Output Per Manshift (OMS)

The Output per Manshift (OMS) report is developed to calculate the output per manshift at Mine level, Area level, Subsidiary level and CIL level.

T codes used in OMS:

ZPP_SG – Grade Wise Reserve.

ZPP_SR – Stripping Ratio.

ZPP_OMS – OMS Report.

ZPP_OMS_HRPY_UPDT – For OMS update HR payroll data

Prerequisites for OMS: -

Maintain all the prerequisites/master table written below.

ZPP_SG - Grade Wise Reserve

ZPP_SR - Stripping Ratio

ZSGGRADE - Grade and Specific gravity master for PP_OMS report.

ZHRPP_OMS_WAGE - HR payroll wage types data for OMS report.

We can see the table view using SE16N T code.

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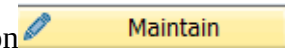
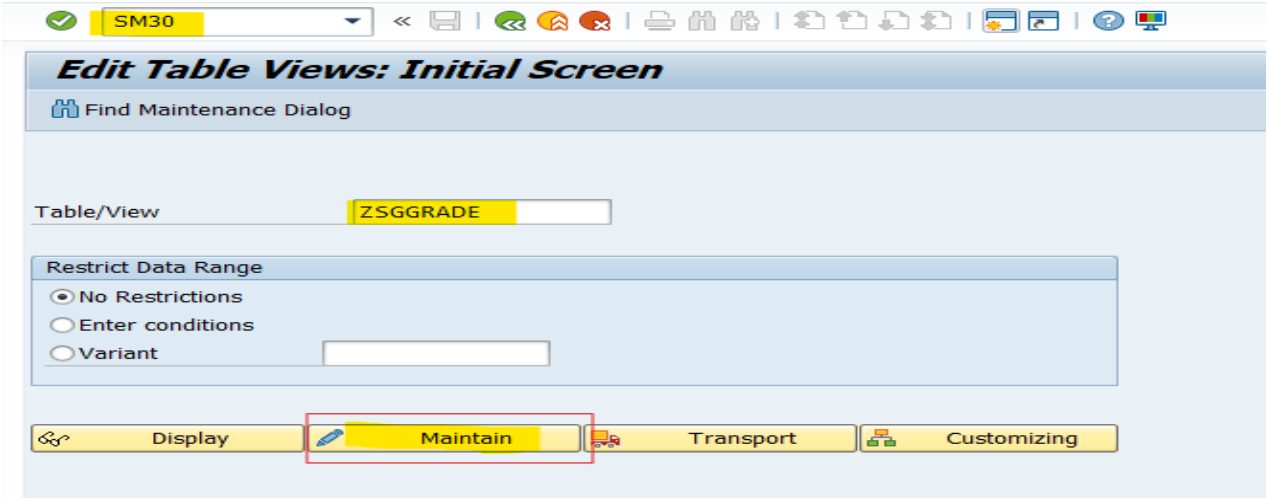
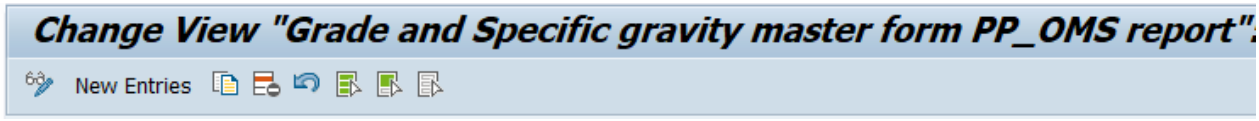
ZSGGRADE: -

Update the ZSGGRADE table by table maintenance using T code SM30. Execute the T code SM30 and put the table name in table field and press to maintain radio button 

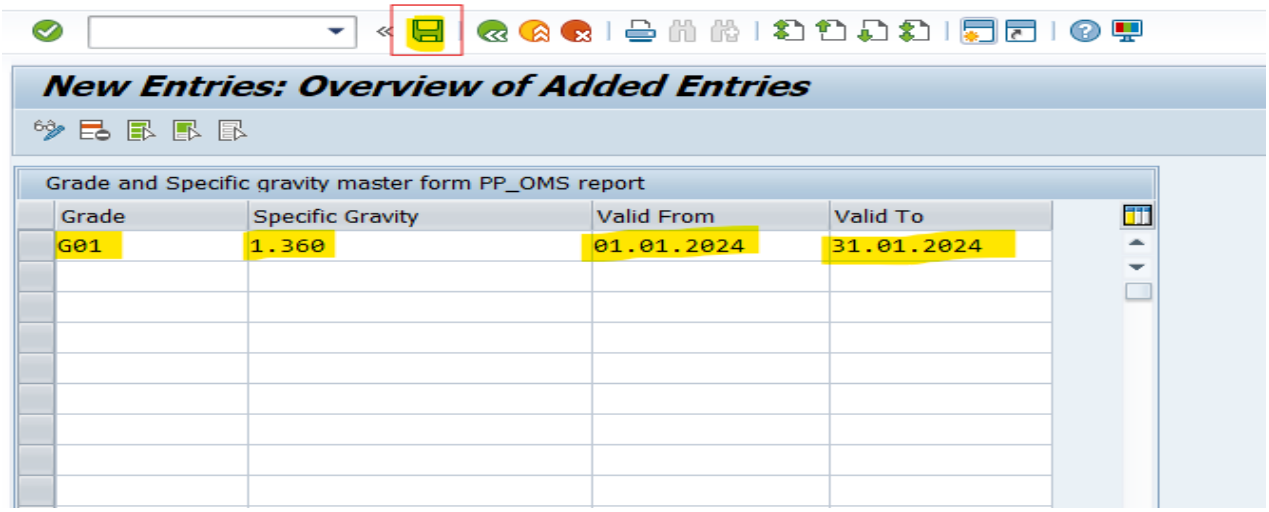
as displayed in the screenshot below.



