



LOCOMOTIVES



GT-Series Freight Locomotives

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 GT-Series locomotive platform includes GT38AC, GT42AC and GT46AC models. These locomotives integrate EMD 710-Series engines together with AC traction technology to provide superior efficiency and performance for a broad range of operations. We pioneered development of AC traction for heavy haul diesel-electric locomotives, and today thousands of EMD AC locomotives operate worldwide providing enhanced adhesion performance and lower life cycle costs.

The advanced technologies of EMD GT-Series Locomotives provide key product solutions for safety, reliability, efficiency and sustainability, with GT38AC, GT42AC and GT46AC locomotives delivering optimal rail solutions in service across South America, the Middle East, Africa and Southeast Asia.

GT-Series AC Freight Locomotive Features and Benefits

- ▶ Highly reliable and fuel efficient EMD 710 engine
- ▶ Durable AC traction
- ▶ Bogie-controlled AC traction inverters for increased reliability
- ▶ Semi-steering bogie option for enhanced curve negotiation capability
- ▶ High capacity dynamic brake offers uniform braking effort over a wide speed range
- ▶ Inverter driven accessories for improved fuel economy
- ▶ Cab and carbody engineered for improved visibility
- ▶ Functionally Integrated Railroad Electronics (FIRE™) man-machine interface
- ▶ Option for EMD Uptime next-generation rail predictive analytics platform

EM2000™ Microprocessor Control System

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

GT-Series AC Locomotive Technical Details

	GT38AC	GT42AC	GT46AC
Locomotive Traction System	AC Traction	AC Traction	AC Traction
Diesel Engine	8-710	12-710	16-710
Number of Axles	6	6	6
Locomotive Height	3,766 mm	4,231 mm	4,492 mm
Length over Couplers	18,942 mm	20,314 mm	22,295 mm
Traction Horsepower	1,491 kW	2,237 kW	3,207 kW
Maximum Speed	80 kph	100 kph	100 kph
Starting Tractive Effort	475 kN	500 kN	650 kN
Continuous Tractive Effort	400 kN	470 kN	650 kN
Dynamic Braking Effort	225 kN	264 kN	332 kN
Fuel Capacity (usable)	3,800 liters	5,000 liters	9,500 liters
Maintenance Interval (minimum)	92 days	92 days	92 days
Maximum Weight	108 mT	120 mT	156 mT
Maximum Axle Load	18 mT	20 mT	26 mT
Track Gauge	1,000 -1,435 mm	1,000 -1,435 mm	1,000 -1,435 mm
Designed for	Sub-Saharan Africa and Southeast Asia	Sub-Saharan Africa, South America & Southeast Asia	Australia, the Middle East, North Africa, South America

Optional Model Configurations

Other Gear Ratios Available

Track Gauges up to 1,676 mm

Heavy weight GT46AC model available / GT46ACS model available for desert operations