement between the Contractor and the Company, the Bank shall renew the period of the guarantee failing which it shall pay to the Company the said sum of Rs....., or such lesser amount out of the said sum of Rs.....as maybe due to the Company and as the Company may demand. This guarantee shall remain in force until the dues of the Company in respect of the said sum of Rs..... are fully satisfied and the Company certifies that the Agreement has been fully carried out by the contractor and discharges the guarantee.



The Bank further agrees with the Company that the Company shall have the fullest liberty without the consent of the Bank and without affecting in any way the obligations hereunder to vary any of the terms and conditions of the said Agreement or to extend the time for performance of the said Agreement from time to time or to postpone for any time or from time to time any of the powers exercisable by the Company against the contractor and to forbear to enforce any of the terms and conditions relating to the said Agreement and the Bank shall not be relieved from its liability by reason of such failure or extension being granted to the contractor or through any forbearance, act or omission on the part of the Company or any indulgence by the Company to the contractor or any other matter or thing whatsoever which under the law relating to sureties would but for this provisions have the effect of relieving or discharging the Guarantor.

The Bank further agrees that in case this guarantee is required for a longer period and it is not extended by the Bank beyond the period specified above, the Bank shall pay to the Company the said sum of Rs..... or such lesser sum as may then be due to the Company and as the Company may require.

Notwithstanding anything herein contained the liability of the Bank under this guarantee is restricted to Rs.....only. The guarantee shall remain in force till the.....day of .....20... and unless the guarantee is renewed or a claim is preferred against the Bank within the validity period and/or the claim period from the said date, all rights of the Company under this guarantee shall cease and the Bank shall be released and discharged from all liability hereunder except as provided in the preceding clause.

The Bank has under its constitution power to give this guarantee and..... [(Name of the person(s)] who have signed it on behalf of the Bank has authority to do so.

Dated this.....day of .....20.....

Place.....

Signature of the authorized person(s)  
For and on behalf of the Bank.



Annexure-3**Pro-forma of Commissioning Certificate to be issued by the Purchaser after Successful  
Commissioning of Equipment**

No. :

Date :

M/s:

Sub : Certificate of Commissioning of Equipment

1. This is to certify that the equipment as detailed below has been received in good condition along with all the standard and special accessories and a set of spares in accordance with the Contract / specifications. The same has been installed and commissioned as detailed below:

(a) Contact No. \_\_\_\_\_ Date \_\_\_\_\_

(b) Description and Model of the Equipment \_\_\_\_\_

(c) Details of Commissioning:

Manufacturer's Equipment / Sl. No.	Date of Commissioning (date/month/year)

(d) Bill of Lading No. & Date \_\_\_\_\_  
(for imported contract)

(e) Name of the Vessel / Transporter \_\_\_\_\_

(f) R/ R Consignment Note/ Challan No. \_\_\_\_\_ Date \_\_\_\_\_

(g) Date of receipt of last consignment of equipment \_\_\_\_\_

(h) Name of the Project/ Consignee \_\_\_\_\_

2. Details of Accessories / Spares & Consumables for warranty period not yet supplied and recoveries to be made on that account :

Sl. No.	Description	Amount to be recovered
---------	-------------	------------------------

3. The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment.



4. The supplier has fulfilled his contractual obligations for successful commissioning satisfactorily:

Or

The supplier has failed to fulfil his contractual obligations with regard to the following:

- (a)
- (b)
- (c)
- (d)

5. The amount of recovery on account of non-supply of accessories is given under paragraph number 2.
6. The amount of recovery on account of failure of the Supplier to meet his contractual obligations is as indicated in endorsement of the letter.

Signature (s)

Name(s)

Designation(s) with Stamp

---

**Explanatory notes for filling up the commissioning certificate by the Purchaser**

- (a) He has adhered to the time schedule specified in the contract in dispatching the documents / drawings pursuant to Technical Specifications.
- (b) He has supervised the commissioning of the equipment in time, i.e. within the period specified in the Contract from the date of intimation by the Purchaser in respect of the installation of the Equipment.

The commissioning certificate shall be signed by the concerned officials of the Project and counter-signed by the Area General Manager and HOD of Excavation Deptt. of subsidiary company.

In the event of documents / drawings having not been supplied or installation and commissioning of the Equipment having been delayed on account of the Supplier, the extent of delay should always be mentioned.

A. Sarvag

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*



**Format for 'No Claim Certificate' to be issued by Supplier**

(On company letterhead)

To

..... (Name & address of the concerned  
subsidiary Company / Purchaser Company)

**NO CLAIM CERTIFICATE**

Sub: Contract no. ----- dated -----for the supply of -----

We have received the sum of Rs. (Rupees \_\_\_\_\_ only) in full and final settlement of all the payments due to us for the supply of \_\_\_\_\_ under the above mentioned contract agreement, between us and \_\_\_\_\_ (CIL or Subsidiary). We hereby unconditionally and without any reservation whatsoever, certify that we have no claim whatsoever, of any description, on any account, against \_\_\_\_\_ (Procuring Entity i.e. concerned subsidiary / Purchaser Company), against aforesaid contract agreement executed by us. We further declare unequivocally, that we have received all the amounts payable to us, and have no dispute of any description whatsoever, regarding the amounts worked out as payable to us and received by us, and that we shall continue to be bound by the terms and conditions of the contract agreement, as regards performance of the contract.

Yours faithfully,

Signatures of contractor / supplier or  
officer authorised to sign the contract documents

on behalf of the contractor / supplier

(Company stamp)

Date: \_\_\_\_\_

Place: \_\_\_\_\_

*[Handwritten signatures and stamps]*



**ANNEXURE - 5****Hindrance Register Format**

Equipment: \_\_\_\_\_ Model: \_\_\_\_\_ Supplier: \_\_\_\_\_

Sl. No.	Nature of Hindrance	Activity of work affected	Date of occurrence of Hindrance	Date of Removal of Hindrance	Period of Hindrance	Signature of Supplier Representative	Signature of Users Representative (Concerned Engineer)



## Annexure to Technical Specifications

*[Signature]*  
*[Signature]*

*[Signature]* *[Signature]*

*A. Sankar*

*[Signature]* *CSM*

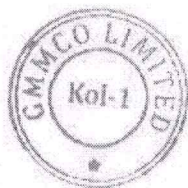


**Gmmco****CAT****GMMCO LIMITED**

GMMCO LTD		SEC-VI,PART-D,CLAUSE-D.9.1.b	
Tender No:Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024			
Sl No	Part No	Description	Required Quantity
1	D11 TOOL KIT	COMPREHENSIVE TOOL KIT	1

Clause D.9.1 General (b)		
Tender No.		
Details Of Standard Tool included in Tool Kit with Part- No D11TOOLKIT are follows		
Sl. No.	Description	Qty
1	Slide Wrench	1
2	Cutting Plier	1
3	Double End Spanner	13
4	Extension Rod 8" LongX1" Drive	1
5	Feeler Guage	1
6	Hammer (0.6 Kg)	1
7	RATCHET	3
8	RING SPANNER	12
9	Screw Driver	3
10	Socket 1" SQ	1
11	Socket 1/2" SQ	14
12	Socket 3/4" SQ	3
13	Socket 1" SQ - Heavy Duty 7/8"	1
14	Filter Wrench	1
15	Tool Box With Lock	1

Thanking You,

Yours faithfully  
For GMMCO LimitedVikash Kumar  
General Manager

*[Signature]*

*[Signature]*

*[Signature]*

*A. Sanyal*

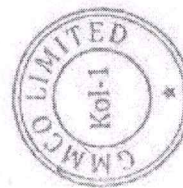
*[Signature]* *cedant*



GMMCO LTD			Sec-VI, Tech Specs, Part D, Clause D.9.1 General (b)	
Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024				
D11 TOOL KIT WITH EACH MACHINE				
Sl. No.	Part No.	Description	Required Quantity	
1	D11 TOOL KIT	COMPREHENSIVE TOOL KIT	1	

D11 SPECIAL TOOLS - PROJECT WISE			
Sl. No.	Part No.	Description	required Quantity
1	1516320	WIRE REMOVAL TOOL	1
2	1957970	WIRE REMOVAL TOOL	1
3	8T9208	PROBE ASSEMBLY	1
4	W4776	LAPTOP	1
5	5385051	ADAPTOR GP	1

1 no. laptop for a fleet upto 5 equipment or part thereof, for each project will be provided.



For GMMCO LTD,

Vikash Kumar  
General Manager

A. SARKAR

Chak



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.**Clause-D.9.2 (x), Technical Details, Section VI**

Date: 19-09-2024

GMMCO/CIL/850HP Dozer/24-25/Shortfalls

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata – 700156

Dear Sir,

**SUB- Details of major bought-out assemblies and sub-assemblies****REF: Tender Number: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024**

We confirm following towards major bought-out assemblies and sub-assemblies – same is in line with clause no: 14.2  
(iii) - & Annexure-6 submitted along with BID

Major Bought-out Items		
Assembly/Sub-assembly	Type	BOI make details
Alternator	CKD Component	CAT/C.E Niehof & Co.
AFDSS	Dry Chemical Powder	SOUTHERN ELECTRONICS/ AUTOMATION CONTROLS / MACO/RIZITEK
Fire Extinguisher	Dry Chemical Powder	KANEX/GUNEBO/SOUTHERN ELECTRONICS/ AUTOMATION CONTROLS / MACO/RIZITEK
Rear Vision System	BS 8000	DAVESMEN/ AUTOMATION CONTROLS / SOUTHERN ELECTRONICS / RIZITEK/ ELTRON/ MYPORT/SIXTH SENSE
Proximity Warning Device	VBV 700	DAVESMEN/ AUTOMATION CONTROLS / SOUTHERN ELECTRONICS / RIZITEK/ ELTRON/ MYPORT
Reversing Audio Visual Alarm	Audio Visual	DAVESMEN/ AUTOMATION CONTROLS / SOUTHERN ELECTRONICS / RIZITEK/ ELTRON/ MYPORT
Driver Fatigue Monitoring system	Camera Based Sensing	DAVESMEN/ AUTOMATION CONTROLS / SOUTHERN ELECTRONICS / RIZITEK/ ELTRON/ MYPORT/SIXTH SENSE
Seat Belt reminder	DGMS Complied	DAVESMEN/ AUTOMATION CONTROLS / SOUTHERN ELECTRONICS / RIZITEK/ ELTRON/ MYPORT
Hand Tools	Hand Tools	EVEREST / TAPARIA/ JHALANI/STANLEY/SNAPON/ROBUST/HONEYTON/IMPACT
Auto Dipper	150MT Range	DAVESMEN/ AUTOMATION CONTROLS / SOUTHERN ELECTRONICS / RIZITEK/ MACO/ MYPORT
Blind Spot Mirror	Heavy Duty	DAVESMEN/ AUTOMATION CONTROLS / SOUTHERN ELECTRONICS / RIZITEK/ MACO/ MYPORT

Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in

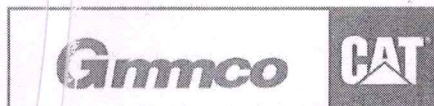
(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

Page 129 of 227

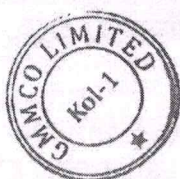




GMMCO LIMITED

Manufacturer	Address
Southern Electronics	16-A, Peenya Industrial Area, Phase-1, Peenya, Bengaluru – 560 058
Automation Control	K 10/2, Near PIX Transmission, MIDC Hingna, Nagpur – 440 016
Kanex	A-110, Kanada Business Center, B/h Everest Garden Apt. Laxmi Nagar Ghatkopar (East), Mumbai – 400 075
Gunnebo	Unit No. 102, 1 <sup>st</sup> Floor, Akruti SMC, LBS Marg, Khopat, Thane (W) – 400 601
AG Electronics	208, Bhivapurkar Chambers, Dhantoli, Nagpur 440 012
Davesmen	Room No. 206, 1 <sup>st</sup> Floor 12-A, Annapurna Bldg., Lord Sinha Road, Kolkata - 700071
Everest	Dohil Chamber, 46, Nehru Place, New Delhi-110019
Taparia	423/424 A-2, Shah & Nahar, Lower Parel(w), Mumbai 400 013
Jhalani	51-52 Gedore House, Nehru Place, New Delhi-110019.
Stanley	1 81 MAYA NAGARCIVIL LINES, LUDHIANA, Punjab - 000000
Snap-on	6/2, Begumpur Khatola, Behind Toyota Showroom, NH-8, Delhi-Jaipur Highway, Gurgaon 122004 HR, India
Ansul (Maco)	7th Floor Suite, 2/5, Sarat Bose Road, Sukh Sagar, No. 7A, Ballygunge Circular Rd, Kolkata, West Bengal 700020
C. E Niehof & Co.	2021 Lee St, Evanston, IL 60202, USA
MyPort	509/510/511 Atlantic Commercial Tower, Above Vodafone gallery, Patel chowk, opposite kotak mahindra bank, Ghatkopar East, Mumbai, Maharashtra 400077
Rizitek	201, Park View Enclave Kanke Road, Ranchi Jharkhand – 834 008 IN
Eltron	235 A/1, S K Deb Road, Sree Bhumi, Kolkata - 700048
Sixth sense	A 909, The Capital, Bandra Kurla Complex, Bandra East, Mumbai, 400051, India.
Honiton	Omni Impex, Jorasanko, Kolkata, West Bengal.
Robust	No 85, Vilaskon House, Nr. Prince Hotel Street, Hill Garden Cross Road, Mirzadar Road, Bhuj, Gujarat, 370001, India.
Impact	Pune, Maharastra, India

For GMMCO LTD,

Vikash Kumar,  
General Manager

A. SARKAR



Gmmco



Tender Number: Tender No. CIL/C2D/650HP Dozers/R-153/24-25/385 Dated 12.06.2024

Sec-VI, Tech Specs, Part C, Clause - C.6.4

D11 LUBE RECOMMENDATION

COMPARTMENT	INTERNATIONAL STANDARD NUMBER/ COMMERCIAL OIL SPEC	APPROX. REFILL CAPACITY REQUIRED PER MAINTENANCE (LITERS)	CHANGING INTERVAL (HOURS)	ESTIMATED ANNUAL CONSUMPTION (LITERS)
ENGINE	SAE 15W40 C14 WITH ECF2 CERTIFICATION	133	500	1463
POWER TRAIN	SAE 30 TRANSMISSION OIL WITH T04 CERTIFICATION	391	2000	1075
HYDRAULIC TANK	SAE 10W HYDRAULIC OIL	160	2000	440
FINAL DRIVES	SAE 60 FINAL DRIVE OIL WITH FD1 CERTIFICATION	94	1000	517
RECOIL SPRING & PIVOT SHAFT	SAE 50 TRANSMISSION OIL WITH T04 CERTIFICATION	198	8000	136
GREASE SYSTEM	NLG2 WITH MOLYBDENUM DI SULFIDE		AS & WHEN REQD	540

Note . 1. The above indicated quantities are required for regular maintenance change. Top up quantity for any system leakage is not included.

2. The Commercial Oil Specification (Grade) Indicated is the International Standard Number of lubricants. These are generic specifications and Oil manufacturers (Indian Eq.ivalents) complying to these requirements offer their brand names.



For GMMCO Ltd.

Vikash Kumar

General Manager



Quality Assurance Plan						
Quality Assurance Department - EP						
Customer:		Machine No: D11		Quality Assurance Department		
Component: Standard Parts		Test	1. Chemical; 2. Mech. Properties; 3. Hardness; 4. Ultrasonic; 5. Heat Treatment; 6. Dimensional; 7. Function; 8. Visual; 9. Surface Crack			
Description	Test	Verification	Method	Acc. Std	Stage	Approved Department
Steel Castings	1,2,6,8,9	Conformance to Cat 1E Specification	Conformance to Cat 1E Specification	Conformance to Cat 1E Specification	At the Manufacturer	At Supplier
Frame	4,6,8,9	Conformance to Cat 1E Specification	Conformance to Cat 1E Specification	Conformance to Cat 1E Specification	After Welding	Interplant Supplier (LL)
Engine	7,8	100%	Test Run	Conformance to Cat 1E Specification	Before Shipping to EP	Interplant Supplier (Griffin)
Transmission	7,8	100%	Functional and Leak Test	Conformance to Cat 1E Specification	Before Shipping to EP	Interplant Supplier (KK)
Final Drives	7,8	100%	Functional and Leak Test	Conformance to Cat 1E Specification	Before Shipping to EP	Interplant Supplier (KK)
Chassis System	7,8	100%	1. Test Run 2. Visual Check	Conformance to Cat 1E Specification and Test Drawing	After Assembly	1. Test Booth 2. Quality Gate & PDI/PDA
Engine & Powertrain System	7,8	100%	1. Test Run 2. Visual Check	Conformance to Cat 1E Specification and Test Drawing	After Assembly	1. Test Booth 2. Quality Gate & PDI/PDA
Hydraulic System	7,8	100%	1. Test Run 2. Visual Check	Conformance to Cat 1E Specification and Test Drawing	After Assembly	1. Test Booth 2. Quality Gate & PDI/PDA
Electrical System	7,8	100%	1. Test Run 2. Visual Check	Conformance to Cat 1E Specification and Test Drawing	After Assembly	1. Test Booth 2. Quality Gate & PDI/PDA
Cooling System	7,8	100%	1. Test Run 2. Visual Check	Conformance to Cat 1E Specification and Test Drawing	After Assembly	1. Test Booth 2. Quality Gate & PDI/PDA
Steering System	7,8	100%	1. Test Run 2. Visual Check	Conformance to Cat 1E Specification and Test Drawing	After Assembly	1. Test Booth 2. Quality Gate & PDI/PDA



*Deep Kumar Das*

*Deep Kumar Das*

*Deep Kumar Das*

Caterpillar: Confidential Green





Caterpillar Inc.

Annexure-6e

100 NE Adams Street  
Peoria, Illinois 61629-7150

June 2, 2021

To Whom It May Concern:

**Subject: Certification details for D11 Track Type Tractor**

Caterpillar D11 Track Type Tractors are equipped with Caterpillar C32 engines. The engines are capable of meeting EPA Tier 2 emissions standards for engine greater than 560 kW for criteria pollutants shown below:

ISO 8178 C1 cycle	Tier 2 Standards (g/kW-hr)
NOx + HC	6.4
Carbon Monoxide (CO)	3.5
Particulate Matter (PM)	0.20

Exhaust gas emissions levels of the tested engine were measured using instrumentation and procedures detailed in US Code of Federal Regulations. All test facilities, instrumentation and technical personnel are acceptable for certification of Caterpillar products by the United States Environmental Protection Agency.

Sincerely,

/ CTV

Gregory D. Hoenert  
Manager, Global Emissions Certification  
Large Power Systems Division (AC 6146)  
Caterpillar Inc.

Telephone: (309) 578-4868  
Hoenert\_Gregory\_D@Cat.com





Gmmco Limited

CK Birla Group

GMMCO/850HP Dozer/24-25  
R.N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

Sec-VI, Tech Specs Part D, Clause - D.4.2

Date: 22-07-2024

To  
General Manager(MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sirs

Sub Proposed Method of Drive System

Ref Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

The Proposed method of offered Drive System is Conventional Drive System. The followings are provided in the equipment-

**Transmission:**

Equipment is fitted with Torque-flow (Planetary Power shift) transmission consisting of single stage torque Converter (Static Clutch Divider), planetary gear drives and hydraulically operated multiple disc type clutches equipped with suitable valves for developing a minimum of 3 forward speed and 3 reverse speed.

Heavy-duty removable belly guard, designed such that it does not allow accumulation of dirt.

**Differential:**

Equipment is fitted with Heavy-duty differential with high quality spiral bevel gear and pinions.

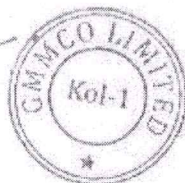
**Final Drive:**

Equipment is fitted with Heavy-duty spur and / or planetary gear system from differential to drive axle.

Thanking You.

Yours Sincerely,

Vikash Kumar  
General Manager



*hmk*

*AK Singh*

*hmk*

*A. Lankar*

*hmk*

*hmk*

Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1708 E mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1968PLC028000

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.Sec- VI, Tech Specs, Part- D, Clause- 4.18 of NIT

GMMCO/CIL/850HP Dozer/24-25

Date: 22-07-2024

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sir,

SUB- Undertaking For AFDSS

Name Of the Manufacturers- Southern Electronics / Automation Control / Ansul(Maco)

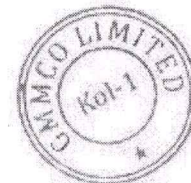
REF:Tender no. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

This is to certify that the A suitable automatic fire detection and suppression system of above referred Manufacturers (indigenous), shall be provided on the equipment complying DGMS (Tech) Circular No. 06 of 2020 dated 27.02.2020.

We also confirm that, a valid Test Certificate (valid as on the date of Commissioning of the equipment at site) shall be submitted at the time of supply of equipment along with other documents, for AFDSS including materials and chemicals used in fire suppression system from any Government or Government approved Laboratory in compliance with relevant Indian Standards as per DGMS (Approval) Circular No. 02 dated 08th July 2013 with subsequent amendments.

Note: 1. Periodical refilling shall be done by us.

2. Details of AFDSS also indicated in Major Bought Out items list & Technical details are enclosed as Annexure.

*myer**Vignesh Kumar**[Signature]**[Signature]**[Signature]**M. Sankar*Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

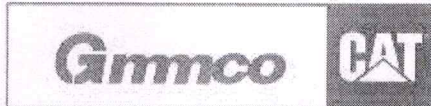
(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

Page 135 of 227





We also confirm that, the AFDSS system will comply to the following provisions:

Automatic fire detection and suppression system suitable for fire class A, B & C will be provided in the fire prone zone of the dozer.
· Schematic drawing is submitted indicating Plan of the system with relative position of items to be protected from fire.
· Fire detection and suppression of fire will be either total liquid flooding or dry chemical powder base spray through nozzle strategically through an actuation cartridge, located to the targets, or combination of the two.
· Fire suppression agent used in neighborhood of electrical appliances will be clean and shall not damage electrical / electronic component.
· Fire suppression system will be non-hazardous & safe for human and environment friendly. It should have quick cleanup and environmental sustainability.
· The sensor will send the signal to the control unit integrated with a LED and/or alarm indicator to show the status of the detector.

· The system will operate only in active fire area to supply adequate quantity of fire suppressing agent for effective firefighting and to avoid re-ignition and suitably designed to extinguish the fire as per class of fire (A, B & C) of that location.
· The system will be actuated automatically by detection of fire and control unit to be installed within the Operator's cabin for automatic system operation.
· The system will also have provision of actuating manually.
· The system will provide facility for self-checking /testing/inspection without operating.
· The data regarding health & event shall be logged in the system with date & time in memory having capacity to store data of at least 15days, which can be downloaded to PC/ Laptop in later stage.
· The system will be capable for efficient operation in the extreme mining conditions with dust, dirt, water & vibrations.

Thanking You,

Yours Sincerely,

For GMMCO LIMITED

Vikash Kumar  
General Manager



A. Lakshmi

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*

*[Signature]*



## DATA SHEET



## A-101 Fire Suppression System Models 10, 20, 30 and Models 50, 125, 250

### Features

- FM Approved
- Manual and/or automatic detection and actuation
- Extreme temperature option
- Low profile tank option
- Rugged construction
- Approved for use in under ground mines for either manual or automatic agent release (automatic detection System incorporating MSHA approved ANSUL® CHECKFIRE MP-N detection system)
- CE Marked

### Applications

The ANSUL A-101 Fire Suppression System is an automatic or manual fire suppression system using FORAY (monoammonium phosphate base) dry chemical agent for Class A, B, and C fires. The fire suppression system is designed for use on large, off-road type construction and mining equipment (such as large excavators/shovels, draglines, haul trucks, wheeled loaders), underground mining equipment, and specialty vehicles (such as slag, pot and/or slab carriers, tunnel boring machines, solid waste handling equipment, and forestry vehicles). These types of equipment have large volumes of oils and hydraulic fluids under pressure.

The fire system described is a suppression system only and is not designed or intended to suppress all fires. It is extremely important that alternative firefighting equipment be available in case the system does not totally suppress a fire.

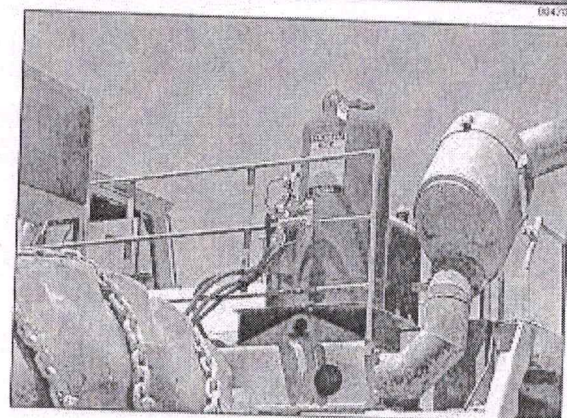
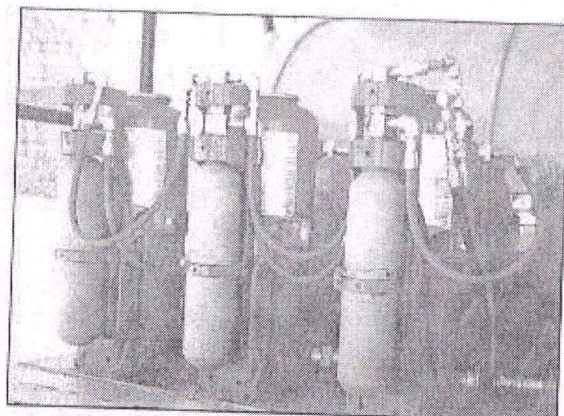
If an automatic fire detection and actuation system has not been supplied or has been disconnected, system actuation and discharge will not occur unless the fire suppression system is manually actuated.

### Description

The ANSUL A-101 Fire Suppression System is a pre-engineered, cartridge-operated dry chemical system with a fixed nozzle distribution network. It is approved by Factory Mutual (FM).