After pressing the maintain button we have a screen like the snap below.

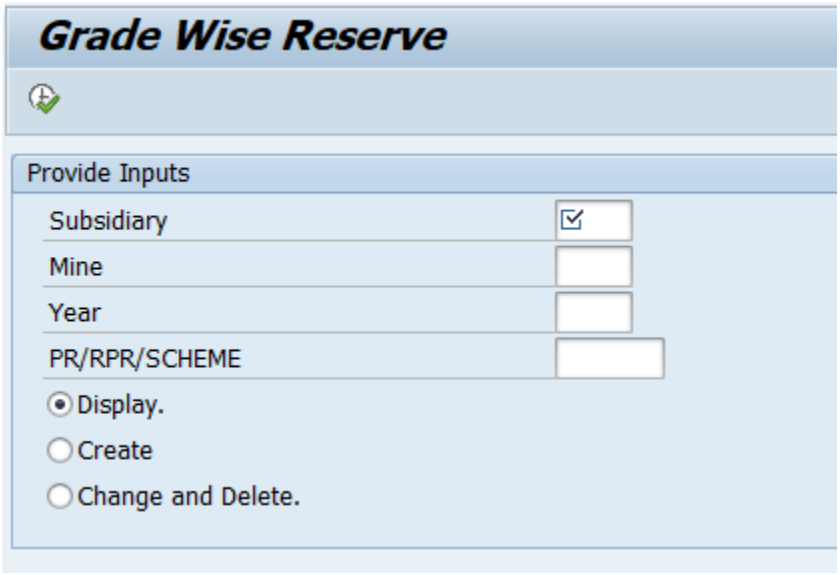


Choose new entries and fill in the required data in a specified column and save the data by pressing the save  button.

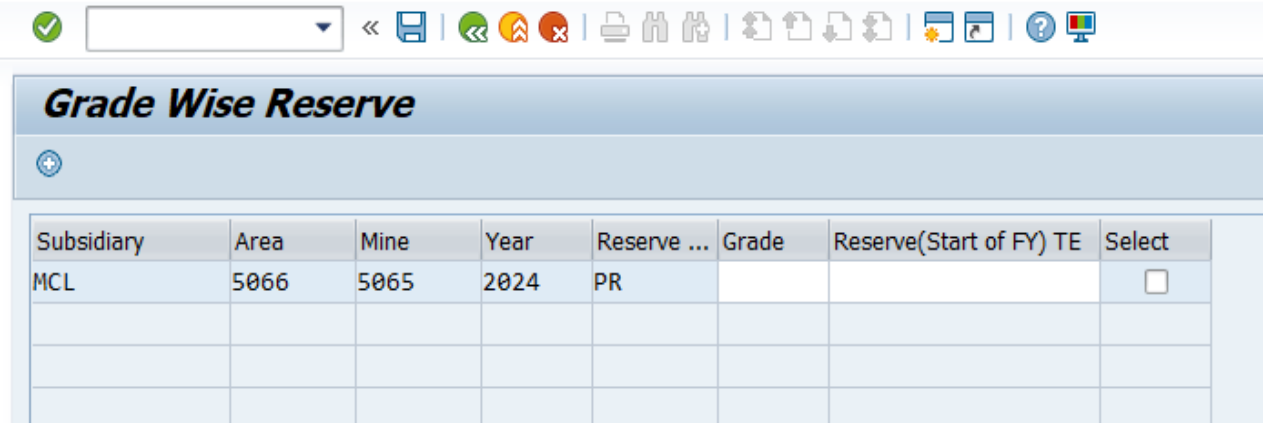


ZPP_SG: -

Maintain Grade wise reserve using T code ZPP_SG with respect to Subsidiary, Area, Mine, Year, Reserve type and Grade. After executing the T code ZPP_SG below screen will open.



