RAILWAY: SOUTH EASTERN RAILWAY SHED: DIESEL LOCO SHED, KHARAGPUR

I. Brief History

Photo of Shed Loco of Shed in Colour Scheme

Diesel Loco Shed, Kharagpur, S.E.Railway









1. Year of Establishment: 1986.

2. Road No./Type of the first loco homed in Shed: WDM1

3. Details of any heritage Locos in Shed on pedestal or otherwise: NIL

4. ISO Certification Year

   9001
   14001 ISO Certification under process. Expected to be completed within this calendar year.
   18001

5. Type Wise Holding (as on 01-06-10): WDM2: 46+2(Derated); WDM3A:35 WDG3A:5 WDS6:21
   DEMU 1400 HP DPCs: 07

6. Maximum Holding (Year/Number of Locos): Avg: 117.26 in 2008-09 (excluding 7 DEMU DPCs)

7. Present Loco Link: The shed is presently maintaining a 26 loco Coaching link, working in TATA-DNR-ECR link (15 loco link with 15 days schedule of WDM3A) & HWH-SRC-DIGHA circuit (11 loco link). Other locomotives are working in Multies & Consist formation over SE, SECR, ER, ECR, E.Co.R, NFR, NER & NR. Three DEMU rake working in Santragachi-Digha, Bankura-Rainagar and Rupsa-Baripada.

8. Homing Capacity: 100 locomotives

9. Augmentation Plans: Proposal for enhancement of homing capacity from 100 to 150 locomotives at Diesel Loco Shed/Kharagpur has been sent to HQ on 28-05-2008.

10. Other History (Not more than 4 lines):

- Old steam shed converted to diesel loco shed: 01-09-1986

- Initial homing capacity: 60 in 1987
- Homing capacity increased to 100 in 1995
- Bio-diesel esterification plant of 2 KL per day capacity was commissioned in June 2006.
- Augmentation of facilities at Diesel Loco Shed, Kharagpur for maintenance of DEMUs under progress. Expected to be completed by August 2010.

II. Vital Statistics

1. Sanctioned Strength : 801
2. On Roll Strength : 728 (excluding non-core activity, viz. shed shunting, bio-diesel production, Canteen & fan&light maintenance in DEMU rake)
3. No. of Officers : 7
4. No. of Supervisors : 56
5. Total Area : 85,840 sq.mts. (Approx.)
6. Covered Area : 14,500 sq.mts. (Approx.)
7. %age of Staff housed in Railway Quarters: 39.6% (excluding ministerial staff)
8. Power Consumption : Data not available.
9. Water Consumption : Data not available.

10. Educational Profile of Staff:

Upto 8th	>8th	10th Pass	10-12th	ITI	Graduate
14.61%	4.49%	33.87%	28.57%	62.28%	18.46%

11. Age Profile of Staff:

<30 yrs	30-40	41-50	51-55	56-60
5.8%	25.5%	52.7%	8.3%	7.7%

12. MPR as circulated by E&R Dte: 6.27 (Shed statistics)

III Performance parameter (2009-10)

S.F.C: Coaching: 3.06 lts / 1000 GTKM Goods: 2.07 lts / 1000 GTKM

LOC: 1.56 lts / 100 EKM

Shed consumption of fuel: 367135 lts/Year.

Kms Earned by Shed locos/month : 10869 km

IV. Any Important innovation

Dynamic grid isolation circuit modification in WDM3A locomotives:-

Grid resistance of WDM-3A locomotives becomes low due to water ingress. Efforts have to be made in every schedule to locate the trouble so that grid resistance can be improved which is very difficult during rainy season. With single reversor and single BKT design (WDM3A & WDG3A) locomotive, armature negative connection of traction motor Nos.4, 5 & 6 are directly connected with grid resistance, through R4, R14 & R21 hence ground relay is tripped if for any reason grid resistance becomes zero even in motoring.

3 Nos. magnetic contactors (FS1, FS2 & FS3) is connected to armature negative connection of traction motor Nos.4, 5 & 6. Its operating coil is connected with wire No.23 & 4, through master controller finger interlock. During dynamic application by advancing selector handle from OFF position to active zone, magnetic contactor will get supply through closed finger interlock and 3 magnetic contactor will be picked up and grid resistance will be automatically connected with R1, R14 & R21 and dynamic grid resistance will be activated. In case of earth fault of dynamic grid or low IR of grid resistance, the selector handle can be eased to OFF position, whereby FS1, FS2 & FS3 will be dropped and TM No.4,5&6 armature circuit completely cut off from dynamic brake circuit.

****