The system is capable of automatic detection and actuation and/or remote manual actuation. When a fire is detected, the A-101 system is actuated either manually or automatically, operating the pneumatic actuator. The pneumatic actuator ruptures a seal disc in the expellant gas cartridge. This, in turn, pressurizes and fluidizes the dry chemical suppressing agent in the tank, ruptures the burst disc when the required pressure is reached, and propels the dry chemical through the network of distribution hose. The dry chemical is discharged through fixed nozzles into the protected areas, suppressing the fire.

The automatic detection portion of the fire suppression system incorporates electric detection, either linear detection wire or spot thermal detection.



In addition, Triple IR flame detectors added to the linear or thermal detection circuit can be utilized for quick fire detection response.

The fire suppression system is capable of providing local application hazard protection for mobile equipment and industrial hazards. In certain industrial hazards, total flooding can be used.

The basic system consists of: Dry Chemical Agent Storage Tank(s), Expellant Gas Cartridge, Distribution Hose and Nozzles, Manual/Automatic Actuator, Automatic Detection System, and Accessories.

**Agent Storage Tank** – The agent storage tank(s) consists of a welded steel tank, gas tube, brass or aluminum fill cap, agent outlet sealed bursting disc assembly, and instruction nameplate. Tanks for temperature ranges of +32 °F to +120 °F (0 °C to +49 °C) and the LT-A-101-10, have a cartridge receiver and an expellant gas cartridge located on the side of the tank. Low profile and extreme temperature model tanks, (-65 °F to +210 °F (-54 °C to +99 °C)), have a separate cartridge/pneumatic actuator assembly which is connected to the tank by a high pressure 1/4 in. hose. The tank is painted with a red enamel paint. Agent storage tanks are available in six sizes (10 lb, 20 lb, 30 lb, 50 lb, 125 lb and 250 lb).

One Stanton Street | Marquette, MI 49843-2542, USA | +1-715-735-7411 | www.ansul.com

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Johnson  
Controls





## Specification Chart

Model	Part No.	Capacity	Shipping Weight
A-101-10 Basic unit consists of: • Agent tank with CO <sub>2</sub> cartridge • Tank mounting bracket • Owners manual	16559 (431450) CE (423767) TC	8 1/2 lb (3.9 kg) FORAY multi-purpose dry chemical	31 lb (14 kg) (with bracket)
A-101-20 Basic unit consists of: • Agent tank with CO <sub>2</sub> cartridge • Tank mounting bracket • Owners manual	16430 (431458) CE (423770) TC	17 lb (7.7 kg) FORAY multi-purpose dry chemical	43 lb (19.5 kg) (with bracket)
LP-A-101-20-B Basic unit consists of: • Agent tank • CO <sub>2</sub> cartridge • Tank mounting bracket • Cartridge bracket • Owners manual	31344 (431474) CE (423784) TC	17 lb (7.7 kg) FORAY multi-purpose dry chemical	54 lb (24.4 kg) (with bracket)
A-101-30 Basic unit consists of: • Agent tank with CO <sub>2</sub> cartridge • Tank mounting bracket • Owners manual	16131 (431466) CE (423773) TC	25 lb (11.3 kg) FORAY multi-purpose dry chemical	61 lb (27.6 kg) (with bracket)
LT-A-101-10 Basic unit consists of: • Agent tank with CO <sub>2</sub> cartridge • Tank mounting bracket • Owners manual	31581 (431451) CE (423776) TC	8 1/2 lb (3.9 kg) FORAY multi-purpose dry chemical	31 lb (14 kg) (with bracket)
LT-LP-A-101-20-B Basic unit consists of: • Agent tank • N <sub>2</sub> cartridge • Tank mounting bracket • Cartridge bracket • Pneumatic actuator • Owners manual	24307 (431475) CE (423787) TC	17 lb (7.7 kg) FORAY multi-purpose dry chemical	54 lb (24.4 kg) (with bracket)
LT-A-101-20 Basic unit consists of: • Agent tank • N <sub>2</sub> cartridge • Tank mounting bracket • Cartridge bracket • Pneumatic actuator • Owners manual	24306 (431459) CE (423779) TC	17 lb (7.7 kg) FORAY multi-purpose dry chemical	43 lb (19.5 kg) (with bracket)
LT-A-101-30 Basic unit consists of: • Agent tank • N <sub>2</sub> cartridge* • Tank mounting bracket • Owners manual • Cartridge bracket* • Pneumatic actuator*	53003 (431467) CE (423780) TC plus 24883	25 lb (11.3 kg) FORAY multi-purpose dry chemical	66 lb (29.9 kg) (with bracket)
LT-A-101-50 Basic unit consists of: • Agent tank • N <sub>2</sub> cartridge* • Tank mounting bracket • Cartridge bracket* • Pneumatic actuator* • Owners manual	433788 (DOT/TC/CE) plus 24883	45 lb (20.4 kg) FORAY multi-purpose dry chemical	105 lb (47.6 kg)
LT-A-101-125 Basic unit consists of: • Agent tank • N <sub>2</sub> cartridge • Cartridge bracket • Pneumatic actuator • Owners manual	427745 (DOT/TC) (434378) CE	112 lb (50.8 kg) FORAY multi-purpose dry chemical	247 lb (112 kg)
LT-A-101-250 Basic unit consists of: • Agent tank • N <sub>2</sub> cartridge • Cartridge bracket • Pneumatic actuator • Owners manual	427746 (DOT/TC) (434379) CE	225 lb (102.1 kg) FORAY multi-purpose dry chemical	525 lb (238 kg)

\* INCLUDED IN PART NO. 24883 SHIPPING ASSEMBLY

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Vijay Kumar



A. SARKAR

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Dimensions	Actuation	Nozzles	Cartridges	Temperature
H: 16 3/4 in. (425.5 mm) (with bracket) 16 1/2 in. (419.1 mm) (without bracket) W: 8 1/4 in. (209.5 mm) (with bracket) D: 5 1/4 in. (133.4 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 2 per tank maximum	Dry chemical propellant (CO <sub>2</sub> ) 840 psi (57.2 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	+32 °F to +120 °F (0 °C to +49 °C)
H: 19 7/8 in. (504.8 mm) (with bracket) 19 7/8 in. (504.8 mm) (without bracket) W: 11 1/2 in. (292.1 mm) (with bracket) D: 8 in. (203.2 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 4 per tank maximum	Dry chemical propellant (CO <sub>2</sub> ) 840 psi (57.2 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	+32 °F to +120 °F (0 °C to +49 °C)
H: 15 1/4 in. (387.3 mm) (with bracket) 14 7/8 in. (377.8 mm) (without bracket) W: 9 3/4 in. (247.6 mm) (with bracket) D: 8 1/2 in. (215.9 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 4 per tank maximum	Dry chemical propellant (CO <sub>2</sub> ) 840 psi (57.2 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	+32 °F to +120 °F (0 °C to +49 °C)
H: 23 in. (584.2 mm) (with bracket) 22 in. (558.8 mm) (without bracket) W: 12 in. (304.8 mm) (with bracket) D: 9 1/2 in. (241.3 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 6 per tank maximum	Dry chemical propellant (CO <sub>2</sub> ) 840 psi (57.2 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	+32 °F to +120 °F (0 °C to +49 °C)
H: 16 3/4 in. (425.4 mm) (with bracket) 16 1/2 in. (419.1 mm) (without bracket) W: 8 1/4 in. (209.5 mm) (with bracket) D: 5 1/4 in. (133.3 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 2 per tank maximum	Dry chemical propellant (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	-65 °F to +210 °F (-54 °C to +99 °C)
H: 15 1/4 in. (387.3 mm) (with bracket) 14 7/8 in. (377.8 mm) (without bracket) W: 9 3/4 in. (247.6 mm) (with bracket) D: 8 1/2 in. (215.9 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 4 per tank maximum	Dry chemical propellant (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	-65 °F to +210 °F (-54 °C to +99 °C)
H: 22 3/8 in. (568.3 mm) (with bracket) 21 3/8 in. (542.9 mm) (without bracket) W: 12 in. (304.8 mm) (with bracket) D: 9 1/2 in. (241.3 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 4 per tank maximum	Dry chemical propellant (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	-65 °F to +210 °F (-54 °C to +99 °C)
H: 22 5/8 in. (574.6 mm) (with bracket) 22 3/8 in. (568.3 mm) (without bracket) W: 9 7/8 in. (258.8 mm) (with bracket) D: 7 3/4 in. (196.8 mm) (with bracket)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 6 per tank maximum	Dry chemical propellant (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	-65 °F to +210 °F (-54 °C to +99 °C)
H: 21 1/2 in. (550 mm) W: 11 3/8 in. (290 mm) D: 12 1/2 in. (320 mm)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 4, 6, or 8 per tank maximum	Dry chemical propellant (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	-65 °F to +130 °F (-54 °C to +54 °C)
H: 31 in. (787 mm) W: 18 in. (457 mm) D: 22 in. (559 mm)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or with V-1/2, 8, 12 or 16 per tank maximum	Dry chemical propellant (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	-65 °F to +130 °F (-54 °C to +54 °C)
H: 44 in. (1118 mm) W: 22 in. (559 mm) D: 28 in. (711 mm)	Electric detection with pneumatic actuation; manual remote pneumatic, push button	F-1/2, C-1/2 or V-1/2, 8, 12, 16, or 24 per tank maximum	Dry chemical propellant (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C) Remote actuators (N <sub>2</sub> ) 1800 psi (122.5 bar) at 70 °F (21 °C)	-65 °F to +130 °F (-54 °C to +54 °C)





## Description (Continued)

**Mounting Bracket (10, 20, 30, 50)** – Tank mounting bracket consists of a rugged, welded steel back plate and clamp arm assembly. The bracket is designed to retain and protect the agent storage tank in the normal hostile environment that these systems are installed in. The bracket is painted red enamel and can be mounted by bolting or welding.

**Mounting Ring (125, 250)** – The mounting ring for the 125, 250 tanks is fabricated of 1/2 in. steel. The ring conforms to the outline of the tank assembly bottom. The ring can be welded to the mounting surface and the tank can then be bolted to the ring, using the pre-threaded holes in the ring.

**Expellant Gas Cartridge** – The expellant gas cartridge is a spun high pressure cartridge containing either carbon dioxide for temperature ranges of +32 °F to +120 °F (0 °C to +49 °C), or nitrogen for extreme temperature ranges of -65 °F to +210 °F (-54 °C to +99 °C).

**Distribution Hose and Nozzles** – The distribution piping (hose) network is designed to properly distribute the dry chemical to the nozzles. To survive the vibration found on mobile equipment, hose is used to distribute the dry chemical. In the A-101 pre-engineered system; hose sizes, maximum and minimum hose lengths, and number of nozzles are predetermined. There are three types of nozzles available for the A-101 system. Each type of nozzle has been designed and tested for various applications and area of coverage. Nozzle blow-off caps are available to keep the nozzles free of dirt and grease.

**Manual/Automatic Actuator(s)** – The manual actuator consists of an actuator body, a nitrogen cartridge, and a mounting bracket. Two types of manual actuators are available: Remote type and Dashboard type. The Remote type uses either the "S" style bracket or the cartridge guard style enclosure. The Dashboard type uses the "L" or "S" style mounting bracket. When the manual actuator is operated by hand, gas supplied from the nitrogen cartridge is released into 1/4 in. actuation hose. This nitrogen pressure then operates the pneumatic actuator that punctures a larger expellant gas cartridge (either carbon dioxide or nitrogen) and this fluidizes and propels the dry chemical from the agent storage tank.

Automatic actuators (a component of the automatic detection system) operate the same way, except they can be operated automatically by the detection system.

**Automatic Detection System** – Three automatic detection systems are available for use with the ANSUL A-101 fire suppression systems: CHECKFIRE Series I, CHECKFIRE SC-N, or the CHECKFIRE MP-N.

Mounting location temperatures for the control modules for the detection systems are as follows:

CHECKFIRE Series I -40 °F to +140 °F (-40 °C to +60 °C)

CHECKFIRE SC-N -40 °F to +140 °F (-40 °C to +60 °C)

CHECKFIRE MP-N +32 °F to +120 °F (0 °C to +49 °C)

CHECKFIRE systems utilize either an electrical, mechanical, or pneumatic principle. Four types of detector options can be used: A temperature-sensitive linear wire, a spot-type heat detector, or a gas filled stainless steel tubing, or a combined linear/spot type with Triple IR (IR3) flame detectors.

- Temperature-sensitive linear wire – When fire breaks out, the wire's insulation melts, completing an electrical circuit and causes the detection system to actuate the fire suppression system.
- Spot-type heat detectors – Internal contacts will close when the temperature of the surrounding air reaches the set point temperature of the detector. This action completes an electrical circuit and causes the detection system to actuate the fire suppression system.

- Gas filled stainless steel tubing – When the gas in the tubing heats up, the increase in pressure operates a responder, thus completing an electrical circuit and causes the detection system to actuate the fire suppression system.
- The Triple IR (IR3) Flame Detector is a high performance and high reliability self-contained triple spectrum flame detector. This detector, packaged in a small, convenient sized housing for easy installation in tight areas, is specially designed as a general-purpose flame detector for off-road (mining) and industrial applications with the highest immunity to false alarms. The patented Triple IR design offers two to three times the detection distance of any conventional IR or UV/IR detector, scanning for oscillating IR radiation (1 to 10 Hz) in three special bands. Each sensor band pass has been selected to help ensure the greatest degree of spectral matching to the radiant energy emissions of fire, and the lowest degree of matching to non-fire stimuli.

## Specifications

The fire suppression system shall be the dry chemical pre-engineered fixed nozzle cartridge-operated type, incorporating automatic detection with engine shutdown capabilities. It shall be approved by Factory Mutual (FM) for the hazards to be protected based on actual fire tests by the manufacturer and confirmed by the nationally recognized testing laboratory. The design of the system (specific hose sizes, maximum and minimum lengths, hose specifications, number of fittings, number and type of nozzles, and quantity of dry chemical) shall provide protection for the hazard as prescribed by the national testing laboratory. Installation shall be in accordance with the approved Design, Installation, Maintenance Manual and conform to NFPA Standard 17, "Dry Chemical Extinguishing System," and NFPA Standard 121, "Mobile Surface Mining Equipment."

## Approval

The ANSUL A-101 System is Factory Mutual (FM) Approved, Transport Canada (TC) Approved, and CE Marked.

## Twin-Agent Concept

The LVS Liquid Agent Fire Suppression System is designed to be installed with an ANSUL A-101 Dry Chemical system to create a twin-agent system concept that is capable of quick fire knock-down, coupled with the cooling application of the LVS liquid agent. The system consists of both dry chemical and wet chemical. The dry chemical side of the system is the ANSUL LT-A-101 type system and the liquid agent side of the system consists of wet chemical tank(s) containing a premixed solution of LVS agent.

## Ordering Information

Order all system components through Customer Services, One Stanton Street, Marinette, WI 54143-2542 (715) 735-7411.

Safety Data Sheets (SDS) are available at [www.ansul.com](http://www.ansul.com)

**Note:** The converted values in this document are provided for dimensional reference only and do not reflect an actual measurement.

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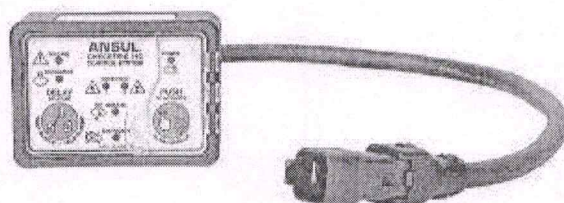




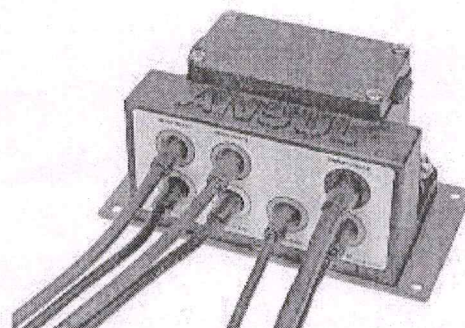
## CHECKFIRE 210-D Detection and Actuation System

### Features

- FM 5970 Approved, 2022 Edition Tested to meet or exceed vehicle equipment manufacturer's specifications for environment, vibration and EMC profiles
- Supervised power, detection, release, and communication circuits
- System can be independently powered by utilizing either the primary power input or secondary power input.  
NOTE: Both primary and secondary power supplies must be utilized to maintain FM 5970 approval.
- Two time delays programmable to 0, 5, 10 or 15 seconds
- "DELAY / Reset / Silence" button
- PUSH To Activate / Alarm When Lit" electric manual activation button and LED
- Minimum 75 dB internal sounder
- Dust and water tight connectors (IP68 rated)
- Manual programming button
- Computer programmable via mini USB port
- Two analog detection circuits, detection circuit #2 may be programmed for pressure switch feedback
- Detection circuits are programmable for independent detection and release, cross-zone detection and release or detection only
- Auxiliary Power output available when external power is connected
- Two internal programmable SPDT Form "C" relays (6A @ 30 VDC resistive, 3A @ 30 VDC Inductive)
- Isolate function via Display Module
- Downloadable 4000+ Event History Log



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### Application

The CHECKFIRE 210-D Detection and Actuation System is typically used with an ANSUL® A-101 or LVS Vehicle Fire Suppression System for 24-hour protection of equipment. The system is designed for vehicles and equipment in extreme environmental and physical conditions.

Industries where vehicles use CHECKFIRE 210-D Systems:

- |                         |                  |
|-------------------------|------------------|
| ■ Forestry              | ■ Land fills     |
| ■ Agriculture           | ■ Waste disposal |
| ■ Construction          | ■ Mining         |
| ■ Public transportation |                  |
| ■ Public utilities      |                  |

### Description

The CHECKFIRE 210-D Automatic Detection and Actuation System provides supervised input/output circuits to activate an ANSUL® fire suppression system. Upon detecting a fire condition, the interface control module activates the release circuit, resulting in the discharge of an expellant gas cartridge, initiating fire suppression system operation.

Green, amber, and/or red pulsing LEDs, and the internal sounder notify operator of system status. The sounder only activates for faults, isolate mode, and system release.

Operating components include the display module, interface control module, linear detectors, electric manual actuators, protruding actuation devices (PAD), electric-pneumatic actuators, and cables for power, detection, and release circuits. The entire system is electronics based for supervision, communication, and control of system components.

One Station Street | Manitowish, WI 54143-2542, USA | +1 715 735 7411 | www.ansul.com

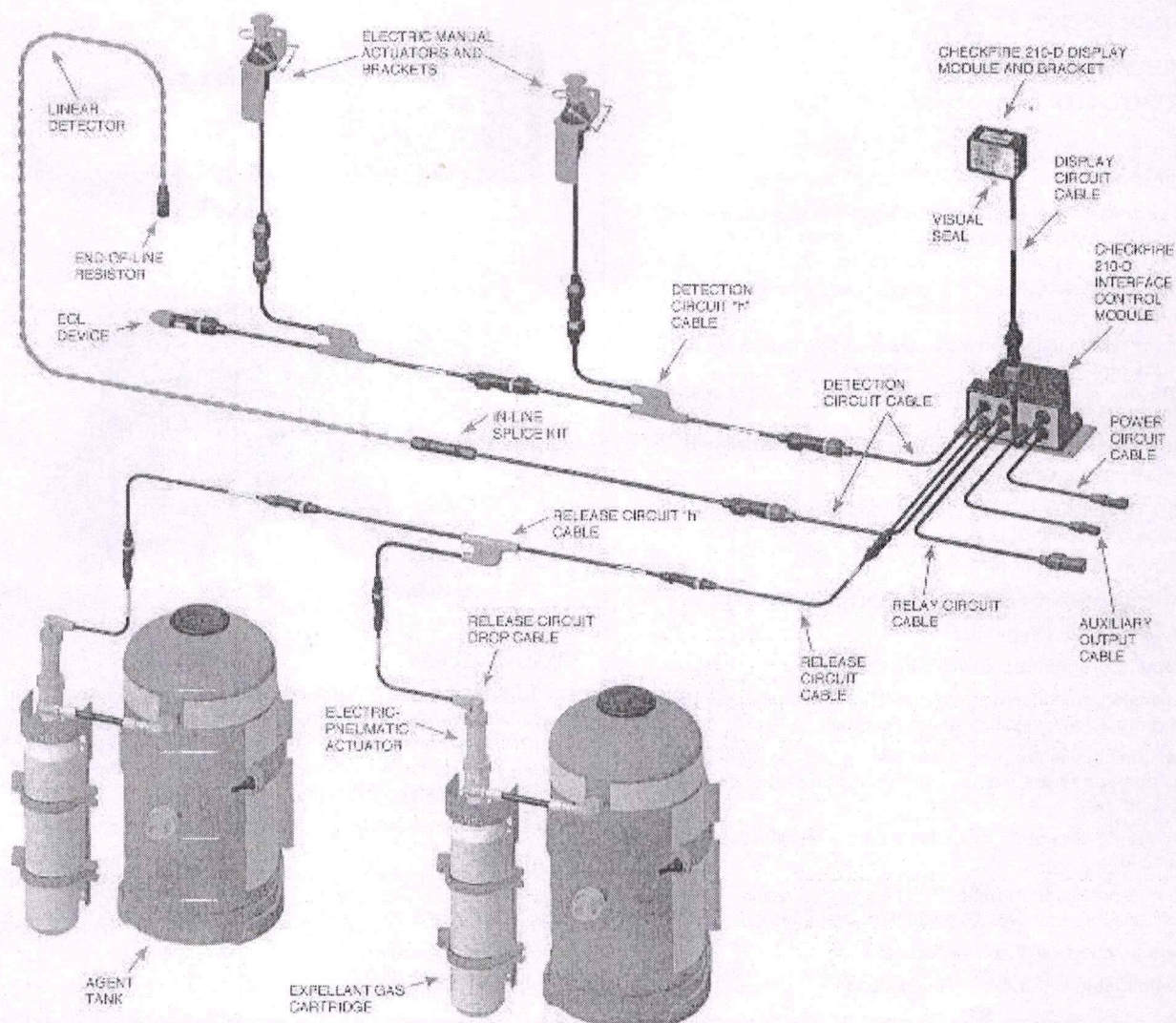
© 2023 Johnson Controls. All rights reserved. All specifications and other information shown were current as of document revision date and are subject to change without notice. | Form No. F-2023007-01

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## CHECKFIRE 210-D SYSTEM - SAMPLE CONNECTIONS



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## Typical System Connections

The CHECKFIRE 210-D Display Module communicates with the CHECKFIRE 210-D Interface Control Module (ICM) through the display cable. The ICM is the central connection point for all system cables.

### System Cabling:

- Enables communication and control of components
- IP68 connectors
- Integral connectors on each end of cable
- Offered in factory set lengths or can be custom fabricated on site
- Temperature rating: 221 °F (105 °C)

**Detection Circuits #1 and #2:** Permits multiple-detection options using detection circuit cable and detection circuit "h" cables for the main detection trunk and branch lines.

- Electric manual actuators
- Linear detectors
- Pressure switch (detection circuit #2 only)

**Release Circuit:** Connects to a maximum of 8 electric-pneumatic actuators installed on agent tank expellant gas cartridges using release circuit cables, "h" cables, and release circuit drop cables.

**External Power Circuit:** Provides a direct connection to the vehicle power source using power circuit cables and a single fused power circuit cable, when external power is required.

**Auxiliary Output Circuit:** Connects to external notification devices.

**Display Circuit:** Connects display module with ICM.

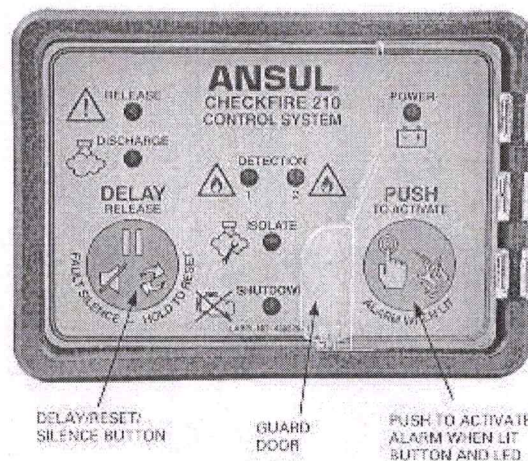
**Relay Circuit:** Provides connection for two independent internal relay contacts for connection by others.

## Detection

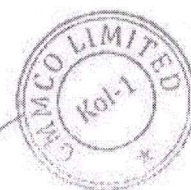
A Linear Detector with a predetermined temperature rating provides fire detection in the protected area. Color coded temperature ratings offer quick identification of linear cable selection. 356 °F (180 °C) cables are red, while 220 °F (105 °C) cables are white.

## Display Module

The CHECKFIRE 210-D Display Module communicates with the Interface Control Module (ICM) to indicate system status. Installation within reach of the operator provides easy access to operator controls.



- Durable high-strength glass-filled nylon material
- Surface or bracket mounted
- Two index pins on back for secure mounting
- Ambient temperature range: -40 °F to 185 °F (-40 °C to 85 °C)
- LED indicators provide notification of system status (internal sounder matches LED pulse rate)
- PUSH To Activate / Alarm When Lit manual-activation button and LED
  - Provides manual actuation (immediate release)
  - Indicates alarm condition
- Guard door with visual seal to protect manual-activation button
- DELAY/Reset/Silence Button
  - Restarts Time Delay #1 (TD1) before TD1 sequence expires
  - Resets system (during non-alarm status)
  - Silences internal sounder during fault conditions and isolate mode
  - Activates/deactivates Isolate Mode



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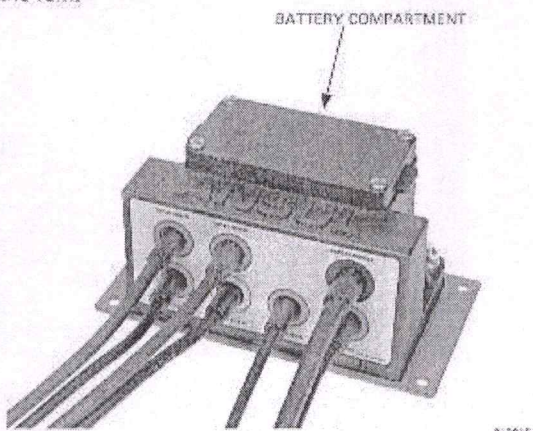
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### Interface Control Module (ICM)

The CHECKFIRE 210-D Interface Control Module (ICM) is the central connection point for input/output circuits. Through communication with the display module, operators receive continuous system status updates, and operator input commands go directly to the ICM.