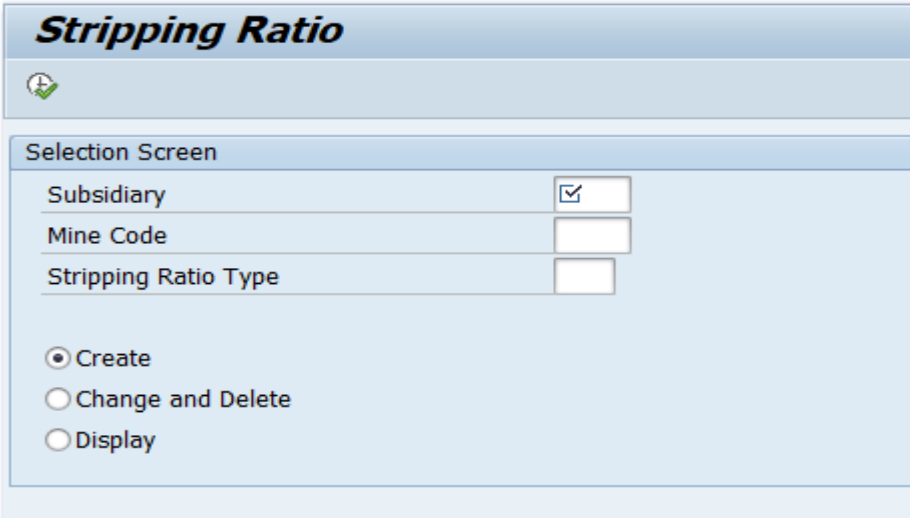
Please fill all the requirements as per need and choose the radio button as create, change and display, then execute. Put the grade and reserve as shown below snap and mark the tick and save the record.



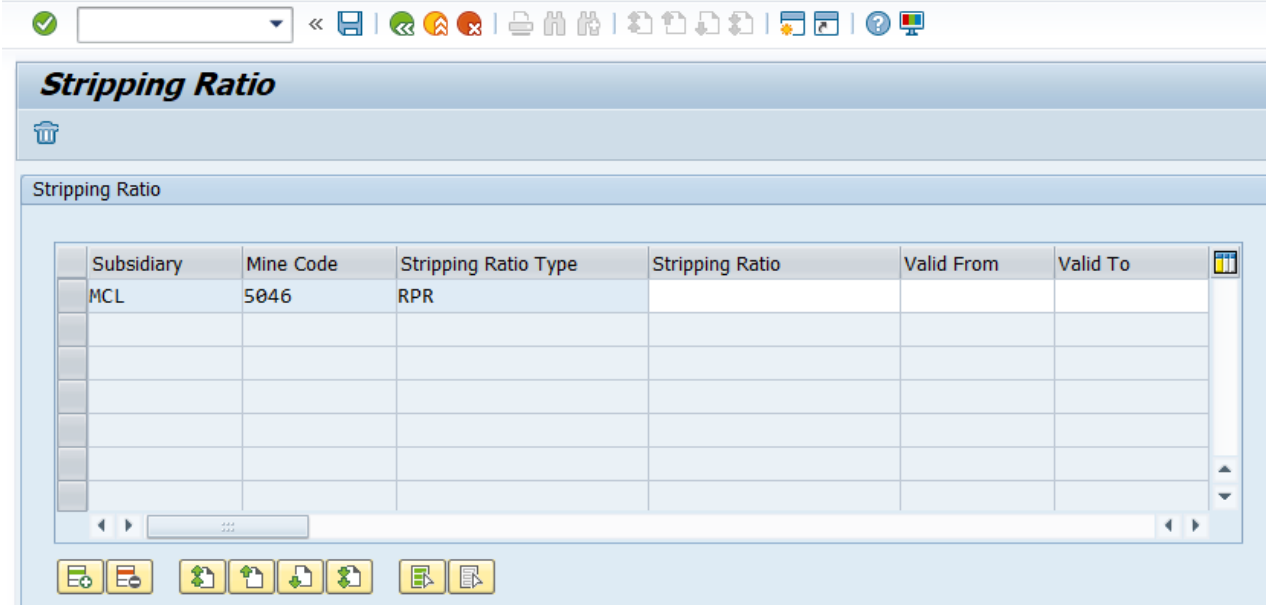
Record saves in table ZRGTT_PPOMS_SG.

ZPP_SR: -

Maintain Mine wise Stripping Ratio using T code ZPP_SR with respect to Subsidiary, Mine and SR type. Stripping ratio is only for OCM mine. After executing the T code ZPP_SR below screen will open.



Please fill all the requirements as per need and choose the radio button as create, change and display, then execute. Put the stripping ratio, valid from and valid to range as shown below snap and save the record.

