

GT46AC for 1,520 mm Gauge (TE4500)





For more than 100 years, Progress Rail has produced the most durable, reliable and sustainable locomotive products and services in the rail industry. Progress Rail designs, manufactures and sells the iconic EMD® locomotives for all commercial railroad applications. Over 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.

Many of the core technologies powering the GT46AC locomotive for 1520 gauge were first introduced with the SD70ACe platform in 2005. This powerful and efficient locomotive integrates the reliable 16-cylinder 710 engine, our EM2000[™] microprocessor control system and AC traction. The GT46AC is driven by advanced technologies, providing safety, reliability, efficiency and sustainability, while delivering optimized life-cycle cost. This service-proven workhorse demonstrates leading performance even while operating in harsh conditions.

Thousands of EMD-powered freight locomotives operate in heavy-haul service across the globe, including North America, South America, the Middle East, Africa and Australia. Built on this expertise and utilizing extensive engineering design, testing and validation, the GT46AC locomotive meets the latest Eurasia Economic Union Technical Regulation requirements and can perform successfully in demanding operating environments.







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TECHNICAL DETAILS

Locomotive Traction System	AC
Diesel Engine	EMD® 16-710G3C
Number of Axles	6
Locomotive Height	5,066 mm
Length over Couplers	22,720 mm
Engine Power	3,355 kW
Maximum Speed	120 kph
Starting Tractive Effort	660 kN
Dynamic Braking Effort	365 kN
Fuel Capacity	9,300 liters
Maintenance Interval	184 days
Maximum Service Weight	150 +0/-3% mT
Maximum Axle Load	25 mT
Track Gauge	1,520 mm

FEATURES AND BENEFITS

- Designed to meet TR/CU and GOST regulations, including 9238-1T clearance profile
- Highly reliable two-stroke, 16-cylinder 710 engine
- EU IIIA emissions compliant
- ⁻ Tuned for maximum fuel efficiency
- Dynamic Gas Blending[™] option for up to 80% substitution of diesel with liquefied natural gas
- Isolated cab for reduced driver exposure to noise and vibration
- High adhesion, radial bogie design
- Individual axle control traction system
- Inverter-driven accessories for improved fuel economy

EMD Functionally Integrated Railroad

- Electronics (FIRE™) man-machine interface
- Optional IntelliTrain[™] remote monitoring and diagnostic services
- Operates in extreme weather conditions and climates down to -50°C

EM2000[™] Microprocessor Control System

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