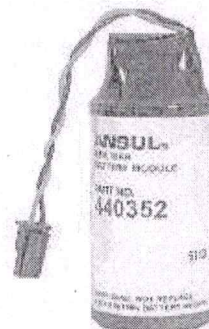


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The protective battery compartment cover is held in place with 4 captive screws. Besides the internal power supply, the compartment includes a mini USB connection port and the programming interface (button and LEDs). The system programming may be accomplished with the manual programming button or by using a computer with the ANSUL® CHECKFIRE 210 Programmer software communicating through the mini USB port.

The system can be put into Isolate mode at the display module to temporarily disable the automatic system release function. While disabled, manual system release is still available. An amber isolate LED on the display module continues to pulse until the switch is returned to normal.

- Dust and water tight (IP67 rated)
- Durable high-strength glass-filled nylon material
- UL94 Flame rating
- Ambient temperature range: -40 °F to 185 °F (-40 °C to 85 °C)
- Steel mounting plate



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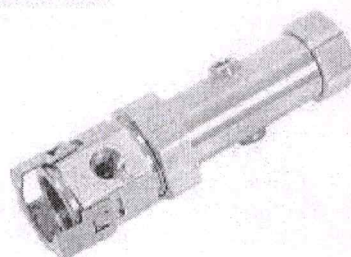
### Battery Module

A supervised 3.6 VDC lithium CHECKFIRE 210-D Battery Module provides internal power for the CHECKFIRE 210-D System.

### Electric-Pneumatic Actuator

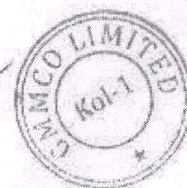
With a focus on ease of installation and safety, the Electric-Pneumatic Actuator reduces system complexity. The Protracting Actuation Device (PAD) directly actuates the electric-pneumatic actuator pin eliminating the need for pneumatic actuation.

The PAD with plug-in spade connectors is easy to install and replace without tools. After plugging the PAD into the re-designed release circuit drop cable, the cable is attached to the top of the electric-pneumatic actuator.



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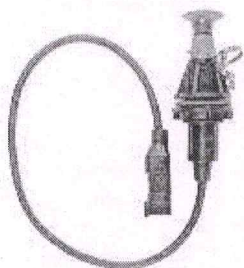
If required, optional pneumatic actuation is available.



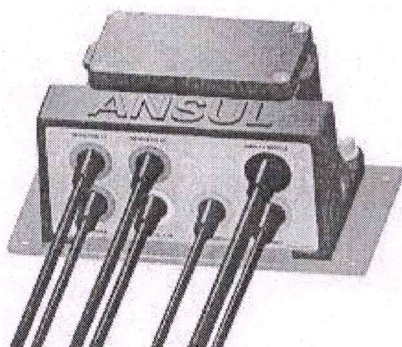


## Electric Manual Actuator

The newly designed Electric Manual Actuator (EMA) provides electrical activation of the fire suppression system. Pulling the pin and striking the red button sends a signal to the interface control module for immediate actuation of the electric-pneumatic actuator. Upon actuation, the expellant gas cartridge initiates fire suppression system operation.



EMAs are typically accessible from ground level and/or in a path of egress. An index nub ensures the EMA remains at the proper angle for access to the pull pin.



## System Specifications

Interface Control  
Module Power: Internal power source  
and/or: 12/24 VDC nominal external  
power  
(24 hour operation)

Operating  
Temperature Range: -40 °F to 185 °F  
(-40 °C to 85 °C)

Shock: In accordance with UL1254

Vibration: In accordance with UL1254

Electromagnetic  
Compatibility: Heavy Industrial EMC Directive  
Compliant (2004/108/EC)

## Approvals

FM 5970 Approved and CE Marked

## Ordering Information

Part No. Description

### System Components

A16381C9PK	CHECKFIRE 210-D Display Module
439564	Mounting Bracket, CHECKFIRE 110/210
A16381C9PL	Interface Control Module (ICM), CHECKFIRE 210-D
439569	Electric Pneumatic Actuator (EPA)
440352	CHECKFIRE 210 Battery

### Display/Communication Circuit

A16381EW4C	100 ft (30.5 m) Bulk Display/Communication Circuit Cable Box
A16381EW48	200 ft (61.0 m) Bulk Display/Communication Circuit Cable Spool
A16381CBC1	2 ft (0.61 m) Display/Communication Circuit Cable
A16381CBC2	3 ft (0.92 m) Display/Communication Circuit Cable
A16381CBC3	5 ft (1.53 m) Display/Communication Circuit Cable
A16381CBC4	10 ft (3.05 m) Display/Communication Circuit Cable
A16381CD2V	20 ft (6.10 m) Display/Communication Circuit Cable
A16381CD2W	30 ft (9.15 m) Display/Communication Circuit Cable
A16381CD30	50 ft (15.24 m) Display/Communication Circuit Cable

### Detection Circuit

A16381EW49	100 ft (30.5 m) Bulk Detection/Relay Circuit Cable
A16381EW45	500 ft (152.4 m) Bulk Detection/Relay Circuit Cable Spool
A16381C9PN	2 ft (0.61 m) Detection Circuit Cable
A16381CB0F	3 ft (0.91 m) Detection Circuit Cable
A16381CB0G	5 ft (1.53 m) Detection Circuit Cable
A16381CB62	10 ft (3.05 m) Detection Circuit Cable
A16381CB63	20 ft (6.10 m) Detection Circuit Cable
A16381CB64	30 ft (9.15 m) Detection Circuit Cable
A16381CB65	50 ft (15.24 m) Detection Circuit Cable
A16381CD32	"h" Cable, Detection Circuit
A16381C9PM	Electric Manual Actuator (EMA)
440537	Electric Manual Actuator Bracket
426520	End-of-Line Resistor
426461	End-of-Line Resistor (10 Pack)
A16381CB66	EOL (End-of-Line) Device, Detection Circuit





## Ordering Information (Continued)

Part No.	Description
<b>Detection Circuit (Continued)</b>	
A16381CB6Y	Branch Terminator, Detection Circuit
428375	In-Line Splice Kit
A16381TK26	Discharge Pressure Switch
<b>Linear Detectors (Red)</b>	
071230	100 ft (30.5 m) Red Bulk Linear Detection Wire 356 °F (180 °C)
<b>Linear Detectors (White)</b>	
A16381ULBP	100 ft (30.5 m) White Bulk Linear Detection Wire 220 °F (105 °C)
<b>Relay Circuit</b>	
A16381EW49	100 ft (30.5 m) Bulk Detection/Relay Circuit Cable
A16381EW45	500 ft (152.4 m) Bulk Detection/Relay Circuit Cable Spool
A16381CB9R	2 ft (0.61 m) Relay Circuit Cable
A16381CB9T	5 ft (1.53 m) Relay Circuit Cable
A16381CB9U	10 ft (3.05 m) Relay Circuit Cable
A16381CB9Y	20 ft (6.10 m) Relay Circuit Cable
<b>Release Circuit</b>	
A16381EW4B	100 ft (30.5 m) Bulk Release/Power Circuit Cable
A16381EW47	500 ft (152.4 m) Bulk Release/Power Circuit Cable Spool
A16381CB70	2 ft (0.61 m) Release Circuit Cable
A16381CB71	3 ft (0.91 m) Release Circuit Cable
A16381CB72	5 ft (1.53 m) Release Circuit Cable
A16381CB73	10 ft (3.05 m) Release Circuit Cable
A16381CB74	20 ft (6.10 m) Release Circuit Cable
A16381CB7D	30 ft (9.15 m) Release Circuit Cable
A16381CB7E	50 ft (15.24 m) Release Circuit Cable
A16381CD33	"h" Cable, Release Circuit
439436	Branch Terminator, Release Circuit
A16381CB7H	38 in. (0.97 m) Release Circuit Drop Cable
439448	Protracting Actuation Device (PAD)
<b>Power Circuit</b>	
A16381EW4B	100 ft (30.5 m) Bulk Release/Power Circuit Cable
A16381EW47	500 ft (152.4 m) Bulk Release/Power Circuit Cable Spool
A16381CB7K	2 ft (0.61 m) Power Circuit Cable
A16381CB7L	3 ft (0.92 m) Power Circuit Cable
A16381CB7M	5 ft (1.53 m) Power Circuit Cable
A16381CB7P	10 ft (3.05 m) Power Circuit Cable
A16381CB7T	20 ft (6.10 m) Power Circuit Cable
A16381CB8K	30 ft (9.15 m) Power Circuit Cable

Part No.	Description
<b>Power Circuit (Continued)</b>	
A16381CB8M	50 ft (15.24 m) Power Circuit Cable
A16381CB9P	Fused Power Circuit Cable - 3 ft (0.91 m) (w/Fuse Holder)
<b>Bulk Circuit Connector Kits</b>	
A16381TK21	2-Pin Connector Kit, 1 pack Release/Power Circuits
A16381TK20	2-Pin Connector Kit, 5 packs Release/Power Circuits
A16381TK1V	6-Pin Connector Kit, 1 pack Display/Detection/Relay Circuits
A16381TK1Y	6-Pin Connector Kit, 5 packs Display/Detection/Relay Circuits
<b>Cable Mounting Hardware</b>	
448174	Bulkhead Cord Grip, (Pkg. 50)
440737	Double Loop Cable Tie (Pkg. 50)
447931	2-Hole Grommet (25 Pack)
447928	3-Hole Grommet (25 Pack)
447321	Linear Detector Grommet (Pkg. 25)

Note: The converted values in this document are provided for dimensional reference only and do not reflect an actual measurement.

ANSULs, CHECKFIRE, and the product names listed in this material are marks and/or registered marks. Unauthorized use is strictly prohibited.

A. S. S. S.



mper

A. S. S. S.

Kuldeep

A. S. S. S.

S. S. S.



## Automatic Fire Detection and Suppression System (AFDSS) with Two Zones

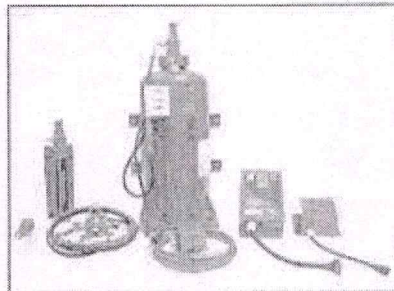


**Automation  
Controls**  
An ISO 9001:2015 Company

Annexure-6g

(As per DGMS (Tech) Circular No. 06 of 2020, Dhanbad, dated 27/02/2020)

Our Automatic Fire Detection & Suppression System (AFDSS) meets all requirements as per DGMS (Tech) Circular No. 06 of 2020, Dhanbad, dated 27/02/2020. We are happy to introduce "Multi Zone Automatic Fire Detection and Suppression system" which we have developed indigenously.



The major and critical inclusion as per DGMS (Tech) Circular No. 06 of 2020 is:

"The system, as far as practical, shall be designed in such a way to supply adequate quantity of fire suppressing agent to the zone where the fire is detected and to be suppressed on need basis for effective firefighting and to avoid re-ignition of fire instead of blind discharge through all discharge nozzles" (hereinafter referred as "Two Zone AFDSS"), where engineering innovation is required.

How we are providing "Two Zone AFDSS":

**Zone 1** : Engine Area.

**Zone 2** : Diesel Tank, Transmission, Exhaust Pipe and other hot zones having the potential to cause a fire. (or as specified by customer)

In case if we install two zone AFDSS with the cylinder capacity of 30 Kg DCP Powder. That is two cylinders of 15 Kg +15 Kg on the HEMM.

**Condition 1** : If the fire is detected in Zone 1, then total DCP powder that is 30 Kg. will be sprayed in zone 1, and no DCP powder will be sprayed in Zone 2.

**Condition 2** : In the same way, if the fire is detected in Zone 2, then total DCP powder that is 30 Kg. will be sprayed in Zone 2, and no DCP powder will be sprayed in Zone 1.

Other features which are mentioned in Circular No. 06 of 2020, the basic inclusion are as follows:

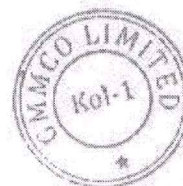
All other parameters available in our AFDSS System:

- I. Control Panel is with system healthy and system malfunction indicator.
- II. AFDSS is having with manual actuation, inside and outside operators' cabin (away from hot zones). If the system is manually operated, then DCP powder should spray through all the nozzles.
- III. No obstruction in Operator's line of sight, as size of display panel is very small 5 inch X 6 inch.
- IV. AFDSS will cover all fire susceptible areas having the potential to cause a fire.
- V. Our Automatic Fire Detection & Suppression System (AFDSS) meets all requirements of DGMS (Approval) Circular No. 2 dated 08/07/2013 as per DGMS (Tech) Circular No. 06 of 2020, Dhanbad, dated 27/02/2020.

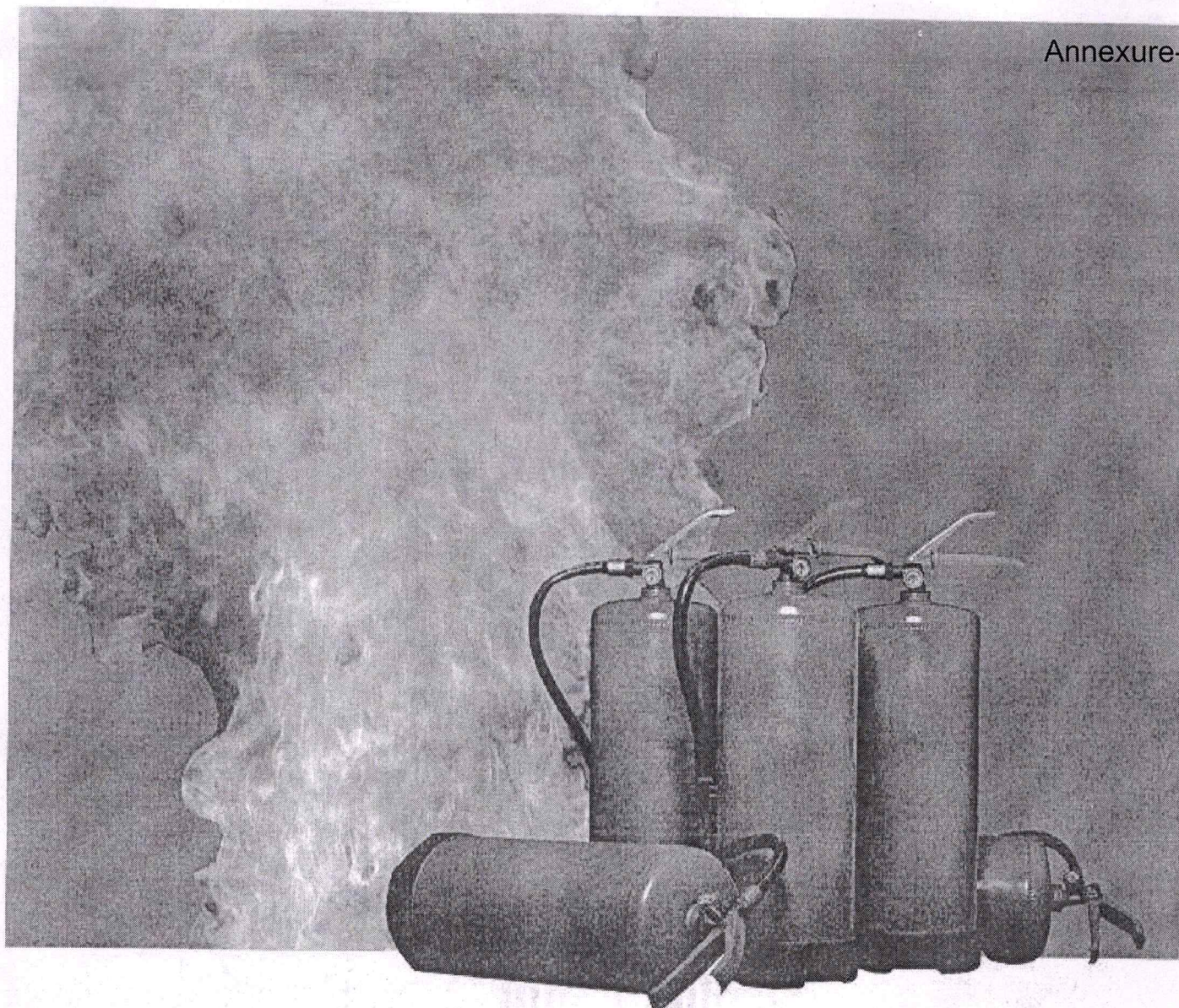
Like 2 Zone AFDSS System we can make 3 Zone AFDSS System and 4 Zone AFDSS System as per customers need.



Manufacturer of Safety Equipments as per D.G.M.S. Circulars  
K 10/2, MIDC Hingna, Dist.- Nagpur - 440 016. Phone : +91 7104 - 237200  
E-mail : info@automationcontrol.in, automat.ngp@gmail.com  
Web : www.automationcontrol.in EM II No.: 270091101109 (MSME)







**SE** SEONICS

# FIRE PROTECTION AND SAFETY SYSTEMS

*A. Laksh*

*Vijay Kumar*

Tel: +91-80-39280346/341  
www.seonics.in / marketing@seonics.co.in

16-A, Phase -1, Peenya,  
Bengaluru, Karnataka 560058

*mkr*

*AC*

*Vijay*

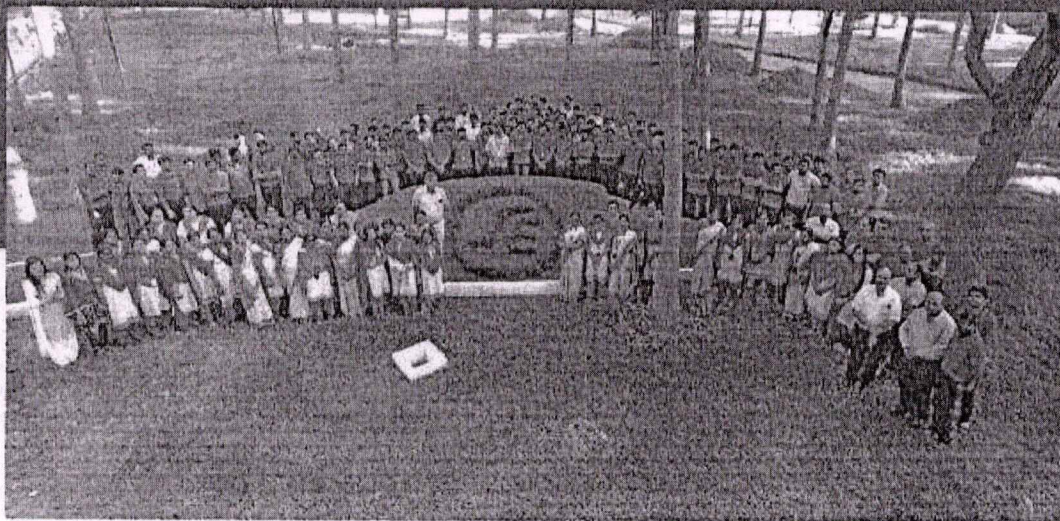
*AC*

*Colonel*



# INTRODUCTION

- Established in 1971
- Core Competence in Design, Development and manufacture of fire protection and equipment safety products
- AS 9100D ISO14001, ISO45001, ISO27001 Certified Company
- CEMILAC Approved Design Organisation
- Govt. of India recognised R&D House



## WHY CHOOSE US?



Willing to invest in strategic alliances.



On-time delivery.



High reliability products.



Wide service network across India

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*Vignesh Kumar*  
*[Signature]*



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CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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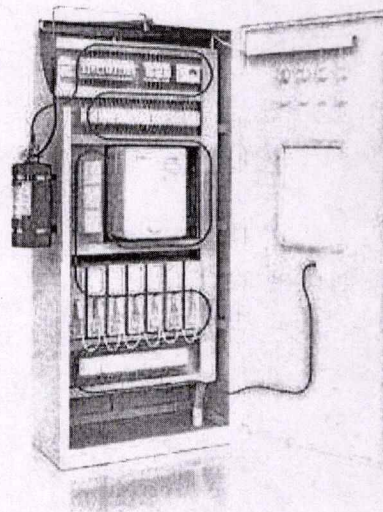
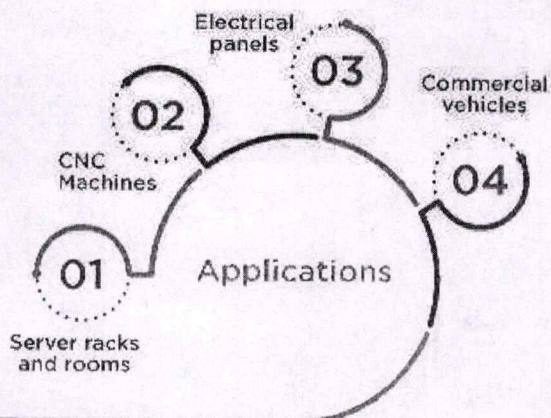
*A. Jankar*



## TUBE BASED SYSTEMS

### Features:

- Flexible, temperature sensitive Polymer tube making routing in tight corners easy.
- Ruptures at hottest spot and forms a nozzle shaped opening.
- Autonomous system works independent of electricity.
- Works as a Multi-Sensor.

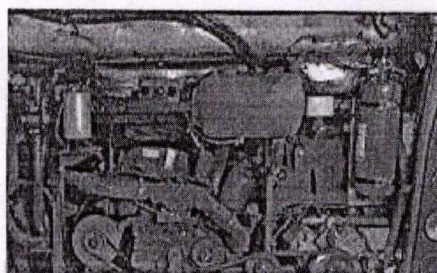
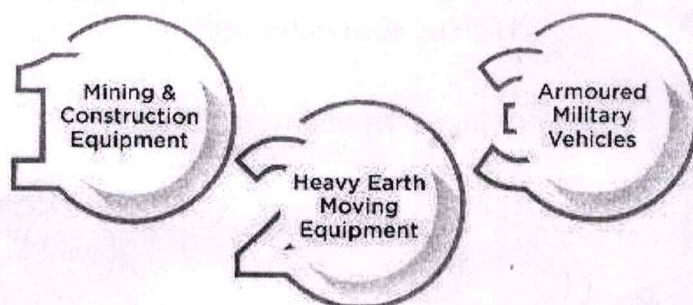


## LINEAR HEAT DETECTION (LHD) TUBE BASED SYSTEMS

### Features:

- LHD tube for detection.
- Dry Chemical Powder/Wet chemical for Suppression.
- Automatic Detection, Suppression and provision to manually activate the system.

### Applications:



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*A. S. RAY*

*Amey*

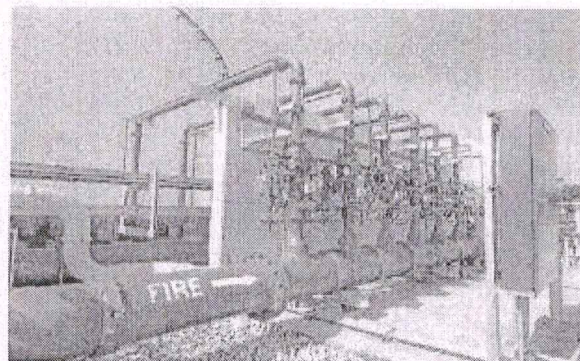
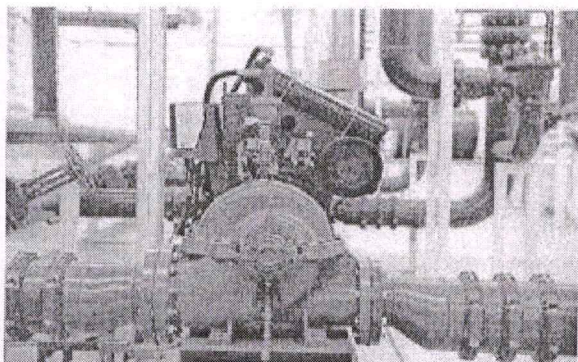
*Vikash Kumar*





## HYDRANT SYSTEMS

- Hydrant systems are provided to protect the entire plant / building from risks.
- The system comprises of a combined network of underground & above ground pipes throughout the protected area and is provided with hydrant valves, hose reels and nozzles at strategic locations.
- The system is connected to a reliable source of water supply and is pressurized by using pump sets.



## PORTABLE FIRE EXTINGUISHERS

Portable fire extinguishers can be used for multiple purposes and are triggered manually on spotting fire. The following systems comply to IS specifications.

Agent	Type of Fire	Sticker Type	Capacity (in kgs)	Applications
DCP Powder			1, 2, 3, 4, 6, 9	Home, Office, Warehouses
Clean Agent			1, 2, 4, 6	Server Racks, Labs Boat Engines
Water			6, 9, 25, 50, 75	Schools, Theaters, Apartments
Mechanical Foam			6, 9, 50	Petrol Stations, Restaurants
CO <sub>2</sub>			2, 3, 4.5, 6.5, 9, 22.5	Chemical Plant, Oil Rigs, Garages



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.Sec- VI, Tech Specs, Part- D, Clause- 4.19 of NIT

GMMCO/CIL/850HP Dozer/24-25

Date: 22-07-2024

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sir,

SUB- Fire Extinguisher

Name Of the Manufacturers- Kanex / Gunnebo /Automation control/Southern Electronics/Ansul(Maco)

REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

This is to certify that, a fire extinguisher shall be provided on the dozer, suitably mounted in heavy-duty bracket for ease of removal. The extinguisher shall be dry powder (cartridge type) with a minimum capacity of 5 kg and shall comply with Indian Standard IS: 15683 with latest amendment.

We also confirm that, a valid Test Certificate (valid as on the date of commissioning of the equipment at site) shall be submitted at the time of supply of equipment along with other documents, for Fire Extinguisher including Materials and Chemicals to be used in fire extinguisher from any Government or Government approved Laboratory in compliance with relevant Indian Standards as per DGMS Circular No. DGMS (Approval) Circular No.02 dtd. 08th July 2013 with subsequent amendments.