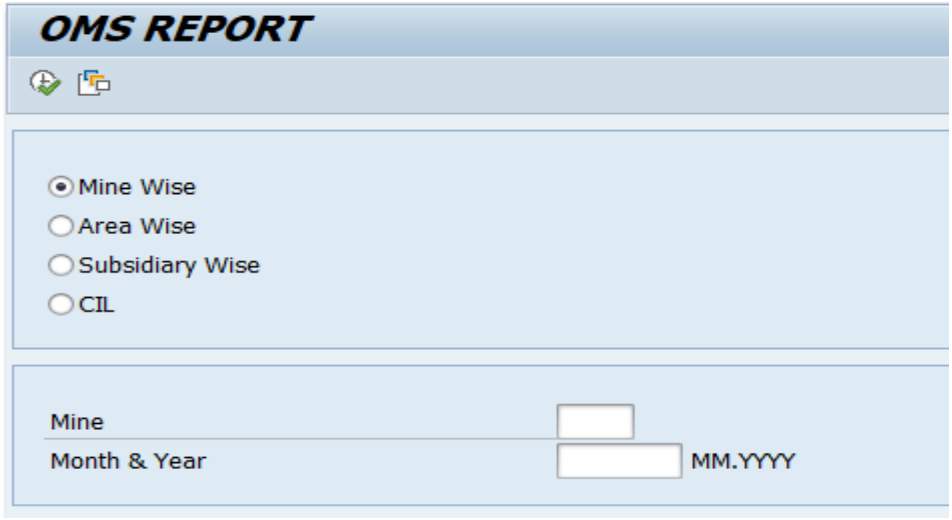


Record saved in table ZPP_STRIP_RATIO.

ZPP_OMS: -

Once all the prerequisites are maintained then only, we go to run the OMS.

After executing the T code ZPP_OMS we have the screen below as shown in snap.



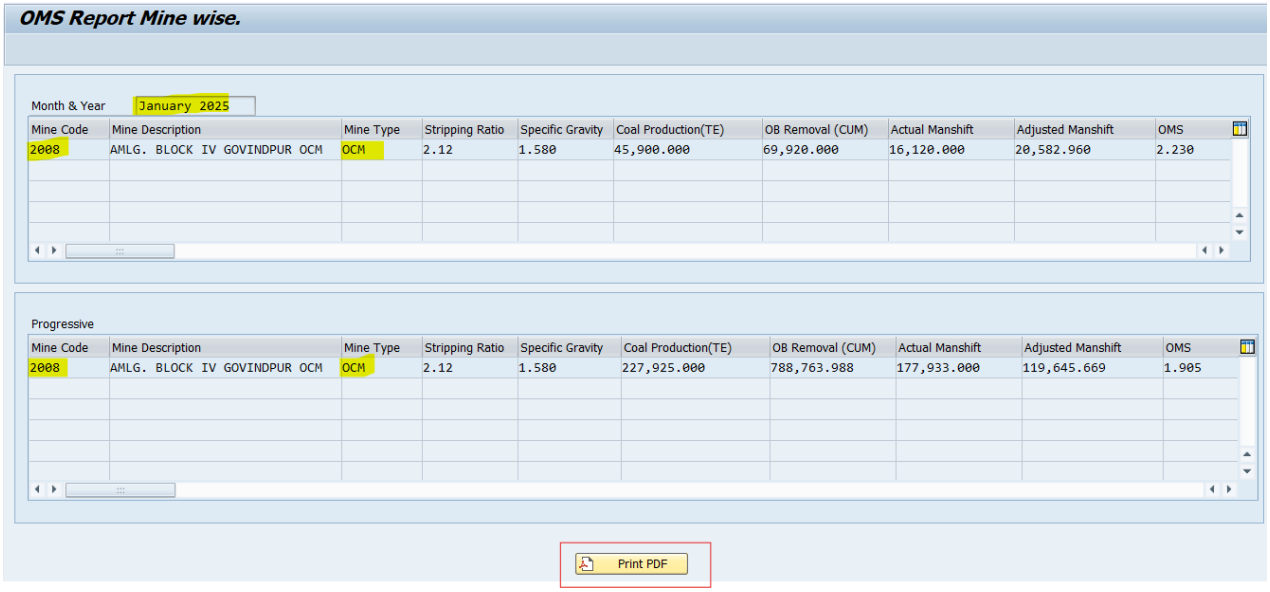
Choose the radio button from Mine, Area, Subsidiary and CIL and as per selection of radio button input the required fields, then execute.

1. **Mine Wise: -**

Choose mine wise radio button and input the mine, month and year then execute mine level OMS, we have the screen below as shown in snap.

USER MANUAL

Output Per Manshift (OMS)



We have OMS value in the above screen of same mine for same month and year and also for progressive year, which we will put in the input fields. For printing the report in PDF format, we have an option below the report as Print PDF click on that and download the PDF.

Check points: -

- **Mine Code –** User Entry data in selection screen as per ZRGTT_PP.
- **Mine Description** -Check name of Mine Code entered by user in selection screen from ZRGTT_PP.
- **Mining Type –** Check mining Type for mine code entered by user in selection screen from ZRGTT_PP.
- **Stripping Ratio –** Check it using T code ZPP_SR or table ZPP_STRIP_RATIO for respective mine and period.
- **Specific Gravity –** Check it using T code ZPP_SG or table ZRGTT_PPOMS_SG for respective mine and period.
- **Coal Production –** Check coal production Quantity from ZPP_PROD for respective mine and period. (Excluding CHP process)
- **OB Production –** Check OB Production from OB Reconciliation Table (ZRGTT_OBM_REC). If in case OB measurement is not completed for same period, you can check ZPP_PROD for respective mine and period.
- **Actual Manshift** - Actual manshift is calculated with wage types UG + Weekly Off + Physical Attendance + Holiday + Over time.

