



WDP4D – 4500 HP PASSENGER LOCOMOTIVE

Broad gauge passenger traffic Co-Co diesel electric locomotive equipped with 16 cylinder 4500 hp engine with IGBT based traction control system.

This is a dual cab locomotive i.e. it has driving cabs at both ends. Both the cabs have full width control consoles, each console having three TFT displays. Each cab is provided with a 'Button Lever' (BL) key for operating the locomotive. The ECC-1 Side cab is named as Cab-1 while the Radiator Side cab is named as Cab-2. The first WDP4D loco was manufactured in Oct '10.

Diesel Engine

- ▶ 16 Cylinder 710 G3B, 2 stroke, turbocharged – after cooled
- ▶ Fuel Efficient Engine
- ▶ Injection System - Mechanical Unit Injector
- ▶ Governor - Woodward
- ▶ Compression Ratio- 16:1
- ▶ Lube Oil Sump Capacity - 1457 Ltrs.

Brakes

- ▶ Electronic Air Brake System (KNORR-NYAB-Computer Controlled Braking)
- ▶ Air, hand, dynamic brake
- ▶ Pure air brake

Transmission

- ▶ Electrical AC-AC
- ▶ 6 Traction motor (3 in parallel per bogie)
- ▶ Suspension – Axle hung / taper roller bearing
- ▶ Gear Ratio – 77:17

Truck

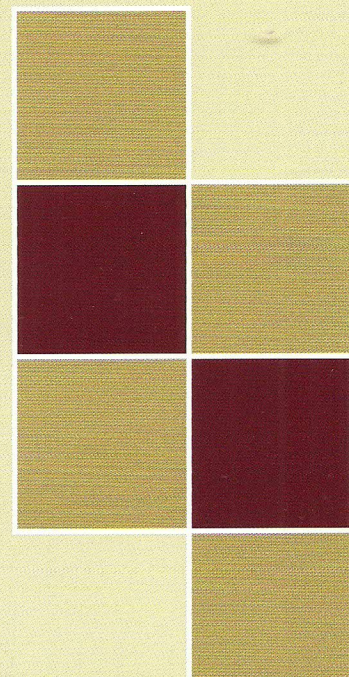
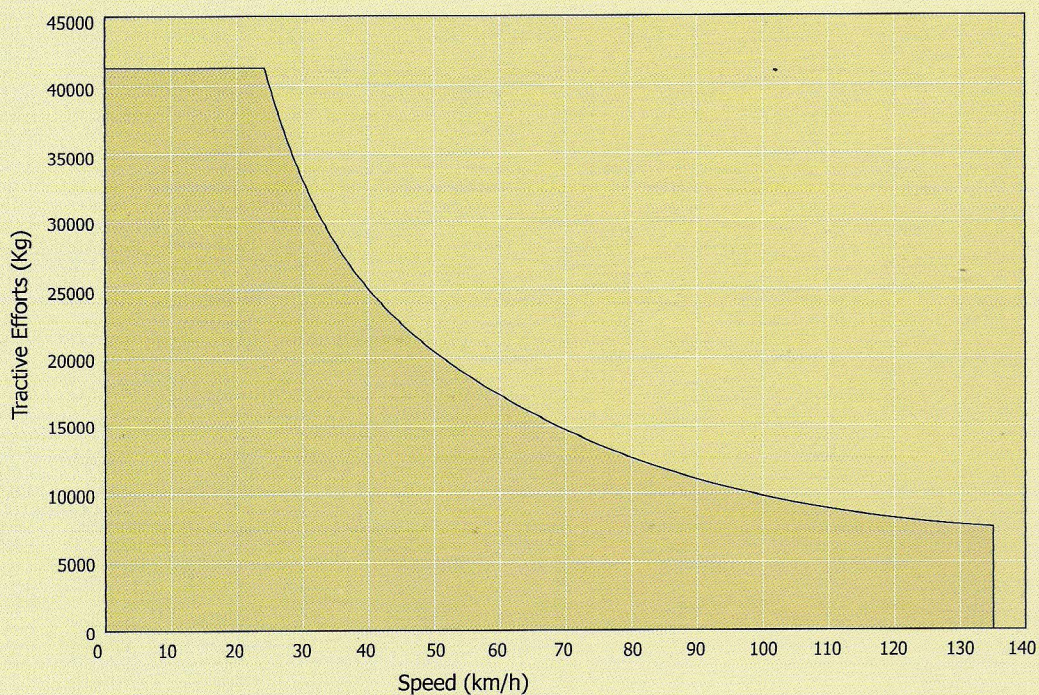
- ▶ High adhesion Fabricated Steel Fab-II/Cast design truck
- ▶ High traction, high speed, bolsterless 3 axle bogie with unidirectional Traction motor arrangement



General Characteristics	
Installed Power	4500 HP
Axle Load	20.5 T
Gauge	1676 mm
Wheel arrangement	Co-Co
Wheel diameter	1092 mm
Height	4201mm
Width	3062 mm
Overall Length	23 m
Weight	123.0 T
Max tractive effort	41 T
Maximum speed	135 Kmph
Fuel tank capacity	5000 Ltrs.
Locomotive Control	Loco Control Computers Traction Control



Tractive Effort Chart



For enquiries contact:
Chief Marketing Manager, Diesel Locomotive Works, Varanasi, INDIA, 221 004
 Tel: 0542-2642502, Fax-0542-2270101, Email: cmgm@dlw.railnet.gov.in
 Website: www.dlw.indianrailways.gov.in