Note: Periodical refilling shall be done by us.

Thanking You,

Yours Sincerely,

For GMMCO LIMITED

*Vikash Kumar*  
Vikash Kumar  
General Manager

*A. S. Saha*Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E-mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

Page 152 of 227



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

Sec-VI, Tech Specs, Part D, Clause- D.4.20 of NIT

Date: 22-07-2024

GMMCO/CIL/850HP24-25

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sir,

**SUB- SAFETY FEATURES**

REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

We hereby confirm that, All safety features & devices as per Govt. Of India Gazette notification no. Z 20045/01/2018/S&T (HQ) dated 01.10.2018, DGMS (Tech) Circular No. 06 of 2020 Dhanbad dated 27.02.2020 and subsequent amendments, if any, including following shall be provided in the equipment.

We also confirm that all safety features and devices are incorporated in the equipment-

- Roll over protection.
- Turbocharger guard.
- Fire resistant /fire retarder hydraulic hoses and wiring near hot zone.
- Seat belt for operator -Seat belt reminder should also be provided to alert operator for using the seat belt.

Thanking You,

Yours Sincerely,

For GMMCO LIMITED

*Vikash Kumar*  
Vikash Kumar  
General Manager

*A. Sankar**myer**Indrajit**Amal*Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

Page 153 of 227



Gmmco Limited

Clause- Section VI – Technical Specifications- D.4.21

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

GMMCO/CIL/850HP/24-25

Date : 22-07-2024

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sir,

SUB- Lubrication system

REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

A centralized micro control/PLC based electrically operated, automatic lubrication system as per design of the manufacturers provided to service all lubrication points on the machine.

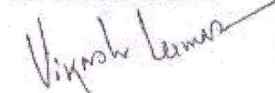
The lubrication system is fully monitored to ensure adequate lubricant flow is maintained to all Points of major parts. The monitoring system is, wherever necessary, interlocked with the relevant control circuits to prevent damage due to lack of lubrication at any point. Alarms and indications for failure of lubrication system are provided and is repeated in the OBD of operator's cab. All lubrication lines and injectors/Feed points are protected from damage. Location of all injectors are such that these can be conveniently inspected and repaired. The lubrication lines to the remote points are properly guided. Flexible lines are only used where there is relative movement between parts and for final connection to movable components. Preferably steel piping is used for long runs and terminates in steel junction blocks or rigidly mounted bulk head connectors to prevent disturbance to steel piping when flexible hoses are replaced.

Fire/heat resistant hydraulic hoses are provided in lubrication system. The vent valve, part of pump group can be removed. Lubricants recommended are of reputed make with Indian equivalent.

Suitable motorized and manual Transfer Pumps as per design of the manufacturer to prevent contamination and mixing of different grade of lubricants will be provided.

Yours Sincerely

For GMMCO LIMITED



Vikash Kumar  
General Manager



Phone: 10331 3918 1/00 To 12 Fax: 10331 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1906PLC026000

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

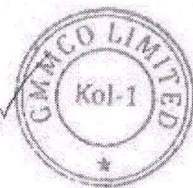
Page 154 of 227



SMCS - 7540

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The lubrication system consists of the lubrication pump group, the injector banks, and the lubrication injectors.

*A. Lakshmi**Vijay Kumar**Super**[Signature]**[Signature]**[Signature]**[Signature]*



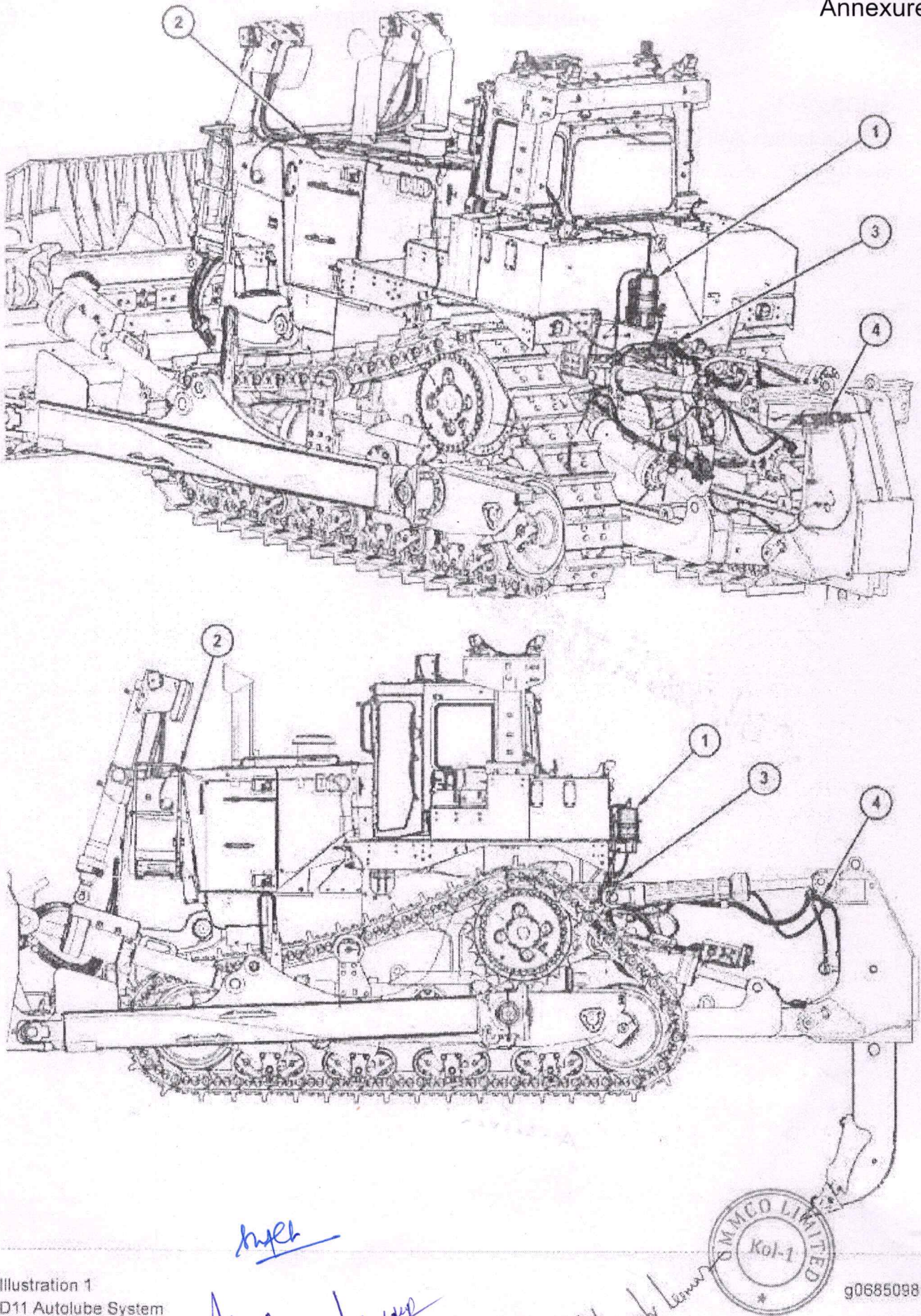


Illustration 1

D11 Autolube System

- (1) Lubrication pump group
- (2) Front injector bank
- (3) Rear injector bank
- (4) Ripper injector bank



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## References

Annexure-6j

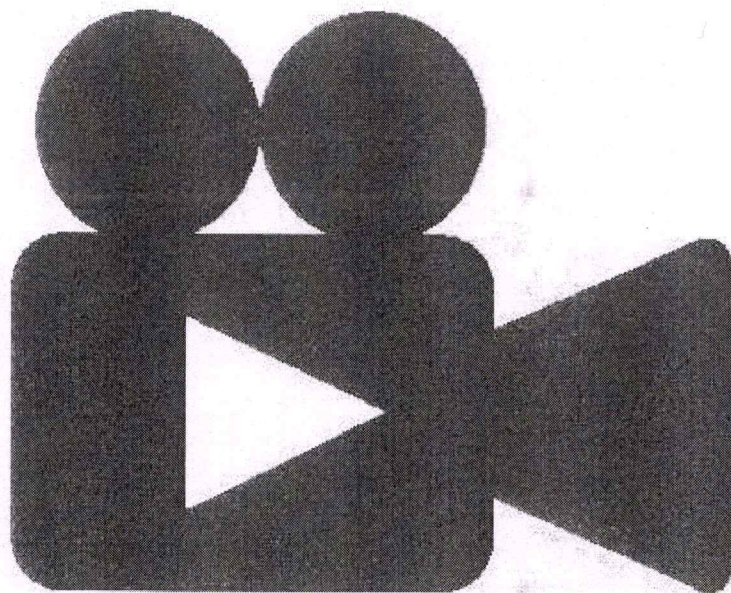


Illustration 2

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**Reference:** For more information, refer to supplemental video "D11 Track-Type Tractor Lubrication System Operation" on Caterpillar Channel1 (A CWS login is required to access Caterpillar Channel1).

**Note:** Click or copy the following link into a web browser. (A CWS login is required to access Caterpillar Channel1) or scan the following QR code using a QR enabled device.

[https://channel1.mediaspace.kaltura.com/media/1\\_u3k4hxgi](https://channel1.mediaspace.kaltura.com/media/1_u3k4hxgi)



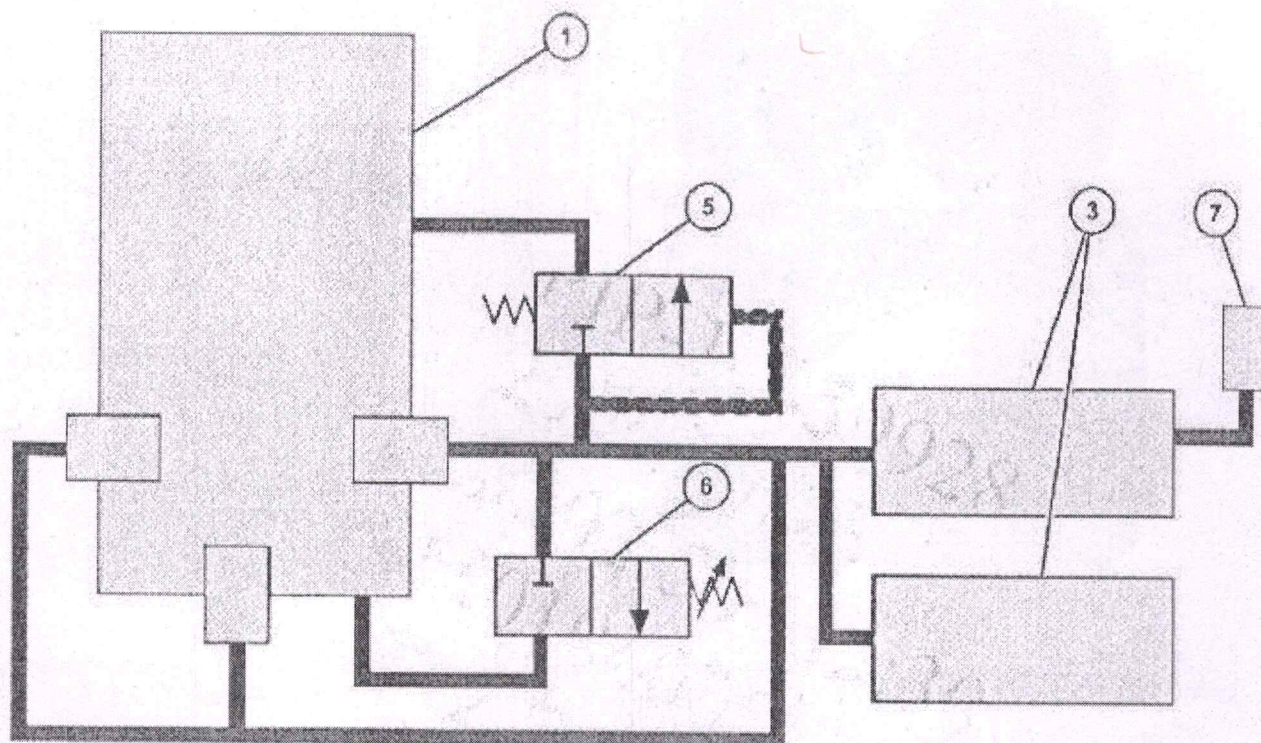
Illustration 3

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## Annexure-6j



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- (1) Lubrication pump group
- (3) Injectors
- (5) Relief valve
- (6) Vent valve
- (7) Pressure sensor

## Automatic Lubrication System

*Vijaya Kumar*

GMMCO LIMITED  
Kol-1  
★



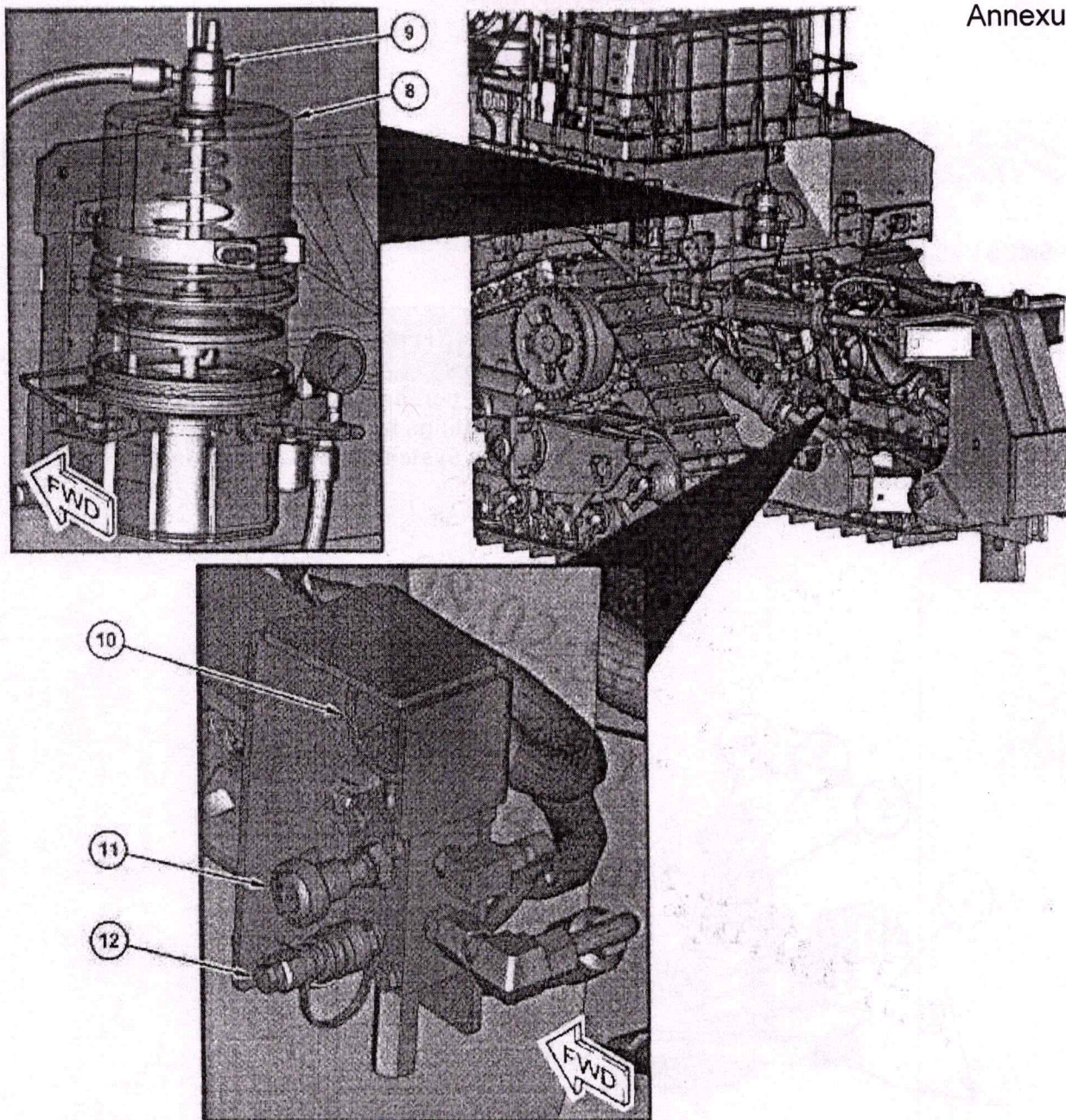


Illustration 5

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- (8) Grease reservoir
- (9) Auto-fill shutoff valve
- (10) Fill pressure gauge
- (11) Pressure relief valve
- (12) Ground level grease fill port

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A. Sankar

A. Sankar



SMCS - 7540

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**WARNING**

A pressure hazard is present. Severe personal injury or death can result from removing hoses or fittings that are under pressure. Relieve the pressure in the system before you remove hoses or fittings.

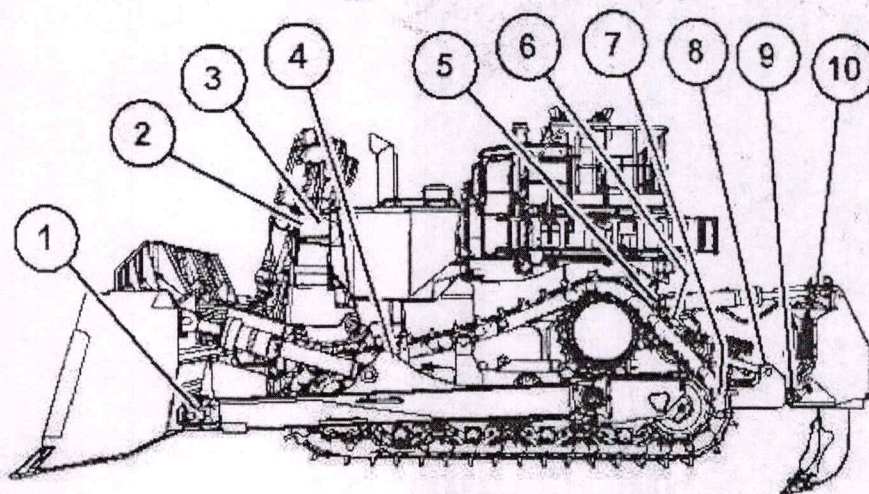


Illustration 1

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- (1) CarryDozer Pusharm
- (2) (3) Lift cylinder yoke, left and right pivot bearings (two locations on each side)
- (4) Equalizer bar end pins, left and right (fittings remote mounted on fender)
- (5) Ripper tilt cylinder, left and right frame pivot bearings
- (6) Ripper lift cylinder, left and right frame pivot bearings
- (7) Ripper frame, left and right pivot bearings
- (8) Ripper lift cylinder, left and right pivot bearings
- (9) Beam/Carriage, left and right pivot bearings
- (10) Ripper tilt cylinder, left and right pivot bearings



1. Remove any buildup of grease at the fitting locations. *myer*
2. Initiate a manual or automatic lubrication pumping cycle. While pumping, ensure that each injector pin is being retracted. If a pin is successfully retracted, fresh grease is being delivered to the joint. Check that each pin joint is receiving a fresh supply of grease.  
**Note:** It may take more than one manual pumping cycle to review all injector pins.

3. Check the grease level at the top vent port of the reservoir.



Reference: Refer to Operation and Maintenance Manual, "Automatic Lubrication G  
Reservoir - Fill (If Equipped)" for information on filling the reservoir. **Annexure-6j**

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Vignesh Kumar



A. S. S. S.

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**SMCS - 7540**

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The automatic lubrication system is used to lubricate the following components automatically on the D11 Track-Type Tractor:

- Lift cylinder yoke LH and RH pivot bearings (one on each side)
- Ripper tilt cylinder, LH, and RH case pivot bearings
- Ripper lift cylinder, LH, and RH case pivot bearings
- Ripper frame LH and RH case pivot bearings
- Ripper lift cylinder LH and RH ripper frame pivot bearings
- Ripper frame LH and RH ripper carriage pivot bearings
- Ripper tilt cylinder LH and RH ripper carriage pivot bearings
- Equalizer bar, LH, and RH end pin bearings

The automatic lubrication system consists of the following systems:

- Electrically driven pump with grease reservoir
- Electrical system consisting of power/control harness
- Grease lines, distribution blocks, and injectors
- Pump control and fault code integration to Cat software

The electrical drive pump is used to pressurize the lubrication system. The control unit turns the system ON and OFF at periodic intervals.

The grease lines and injectors deliver a predetermined amount of grease to the grease points that is based on an adjustment sleeve at the injector. The pump timing can be adjusted to 30, 45, 60, 75, 90, 105, or 120 minutes.

## Location of the Lubrication Points

*Amr**A 30-120**Vijay Kumar**CSM*



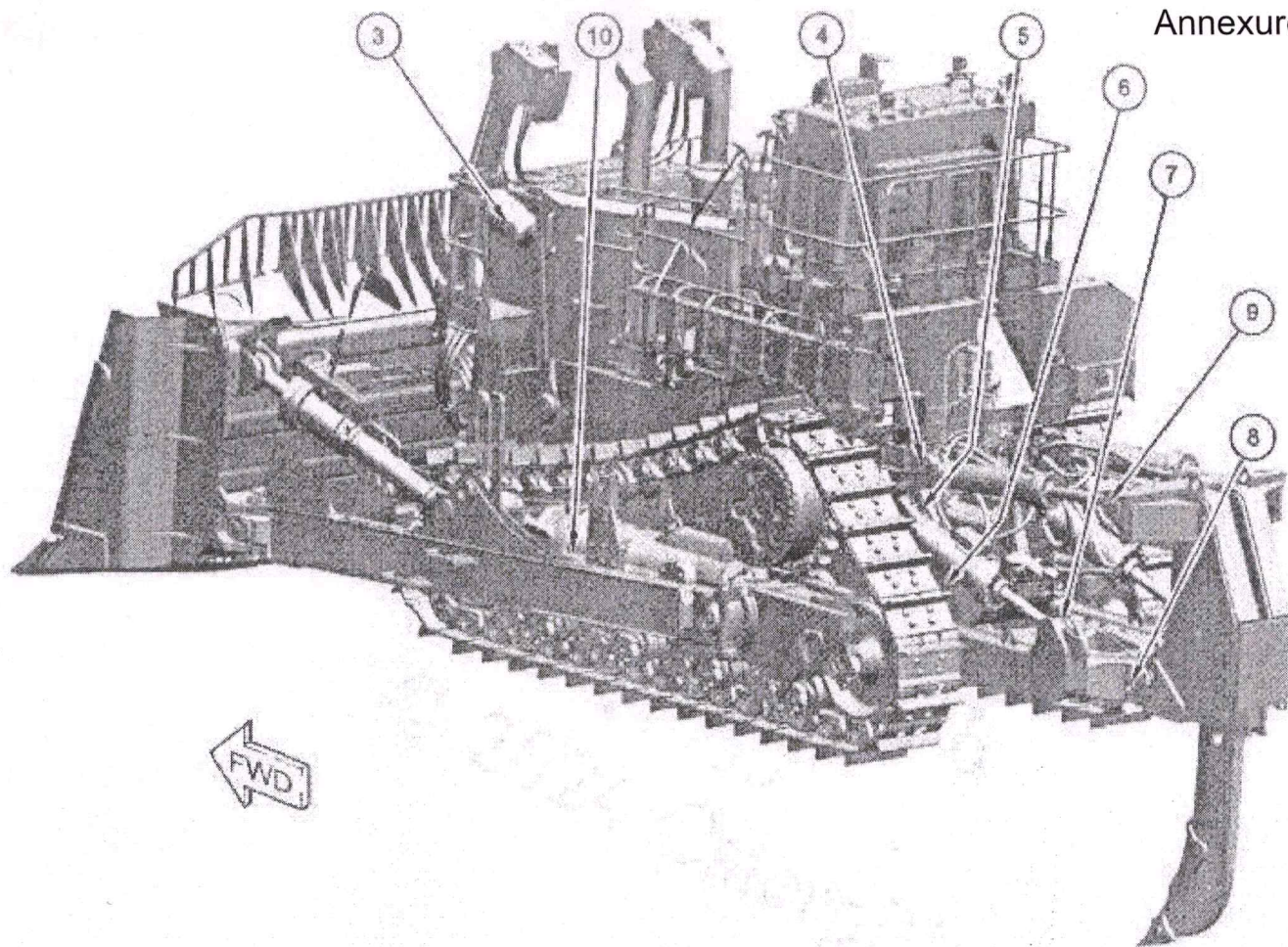


Illustration 1

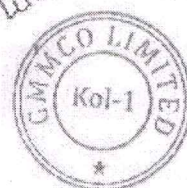
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- (3) Lift cylinder yoke LH and RH pivot bearings (one location on each side)
- (4) Ripper tilt cylinder LH and RH case pivot bearings
- (5) Ripper lift cylinder LH and RH case pivot bearings
- (6) Ripper frame LH and RH case pivot bearings
- (7) Ripper lift cylinder LH and RH ripper frame pivot bearings
- (8) Ripper frame LH and RH ripper carriage pivot bearings
- (9) Ripper tilt cylinder LH and RH ripper carriage pivot bearings
- (10) Equalizer bar

Table 1

Recommended Lubrication for the Automatic Lubrication System <sup>(1)(2)(3)</sup>		
Grease	NLGI	Temperature Range (Celsius/Fahrenheit)
Caterpillar Autolube	1	-18° C to 29° C (0° F to 84° F)
Caterpillar Autolube	2	-1° C to 41° C (30° F to 106° F)
Caterpillar Autolube	0	-29° C to 10° C (-20° F to 50° F)
Caterpillar Arctic Platinum	000	-59° C to 4° C (-74° F to 39° F)
Caterpillar Desert Gold	2	4° C to 66° C (39° F to 151° F)

- (1) To use a non-Caterpillar lubricant, the supplier must certify that the lubricant is compatible with Caterpillar grease. Otherwise, each pin joint will require flushing with the new lubricant to remove the Caterpillar lubricant. Failure to meet this requirement may lead to failure of a pin joint due to premature breakdown of the lubricant.
- (2) The grease that is used with the automatic lubrication system must not contain any graphite or PTFE.
- (3) For additional information on the greases in this table, refer to Operation and Maintenance Manual, SEBU6250, "Caterpillar Machine Fluids Recommendations".





