Railway : Western Railway	Shed : Ratlam

I) **Brief History**

Ratlam Diesel Shed, Located on the main line between Delhi-Mumbai, started with a meager holding of 15 locomotives on 1st May 1967. The shed has to its credits of hauling prestigious Delhi-Mumbai Rajdhani Exp. and other long distance trains. As on today the shed has holding of 126 locos comprising of WDM_{2A}-55, WDM_{3A}-46, Inferior Service (WDM_{2A})-14, WDS6-04 and WDS4B-07 class locomotives. The shed caters to the need of freight as well as passenger trains operating in Madhya Pradesh, Gujrat, Maharastra and Rajasthan states and long distance passenger train like Sampark Kranti (For BRC-MOD) and Sabarmati Exp. (RTM-DBG).

Photo of Shed	Loco of Shed in Colour Scheme
	

1	Year of Establishment	1st May 1967
2	Loco No. / Type of the first Loco	18417 WDM2 (Recd. on 30.04.1967 from NKJ)
3	Details of any Heritage locos in shed on pedestal or otherwise	--No --
4	ISO Certification Year ISO : 9001-2008 ISO : 14001-2004 ISO : 18001-2007	Integrated Management System Certification achieved on 04.09.2009

5	Type -Wise Holding	WDM2	WMD_{3A}	WDS 6	WDS 4B	Inferior service WDM 2	Total
		55	46	04	07	14	126

6	Maximum Holding (Year/Number of Locos)	168 WDM_2 in 1986
7	Present Loco Link	55
8	Homing Capacity	100 locos
9	Augmentation Plans	A New (BG) Rail Line from Dungerpur to Ratlam Via Banswara in Western Railway was sanctioned as per letter No. M.137/18/99 dated 26.10.09 of CME (Plg.) CCG & Rly. Bd. Letter No. 96/W-I/LCT/W/5 dated 15.07.09. On the basis of above project, it is anticipated and proposed augmentation of 50 loco at RTM loco shed.

10	Other History (Not more than 4 lines)

- Ratlam Diesel Shed loco No. 16815 has won 2nd prize of Rs. 2 lacks in Crew Friendly Cab Competition (All India Level) on 16.11.02, which was held at New Delhi and shed staff was awarded Rs. 25,000/- by General Manager- WR.
- Railway Board started a project of FRP cab modification with TIFAC, at Ratlam shed. Under this project two loco has been modified as FRP cab. (loco No. 18707 & 18626.)
- The efficiency shield for Best Diesel Shed has been awarded to Ratlam Diesel shed in last Four year i.e. 2005-06, 2006-07, 2007-2008 & 2008-2009 successively and this year also shed is successfully achieve the targets given by HQ till date.
- A trouble Shooting Guide for diesel loco pilot has been brought by DTTC-RTM. This guide contents various trouble shooting process about for WDM 2A, WDM 3A, WDG 3A, WDM 3D and WDG 3D alongwith MEP-660 and MCBG, VCD, Auto Flasher etc. This guide also depicts about valve, Cocks, Relays, Contactors and Assemblies etc. fitted with the locomotive. A flow diagram is provided for trouble shooting of locomotive indicted Yes / No. Contents of this guide will help in enhancing knowledge of loco pilot and to prevent on line failures.

II) VITAL STATISTICS

1	Sanctioned Strength	1120
2	On Roll Strength	996
3	No. of Officers	08
4	No. of Supervisors	132
5	Total Area	119000 m^2 (Approx)
6	Covered Area	6902 m^2 (Approx)
7	Percentage of Staff housed in Railway Quarters	24.75 %
8	Power Consumption	2400 Unit per day (Avg.)
9	Water Consumption	1.5 lacks ltrs / day (Avg.)

10	Education Profile of Staff	Upto 8^{th}	8^{th}	10^{th} pass	10-12^{th} pass	ITI Pass	Graduate
		2.1%	24.0 %	18.3 %	5.0 %	30.3 %	20.2 %

11	Age Profile of Staff	<30 years	30-40 years	41-50 years	51-55 years	56-60 years
		20.2 %	21.0 %	23.3 %	21.2 %	14.0 %

12	MPR as Circulated by E & R dte	6.29

III) Performance Parameters

1	SFC (2009-10)	Freight	Passenger
		1.61	4.33

2	LOC (2009-10)	With change	Without Change
		2.82	2.51

3	Shed Consumptions of Fuel	488.6 ltrs. / Loco / Month (Avg)

4	Kms. Earned by Shed Locos / Month (2009-10)	1456266 (Avg. / Month)

IV) Any Important Innovation

MODELS IN MODEL ROOM

WORKING MODEL OF WDM2 LOCO:- This model is prepared by Diesel traction training center Ratlam

This model contents working engine notch up, loco movement, automatic transition, working procedure of dynamic brake etc.

It also includes artificially troubleshooting of;

a) Engine not cranking

b) Engine not raising

c) Series power contactor not pickup

D) Fuel pump contactor not pickup

e) GF contactor not pickup.

This model is used for training to running staff and maintenance staff.



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MODELS IN MODEL ROOM

ENGINE NOT CRANKING

This work station is prepared by Diesel traction training center Ratlam for practically training about WDM3A diesel loco's "Engine not cranking".

In this new work station includes all possible troubles and their written remedial action sequencely displayed, practically demonstrate & shown through photographs

This model is used for training to running staff and maintenance staff.



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Engine Block Track Trolley

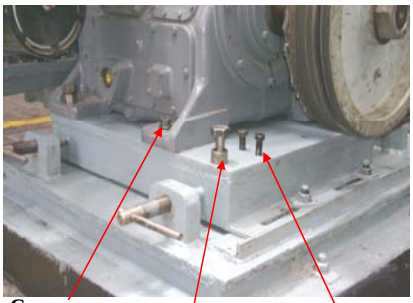
Engine Block Track Trolley is developed for movement of engine block from block section to cleaning section. Block cleaning in cleaning section improves quality of cleaning for detection of fine cracks, welding defects etc in engine block and effective utilization of cleaning resources.

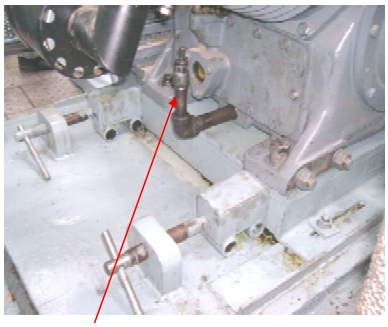


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Compressor Exhauster Test Stand

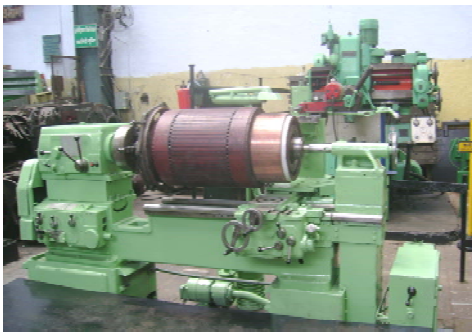
Diesel shed has developed new foundation for testing of compressor and exhauster on one stand. Previously it was done on two different test stand hence it was troublesome for alignment/fitment. By the development of new foundation, there is a saving of manpower & time with good quality work.





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TM Armature Mica Cutting Machine





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Shed has developed Mica under cutting machine by using old scraped lathe machine. The machine is modified to hold armature in such a way that mica under cut of traction motor is done through motor drive.

Before development of this machine the work was carried out manually in 8-10 Hrs. Now with the help of this machine the same is done within 3 Hrs it is a saving of man power with excellent accuracy .