



MINUTES OF MEETING BETWEEN MAHANADI COALFIELDS LIMITED (MCL), HINGULA OCP AND ABHITECH ENERGYCON LTD (AEL) FOR THERMOL-D PERFORMANCE EVALUATION REPORT

Dated: 04/01/2020

Reference:

PO No. MCL/GM(HA)/MMW/X/I-144/18-19/9050230131094 Dated: 29.08.2019

Equipment	Without Thermol-D	With Thermol-D
SURFACE MINER-25	02-Nov-19 to 10-Nov-19	16-Nov-19 to 18-Dec-19
DOZER-11910	14-Nov-19 to 28-Nov-19	29-Nov-19 to 30-Dec-19

Basis of Evaluation:

To qualify the diesel saving with the usage of THERMOL-D, as per following methods:

Calculation of Specific fuel Consumption & Performance Evaluation:

$$\text{SFC} = \frac{\text{Total Diesel Consumption}}{\text{Total Running Hours}}$$

The Saving (%) will be calculated as per the given formula:-

$$\text{Saving \%} = \frac{\text{SFC}_{\text{Pre}} - \text{SFC}_{\text{Post}}}{\text{SFC}_{\text{Pre}}} \times 100$$

Where,

SFC_{Pre} - Specific Fuel Consumption Without Thermol-D

SFC_{Post} - Specific Fuel Consumption With Thermol-D

Effect of Thermol-D on Key Parameteres:

- ◆ Reduction in Specific Fuel Consumption(SFPC)

Data Collection

- The Post-Trial (with THERMOL-D addition) was started after completion of pre-trial for 7-12 days duration.
- THERMOL-D added in the ratio of 1:2000 on v/v basis.

- The same set of parameters has recorded during the Pre and post- Trial.
- HMR data were taken from the individual equipment's on daily basis.
- All the Data were authenticated by the section engineer.
- Enclosed:
Annexure I – Pre & Post trial report

Comparison Report: Specific Fuel consumption (Liter per hour) comparison is given below:

Reference:

PO no. MCL/GM(HA)/MMW/X/I-144/18-19/9050230131094

Dated: 29/08/2019

SUMMARY OF THERMOL-D TRIAL REPORT Summary, HINGULA OCP						
Equipment	Trial Base	Trial Duration	Running Hour	HSD Cons.	Liter per hour	Average Saving (%)
SURFACE MINER-25	Without Thermol-D	02-Nov-19 to 10-Nov-19	84.87	8681	102.286	12.85%
	With Thermol-D	16-Nov-19 to 18-Dec-19	364.27	32472	89.143	
DOZER-11910	Without Thermol-D	14-Nov-19 to 28-Nov-19	160.48	8600	53.589	4.90%
	With Thermol-D	29-Nov-19 to 30-Dec-19	303.92	15488	50.961	
Total Average Saving (%)						8.88%

Summary of Thermol-D Trial, M/s Mahanadi CoalFields Limited, Hingula OCP (Odisha), Thermol-D Trial Conducted by : M/s Abhitech Energycon Limited, Mumbai (MR).

Sr No.	Equipment	Engine Model No.	Trial Base	Trial Duration	Total Run (Hour)	Total HSD Consumed (Liter)	Liter/Hour	HSD Saving (%)	Remarks
1	SURFACE MINER-25 (L & T)	KSM-303	Pre	02-Nov-19 to 10-Nov-19	84.87	8681.0	102.20	12.85%	
			Post	16-Nov-19 to 18-Dec-19	364.27	32472.03	89.14		
2	DOZER-11910 (BHEL)	D3-755	Pre	14-Nov-19 to 28-Nov-19	160.48	8600.00	53.59	4.90%	
			Post	29-Nov-19 to 30-Dec-19	303.92	15485.00	50.95		

Total Average HSD Saving (%)	8.88%
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For, Mahanadi Coalfields Limited

1. Mr. K.K. Dutta - Project Engineer
Hingula OCP

2. Mr. Parma Chandra Singh - Trial Manager

3.

J.R. Behara, Dy. Mgr. (X)

Manager (Execv.)
Hingula O.C.P.

Handwritten notes:
PROJECT ENGINEER
HINGULA OCP
MCL
Date: 4.1.2020

For, Abhitech Energycon Limited

1. Mr. Dinesh Bhardi - Mgr. (Execv.)

2. Mr. Shankar Lal - Sr. Exe. (Execv.)

Handwritten notes:
Date: 4.01.20
Shanker
ABHITECH ENERGYCON LIMITED
MUMBAI