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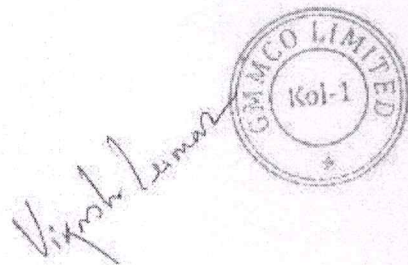
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Annexure-6j



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A. S. Kumar

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**GM/MCO LIMITED**

Tender No. Tender no. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024  
Health Monitoring System (HMS)

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For GMMCO LIMITED

**Vikash Kumar**  
General Manager





4/14/24, 10:58 PM SIS 2.0  
Monitoring System (M0082082-10)

SMCS - 7490

07886688

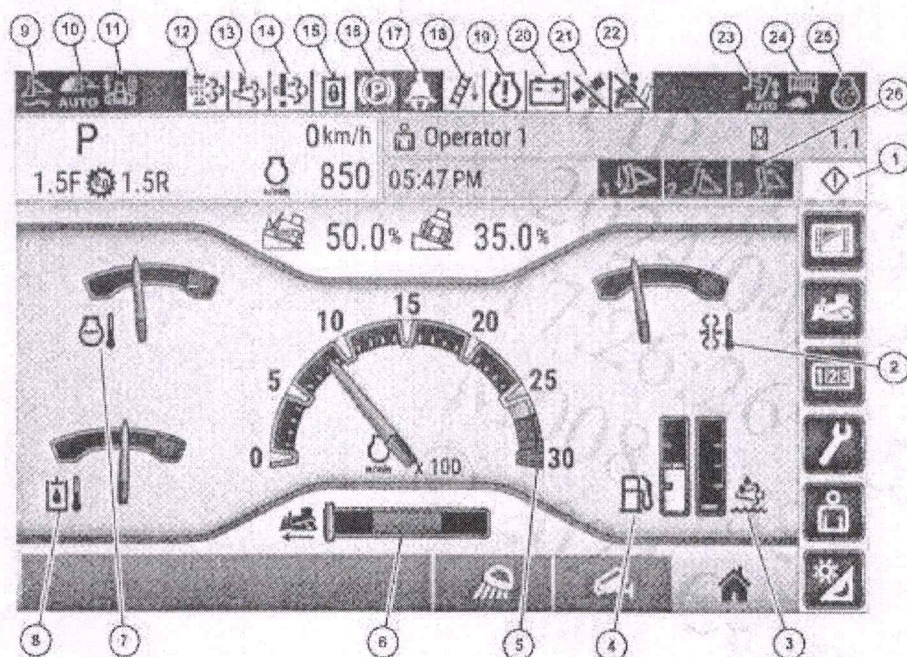


Illustration 1

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<https://sis2.cat.com/W3p-hd-prvw-ws-service/0c7cd56-cc2b-40bf-b603-a747e73ca3e9>

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Vijay Kumar  
Kot-1

hyper

AK

hudey

Ar. Sarker

AKD

C. G. M.



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The Monitoring System is designed to alert the operator to an immediate problem with any of the machine systems that are monitored. The Monitoring System is also designed to alert the operator to an impending problem with any of the machine systems that are monitored. The monitoring system will also provide the operator with status information.

## Action Lamp



**Action Lamp (1)** - Action lamp (1) is located on the right side of the indicator bar on the primary information display. Touching the indicator will bring up a list of active fault codes.

## Gauges



**Torque Converter Temperature (2)** - If the gauge needle reaches the red zone, the oil is 129° C (264° F). Increased temperatures will sound the warning alarm. The monitoring system display will display a warning. Continued operation of the machine during sounding of the alarm or the gauge needle in the red zone may damage the power train. Reduce the load that is on the machine until the torque converter oil temperature decreases. The torque converter temperature gauge indicates the maximum temperature of the torque converter outlet and the calculated transmission lube temperature. The red area indicates excessive power train oil temperature.



Not Equipped



**Fuel Level (4)** - The fuel level gauge indicates the amount of fuel that remains in the fuel tank.

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**NOTICE**

Running out of fuel can cause engine damage. Do not continue to operate the machine when critically low on fuel.

**Engine Speed****NOTICE**

Do not exceed 2900 rpm in any situation. Overspeeding when downshifting, going downhill, etc., can result in serious damage to your engine.

**Engine Speed (5)****Engine Speed (White zone) - 0 - 2500 RPM**

Engine Speed (Yellow zone) - 2500 - 2700 RPM is only a visual caution. This visual indication is a warning that the engine is approaching the maximum recommended speed.

Engine Speed (Red zone) - At 2700 RPM a visual warning alerts the operator that the engine is overspeeding. Both the alert indicator and the action lamp flash.

**NOTICE**

Overspeeding when downshifting and going downhill can result in serious damage to your engine and power train.

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## Work Monitor (6)

Machines that are equipped with either AutoCarry or Auto Ripper control will have a Performance Monitor display in the machine display home screen (bottom, center below the engine tachometer).

The performance monitor displays current machine operating information using a moving indicator. The performance monitor has a green zone that indicates optimum productivity for the machine. Operators can use the performance monitor as an indicator of operating technique to improve productivity.

If the indicator bar is outside the green zone to the right, that indicates the machine is attempting to carry too large a load.

If the indicator bar is outside the green zone to the left, that indicates the machine is attempting to carry too little load.

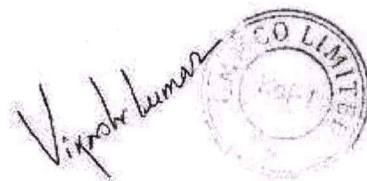
The performance monitor is only valid when the machine is carrying a load, not during the loading and spreading portions of a work cycle. Loading will typically show too heavy a load, spreading will typically show too light a load.



**Engine Coolant Temperature (7)** - The water temperature regulator controls the coolant temperatures. If the gauge needle just enters the red zone, the coolant temperature is 109° C (228° F). Increased temperatures will sound the warning alarm. The monitoring system display will display a warning. Continued operation of the machine during the sounding of the warning alarm or the gauge needle in the red zone may damage the engine. Change operation and allow the engine to cool down in an idle condition before shutting off the engine. Stop the machine in a safe place and investigate the cause.

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**Hydraulic Oil Temperature (8)** - The gauge indicates the temperature of the hydraulic oil in the hydraulic oil sump for the steering and implement circuits. If the gauge needle enters the red zone, the hydraulic system oil is approaching 95° C (203° F). The monitoring system display will display a warning. If necessary, reduce the load that is on the machine until the hydraulic oil temperature decreases.

## Status Indicators



**Blade Float (9)** - This indicator is illuminated when the blade is in float mode.



**AutoCarry (10)** - This status indicator is illuminated green when the AutoCarry function is active and controlling the blade, dark grey when armed, and light grey when active not controlling the blade.



**Single Tilt (11)** - This status indicator is illuminated when the single tilt system is activated.



**Not Equipped (12)**



**Not Equipped (13) (If Equipped)**

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**Aftertreatment Regeneration Device Failure (14) (If Equipped)** - This status indicator indicates that the aftertreatment regeneration device system filter has failed. If this indicator lights, stop machine operation immediately.



**Implement Lockout (15)** - This indicator is illuminated when the implement lockout is activated.



**Parking Brake (16)** - This status indicator indicates that the parking brake is engaged. If this indicator is illuminated, disengage the parking brake before attempting to move the machine.



**Seat Belt (17)** - This indicator is illuminated when the seat belt is unbuckled at machine startup.



**Ladder Down (18)** - This indicator alerts the operator when the ladder is in the DOWN position.



**Engine Failure (19)** - This indicator is illuminated when the engine operation is malfunctioning severely or engine failure is imminent. Stop the machine immediately.



**Charging System (20)** - This status indicator is illuminated when the battery charging system is not OK.



**Signal Lost (GPS) (21)** - This indicator is illuminated when the Global Positioning Satellite (GPS) signal to the machine is lost.

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**Operator Not Present (22)** - This status indicator is illuminated when the key is "ON" and the operator leaves the seat unoccupied.

When the sensor indicates that an operator is present in the seat, the Machine ECM will enable the operation of the travel system of the machine and the implement control system.

**Note:** When the machine is moving and the operator raises from the seat, the power train systems and the implement operation will not shutdown until the machine is stopped.

After the machine is stopped, the Machine ECM will again require the sensor to indicate that an operator is in the seat before the travel and implement systems will be enabled.

**Note:** The brakes will not disengage and the implements will not unlock unless the operator is seated or the brake pedal is depressed.



**Auto Ripper Control (23)** - This status indicator is illuminated green when the Auto Ripper Control function is active, grey when suspended, and dark grey when selected.



**Winch Lock (24A)** - This status indicator is illuminated yellow when the winch control lever is disabled.



**Winch Low Speed (24B)** - This indicator is illuminated green when the winch is locked at low speed.



**Engine Prelube (25)** - This indicator is illuminated when the engine prelube is active. A Warning banner will also appear in the upper right section of the display.



**Auto Blade Assist (ABA) - Load (26A)** - The ABA setting indicator will display and illuminate when the ABA setting is

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active. This indicator will illuminate when the Load function is engaged.



**Auto Blade Assist (ABA) - Carry (26B)** - The ABA setting indicator will display and illuminate when the ABA setting is active. This indicator will illuminate when the Carry function is engaged.



**Auto Blade Assist (ABA) - Spread (26C)** - The ABA setting indicator will display and illuminate when the ABA setting is active. This indicator will illuminate when the Spread function is engaged.

## Primary Display

The Primary Display is a touch screen unit incorporating various machine information systems along with an integrated rear view camera. The screen displays the machine functions on the LCD screen of the primary display. The display receives information from many sources on the machine. The display is located on the front column of the cab.

When the ignition key switch is turned to the ON position, the Primary Display will initialize. The Cat Monitoring System will perform a powerup sequence self test during engine start-up. The powerup sequence will include a functional test of the system. The alert indicators will come on for 3 seconds in order to verify the system. The action alarm will sound until the end of the self test or until the engine is started.

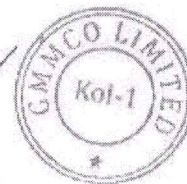
After the primary display initialization is complete and before engine is started, the left side display banner will show the five major fluid compartments on the machine. This system will display the status for the transmission oil, hydraulic oil, engine oil, engine coolant, and pivot shaft oil. The banner provides a green "check mark" if the fluid level is "OK" to start operation and a yellow "exclamation mark" check fluid indicator if the fluid is "LOW". The check fluid indicator aligns with the "Add Fluid" mark in each compartment. If the check fluid indicator is present, verify the fluid level in that compartment using the dipstick or sight gauge and add fluid before starting the engine.

**Note:** Status is only available at key on and the check is disabled if the machine is immediately started.

At machine start-up, the primary display will show the main menu.

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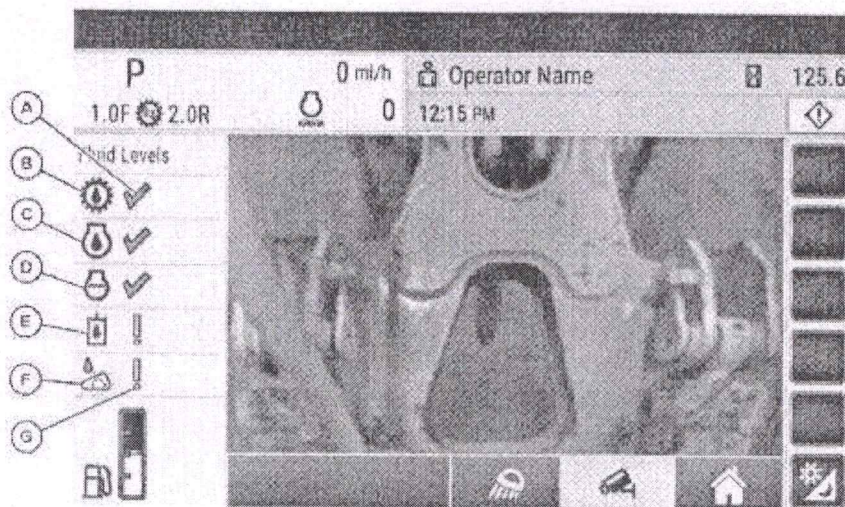


Illustration 2

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- (A) Green check mark
- (B) Transmission Oil
- (C) Engine Oil
- (D) Engine Coolant
- (E) Hydraulic Oil
- (F) Pivot Shaft Oil
- (G) Yellow Exclamation mark

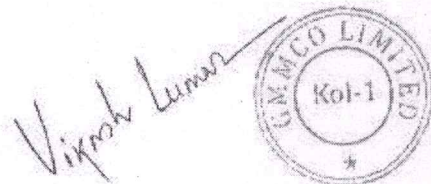
**Green Check Mark (A)** - Fluid Level is at an acceptable level to start operation.

**Transmission Oil (B)** - Transmission oil display icon.

**Engine Oil (C)** - Engine oil display icon

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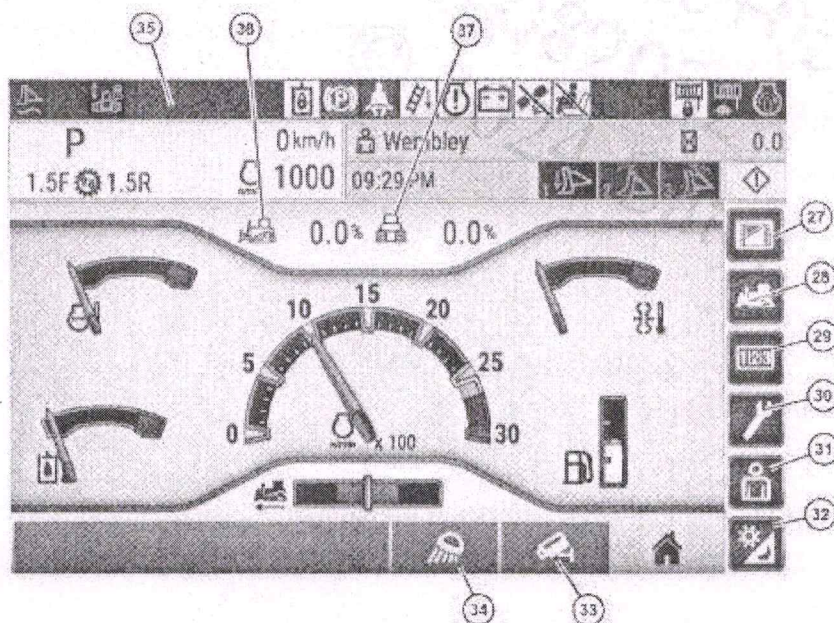
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Engine Coolant (D) - Engine coolant display icon.

Hydraulic Oil (E) - Hydraulic Oil display icon.

Pivot Shaft Oil (F) - Pivot shaft oil display icon.

Yellow Exclamation mark (G) - Check fluid indicator.


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The Main Menu will display the following items:

(27) **Display** - Press the "Display" button to view and adjust display settings, such as screen brightness and units. The software license information is also viewable.

(28) **Machine Setting** - Press the "Machine" button to view and adjust machine settings.

(29) Totals - Press the "Totals" button to view lifetime totals.

**(30) Service** - Press the "Service" button to view and adjust machine diagnostics and calibrations.

(31) Operator Menu - Press the button to view and adjust operator profiles and operator profile settings.

**(32) Display Day/Night** - Press the button to initiate daytime view, white background with black text, or nighttime view, black background with white text.

(33) **Camera (If Equipped)** - Press the "Camera" button to turn on the rear vision camera.

(34) **Work Light Menu** - Press the Work Light Menu Button to open and toggle active day and night work lights.

(35) Information Banner - Displays status indicators based on their current status.

(36) **Machine Mainfall Slope** - Shows the angle of the machine in upward or downward path.

(37) **Machine Side Slope** - Shows the side slope angle of the machine.

**Scroll Bar** - The scroll bar will appear within menu pages. Press the "UP" or "DOWN" button on the scroll bar to navigate up or down within the window.

The operator display and cab lights will change the backlight mode based on the external lighting status. When any of the headlights, marker lights, work lights, or long-distance lights are on, the display and cab lights will enter night mode. When all of these lights are off, the display

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and cab lights will change to day mode.

Touch the screen buttons in order to select the desired option. Navigate through the menus and submenus.

Most screens following the main screen will display navigation buttons on the right side of the screen.



Illustration 4

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The Main Menu can be displayed from any screen by pressing the Home icon in the lower right corner.

## Display Settings

The Display Settings screen allows the operator to view or modify various display settings.

- Language
- Brightness
- Units
- Clock Set
- Auto Night Mode
- Software License Information

## Machine Settings

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**Machine Settings** - The screen allows the operator to modify various machine operation settings.

- Auto Down Shift
- Speed Select
- Custom Bi-Directional
- Blade Float
- Blade Response
- Blade Tilt
- Blade Quick Drop
- Auto Blade Assist
- Auto Carry Load Factor
- Ripper Auto Stow
- Auto Ripper Load Factor
- Auto Rip Shank In
- Automatic Ripper Control Floor Enable

Additional setting option menus may be available if certain features are installed on the machine.

## Speed Select

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**Speed Select** - The Speed Select function allows for Partial Gears. This is a powertrain feature that will automatically control engine speed to provide partial gears for improved machine speed control. The number of gears can be selected in the Primary Display.

This menu can be seen by navigating to the following menu:

- Machine Settings
- Speed Select

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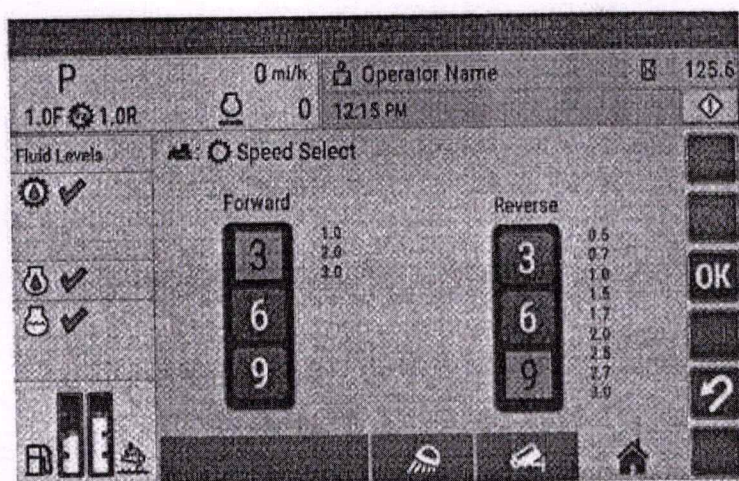


Illustration 5

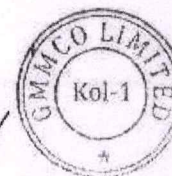
Speed select offers three settings for both FORWARD and REVERSE, independently. Speed Select functions with both Manual and Enhanced Auto Shift modes.

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Table 1

Option	Gears
3	1, 2, 3
6	.5, 1, 1.5, 2, 2.5, 3

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9	.5, .7, 1, 1.5, 1.7, 2, 2.5, 2.7, 3
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## Lifetime



**Lifetime Totals** - The lifetime totals display the total information over the life of the machine.

## Service



**Service Screen** - The Service screen allows the operator or service technician to change more advanced machine configurations or perform various calibrations. Some screens in the Service Menu are password protected for the service technician.

Consult your Cat dealer for information about the service menu options.

The Service Menu is arranged in Seven different areas:

- Diagnostics
- Parameters
- Service Test
- ECM Summary
- Service Mode

## Diagnostics

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**Diagnostics menu** - The Diagnostics menu option provides the operator or technician a list of any active or logged diagnostic codes or events that have occurred on the machine.

To view additional details of a particular code, use the up or down arrows at the top of the screen to highlight the desired code then select "OK".

## Parameters



**Parameters Screen** - The Parameters screen allows the operator or technician to perform the real-time monitoring of electrical components in the major systems. The menu organizes the systems into the following categories:

- Machine
- Fluid Monitor
- Engine
- Powertrain
- Steering
- Braking
- Primary Implement
- Rear Implement
- Temp (Temperature) Control
- Remote Control

Depending on what features have been installed, additional parameter menus may be available.

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## Service Test



**Service Test** - The service test menu allows you to perform a dead engine steering calibration.

## ECM Summary



**ECM Summary** - The ECM Summary menu allows the operator or technician to view the ECM information. Software and hardware information is provided for the various electronic control modules installed on the machine.

## Service Mode



**Service Mode** - The service mode option allows the operator or technician to enable password protected calibrations.

## Functional Test

### WARNING

If the action alarm does not sound during this test or machine monitoring displays are not functioning, do not operate the machine until the cause has been corrected. Machine operation with faulty action alarms or displays could result in injury or death as any Warning Category 3 notifications will not be relayed to the operator.

To ensure the proper operation of the Caterpillar Monitoring System, check the system daily.

The battery disconnect switch must be in the ON position.

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When you turn the engine start switch from the OFF position to the ON position, the Caterpillar Monitoring System will perform an automatic self-diagnostic test.

The self-diagnostic test verifies that the outputs (gauges, alert indicators, and alarms) are operating correctly.

When you turn the engine start switch to the ON position, the following systems are tested for approximately one second: alert indicators, gauges and LCD display.

The gauges must go to the far right positions. All alert indicators must come on momentarily. All segments of the LCD display must come on momentarily. The action alarm must sound.

## Warning Categories

The Monitoring System provides three warning categories. The first warning category requires only operator awareness. The second warning category requires a change to machine operation or the performance of maintenance to the system. The third warning category requires immediate shutdown of the machine.

### Warning Category 1

In this category, only the alert indicator comes on. This category alerts the operator that the machine system needs attention.

### Warning Category 2

In this category, the alert indicator and the action light come on. This category requires a change in machine operation. The display will display a message. If action is required, an instruction will be listed.

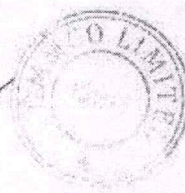
### Warning Category 2S

In this category, the alert indicator and the action light come on and the action alarm sounds at a steady rate. This category requires an immediate change in machine operation. The display will display a message. If action is required, the instruction will be listed.

### Warning Category 3

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In this category, the alert indicator and the action light come on and the action alarm sounds at a pulse rate. This category requires immediate shutdown of the machine in order to prevent injury or death. This category requires immediate shutdown of the machine in order to prevent severe damage to the machine. The display will display a message. If action is required, the instruction will be listed.

**Note:** Do not operate the machine if the Monitoring System is not working or if the Monitoring System fails the self-diagnostic test at start-up. Stop the machine immediately if the following conditions occur:

- The alert indicator turns on.
- The action light indicator is flashing amber.
- The action alarm sounds at a pulse rate.
- The LCD Display is blank.

Engage the parking brake and stop the engine. Investigate the cause of the problem.

Do not operate the machine until the cause of the problem has been corrected.

### Run Time Information Window

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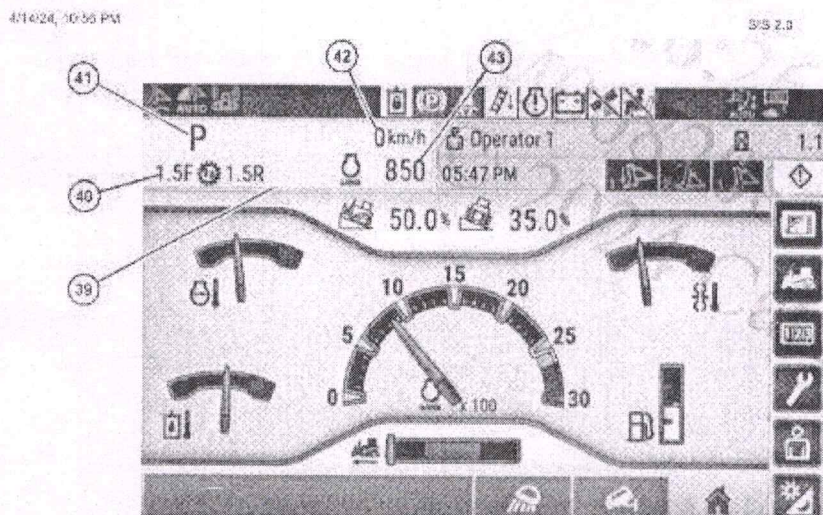


Illustration 6

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- (39) Run Time Information Window
- (40) Bi-Directional Shift Icon and Gear Settings
- (41) Actual Gear Setting and Directional Reading
- (42) Track Speed Reading
- (43) Digital Engine Speed Tachometer

The Run Time Information Window shows the operator critical machine data in a digital format. These readings allow the operator to view real time machine health, displaying information for the following parameters.

### Bi-Directional Shift Icon and Gear Settings

The Bi-Directional Shift Icon shows the operator that the Bi-Directional Shift Mode is active. The gear settings are listed below.

- First Gear Forward (1F)

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- Second Gear Forward (2F)
- Third Gear Forward (3F)
- First Gear Reverse (1R)
- Second Gear Reverse (2R)
- Third Gear Reverse (3R)

#### Actual Gear Setting and Direction Reading

The Actual Gear Setting and Direction Reading shows the operator what gear the machine is currently set to. The gear settings are listed below:

- Park
- First Gear Forward (1F)
- Second Gear Forward (2F)
- Third Gear Forward (3F)
- Neutral (N)
- First Gear Reverse (1R)
- Second Gear Reverse (2R)
- Third Gear Reverse (3R)

Note: For more information, refer to the following section of this manual:

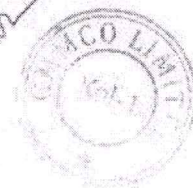
- Machine > Transmission > Initial Gear

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## Track Speed Reading

The Track Speed Reading shows the operator the track speed in the following units:

- Kilometers per Hour (kph) (Metric)
- Miles per Hour (mph) (English)

**Note:** The units of the Track Speed Reading can be changed between Metric and English. For more information refer to the following section in this manual:

- Display > Units

## Digital Engine Speed Tachometer

The Digital Engine Speed Tachometer displays the engine rpm during machine operation. The reading coincides with the reading shown on the Analog Tachometer Gauge.

