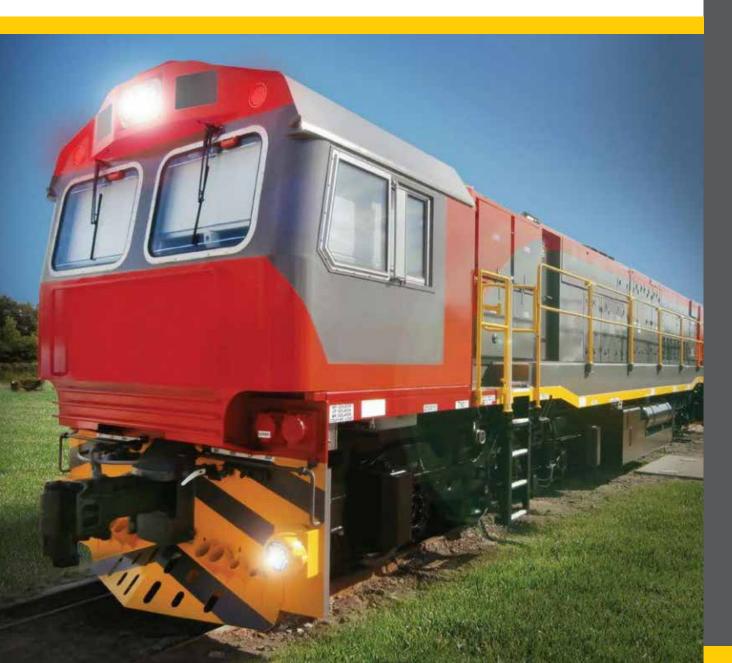
Progress Rail

A Caterpillar Company



EMD22L Freight Locomotive

For more than 90 years, we have produced the most durable, reliable and sustainable locomotive products and services in the rail industry.

Our technology leadership and superior performance drive our reputation for exceptional quality, service and innovation.

The EMD22L locomotive, which is currently operating in Tasmania, was custom engineered for Australia's lighter axle load branch lines, and offers a range of 15.75 to 18 TAL. It integrates the Cat® 3512C HD engine, providing exceptional power and fuel efficiency, and a microprocessor control system.

The advanced technologies of the EMD22L locomotive provide key product solutions for safety, reliability, efficiency and sustainability, while delivering life cycle cost optimization. It offers leading performance for operating in demanding Australia climates and environments.

EMD22L Freight Locomotive Features and Benefits

- **EU Stage IIIA Emissions Compliant**
- ▶ Durable 3500 Series Cat® engine
- ▶ Advanced control system for improved performance diagnostics
- ▶ Auto-Engine Start/Stop System (AESS) for increased fuel savings
- Optional telematics and remote monitoring system available
- ▶ High capacity EMD traction motors for narrow gauge application
- ▶ 15.75 and 18 TAL configurations
- Cab compliant with Australian standards and operator safety and comfort
- Optional RS-1 clearance available
- Operating temperature range between -30°C to 45°C with no derate

Cat® 3500C-HD Engine Series

- ▶ More than 100,000 3500-series engines in service in a wide range of applications
- Built in Lafayette, Indiana, USA
- ▶ 184-day maintenance cycle at EU Stage IIIA

EMD22L Locomotive Technical Details

Diesel Engine	Cat® 3512C-HD
Emissions Standards	EU Stage IIIA Compliant
Engine Power	1,640 kW / 2200 hp
Axle Arrangement	Co - Co
Traction Motors	D43 or D36 optional
Air Brake	Wabtec FastBrake
Dynamic Braking Effort	180 kN (95 kN for optional D36 traction motors)
Stall Tractive Effort (nominal)	350 kN (305 kN for optional D36 traction motors)
Continuous Tractive Effort (nominal)	296 kN (242 kN for optional D36 traction motors)
Nominal Weight	94.5 to 108 tonne
Axle Load Range	15.75 to 18 TAL
Track Gauge	Narrow, standard, yard and broad gauge configurations
Designed for	Australia / Tasmania and South America

