



LOCOMOTIVES



GT50AC Freight Locomotive

For more than 90 years we have produced the most durable, reliable and sustainable locomotive products and services in the rail industry. We design and manufacture diesel-electric locomotives for all commercial rail applications, with 65,000 EMD-powered locomotives delivered to more than 75 countries. Our technology leadership and superior performance drive our reputation for exceptional quality, service and innovation.

The EMD GT50AC Locomotive features the 20-cylinder 710 engine with 5,500 brake horsepower – the most powerful diesel-electric locomotive to run on the rail network in India. With a record high tractive effort of 560 kN, it pulls significantly more load at higher speeds, increasing throughput. Key features of the GT50AC locomotive include a crashworthy cab designed for operator safety and comfort, and lightweight fabricated bogies.

The GT50AC locomotive offers a state-of-the-art locomotive design, providing one of the most versatile and powerful locomotives in the region, capable of running on existing tracks and also on the future dedicated freight corridors.

GT50AC Freight Locomotive Features and Benefits

- ▶ **Highly reliable and fuel efficient EMD 710 engine with 12,000 operating worldwide**
- ▶ **Cab design with EN12667 collision protection and ergonomic control consoles**
- ▶ **Gen3 FIRE—Functionally Integrated Railroad Electronics—Compliant to AAR S590, AAR S591—display and environmental standards and industry standards**
- ▶ **Inverter driven cooling fans and truck blowers for optimized performance**
- ▶ **Microprocessor controlled air brakes**
- ▶ **Pioneering high adhesion, bolsterless, fabricated three axle bogies**
- ▶ **Operator amenities including air conditioning, heating and toilet**
- ▶ **Optional IntelliTrain® remote monitoring and diagnostic services**
- ▶ **Optional distributed power system**

EM2000™ Microprocessor Control System

- ▶ **Excitation and load control**
- ▶ **Adhesion control**
- ▶ **Engine control**
- ▶ **Diagnostic system**
- ▶ **Archived unit history data**

GT50AC Locomotive Technical Details

Locomotive Traction System	AC Traction
Diesel Engine	20-710
Main Traction / Companion Alternator	TA20 / CA9
Number of Axles	6
Traction Rating	4,101 kW
Maximum Speed	105 kph
Starting Tractive Effort	560 kN
Continuous Tractive Effort	405 kN
Fuel Capacity (usable)	8,000 liters
Maintenance Interval (minimum)	92 days
Maximum Weight	134 mT
Nominal Axle Load	22.3 mT
Track Gauge	1,676 mT
Traction Motor	A2921-6 AC
Designed for	India