**Note:** For more information, refer to the following section in this manual:

- Analog Tachometer Gauge

## Display Case Warning Indicators

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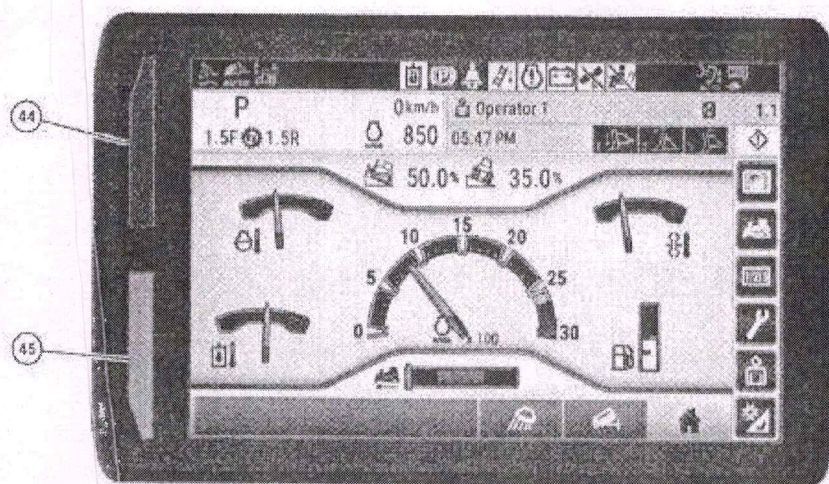


Illustration 7

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(44) Top Warning Indicator (Level 3, Red)

(45) Bottom Warning Indicator (Level 2, Amber)

The display case will feature two indicators on the left side of the display case. The Level 3 (Red) indicator is at the top, the Level 2 (Amber) indicator is at the bottom.

When a Level 2 warning appears in the message window, the bottom warning indicator will light up amber. The indicator will remain until the cause of the warning has been rectified.

When a Level 3 warning appears in the message window, the top warning indicator will light up red. The indicator will flash three (3) times as well as audibly beeping three (3) times. The indicator will remain until the cause of the warning has been rectified.

**Note:** For more information, refer to the following section in the manual: M0095377 Systems Operation, Testing and Adjusting.

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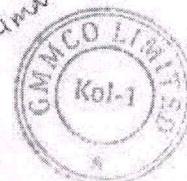
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• Message Window

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2024/04/14

17:26:15+05:30

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© 2024 Caterpillar Inc.

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2024/04/14  
17:26:15+05:30

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*A. Singh*

*Amdeep*

*De*

*A. S. S. S. S.*

*Vijay Kumar*



*A. S. S. S. S.*



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

Sec-VI, Tech Specs, Part D, Clause – D.8

GMMCO/CIL/850HP Dozer/24-25

Date: 22-07-2024

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata – 700156

Dear Sir,

SUB: Expected life of Major Assemblies

REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

EQUIPMENT MAJOR ASSEMBLIES	MAJOR ASSEMBLIES	EXPECTED LIFE* (in Hours)
Caterpillar D11 (850 HP Crawler Dozer)	Main Frame	20000-40000
	Engine	10000-25000
	Transmission/Torque Converter	10000 - 25000
	Electrical system	6000-25000
	Final Drive (excluding sprocket) & steering system	6000-25000
	Under Carriage – Track chain, Roller, Idlers & sprocket Teeth	4500-8000

Expected Overall means Life before first overhaul. Minor repairs/components replacement will be carried out as applicable to achieve expected life as indicated above.

Thanking You,  
Yours Sincerely

For GMMCO LIMITED

*Vikash Kumar*  
Vikash Kumar  
General Manager



Phone: 0331 3918 1700 To 12 Fax: 0331 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026930

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

Page 191 of 227



**Gmmco****CAT****GMMCO LIMITED**

GMMCO LTD		SEC-VI,PART-D,CLAUSE-D.9.1.b	
Tender No:Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024			
Sl No	Part No	Description	Required Quantity
1	D11 TOOL KIT	COMPREHENSIVE TOOL KIT	1

Clause D.9.1 General (b)		
Tender No.		
Details Of Standard Tool included In Tool Kit with Part- No D11TOOLKIT are follows		
Sl. No.	Description	Qty
1	Slide Wrench	1
2	Cutting Plier	1
3	Double End Spanner	13
4	Extension Rod 8" LongX1" Drive	1
5	Feeler Guage	1
6	Hammer (0.6 Kg)	1
7	RATCHET	3
8	RING SPANNER	12
9	Screw Driver	3
10	Socket 1" SQ	1
11	Socket 1/2" SQ	14
12	Socket 3/4" SQ	3
13	Socket 1" SQ - Heavy Duty 7/8"	1
14	Filter Wrench	1
15	Tool Box With Lock	1

Thanking You,

Yours faithfully

For GMMCO Limited

Vikash Kumar

General Manager



msk

msk

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A. Kumar

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msk

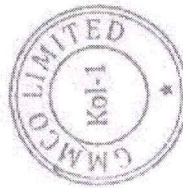


GMMCO LTD			Sec-VI, Tech Specs, Part D, Clause D.9.1 General (b)
Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024			
Sl. No.	Part No.	Description	Required Quantity
1	D11 TOOL KIT	D11 TOOL KIT WITH EACH MACHINE COMPREHENSIVE TOOL KIT	1

D11 SPECIAL TOOLS - PROJECT WISE			required Quantity
Sl. No.	Part No.	Description	required Quantity
1	1516320	WIRE REMOVAL TOOL	1
2	1957970	WIRE REMOVAL TOOL	1
3	8T9208	PROBE ASSEMBLY	1
4	W4776	LAPTOP	1
5	5385051	ADAPTOR GP	1

1 no. laptop for a fleet upto 5 equipment or part thereof,  
for each project will be provided.

For GMMCO LTD,



Vikash Kumar  
General Manager



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.**Sec-VI, Tech Specs, Part D, Clause -- D.9.1 General (c)****GMMCO/CIL/850HP Dozer/24-25****Date: 22-07--2024****The General Manager (MM)****Coal India Limited****Coal Bhawan****Premises No. 4, Action Area 1A,****New Town, Rajarhat,****Kolkata - 700156**

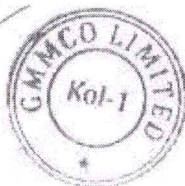
Dear Sir,

**SUB- DETAILS OF ERECTION PROGRAM****REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024**

Sl. No.	TASK	DAYS
1.	Assembling of Undercarriage	8
2.	Mounting of cab and connection installation	7
3.	Installation of Blade	7
4.	Installation of Ripper	4
5.	Installation of AFDSS, Reverse Alarm, Fire Extinguisher, Rear Vision System, Driver Fatigue Monitoring system, Seat Belt reminder, Proximity Warning Device etc.	2
6.	Checking of torque, testing and Inspection and final handover.	2

Total Number Of days for Erection & commissioning of the equipment: **30 days.**

For GMMCO Limited

Vikash Kumar  
General Manager

Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1968PLC026980

**CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025**

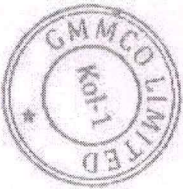
Page 194 of 227



ERECTION PROGRAM																															
Tender No. CIL/C2D/1850HP Dozers/R-153/24-25/395 Dated 12.06.2024															Clause No: C.11.1.d of TPS																
GMMCO/CIL/1850HP Dozer/24-25															Sec-VI, Tech Specs, Part D, Clause - D.9.1 General (c)																
Sl. No.	Description of Jobs	Number Of Days																													
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1	Assembling of Undercarriage																														
2	Mounting of cab and connection installation																														
3	Installation of Blade																														
4	Installation of Ripper																														
5	Installation of A/ESS, Reverse Alarm, Fire Extinguisher, Rear Vision System, Driver Fatigue Monitoring system, Seat Belt reminder, Proximity Warning Device etc.																														
6	Checking of torque, testing and inspection and final handover.																														

For GMMCO LIMITED

Vikash Kumar  
General Manager



A. Samir

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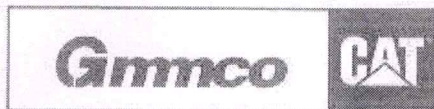
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GMMCO LIMITED

Sec-VI, Tech Specs, Part D, Clause- 9.2.i of NIT

Ref: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

Detailed technical descriptions and specifications of the dozer.**1 Engine:**

The dozer is powered by a direct injection 4-stroke turbo charged diesel engine of net power 634 kW measured at 1800 rpm according to IS/ISO 9249.

The engine is provided with 24V electric starting, dry type 2-stage air cleaner with dust evacuator and dust level indicator and 2-stage fuel filter with water separator. The engine has a water jacket cooling system, thermo-statically controlled, using an engine driven water pump, with the cooling water re-circulated through a heavy-duty radiator. The system is capable of providing sufficient cooling to allow the dozer to continuously operate at full rated output at the maximum ambient temperature.

The radiator cap is fastened with body with the help of suitable chain/locking arrangement. The moving parts of the engine is lubricated by an engine driven oil pump with full flow oil filtration and cooling. The engine is provided with a heavy-duty pan guard as per manufacturer design.

The engine is fuel efficient having fully integrated electronically controlled monitoring system & real-time self-diagnostic features with built in protections. The Engine electronic control module is fully integrated with all systems of power train for all operating conditions and capable to monitor operator's and sensors inputs for optimum engine performance & reduced emissions level. All engine vital parameter data are integrated with On Board Display (OBD) system of operator's cabin. The engine is environment friendly and complies to EPA Tier-II certification standard. Self-Certificate from OEM/Engine Manufacturer for EPA Tire-II or equivalent is enclosed.

A suitable electronic tool (laptop) loaded with compatible software and all related accessories is provided project wise (1 no. laptop for a fleet of 5 nos. or part thereof) along with special tools for retrieval and analysis of the recorded critical parameters of self-diagnostic features, real time monitoring and equipment health-monitoring systems fitted with the equipment. Readable reports downloaded from each Equipment will be provided. Compatible Software loaded in electronic tool (Laptop) is warranted for entire contract period.

**2 Drive System:**

Power transmission from the engine to the crawler drive sprocket is through conventional means i.e. torque flow transmission, differential, final drive, steering and brakes. A dynamically balance propel shaft with universal joints at both ends is utilized for transmission of power. Adequate means are provided to prevent damage to other components in the event of failure of universal joints.

**Conventional Drive System:** Followings are provided in the offered equipment:

*myth*  
*Vijay Kumar*  
*AK mehta*  
*Indu*  
*De*  
  
*A. S. R. R.*  
  
*C. S. R.*



**Gmmco****CAT****GMMCO LIMITED****3 Transmission:**

Equipment is fitted with Torque-flow transmission consisting of single stage torque converter (Stator Clutch Torque Divider), planetary gear drives and hydraulically operated multiple disc type clutches equipped with suitable valves for developing 3 forward speed and 3 reverse speed.

Heavy-duty removable belly guard, is designed such that it does not allow accumulation of dirt.

**4 Differential:**

Equipment is fitted with Planetary Model, Heavy-duty differential with high quality spiral bevel gear and pinions.

**5 Final Drive:**

Equipment is fitted with Double reduction planetary gear system from differential to drive axle.

**6 Steering:**

Independent track steering by means of hydraulically actuated oil cooled multiple disc steering clutches and brakes are provided. These are held in engagement by springs and disengaged hydraulically.

**7 Hoses:**

The offered equipment is fitted with Heat resistant hydraulic hoses in place of ordinary hoses to decrease the chance of fire. All the sleeves and conduits in which cable/wire are laid are of fire resistant /fire retarder type.

**8 Undercarriage:**

The undercarriage is heavy duty rugged designed suitably, suspended with oscillating type equalizer bar and pivot shaft to reduce shock loads transmitted to the dozer. Track frames and load rollers are of sufficient strength to withstand the high loads, which may occur due to uneven ground conditions. They are welded construction and stress relieved as required. The sprocket is segmented bolt-on type. Lifetime lubricated idler and rollers, and a reliable track tensioning arrangement are provided. Extreme service single grouser shoes of 710 mm width is provided.

**9 Dozer Attachment:**

The Dozer is fitted with hydraulically controlled Semi -U Tilt dozer attachment.

The dozer blade is heavy-duty type with steel wear plates and heavy-duty end bits. Heavy duty hardened steel wear resistant cutting edges, which comply with ISO 7129 is provided.

**10 Fuel tank:**

The fuel tank has sufficient capacity for 16 hours operation without refuelling, and is provided with a level indicator and a lockable-hinged cap. Construction of the tank is such that it provides for easy accumulation and drainage of water with minimum loss of fuel. Fuel Tank is provided with Fast Fill System also.

*Amey**Amey**Vignesh Kumar**Vignesh Kumar**A. S. Arav**A. S. Arav**CDM*



**Gmmco****CAT****GMMCO LIMITED****11 Operator's Station:**

A suitable Operator's Station is provided on the equipment as per Gazette notification issued by Chief Inspector of Mines vide F.No. Z-20045/01/2018/S&T (HQ) Dhanbad, the 1st October, 2018.

**11.1 Operator's Cabin:**

A fully insulated, high-visibility, rigidly mounted, sound-suppressed, vibration-suppressed, air conditioned, operator's cab with tinted safety glass is so positioned to facilitate a clear and unrestricted view of the travel & work areas of the machine necessary for its intended use. The performance criteria is in accordance with IS/ISO 5006. The sound level inside the cab is below 85 dB while the equipment is operating, and with the door closed. All operating controls, all monitoring, working signals and emergency switch to stop the engine is conveniently located in consoles within easy reach of the operator and shall comply with IS/ISO 6405 Part-1, IS/ISO 6405 Part-2, IS 11252/ISO 6682 & IS/ISO 10968. The operator's cab is provided with an emergency exit in addition to primary access path to the cabin.

**Alternative opening (Emergency Exit):** An alternative opening shall be provided on a side other than that of the primary opening. A window panel or another door is acceptable if they are easy to open or remove without the use of keys or tools. Latches is used if they can be opened from the inside without the use of keys or tools. The breaking of a suitable size of glass pane is considered to represent a suitable alternative opening, provided that the necessary pane hammer, immediately accessible to the operator, is provided and stored in the cab. When the window panel is used as an emergency exit, it bears an appropriate marking.

Doors, Windows and flaps are securely held in their intended operating positions. Doors are retained at their intended operating positions by a positive engagement device. The front window is fitted with motorized wind screen wipers and washers. The tank of the window washers is easily accessible. Pipes and hoses that contain fluids at pressures exceeding 5MPa or temperatures above 60°C located inside the cab is suitably guarded.

**11.2 Operator's Protective Structures:**

Dozer is equipped with a roll-over protective structure (ROPS). The ROPS complies with IS/ISO 3471. Further, it is fitted with FOPS, when they are intended for applications where there is a risk of falling objects. The fitted FOPS is in accordance with IS/ISO 3449.

**11.3 Operator's Seats:**

The Operator's Station is fitted with an ergonomically designed adjustable seat that supports the operator in a position that allows the operator to control the machine under the intended operating conditions. The seat and its suspension are so designed to reduce vibration transmitted to the operator to the lowest level that can be reasonably achieved. Seat Belt for operator with reminder is provided as per DGMS circular no. DGMS (Tech) Circular No. 06 of 2020 Dhanbad dated 27.02.2020.

*Angela**Angela**Angela**Vijay Kumar**A. Lakshay**AK**CDM*



**Gmmco****GMMCO LIMITED****11.4 Operator's Controls and Indicators:**

The controls have suitable design and construction and arranged so that they are able to be operated with ease from the operator's seat and within the operator's force limits. Controls are laid out and designed to allow easy and safe operation based on the principle that a given direction of movement of any control produces a consistent and expected effect. The surfaces of frequently used pedals are fitted with skid resistant type materials.

Controls that can cause a hazard due to inadvertent activation shall be so arranged, deactivated or guarded as to minimize the risk — particularly while the operator is getting into or out of the operator's station. The deactivation device are either be self-acting or act by compulsory actuation of the relevant device.

A device/system is provided to release the residual pressure in each hydraulic and pneumatic circuits which can cause a risk.

**11.5 Starting and Stopping System:**

Dozer is equipped with a starting and stopping device (e.g. key). The starting system has provision for protection against unauthorized use. The starting and Stopping system are designed such that movement of the machine, is not possible, while starting or stopping the engine, without activating the controls. (E.g. Transmission Neutral-Engine Start safety arrangement.)

**12 Gauges and indicators/ Electronic Display:**

The following are provided:

- a. Water temperature gauge
- b. Engine oil pressure gauge / indicator
- c. Fuel capacity gauge
- d. Engine tachometer
- e. Engine hour-meter

**13 Warning Alarms / Lights/Indicator:**

The following warning alarms are provided:

- a. Coolant level and temperature
- b. Engine oil pressure
- c. Converter oil temperature
- d. Front warning horn
- e. Reversing —DGMS complied Audio Visual Alarm.
- f. Warning alarms in case of failure of automatic lubrication system.

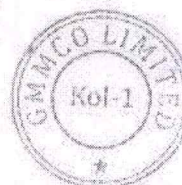
**14 Engine Electrical System:**

The dozer is provided with the following:

- a. 24V DC electrical system with suitable rated alternator of CAT make
- b. 24 V Electrical starter motor of CAT make
- c. High capacity maintenance free batteries of CAT make.
- d. Battery isolation switch / Relay

*A. Sarker*

*Vijesh Kumar*



*Amal*

*Amal*

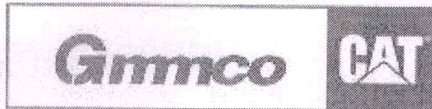
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GMMCO LIMITED

**15 Lighting:**

Adequate lighting is provided for safe nightshift operation. The lighting system includes the following:

- a. 4 nos. LED headlights
- b. 2 nos. rear working LED lights
- c. 4 nos. ROPS mounted working lights (2-front and 2-rear)
- d. Cabin dome light

Headlights and rear working lights are identical in type and size and fitted in protective enclosures.

**16 Guards and shields:**

Adequate guards and shields, which comply with IS/ISO 3457, are provided throughout the dozer.

For GMMCO LIMITED

*Vikash Kumar*  
Vikash Kumar  
General Manager



*A - Sarvag*

*Amber*

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*Amber*

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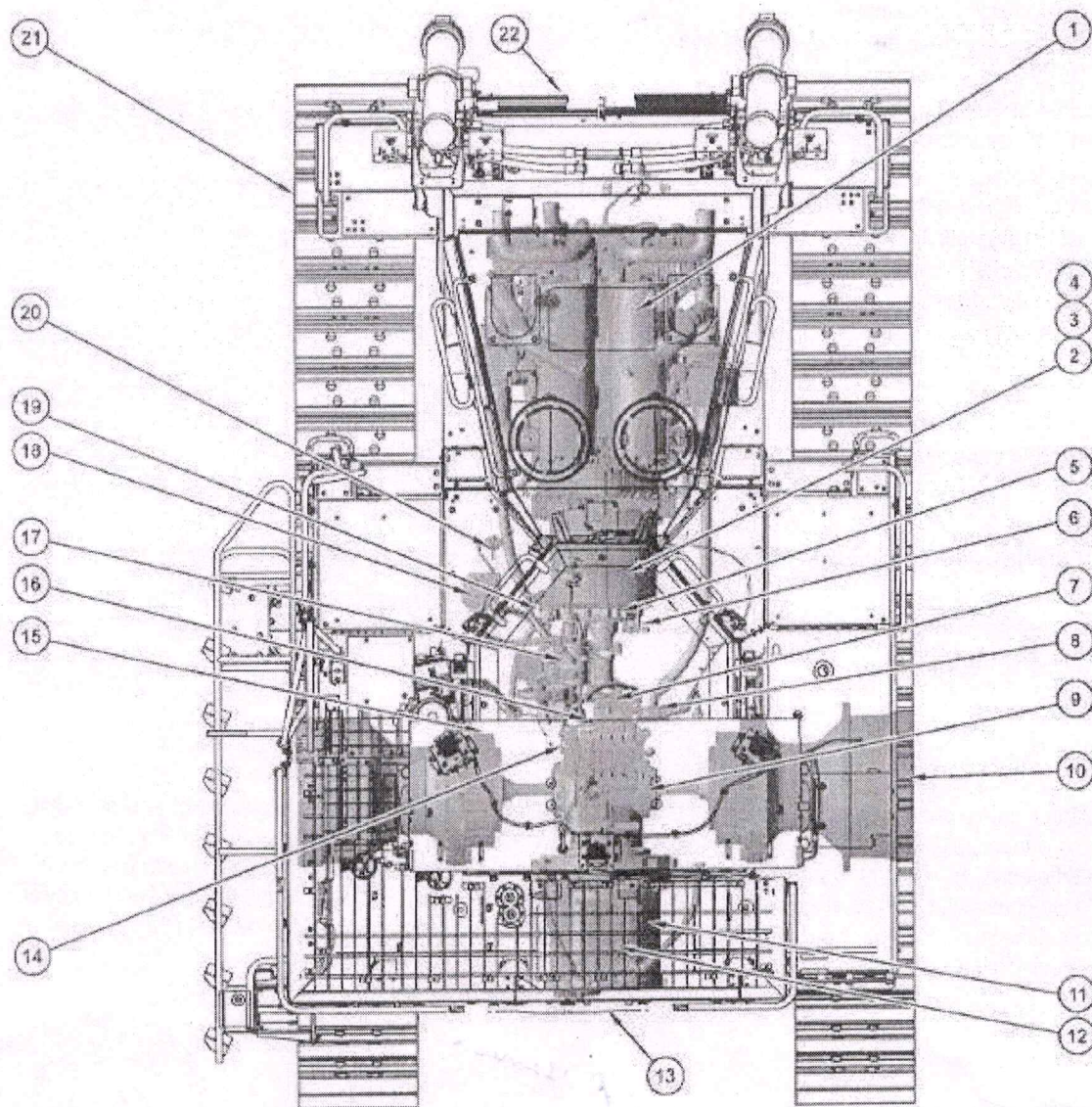
**Gmmco****CAT****GMMCO LIMITED**

GMMCO/CIL/850HP Dozer/24-25

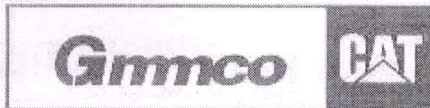
Clause No- D.9.2.ii of NIT

Ref : Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

Layout drawings and detailed descriptions of all machinery including method of power transmission, mounting details and method of alignment of Caterpillar D11 Dozer

*mfr**Hing**hulley**U**A. Sreen**Vijay Kumar**C. Jant*





GMMCO LIMITED

- (1) Diesel engine
- (2) Service brake pedal
- (3) Decelerator pedal
- (4) Rotary speed sensor
- (5) Torque converter housing
- (6) Torque converter outlet relief valve
- (8) Inlet relief valve
- (9) Bevel gears (Differential)
- (10) Final drive (Steering and Brake are marked as "A")
- (11) Transmission
- (12) Transmission hydraulic control valve
- (13) Pin puller (If equipped)
- (14) Steering clutch and brake control valve
- (15) Service brake
- (16) Power train ECM
- (17) Power train oil pump
- (18) Power train oil filter
- (19) Torque converter outlet relief valve
- (20) Kidney loop filter
- (21) Tracks
- (22) Power train oil cooler


Method of power Transmission – Engine to Crawler Drive Sprocket

ENGINE ----- TORQUE CONVERTER ----- DRIVE SHAFT ----- TRANSMISSION-----  
 -----DIFFERENTIAL ----- STEERING & BRAKE----- FINAL DRIVE -----DRIVE SPROCKET -----  
 -----TRACK GROUP

The Power Available at Engine Fly wheel is transferred to Track groups as follows:

The torque converter connects the engine to the planetary transmission through the main drive shaft. The torque converter uses oil to multiply the torque to the transmission. Power from the transmission output shaft goes to Differential (bevel & transfer gears). Power from the differential bevel gear goes to inner axle shafts. The power then goes to the steering clutches and brakes. The steering clutches and brakes are modules that transfer power from the bevel gear to the final drives. Drive sprockets are connected to the Final drives which in turn powers the Track Groups.