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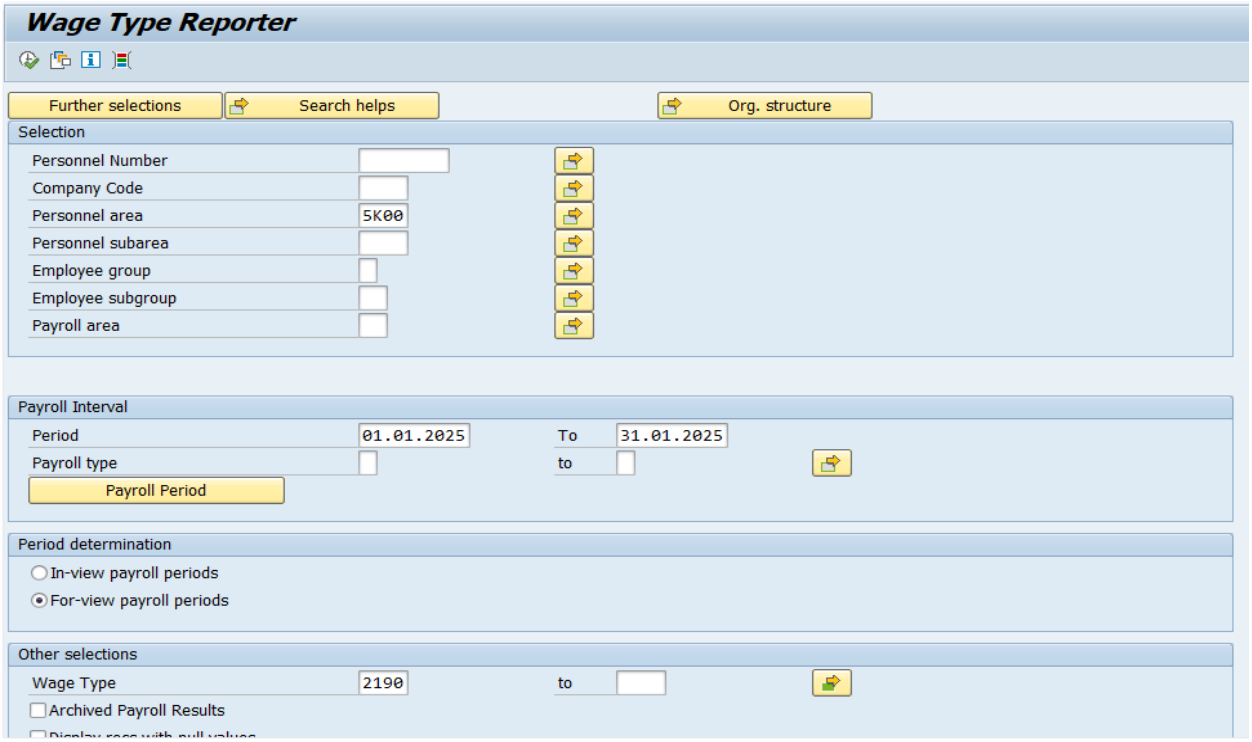
UG	Time wage type	6052							
Phy Attn	Time wage type	6055							
Weekly off	Time wage type	6054							
Holiday	Time wage type	6057							
OT	Time wage type	2190	2200	2210	2220	2450	2460	2470	2480

V_6055 = V_6055 – V_6052

Actual Manshift = (V_6055 + V_6052 + V_6054 + V_6057 + (V_OT / 8)).

The number of man hours for each wage type can be fetched using the standard transaction function module PC00_M99_CWTR.

Pass only Personal area in selection screen, payroll period, for-view payroll periods and select the personal subarea from the object selection and pick it in display layout.



***Note** - Filter the manshift hours as per personal subarea and add total the wage type nos.

OMS Calculation: - The OMS calculation to be done using the formula below based on the mine type.

A. **(i) UG Mines:**

$$OMS = \frac{\text{Coal Production}}{\text{Actual Manshift}} = \frac{P}{M}$$

(ii) OC Mines:

$$OMS = \frac{P + (SG \times Q)}{M\,(1+SR \times SG)}$$

Where P= Coal Production in Tonnes (including Departmental+Hired)

Q= Total OBR (including Solid & RH and Departmental & Hired) in m^3

SR= Stripping Ratio

SG= Specific Gravity in t/m^3

Adjusted Manshift – Coal Production / OMS

Progressive Calculation:

The logic remains the same for all fields except for the consideration of posting date (date range). The date to be considered for the progressive is Start date to be the 1st date of particular financial year till the end of the current month entered by the user.

