



WDM3D - 3300 HP MULTIPLE OPERATION LOCOMOTIVE

The 3300 HP WDM3D locomotive is a mixed service locomotive with 500 mm shorter platform as compared to WDG3A and provided with a modified version of high adhesion bogies employed on WDG3A. It has reduced weight because of fabricated beams, light weight traction motors and a smaller fuel tank etc. It uses modern microprocessor technology for excitation & propulsion control and wheel creep.

This locomotive is suitable for multiple operations.

The locomotive is equipped with AC-DC transmission consisting of a directly coupled self ventilated BHEL make TA10102 EV model traction alternator with BHEL make panel mounted rectifier type AR 3700A, driving 6 axle hung nose suspended BHEL/CG/GE traction motors geared for maximum speed of 120 km/h.

The loco is being further upgraded from 3300 HP to 3500 HP making it capable to haul the 24 coach train at 110 kmph.

Diesel Engine

- ▶ 16 Cylinder 251C (Up-rated) Engine, 4 Stroke, turbocharged
- ▶ Fuel Efficient Engine
- ▶ Injection System – Through Fuel Injection Pump, Fuel Injection Tube & Nozzle
- ▶ Governor - Woodward/MCBG
- ▶ Compression Ratio - 11.75 : 1
- ▶ Lube Oil Sump Capacity – 1025 Ltrs

Brakes

- ▶ Panel mounted IRAB-1 Brake system
- ▶ Pure air Brake system

Transmission

- ▶ Electrical AC-DC
- ▶ 6 Traction motor (3 in parallel per bogie)
- ▶ Suspension – Axle hung / Nose Suspension
- ▶ Gear Ratio – 18:65

Truck

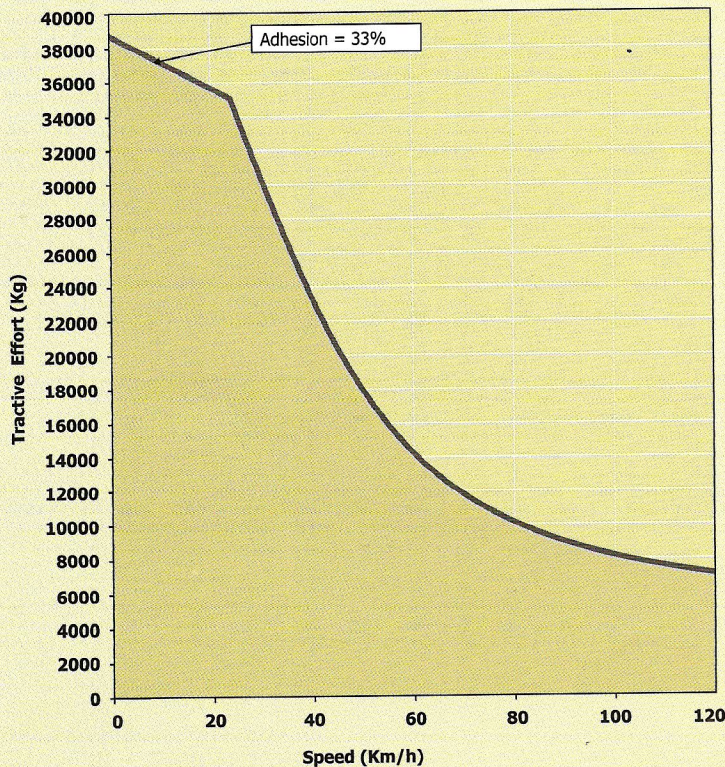
- ▶ High adhesion Fabricated Co-Co bogie
- ▶ Adhesion (μ) - 0.33



General Characteristics	
Installed Power	3300 HP
Axle Load	19.5 T
Gauge	1676 mm
Wheel arrangement	Co-Co
Wheel diameter	1097 mm
Height	4162 mm
Width	3016 mm
Overall Length (Over Buffer Beam)	17350 mm
Weight	117 T
Max. tractive effort	38.6 T
Maximum speed	120 Kmph
Fuel tank capacity	5000 lts
Locomotive Control	Microprocessor



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