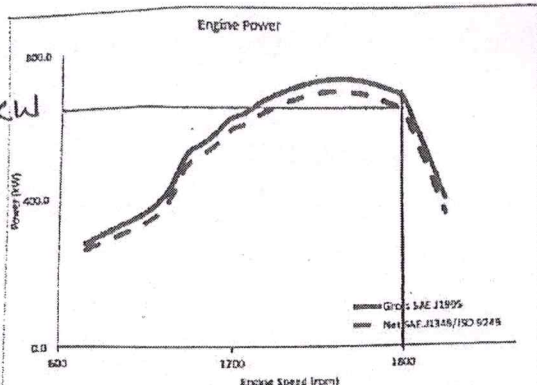
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*AKD*  
*CGM*



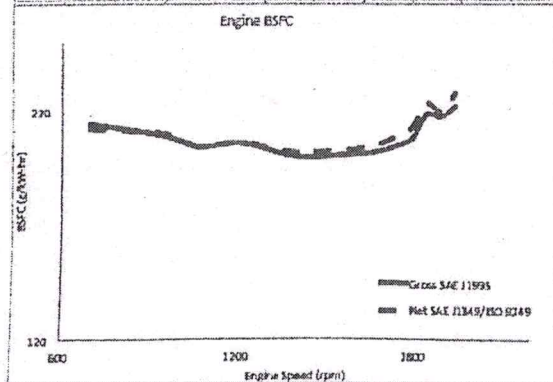
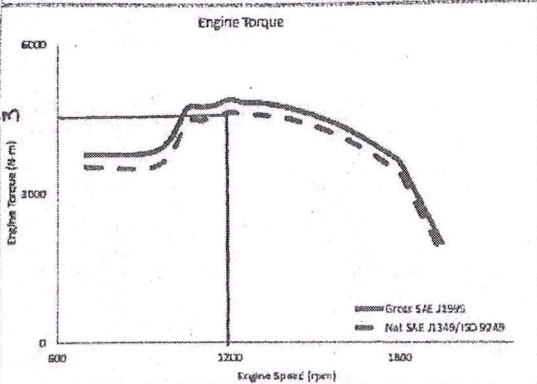


# CATERPILLAR®

634 kW



4748 Nm



Machine	D11 Tier 2 Equivalent
Engine	C32
Emissions	US EPA Tier 2
Displacement (L):	32.1
Bore Stroke (mm):	162
No. Cylinders:	12

Performance	GROSS SAE J1995	NET SAE J1349 / ISO 9249
Rated Speed (rpm):	1800	1800
Rated Power (kW):	670	634

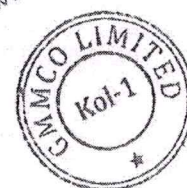
Peak Torque Speed (rpm):	1200	1200
--------------------------	------	------

Low Idle Speed (rpm):	700	700
-----------------------	-----	-----

High Idle Speed (rpm):	1950	1950
------------------------	------	------

Disclaimer: These curves represent nominal values, under normal conditions. Changes to ambient temps, altitude, fuel quality and other conditions will affect engine performance

*Vignesh Kumar*



*A'sarke*

*mper*

*Adinf*

*Indray*

*Ch*

*AD*

*CSM*



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.Sec- VI, Tech Specs, Part- D, Clause- D.9.2.iv of NIT

GMMCO/CIL/850HP Dozer/24-25

Date : 22-07-2024

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sir,

SUB- Maximum Travel Speed

REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

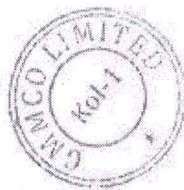
Maximum Travel Speed according to ISO 6014 = 14.7 km/hr

Thanking You,

Yours Sincerely,

For GMMCO LIMITED

*Vikash Kumar*  
Vikash Kumar  
General Manager

*mpb**AK**hmdary**A. Suresh*Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

(Registered office: 9/1, R.N. Mukherjee Road, Kolkata 700 001)

CIN U35202WB1968PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

Page 204 of 227



GMMCO LTD

Sec-VI, Tech Specs, Part D, Clause- D.9.2 (v) of NIT

D11 SU Blade Volumetric Rating as per ISO 9246**Definitions:**

- $V_u$  - Capacity of Semi-U Portion of the Blade  
 $V_s$  - Capacity of Straight Blade  
 $H$  - Blade Height  
 $W$  - Blade Width (without end bits)  
 $Z$  - Wing Length measure parallel to the blade width @ ground length of cutting edge  
 $A$  - Wing Angle

Blade Height	Blade Width	Wing Length	Wing Angle	Projected Frontal Area (Rock Guard Excluded)
2.33 m	5.466 m	0.602 m	25 degree	12.736 m <sup>2</sup>

$$\begin{aligned}
 V_s &= 0.8 \times W \times H^2 \\
 &= 0.8 \times 5.466 \times 2.33^2 \\
 &= 23.74 \text{ m}^3
 \end{aligned}$$

$$\begin{aligned}
 V_u &= Z \times H \times (W-Z) \times \tan \alpha \\
 &= 0.602 \times 2.33 \times (5.466 - 0.602) \times \tan 25 \\
 &= 3.181 \text{ m}^3
 \end{aligned}$$

$V_T$ $=$ $3.181 + 23.7$ $=$ $26.92 \text{ m}^3$
--

The Capacity of SU Blade is the volume carried by a Straight Blade of the same dimensions plus the volume included in the Cups of the SU Blade. It is intended for relative comparison of Dozer sizes and not for predicting capacities or productivities in actual field conditions.

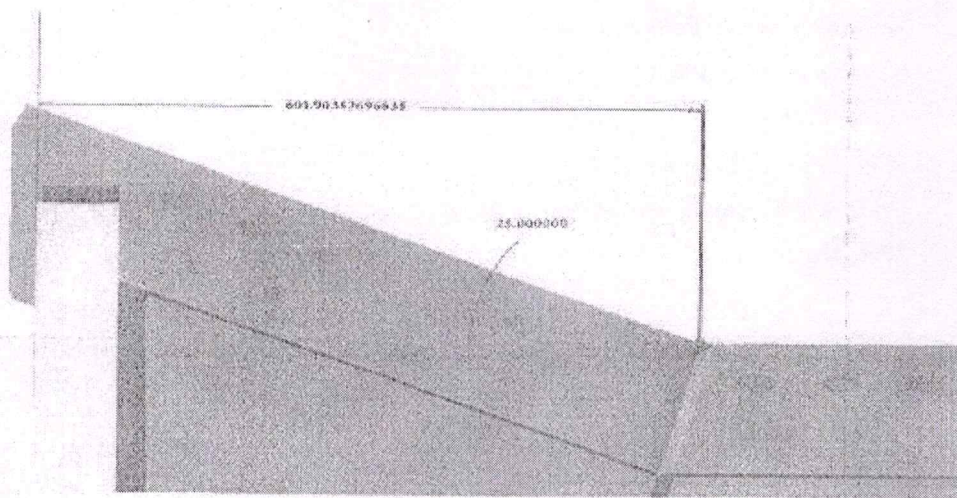
For GMMCO LTD,

*Vikash Kumar*  
 Vikash Kumar  
 General Manager

*A. Sankar**Super**[Signature]**[Signature]**[Signature]*



Sec-VI, Tech Specs, Part D, Clause- D.9.2 (v) of NIT



Wing Angle = 25 degree and Wing length = 601.98 mm

Vijay Kumar



A. Sankar

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A. Sankar

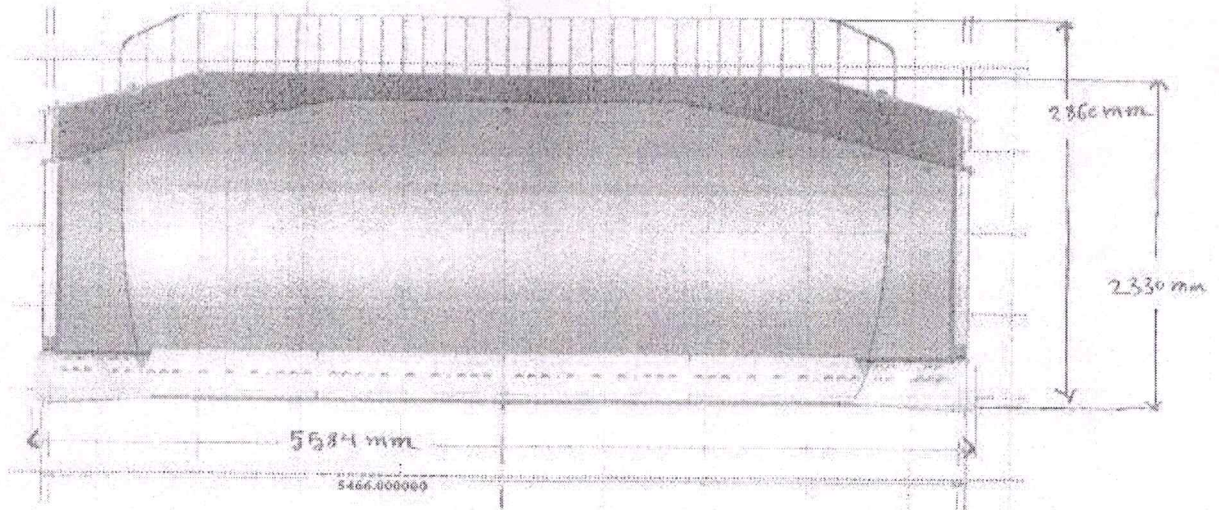
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Blade Width

For GMMCO LTD,

*Vikash Kumar*  
Vikash Kumar  
General Manager



*A. Sarkar*

*Angel*

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*AD*

*CDM*



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

Clause-D.9.2-(v), Technical Details, Section VI, Technical Specifications

GMMCO/CIL/850HP Dozer/24-25

Date: 22-07-2024

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata – 700156

Dear Sir,

SUB- Volumetric rating of the blade

REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

We reconfirm that Volumetric Capacity of the Blade submitted along with bid is for offered equipment:

- 1a. Blade Width: Including End Bits – 5584 mm
- 1b. Blade width – Excluding End Bits- 5466 mm
- 2a. Blade Height – Including Guard Protection – 2866 mm
- 2b. Blade Height- Excluding Guard Protection – 2330 mm

Volumetric capacity calculation is enclosed with above referred dimensions indicated.

Yours Sincerely,

For GMMCO LIMITED

*Vikash Kumar*  
Vikash Kumar  
General Manager



*AS*  
AS

*Amdeep*  
Amdeep

*Amel*  
Amel

*De*  
De

*A. Sanyal*  
A. Sanyal

Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in

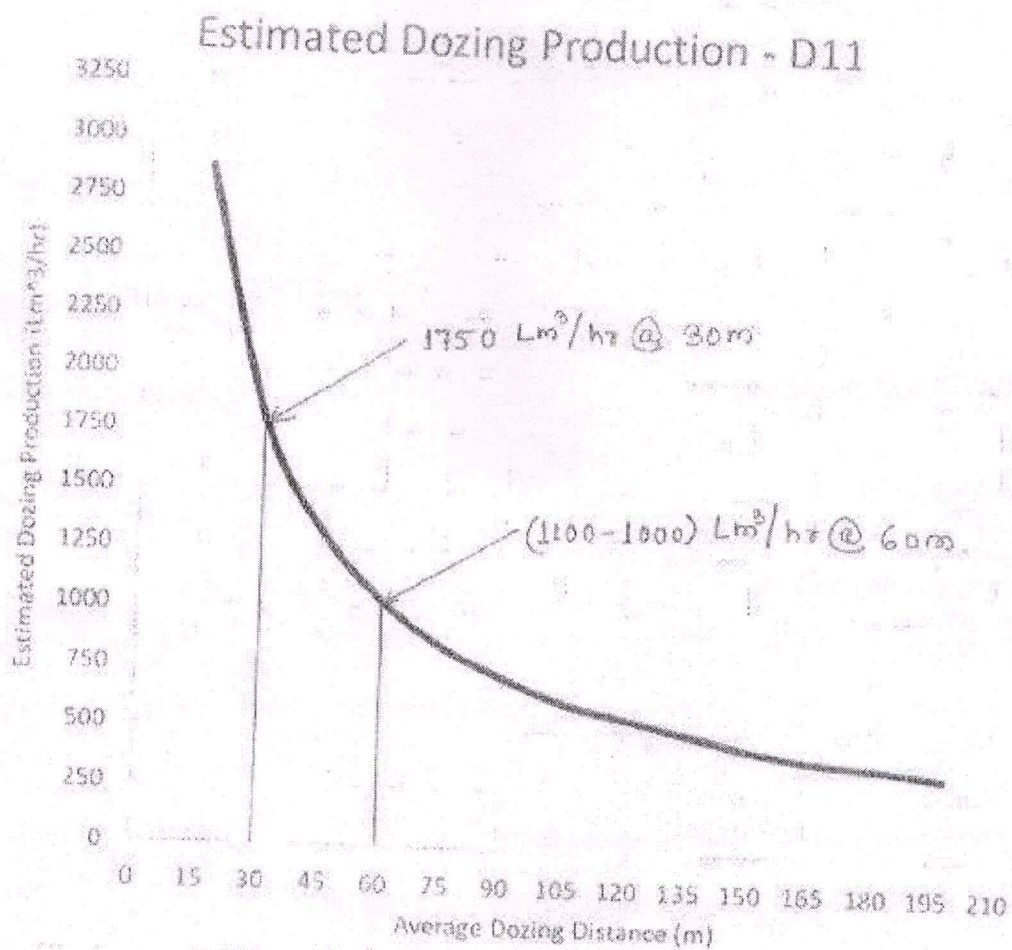
(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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Vijesh Kumar



A. Sarkar

Caterpillar Confidential Green



**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

Sec-VI, Tech Specs, Part D, Clause - 9.2.ix

Ref : GMMCO/850 HP Dozer/24-25

Date : 22-07-2024

To  
General Manager(MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata -- 700156

Dear Sir,

Sub : Comprehensive commercial literature compliance

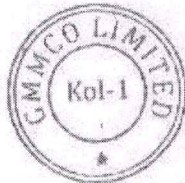
Ref : Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

We hereby certify that the Comprehensive commercial literature specifications submitted by us is  
compliant with IS/ISO 6747.

Thanking You

Yours faithfully  
For GMMCO Limited

*Vikash Kumar*  
Vikash Kumar  
General Manager

*A. S. R. R. V.*Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

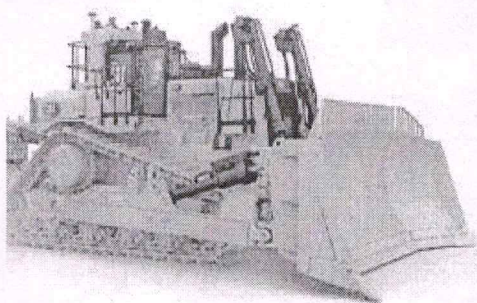
(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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# D11

## Dozer

## Technical Specifications

### Engine – U.S. EPA Tier 2 Equivalent

Engine Model	Cat® C32	
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1,959 in <sup>3</sup>
Engine Power		
Gross SAE J1995*		
Forward	670 kW	899 hp
Reverse	757 kW	1015 hp
ISO 14396		
Forward	657 kW	882 hp
Reverse	744 kW	998 hp
Net SAE J1349/ISO 9249		
Forward	634 kW	850 hp
Reverse	714 kW	957 hp

\* Excludes all fan losses.

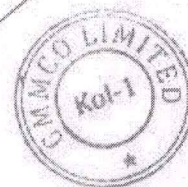
• Engine ratings apply at 1,800 rpm.

• Net power advertised is the power available at the flywheel when the engine is equipped with air cleaner, muffler, alternator, fan, and engine emissions controls as required.

### Engine – U.S. EPA Tier 4 Final/EU Stage V

Engine Model	Cat C32	
Bore	145 mm	5.7 in
Stroke	162 mm	6.4 in
Displacement	32.1 L	1,959 in <sup>3</sup>
Engine Power		
Gross SAE J1995*		
Forward	670 kW	899 hp
Reverse	757 kW	1015 hp
ISO 14396		
Forward	658 kW	882 hp
Reverse	745 kW	999 hp
Net SAE J1349/ISO 9249		
Forward	634 kW	850 hp
Reverse	712 kW	955 hp

*Vijay Kumar*



**CAT®**



## D11 Dozer Specifications

### Fluid Capacities

Fuel Tank – Total Volume	1895 L	500 gal
Fuel Tank – Usable Volume	1800 L	475 gal
Cooling System Refill – Tier 4 Final Engine	177 L	46.8 gal
Cooling System Refill – Tier 2 Equivalent Engine	158 L	41.7 gal
Engine Crankcase Sump	133 L	35.1 gal
Power Train – Total Volume	454 L	120 gal
Power Train – Refill Volume	391 L	103.3 gal
Final Drives (each)	47 L	12.4 gal
Track Roller Frames (each)	94 L	24.8 gal
Pivot Shaft Oil	104 L	27.5 gal
Hydraulic System Tank Only	160 L	42.2 gal
Hydraulic System Tank and Chassis	245 L	64.7 gal
Hydraulic System Chassis + Blade and Ripper (Standard)	445 L	117.6 gal
Hydraulic System Chassis + Blade and Ripper (Carrydozer)	540 L	143.4 gal

### Weights

Operating Weight	104 236 kg	229,800 lb
Shipping Weight	39 100 kg	86,200 lb
Operating Weight – CD	113 700 kg	250,665 lb
Shipping Weight – CD	39 200 kg	86,420 lb

- D11 Operating Weight: Includes blade tilt cylinders, coolant, lubricants, full fuel tank, ROPS, FOPS cab, 11 U ABR bulldozer, single-shank ripper with pin-puller, fast fuel, 710 mm (28 in) ES shoes and operator.
- D11 Shipping Weight: Base machine chassis with cab and pivot shaft. Doesn't include ROPS, ripper, blade, track or roller frames.
- D11 CD Operating Weight: Includes lubricant, coolant, full fuel tank, 915 mm (36 in) extreme service shoes, D11 Carrydozer, single-shank ripper and operator.
- D11 CD Shipping Weight: Base machine chassis with cab and pivot shaft. Doesn't include ROPS, ripper, blade, track or roller frames.

### Hydraulic Controls

Pump Type	Variable displacement piston pump	
Combined Pump Output (Implement)	670 L/min	177 gal/min
Tilt Flow	260 L/min	68 gal/min
Dozer Relief Valve Setting	28 500 kPa	4,130 psi
Tilt Cylinder Relief Valve Setting	26 700 kPa	3,870 psi
Ripper (Lift) Relief Valve Setting	28 500 kPa	4,130 psi
Ripper (Pitch) Relief Valve Setting	28 500 kPa	4,130 psi
Cylinder Sizing	Bore	
Blade Lift	170 mm	6.7 in
Blade Tilt (Standard)	254 mm	10 in
Blade Tilt (Extended Pitch) Left	279.6 mm	11 in
Blade Tilt (Extended Pitch) Right	254 mm	10 in
Blade Tilt (Carrydozer) Left	279.6 mm	11 in
Blade Tilt (Carrydozer) Right	254 mm	10 in
Ripper Shank Lift	235 mm	9.3 in
Ripper Shank Angle	180 mm	7.1 in
Cylinder Sizing	Stroke	
Blade Lift	1760 mm	69.3 in
Blade Tilt (Standard)	285.5 mm	11.2 in
Blade Tilt (Extended Pitch) Left	400 mm	15.7 in
Blade Tilt (Extended Pitch) Right	400 mm	15.7 in
Blade Tilt (Carrydozer) Left	1200 mm	47.2 in
Blade Tilt (Carrydozer) Right	1152 mm	45.4 in
Ripper Shank Lift	615 mm	24.2 in
Ripper Shank Angle	830 mm	32.7 in

- Pump output measured at 1,800 engine rpm and 6895 kPa (1,000 psi).
- Electro-hydraulic pilot valves assist operations of ripper and dozer controls.

*Vijay Kumar*  


*A. Sreen*

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### Undercarriage

Shoe Type	Extreme Service	
Width of Shoe	710 mm	28 in
Width of Shoe - CD	915 mm	36 in
Shoes/Side	41	
Grouser Height	102 mm	4 in
Pitch	318 mm	12.5 in
Ground Clearance*	777 mm	30.6 in
Track Gauge	2896 mm	114 in
Length of Track on Ground	4444 mm	175 in
Ground Contact Area	6.3 m <sup>2</sup>	9,781 in <sup>2</sup>
Ground Contact Area - CD	8.1 m <sup>2</sup>	12,605 in <sup>2</sup>
Track Rollers/Side	8	
Number of Carrier Rollers	1 per side (optional)	

- \* Includes grouser height for total dimensions on hard surface.
- Sleeve Bearing Track with Positive Pin Retention.

### Track Roller Frame

Oscillation	351 mm	13.8 in
-------------	--------	---------

### Steering and Brakes

Steering Controls	Fingertip Controls	
Steering Clutch Type	Pressure Applied Wet Disc	
Steering Clutch Disc Diameter	440 mm	17.3 in
Steering Clutch Disc Count	10	
Brake Type	Spring Applied Wet Disc	
Brake Disc Diameter	612 mm	24.1 in
Brake Disc Count	7	

### Air Conditioning System

The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 2.1 kg of refrigerant which has a CO<sub>2</sub> equivalent of 3.003 metric tonnes.

### Standards

#### ROPS/FOPS

- Rollover Protective Structure (ROPS) meets the following criteria: ISO 3471:2008.
- Falling Objects Protective Structure (FOPS) meets the following criteria: ISO 3449:2005 LEVEL II.

#### Sound

- The average dynamic spectator sound power level when "ISO 6395:2008" is used to measure the value for a machine is 116 dB(A). The measurement was conducted at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds. NOTE: The dynamic sound power level uncertainty is  $\pm 2$  dB(A).
- The average dynamic operator sound pressure level when "ISO 6396:2008" is used to measure the value for an enclosed cab is 78 dB(A). The measurement was conducted at 70% of the maximum engine cooling fan speed. The sound level may vary at different engine cooling fan speeds. The cab was properly installed and maintained. The measurement was conducted with the cab doors and the cab windows closed. NOTE: The dynamic operator sound pressure level uncertainty is  $\pm 2$  dB(A).
- Hearing protection may be needed when the machine is operated with an open operator station for extended periods, in a noisy environment, or with a cab that is not properly maintained.



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# D11 Dozer Specifications

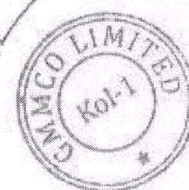
## D11 Dozer

Tag link dozer coupling brings blade closer for better balance and control.

		Standard Pitch	Extended Pitch	Standard Pitch	Extended Pitch	Carrydozer
		11SU ABR	11SU ABR	11U ABR	11U ABR	11CD
Blade						
Blade Capacity (SAE J1265)	m³ (yd³)	27.2 (35.6)	27.2 (35.6)	34.4 (45.0)	34.4 (45.0)	43.6 (57.0)
Width with Blade (over end bits)	mm (in)	5584 (219.8)	5585 (219.9)	6340 (249.6)	6341 (249.6)	6704 (263.9)
Blade Height	mm (in)	2866 (112.8)	2867 (112.9)	2875 (113.2)	2876 (113.2)	3236 (127.4)
Digging Depth						
Blade Pitch – Full Racked Back (Carry)	mm (in)	566 (22.3)	438 (17.2)	566 (22.3)	438 (17.3)	708 (27.9)
Blade Pitch – Nominal	mm (in)	660 (26.0)	660 (26.0)	661 (26.0)	661 (26.0)	1394 (54.9)
Blade Pitch – Full Pitched Forward (Spread)	mm (in)	858 (33.8)	860 (33.8)	859 (33.8)	860 (33.9)	1756 (69.1)
Ground Clearance						
Blade Pitch – Full Racked Back (Carry)	mm (in)	1778 (70.0)	1921 (75.6)	1777 (70.0)	1920 (75.6)	1839 (72.4)
Blade Pitch – Nominal	mm (in)	1669 (65.7)	1669 (65.7)	1668 (65.7)	1668 (65.7)	990 (39.0)
Blade Pitch – Full Pitched Forward (Spread)	mm (in)	1424 (56.1)	1423 (56.0)	1423 (56.0)	1422 (56.0)	255 (10.0)
Maximum Tilt LH	mm (in) Degrees	1700 (66.9) 18.3	1587 (62.5) 17.1	1932 (76.1) 18.3	1806 (71.1) 17.1	1174 (46.2) 10.0
Maximum Tilt RH	mm (in) Degrees	1697 (66.8) 18.3	1607 (63.3) 17.3	1930 (76.0) 18.3	1829 (72.0) 17.3	1162 (45.7) 9.9
Cutting Edge Angle						
Blade Pitch – Full Racked Back (Carry)	Degrees	46.6	42.0	46.6	42.0	35.5
Blade Pitch – Nominal	Degrees	50.2	50.2	50.2	50.2	55.5
Blade Pitch – Full Pitched Forward (Spread)	Degrees	58.9	59.0	58.9	59.0	84.0
Blade Weight (Moldboard Only)	kg (lb)	10 210 (22,509)		12 960 (28,572)		17 401 (38,363)
Blade Weight*	kg (lb)	17 126 (37,756)	17 251 (38,032)	19 875 (43,817)	20 000 (44,092)	24 990 (55,093)
Total Operating Weight** (with blade and single-shank ripper)	kg (lb)	101 487 (223,740)	101 612 (224,016)	104 236 (229,801)	104 361 (230,076)	113 700 (250,665)

\* Does not include hydraulic controls but includes blade cylinders, pusharms.

\*\* D11 includes blade and single-shank ripper, hydraulic controls, blade cylinders, coolant, lubricants, full fuel tank, 710 mm (28 in) shoes, ROPS, FOPS cab, and operator. D11 CD includes blade and single-shank ripper, hydraulic controls, blade cylinders, coolant, lubricants, full fuel tank, 915 mm (36 in) shoes, ROPS, FOPS cab, and operator.

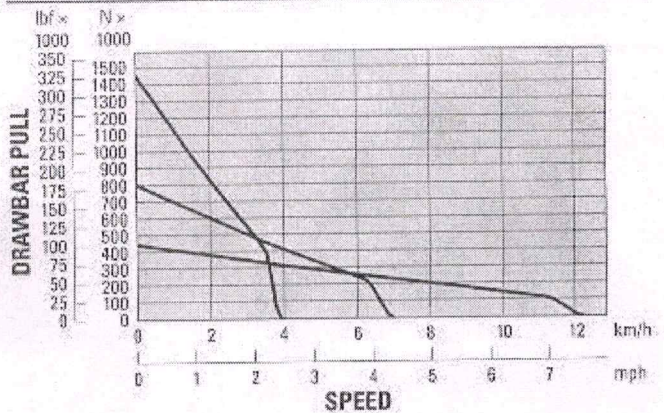




### Transmission

1.0 Forward	4.0 km/h	2.5 mph
1.5 Forward	5.2 km/h	3.2 mph
2.0 Forward	7.0 km/h	4.4 mph
2.5 Forward	9.0 km/h	5.6 mph
3.0 Forward	12.2 km/h	7.6 mph
1.0 Reverse	4.8 km/h	3.0 mph
1.5 Reverse	6.2 km/h	3.9 mph
2.0 Reverse	8.5 km/h	5.3 mph
2.5 Reverse	10.9 km/h	6.8 mph
3.0 Reverse	14.7 km/h	9.1 mph
Type	Planetary powershift	
Transmission Clutch Diameter	533 mm	21 in

### Drawbar Pull vs. Speed



### Ripper

		D11			D11 CD	
		Single Shank	Single Shank	Multi Shank	Single Shank	Multi Shank
Deep Ripping						
Overall Beam Width	mm (in)	— —	— —	3330 (131.1)	— —	3330 (131.1)
Maximum Penetration Force* (shank vertical)	kN (lb)	294 (66,000)	294 (66,110)	344 (77,350)	343 (77,130)	369 (82,875)
Maximum Penetration Depth (standard tip)	mm (in)	1612 (63.5)	2172 (85.5)	1100 (43.3)	1612 (63.5)	1100 (43.3)
Pryout Force (multi-shank ripper with one tooth)	kN (lb)	661 (148,510)	661 (148,510)	648 (145,640)	604 (135,760)	605 (136,080)
Maximum Clearance Raised (under tip, pinned in bottom hole)	mm (in)	1111 (43.7)	873 (34.4)	1090 (42.9)	1111 (43.7)	1090 (42.9)
Number of Shank Holes		4	3	2	4	2
Ripper Weight (no shank) (includes trans guard)	kg (lb)	8625 (19,015)	8625 (19,015)	9007 (19,857)	12,467 (27,485)	12,267 (27,044)
Tooth Gp Weight (each)	kg (lb)	1193 (2,630)	1403 (3,093)	697 (1,537)	1193 (2,630)	697 (1,537)
With 11U ABR blade and ripper				With 11CD blade and ripper		
Total Operating Weight**	kg (lb)	104,236 (229,801)	104,446 (230,264)	105,516 (232,623)	113,700 (250,665)	114,398 (252,204)

\*Shank pinned in deepest ripping position.