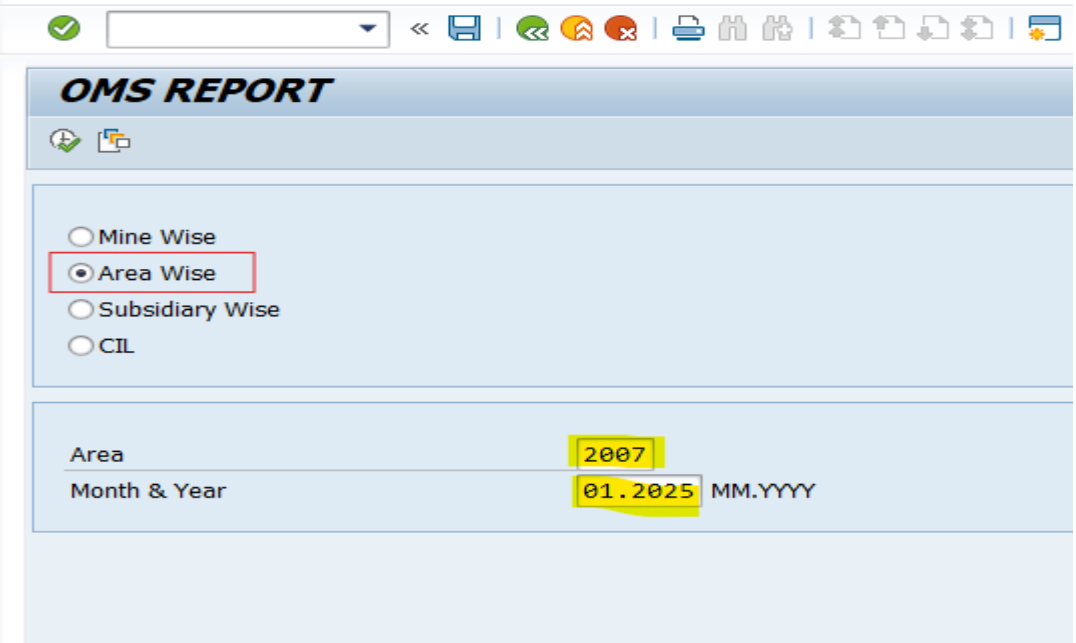
2. **Area Wise: -**

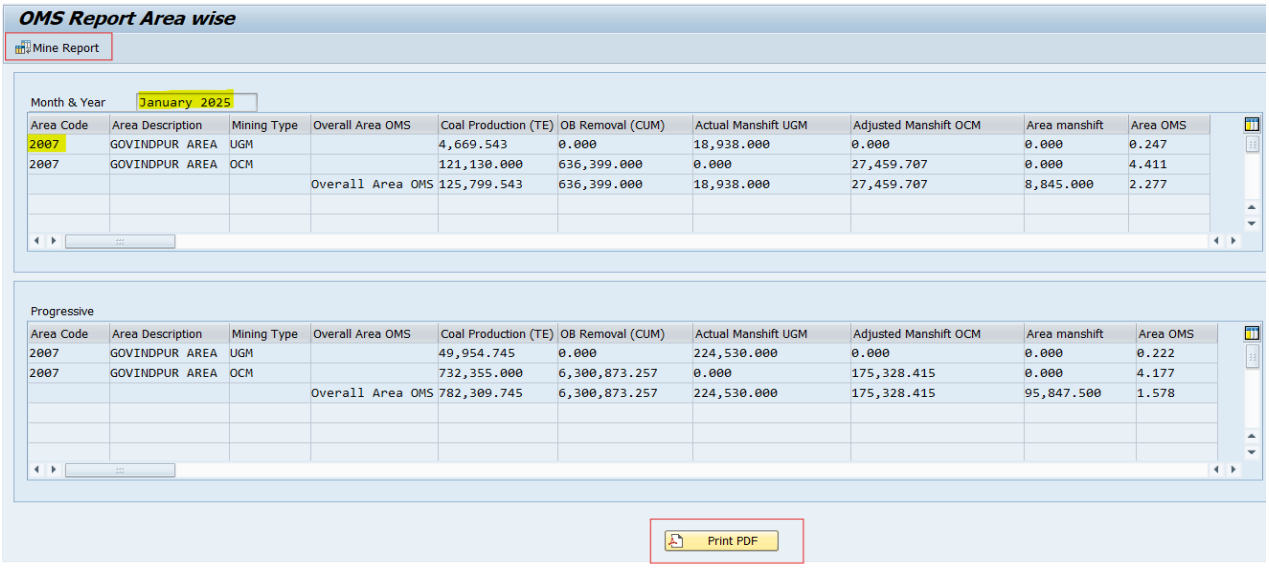
Run OMS for each mine associated with area for the period before executing OMS in area level as a mandatory Prerequisites for Area level OMS.

Choose Area wise radio button and input the Area, month and year then execute Area level OMS, we have the screen below as shown in snap.

USER MANUAL

Output Per Manshift (OMS)





We have OMS value in the above screen of the same Area for same month and year and for progressive year, which we will put in the input fields. For printing the report in PDF format, we have an option below the report as Print PDF click on that and download the PDF.

