



LOCOMOTIVES



SD70ACS Freight Locomotive

For more than 90 years, we have produced the most durable, reliable and sustainable locomotive products and services in the rail industry. As a diesel-electric locomotive supplier to the Middle East and North Africa regions over many decades, we have engineered locomotives tailored for desert environments including Saudi Arabia, the United Arab Emirates and Mauritania.

Based on the EMD SD70ACe locomotive, with thousands operating in heavy-haul service across the globe, the EMD SD70ACS model is specially designed for railroads operating in harsh climatic conditions and temperatures up to +50°C. Through integration of custom design features and technologies, the SD70ACS delivers safety and performance for challenging desert service including sand and extreme heat.

The SD70ACS locomotive is equipped with the EMD 710 engine, AC traction, EM2000 microprocessor control system, and an isolated cab. This locomotive is also fitted with European Train Control System (ETCS) equipment.

The advanced technologies of the SD70ACS locomotive are designed for safety, reliability, efficiency and sustainability, while delivering life-cycle cost optimization and leading performance.

SD70ACS Feight Locomotive Features and Benefits

- ▶ **Highly reliable EMD 16-cylinder 710 engine**
- ▶ **Isolated quiet cab design**
- ▶ **Microprocessor controlled airbrake system**
- ▶ **Three-cylinder WLN air compressor**
- ▶ **HTSC-II bolsterless 3 axle non-radial truck**
- ▶ **EMD Functionally Integrated Railroad Electronics (FIRE™)**

Advanced SD70ACS Features for Desert Operations

- ▶ **Pulse filtration system**
- ▶ **Enhanced carbody / door sealing**
- ▶ **Pressurized carbody**
- ▶ **Labyrinth gearcase sealing**
- ▶ **Advanced sand erosion protection**
- ▶ **Three-stage sand plow**
- ▶ **Cabin air filtration system**
- ▶ **Tropical roof**
- ▶ **High ambient temperature cooling system**
- ▶ **Low humidity dynamic brake system**

SD70ACS Locomotive Technical Details

Locomotive Traction System	AC Traction
Diesel Engine	16-710G3C-T2
Number of Axles	6
Locomotive Height	4,836 mm
Length Over Couplers	22,631 mm
Traction Horsepower	3,215 kW
Maximum Speed	113 km/h
Continuous Tractive Effort	698 kN
Starting Tractive Effort	850 kN
Dynamic Braking Effort	472 kN
Fuel Capacity (usable)	15,520 liters
Engine	16-71063C-T1
Maintenance Interval	184 days
Nominal Weight	190 mT
Axle Load	31 mT
Track Gauge	1,435 mm
Designed for	North Africa and the Middle East