\*\* D11 weight includes Abrasion U Blade and specified ripper with shank(s) installed, full fuel tank, 710 mm (28 in) shoes.

D11 CD weight includes Abrasion CD Blade and specified ripper with shank(s) installed, full fuel tank, 915 mm (36 in) shoes.



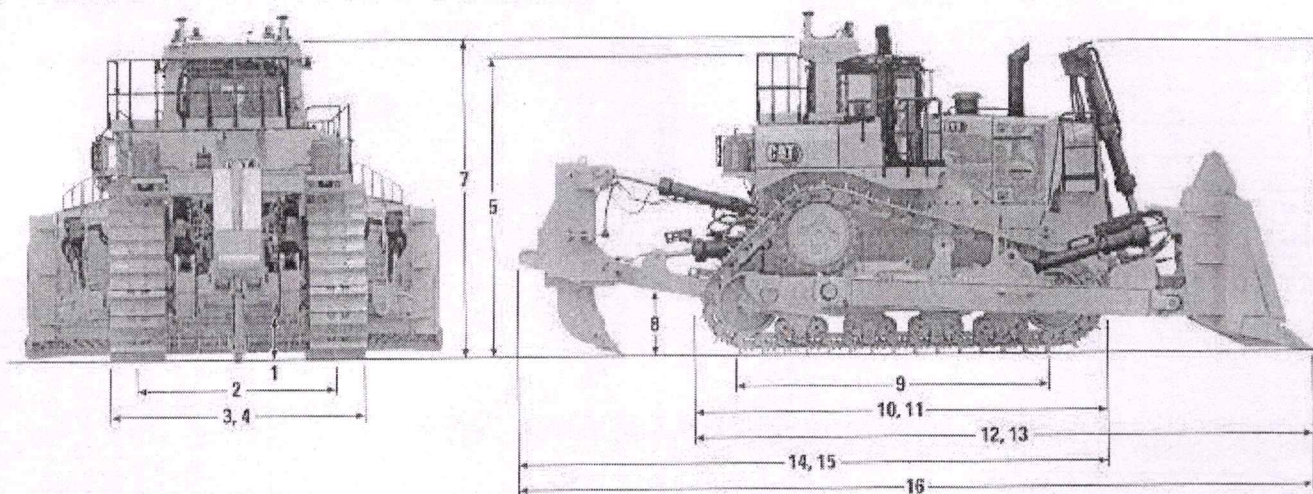


# D11 Dozer Specifications

Annexure-6u

## Dimensions

All dimensions are approximate.



	D11		D11 CD	
1 Ground Clearance*	798 mm	31.4 in	798 mm	31.4 in
2 Track Gauge	2896 mm	114 in	2896 mm	114 in
3 Width without Trunnions (standard shoe)	3782 mm	148.9 in	3806 mm	149.8 in
4 Width over Trunnions	4379 mm	172.4 in	4379 mm	172.4 in
5 Height (FOPS cab)*	4405 mm	173.4 in	4405 mm	173.4 in
6 Height (top of stack)*	4549 mm	179.1 in	4549 mm	179.1 in
7 Height (ROPS/canopy)*	4723 mm	185.9 in	4723 mm	185.9 in
8 Drawbar Height (center of clevis)*	942 mm	37.1 in	942 mm	37.1 in
9 Length of Track on Ground	4444 mm	175 in	4444 mm	175 in
10 Overall Length – Basic Tractor	6160 mm	242.5 in	6160 mm	242.5 in
11 Length – Basic Tractor with Drawbar	6160 mm	242.5 in	6160 mm	242.5 in
12 Length with SU-Blade**	8579 mm	337.8 in	8765 mm	345.1 in
13 Length with U-Blade	8641 mm	340.2 in	—	—
14 Length with Single-Shank Ripper	8107 mm	319.2 in	8107 mm	319.2 in
15 Length with Multi-Shank Ripper	8427 mm	331.8 in	8427 mm	331.8 in
16 Overall Length SU-Blade and SS Ripper**	10 525 mm	414.4 in	10 712 mm	421.7 in

\*Includes grouser height for total dimensions on hard surfaces.

\*\*CD Blade on D11 CD.

Note: D11 shown equipped with 710 mm (28 in) shoes.



*A. Sarwar*

*Vijay Kumar*

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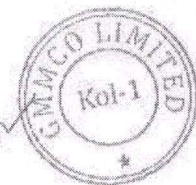


### Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
<b>OPERATOR ENVIRONMENT</b>			Armrest - Adjustable	✓	
ROPS/FOPS, Sound-Suppressed Cab	✓		Interior LED Courtesy Lights	✓	
High-Definition Primary Touchscreen Display	✓		Interior Backlighting - Dimmable	✓	
MineStar™ Terrain Display		✓	Air Conditioning Condenser - Cab Mounted	✓	
Visibility - Rearview Mirrors	✓		Decelerator Pedal	✓	
Visibility - Dual Camera		✓	Controls - Blade - Electronic	✓	
Visibility - Four Cameras - 360-Degree View		✓	Controls - Ripper - Electronic	✓	
Visibility - Camera - Ripper Tip View		✓	Park Brake - Electronic	✓	
Air Conditioner and Heater with Automatic Climate Control	✓		Engine Speed Control Dial	✓	
Seat Belt, 76 mm (3 in) Retractable with Switch	✓		Cab Access - Blade Pusharm Steps and Grab Handle	✓	
Seat - Cloth with Air Suspension	✓		Cab Access - Powered Ladder		✓
Seat - Heated, Cooled, Adjustable Lumbar and Bolsters		✓	Fender Platform Guardrails	✓	
Window Wipers with Wash - Low, High, Intermittent	✓		Rear Cab Platform and Guardrails		✓
Adjustable Fingertip Steering Controls	✓		Site Communication Radio Mount	✓	
Entertainment Radio Ready (12V Power, Harness, Speakers)	✓		Cab Filter Precleaner		✓
Entertainment Radio - AM/FM, Aux Input and Bluetooth		✓	"OK to Start" Fluid Level Monitoring - Five Fluids	✓	
Cab Glass - Single-Pane Tinted Safety	✓		Machine Overspeed Protection	✓	
Cab Glass - Dual-Pane Laminated Impact Safety		✓	Fluid Level Monitoring Strategy	✓	
Cab Glass - High-Pressure Safety (40 psi/275 kPa)		✓	Slope and Side Slope Monitor	✓	
Window Sunscreen		✓	<b>CAT TECHNOLOGY PRODUCTS</b>		
Small Operator 5th Percentile Mounting Group		✓	VIMS	✓	
Cab Door - Right-Hand Swing	✓		Automated Blade Assist (ABA)	✓	
Cab Door - Left-Hand Swing		✓	AutoCarry™		✓
Access/Egress Lighting with Shutdown Timer	✓		Auto Ripper Control		✓
			Cat Terrain with 3D Blade Control		✓
			Cat Terrain Ready		✓
			Cat Product Link Elite (Cellular)		✓
			Cat Product Link Elite Dual Mode (Cellular + Satellite)		✓
			Cat Command for Dozing Ready		✓

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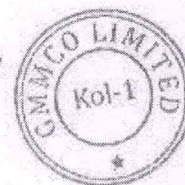
# D11 Standard and Optional Equipment

## Standard and Optional Equipment (continued)

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
<b>CAT POWER TRAIN</b>			<b>UNDERCARRIAGE</b>		
Cat C32 Engine – U.S. EPA Tier 4 Final or Tier 2 Equivalent	✓		Suspension Type Undercarriage	✓	
Air to Air Aftercooler	✓		Track Guide	✓	
Air Filters – With Electronic Service Indicator	✓		Two-Piece Master Link	✓	
High-Performance Single-Plane Cooling Module	✓		Sleeve Bearing Track	✓	
Stator Clutch Torque Divider – Electronic Control	✓		Lifetime-Lubricated Rollers and Idlers	✓	
Powershift Transmission – Three-Speed Electronic Shift	✓		Hydraulic Track Adjusters	✓	
Enhanced Auto Shifting (EAS)	✓		Carrier Roller Ready	✓	
Clutch/Brake Steering – Electronic Control	✓		Equalizer Bar – Greased End Pin Bearings	✓	
Auto Engine Idle Shutdown	✓		Track Shoe (ES): 710/810/915 mm (28/32/36 inch) Width	✓	
Hydraulic Cooling Fan – Automatic Reversing		✓	Track Links – High Abrasion – Tall Link		✓
Controlled Throttle Shifting with Shift Management	✓		Track Links – Heavy Duty XL – Duralink		✓
Precleaner – Strata™ Tube Dust Ejector	✓		Track Shoe – Abrasion Resistant		✓
Precleaner – Turbine		✓	Track Shoe – Anti-Packing Round Hole		✓
Thermal Manifold and Turbo Shields	✓		Abrasion Rollers and Idlers		✓
Starting Aid – Engine Heater Group (120V or 240V)		✓	Cold Weather Rollers and Idlers		✓
Starting Aid – Automatic Ether		✓	Sound-Suppression Undercarriage		✓
Fuel Heater		✓	Carrier Roller		✓
Fuel Priming Pump – Automatic	✓		Carrier Roller – Cold Weather		✓
Fuel Water Separator	✓		<b>HYDRAULICS</b>		
Fuel Tank – 1895 liter (500 U.S. gal)	✓		Electronically Controlled, Load-Sensing Dozer Lift and Tilt	✓	
Final Drive Seal Guard – Open Labyrinth	✓		Electronically Controlled, Load-Sensing Ripper Lift and Pitch	✓	
Final Drive Seal Guard – Clamshell		✓	Carrydozer Hydraulics		✓
Radiator – High-Performance Copper Grommited Tube	✓		Dozer Blade Dual Tilt	✓	
Radiator – Aluminum Bar Plate (standard for Tier 2 Equivalent)		✓	Dozer Extended Blade Pitch		✓
Engine Oil Prelubrication System		✓	Electronically Enabled Blade, Quick Drop	✓	
<b>FLUIDS</b>			Ripper Pin Puller		✓
Coolant – Extended Life, Standard (-37° C/-25° F)	✓		Hydraulic Tank Return Screen	✓	
Coolant – Extended Life, Arctic (-51° C/-60° F)		✓			

(continued on next page)





### Standard and Optional Equipment (continued)

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional		Standard	Optional
<b>ELECTRICAL</b>			<b>REAR ATTACHMENTS</b>		
24V Electric Start, Dual Starters	✓		Ripper - Single Shank - with Pin Puller		✓
Alternator - 150-Amp	✓		Ripper - Single Shank - Pushblock with Pin Puller		✓
Batteries - 4 × 4,200-Amp Hour 12V	✓		Ripper - Single Shank - with Pin Puller - Heavy		✓
12V, 15-Amp Converter	✓		Ripper - Multi Shank (three shank)		✓
Battery Isolation	✓		Ripper - Multi Shank - Heavy (three shank)		✓
Battery Isolation - Dual Pole		✓	Ripper - Multi Shank - Leach Pad with Pin Puller		✓
Starter Control Isolation	✓		Ripper - Multi Shank - Coal (five shank)		✓
Starter Power Isolation		✓	Counterweight - Rear		✓
Backup Alarm	✓		Drawbar with Counterweight		✓
Lights, Engine Compartment	✓		<b>BLADES</b>		
Lights - Halogen - 13 Positions		✓	Semi-Universal (27.2 m <sup>3</sup> /35.6 yd <sup>3</sup> )		✓
Lights - LED - 13 Positions	✓		Universal (34.4 m <sup>3</sup> /45.0 yd <sup>3</sup> )		✓
Lights - Premium LED - 13 Positions		✓	Carrydozer (43.6 m <sup>3</sup> /57 yd <sup>3</sup> )		✓
Light - Warning Strobe		✓	Reclamation Universal (42 m <sup>3</sup> /55 yd <sup>3</sup> )		✓
<b>SERVICE AND MAINTENANCE</b>			Reclamation Universal (53.5 m <sup>3</sup> /70 yd <sup>3</sup> )		✓
Ecology Fluid Drains - All Compartments	✓		Coal Universal (75 m <sup>3</sup> /98.0 yd <sup>3</sup> )		✓
Hinged Bottom Guards	✓		Coal Universal (65 m <sup>3</sup> /85.5 yd <sup>3</sup> )		✓
Sound Reduction Sealed Bottom Guards		✓	Black Blade Paint		✓
High-Speed Oil Change - Engine and Transmission	✓		Abrasion Liners and Guards		✓
Ground-Level Fast Fuel Fill	✓		<b>OTHER</b>		
Ground-Level Fluid Fill and Drain		✓	Fire Suppression Ready		✓
Ground-Level Electrical Service Station	✓		Fire Suppression Installed		✓
S-O-S <sup>SM</sup> Fluid Sampling Ports	✓				
Diagnostic Connector	✓				
Quick-Opening Cab Mounting Group		✓			
Sound Enclosure		✓			
Ripper Lubrication - Autolube with Ground-Level Fill		✓			
Ripper Lubrication - Grouped		✓			
CapSure <sup>TM</sup> Hammerless Ripper Tip and Shank Protectors	✓				
Anchorage Points	✓				



*Vijay Kumar*

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*Handwritten signatures and initials*



*Vijay Kumar*

GMMCO LIMITED  
Kol-1



AJ

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at [www.cat.com](http://www.cat.com)

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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AEXQ2475 (12-2018)  
Build Number: 07A  
(Global)



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*Vijay Kumar*

*AD*

*CDK*



**Gmmco Limited**

CK Birla Group  
11<sup>th</sup> Floor, Birla Building, 9/1, A. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

Sec-VI, Tech Specs, Part D, Clause 9.2 (x) of NIT

GMMCO/CIL/850HP Dozer/24-25

Date: 22-07-2023

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sir,

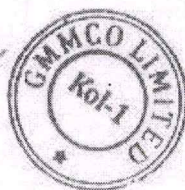
SUB- OPERATION AND MAINTENANCE MANUAL

REF: Tender No. CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

The Operation and Maintenance Manual will be provided at the time of commissioning of the Machine

For GMMCO Limited

*Vikash Kumar*  
Vikash Kumar  
General Manager



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*Hand*  
*De*  
Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E-mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

(Registered office: 9/1, A.N. Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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**Gmmco Limited**

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

## Clause-D.9.3.2 (a), Machine Weight, Section VI, Technical Specifications

GMMCO/CIL/850HP/24-25/SHORTFALL

Date: 19-09-2024

The General Manager (MM)  
Coal India Limited  
Coal Bhawan  
Premises No. 4, Action Area 1A,  
New Town, Rajarhat,  
Kolkata - 700156

Dear Sir,

SUB: Shipping Weight

REF: Tender Number: CIL/C2D/850HP Dozers/R-153/24-25/395 Dated 12.06.2024

Considering shipment of units, we submit shipping weight of individual components as follows:

Component	Weight (Kg)
D11 Tractor Cab / Rops Off (RORO Unit)	73400
ROPS	798
Cab Box	1016
Operator Station Box	272
Ripper Frame (For Machines with Ripper)	2314
Ripper Beam (For Machines with Ripper)	3333
Ripper Tilt Carriage (For Machines with Ripper)	1034
Ripper Lift Frame (For Machines with Ripper)	1098
Ripper Shank (For Machines with Ripper)	1161
Blade (Excl pins)	9946
Blade Install Box 1	1851
Blade Install Box 2	835
Push arm	3227
Lift Cylinder front (Box)	1234
Tag link	363
Guard Rail Box	345
Pre-Cleaner	110
Box Misc	798
SKID Counterweight (For Machines W/o Ripper)	8980



Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: contactus@gmmcoindia.com Website: www.gmmco.in

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025





GMMCO LIMITED

Shipping weight excludes the Onsite attachments such as AFDSS, Fire extinguisher, Proximity warning device etc however it includes packing weight.

Box will contain small items which are required during installation of complete system.

For Gmmco Limited

*Vikash Kumar*

Vikash Kumar  
General Manager



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*AD*

*CDK*



## Format For Bank Details For Electronic Payment

To Coal India Ltd.,  
1<sup>st</sup> Floor, Premises No. 04  
Plot No. AF - III, Action Area 1A  
New Town, Kolkata - 700 156.

Dear Sir

Tender Ref No. : CIL/C2D/850 HP Dozers/R-153/24-25/395 Dated 12.06.2024

Sub : Authorization of all our payments through Electronic  
Fund Transfer system / RTGS/NEFT/LC



1	Name of the Beneficiary, Address with Telephone No.	Name - GMMCO Limited Address - 6, G. S. T. Road, St. Thomas Mount, Chennai. Telephone No. - 044 2267 6469.
2	Bank Name. Address with Telephone No.	Name - HDFC Bank Limited Address - No.115,R.K.SALAI, OPP Kalyani Hospital Chennai - 600 004
3	Branch Name & Code	Branch Name - R. K. Salai, Chennai Branch Code - Annexure Attached.
4	Bank Account Number with style of account (Savings Current)	Annexure Attached.
5	IFSC Code No. / Swift Code of the Bank	Annexure Attached.
6	PAN No. of the Beneficiary	AABCG0949C
7	E-Mail No. and Mobile No. of the Beneficiary for intimation of release of payment	E-Mail No. - godwyn@gmmcoindia.com Mobile No. - 9823030668

I/We hereby declare that particulars given above are correct and complete and if the transaction is delayed or credit is not effected due to incorrect information, I/we will not hold Coal India Ltd. Responsible.

REKHA TEWARI  
NOTARY  
Regn. No. - 10288/13  
C.M.M'S. COURT  
KOLKATA - 700 006

ATTESTED BY ME  
REKHA TEWARI  
NOTARY  
Regn. No. - 10288/13  
C.M.M'S. COURT  
KOLKATA - 700 006

Vignesh Kumar  
GMMCO LIMITED  
Kol-1

Bank Certification

R. Sankaranarayanan  
Authorised Signatory  
Name : R.SANKARANARAYANAN  
Official Stamp with Date  
24 JUL 2021

GMMCO LTD.  
6, G.S.T. Road,  
St. Thomas Mount,  
Chennai-16

It is certified that above mentioned beneficiary holds a Bank Account with our Branch and the Bank particulars mentioned above are correct. Details verified in annexure reference no. CIL/C2D/850 HP Dozers/R-153/24-25/395 dated 12.06.2024.

GMMCO Limited

No.6, GST Road, St. Thomas Mount, Chennai 600016 +91 44 2267 6000 Fax 044 2267 6469 Date  
contactus@gmmcoindia.com www.gmmco.in  
Regd. Office: 9/1, RN Mukherjee Road, Kolkata 700001

CIN : U35202WB1965PLC025980

HDFC BANK LTD.  
CHENNAI  
600 004  
R.K. SALAI

Authorised Signatory  
Name :

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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Tender Ref No. : CIL/C2D/850 HP Dozers/R-153/24-25/395 Dated 12.06.2024

Name of Bank & Branch	Customer	Project	Branch Name & Code	Bank Account Number with Code	Style of Account (Savings / Current)	IFSC Code No. / Swift Code of the Bank
HDFC Bank Ltd., R. K. Salai, Chennai	SECL	GEVRA OCP	1097	GMMCO LTD 4020	CASH CREDIT	HDFC0001097
HDFC Bank Ltd., R. K. Salai, Chennai	SECL	DIPKA OCP	1097	GMMCO LTD 3575	CASH CREDIT	HDFC0001097
HDFC Bank Ltd., R. K. Salai, Chennai	NCL	DUDHICHUA OCP	1097	GMMCO LTD 4174	CASH CREDIT	HDFC0001097
HDFC Bank Ltd., R. K. Salai, Chennai	NCL	BINA-KAKRI AMALGAMATI ON OCP	1097	GMMCO LTD 4170 GMMCO LTD 4171	CASH CREDIT	HDFC0001097
HDFC Bank Ltd., R. K. Salai, Chennai	NCL	JAYANT	1097	GMMCO LTD 4224	CASH CREDIT	HDFC0001097
HDFC Bank Ltd., R. K. Salai, Chennai	NCL	NIGAHI	1097	GMMCO LTD 4173	CASH CREDIT	HDFC0001097
HDFC Bank Ltd., R. K. Salai, Chennai	NCL	AMLOHRI OCP	1097	GMMCO LTD 4169	CASH CREDIT	HDFC0001097
HDFC Bank Ltd., R. K. Salai, Chennai	NCL	KRISHNASHIL A OCP	1097	GMMCO LTD 4271	CASH CREDIT	HDFC0001097

I/We hereby declare that particulars given above are correct and complete and if the transaction is delayed or credit is not effected due to incorrect information, I/we will not hold Coal India Ltd. Responsible.

For GMMCO LIMITED

Authorised Signatory

Name : R.SANKARANARAYANAN

Official Stamp with Date



## Bank Certification

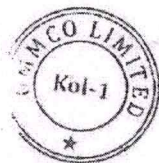
It is certified that above mentioned beneficiary holds a Bank Account with our Branch and the Bank particulars mentioned above are correct.



Authorised Signatory

Name : JOTHILAKSHMI VENKATESH

Official Stamp with Date



Vijay Kumar

A-3

REKHA TEWARI  
NOTARY  
Regn. No. 10288/13  
C.M.M.'S Court  
Kolkata-700 001

ATTESTED BY ME

REKHA TEWARI  
NOTARY  
Regn. NO. 10288/13  
C.M.M.'S Court  
Kolkata-700 001

24 JUL 2024

GMMCO Limited

No.6, GST Road, St. Thomas Mount, Chennai 600016 +91 44 2267 6000 Fax: +91 44 2267 6360

contactus@gmmcoindia.com www.gmmco.in

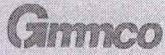
Regd. Office: 9/1, RN Mukherjee Road, Kolkata 700001

CIN: U35202WB1960PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

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## Annexure-7

### Gmmco Limited

CK Birla Group

11<sup>th</sup> Floor, Birla Building, 9/1, R. N. Mukherjee Road,  
Kolkata - 700 001 West Bengal.

Ref : GMMCO/CIL/850HP/24-25

Dated : 22.7.2024.

To  
Coal India Limited  
Coal Bhawan  
Premises No. 4  
Action Area 1A  
New Town, Rajarhat  
Kolkata - 700 156  
India.

Dear Sirs

Sub : CAT Bank Details

Ref : Tender No. CIL/C2D/850 HP Dozers/R-153/24-25/395 dated 12.06.2024

Please find attached herewith J P Morgan Bank Details of CAT.

Thanking you

Yours faithfully  
For GMMCO Limited

Vikash Kumar  
General Manager



A-1

Phone: (033) 3918 1700 To 12 Fax: (033) 3918 1706 E mail: [contactus@gmmcoindia.com](mailto:contactus@gmmcoindia.com) Website: [www.gmmco.in](http://www.gmmco.in)

(Registered office: 9/1, R.N Mukherjee Road, Kolkata 700 001)

CIN U35202WB1966PLC026980

CIL/C2D/Crawler Dozer/R-153/301 dated 01.09.2025

Page 226 of 227



**CATERPILLAR®**CATERPILLAR SARL  
SINGAPORE BRANCH

REGISTRATION NO S99FC5744H

7 Tractor Road  
Singapore 627968  
Tel : (65) 6828 7333

6 August 2024

Coal India Limited  
1<sup>st</sup> Floor, Premises No. 04  
Plot No AF - III, Action Area 1A,  
New Town, Kolkata - 700 156.

Dear Sir,

Sub: Authorization of all our payments through Electronic Fund Transfer system/RTGS/NEFT/LC.

We hereby authorize Coal India Limited to disburse all our payments through Electronic Fund Transfer system/RTGS/NEFT/LC. The details for facilitating the payment are given below:

1.	Name of the Beneficiary, address	Caterpillar SARL Singapore Branch, 7 Tractor Road, Singapore - 627968
2.	Bank name, address	Citibank N.A., Singapore Branch, 8, Marina View # 16-00 Asia Square Tower, Singapore - 018960
3.	Branch name & code	Citibank N.A., Singapore Branch 7214-001
4.	Bank account number with style of account (Savings / Current)	USD Current Account 0709113038
5.	IFSC Code No /Swift Code of the Bank	Swift Code : CITISGSG
6.	PAN No. of the Beneficiary	NIL
7.	E-Mail No. and Mobile No. of the Beneficiary for intimation of release of payment.	Vivia Cao cao_yue@cat.com +65 68287236

I/We hereby declare that particulars given above are correct and complete and if the transaction is delayed or credit is not effected due to incorrect information, I/we will not hold Coal India Limited responsible.

Authorized Signatory  
Name:Decided by: Chie Huat Tiang  
Name: Chie Huat Tiang Teck Cheong

Official Stamp with date 8/13/2024

Bank Certification

It is certified that above mentioned beneficiary holds a Bank Account No. 0709113038 with our branch and the Bank particulars mentioned above are correct.

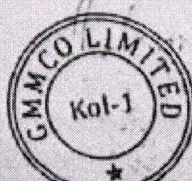
Authorized Signatory  
Name:

Official Stamp with date

Bhadi  
Vikash Bhandari  
6/18/24



TRUE COPY ATTESTED



DEKHA TEWARI  
NOTARY  
101 M's CO.  
Kolkata - 700 001

Caterpillar: Confidential Green