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Tech Mahindra	USER MANUAL	कोल इंडिया Coal India
	Output Per Manshift (OMS)	

Check points: -

- **Area Code –** User Entry data in selection screen as per ZRGTT_PP.
- **Area Description** -Check name of Area Code entered by user in selection screen from ZRGTT_PP.
- **Mining Type –** Check mining Type for mine code associated with the area entered by user in selection screen from ZRGTT_PP.
- **Coal Production –** Check coal production Quantity from ZPP_PROD for mine code associated with the area entered by user in selection screen and period. (Excluding CHP process)
- **OB Production –** Check OB Production from OB Reconciliation Table (ZRGTT_OBM_REC) mine code associated with the area. If in case OB measurement is not completed for same period, you can check ZPP_PROD for mine code associated with the area entered by user in selection screen.
- **Actual Manshift –** Sum of actual manshift of all UG mine.
- **Adjusted Manshift –** Sum of adjusted manshift of all OC mine.
- **Area Manshift –** For area manshift follow the below steps.
  a. View the table V_001P_ALL as input parameter INDIA and pass the personal area from ZRGTT_PP against the area code entered in entry screen collect all the sub area against the same personal area.
  b. Delete those sub area of OCM and UGM mines which have used in mine level mentioned in ZRGTT_PP for same personal area.
  c. Then pass the rest of sub area collected from V_001P_ALL in PC00_M99_CWTR in sub area field, pass the financial start date and the last date of month entered in entry screen, put the wage type and take the view as For-view payroll period and execute as executed in mine level.
  d. Same for OT.

Note: -We faced run-time issues while executing the areal level OMS at the time of fetching manshift. So, we created a custom table **ZHRPP_OMS_WAGE** to update manshift data at CIL level to eliminate performance issues while executing OMS in area level.

In table **ZHRPP_OMS_WAGE** we update the manshift data as per company code, personal area, personal sub-area, for view pay roll period, wage type, amount from wage type report PC00_M99_CWTR.

To update the table **ZHRPP_OMS_WAGE** we made a T code ZPP_OMS_HRPY_UPDT where we must input the month and year and execute, in the basis of input data all the manshift data fetched from wage type report and update in the custom table.

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Tech Mahindra	USER MANUAL	Coal India
	Output Per Manshift (OMS)	

OMS Calculation: - The Area OMS calculation to be done using the formula below based on the mine type.

- Overall UG OMS.
- Overall OC OMS.
- Overall Area OMS.

(i) Overall UG OMS

$$= \frac{\sum \text{Coal production of all UG mines}}{\sum \text{Manshift of all UG mines}}$$

(ii) Overall OC OMS

$$= \frac{\sum \text{Coal production of all OC mines}}{\sum \text{Adjusted Manshift of all OC mines}}$$

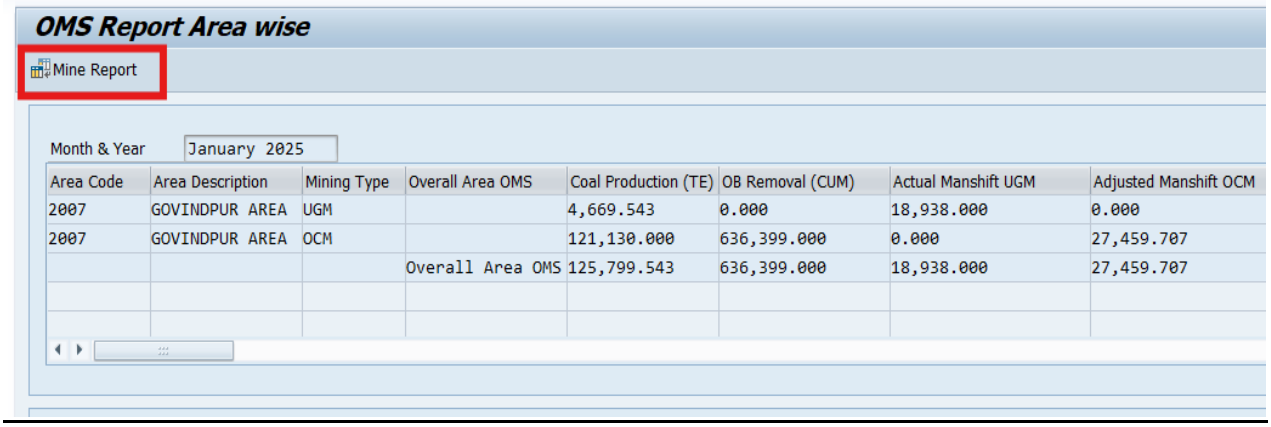
(iii) Overall OMS

$$= \frac{\sum \text{Coal production of all UG \& OC mines}}{\sum \text{Manshift of all UG mines, adjusted Manshift of all OC mines and Area Manshift}}$$

Progressive Calculation:

The logic remains the same for all fields except for the consideration of posting date (date range). The date to be considered for the progressive is Start date to be the 1st date of particular financial year till the end of the current month entered by the user.

We have also a radio button option for all mines wise report associated with the area in left corner of Area OMS report.



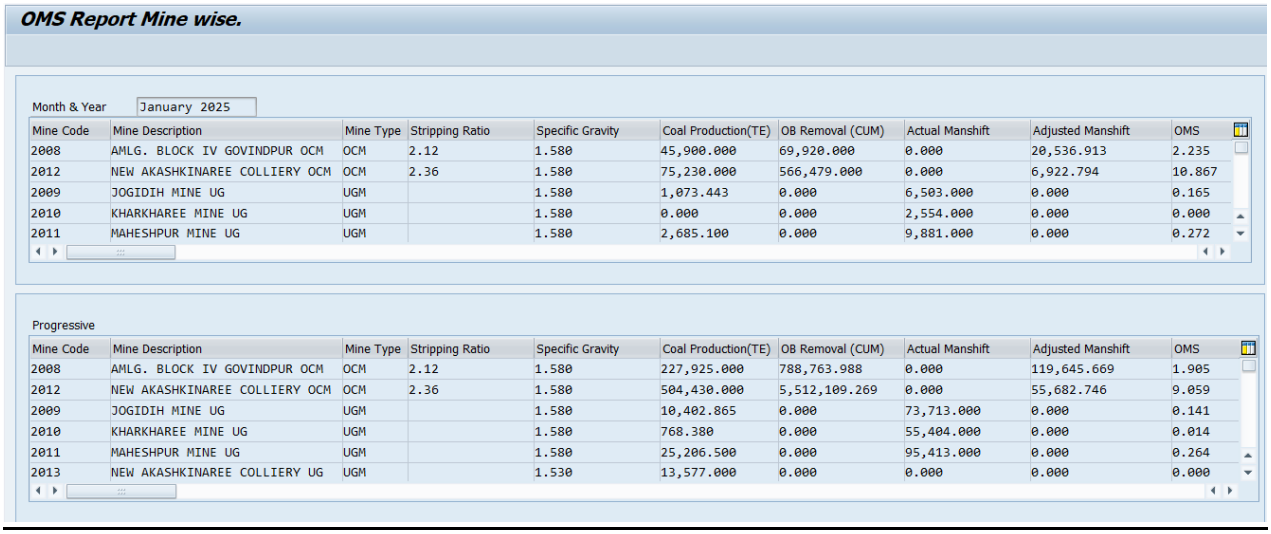
OMS Report Area wise

Mine Report

Month & Year: January 2025

Area Code	Area Description	Mining Type	Overall Area OMS	Coal Production (TE)	OB Removal (CUM)	Actual Manshift UGM	Adjusted Manshift OCM
2007	GOVINDPUR AREA	UGM		4,669.543	0.000	18,938.000	0.000
2007	GOVINDPUR AREA	OCM		121,130.000	636,399.000	0.000	27,459.707
			Overall Area OMS	125,799.543	636,399.000	18,938.000	27,459.707

While pressing on the mine report below screen will open for all mine associated with the area.



OMS Report Mine wise.

Month & Year: January 2025

Mine Code	Mine Description	Mine Type	Stripping Ratio	Specific Gravity	Coal Production(TE)	OB Removal (CUM)	Actual Manshift	Adjusted Manshift	OMS
2008	AMLG. BLOCK IV GOVINDPUR OCM	OCM	2.12	1.580	45,900.000	69,920.000	0.000	20,536.913	2.235
2012	NEW AKASHKINAREE COLLIERY OCM	OCM	2.36	1.580	75,230.000	566,479.000	0.000	6,922.794	10.867
2009	JOGIDIH MINE UG	UGM		1.580	1,073.443	0.000	6,503.000	0.000	0.165
2010	KHARKHAREE MINE UG	UGM		1.580	0.000	0.000	2,554.000	0.000	0.000
2011	MAHESHPUR MINE UG	UGM		1.580	2,685.100	0.000	9,881.000	0.000	0.272

Progressive

Mine Code	Mine Description	Mine Type	Stripping Ratio	Specific Gravity	Coal Production(TE)	OB Removal (CUM)	Actual Manshift	Adjusted Manshift	OMS
2008	AMLG. BLOCK IV GOVINDPUR OCM	OCM	2.12	1.580	227,925.000	788,763.988	0.000	119,645.669	1.905
2012	NEW AKASHKINAREE COLLIERY OCM	OCM	2.36	1.580	504,430.000	5,512,109.269	0.000	55,682.746	9.059
2009	JOGIDIH MINE UG	UGM		1.580	10,402.865	0.000	73,713.000	0.000	0.141
2010	KHARKHAREE MINE UG	UGM		1.580	768.380	0.000	55,404.000	0.000	0.014
2011	MAHESHPUR MINE UG	UGM		1.580	25,206.500	0.000	95,413.000	0.000	0.264
2013	NEW AKASHKINAREE COLLIERY UG	UGM		1.530	13,577.000	0.000	0.000	0.000	0.000

----------THANK YOU----------

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