# **ROLLING STOCK**





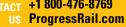




**EMD FREIGHT & PASSENGER LOCOMOTIVES** EMD JOULE BATTERY ELECTRIC LOCOMOTIVES LOCOMOTIVE MODERNIZATIONS & REBUILDS **LOCOMOTIVE COMPONENTS & SERVICES NEW & RECONDITIONED FREIGHT CARS** FREIGHT CAR COMPONENTS LOCOMOTIVE & FREIGHT CAR LEASING















### **ROLLING STOCK**

# Progress Rail

A Caterpillar Company



Progress Rail serves customers through a diversified line of EMD® freight and passenger locomotives, and offers new, used and leased freight cars. EMD locomotives, engines and services have kept the global rail industry rolling for the past century. Progress Rail acquired Electro-Motive in 2010. Since then, we have worked together as one team to deliver complete rail solutions. Our team is willing to take today's challenges and address them head on for the next wave of modern rail.

Today, we continue the EMD legacy by providing the same reliable products the industry has come to depend on – not only with the iconic EMD product name, but also innovative features and technologies to meet stringent customer requirements and maintain high performance.

#### FREIGHT & PASSENGER LOCOMOTIVES

As a worldwide leader, Progress Rail offers diesel-electric EMD locomotives and aftermarket parts for all commercial railroads, including freight, intercity passenger, commuter, switching, industrial and mining applications. Over 64,000 EMD-powered locomotives have been delivered to more than 75 countries to date.

EMD freight locomotives have been specifically developed to deliver the leading fuel efficiency, reliability and maintainability railroads expect. These workhorses offer optimal rail service across North and South America, Europe, the Middle East, Eurasia, Africa and Southeast Asia, with a growing global presence. In addition, all EMD 645 and 710 engines can be operated using B20 biodiesel. Use of natural gas as a fuel is also supported.

EMD passenger locomotives and parts have helped serve the transit industry since 1924. Fast forward to today. Progress Rail has devoted countless hours and design expertise to bring our innovative EMD F125 passenger locomotive to market. The F125 is the first new U.S. EPA Tier 4-certified passenger locomotive to be sold worldwide. Powered by a 4,700 horsepower Cat® C175 engine, the F125 has a broad range of advanced technologies and important safety features for enhanced performance, service-proven components for increased reliability and optimized fuel economy for commuter and intercity operations.

#### **EMD® JOULE SERIES BATTERY ELECTRIC LOCOMOTIVES**

The EMD Joule Battery Electric Locomotive series offers new builds or repowers ranging in battery capacities from 0.5 to 14.5 MWh to support a wide range of railway operations.

Joule locomotives recover energy through dynamic braking. When dynamic braking is activated to control train speed, the batteries are charged, saving what could otherwise be wasted energy. Alternatively the batteries can be charged through our range of wayside charging options tailored to meet operational needs.

#### HYDROGEN LOCOMOTIVE DEMONSTRATION

Progress Rail, BNSF, and Chevron have announced a memorandum of understanding (MOU) to advance the demonstration of a locomotive powered by hydrogen fuel cells to confirm the feasibility and performance of hydrogen fuel for use as a viable alternative to traditional fuels for line-haul rail. Hydrogen has the potential to play a significant role as a lower-carbon alternative to diesel fuel for transportation, with hydrogen fuel cells becoming a means to reduce emissions.



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REPOWERS, REBUILDS & LOCOMOTIVE LEASING

Progress Rail was built on a foundation of sustainability and a firm belief in extending the life cycle of rail products. Our repowered locomotives continue that tradition in the most innovative manner, by providing the greatest flexibility of any provider in the marketplace — now with a U.S. EPA Tier 4 compliant version to meet stringent emissions standards. By replacing less efficient engines and control systems with new, state-of-the-art technologies, the next generation of single-engine locomotives are ready to deliver reliable service for decades to come.

We extend the use of existing locomotives by providing rebuild, overhaul, and repower options. These turnkey modernization programs include upgrades to both electrical and mechanical systems to help extend the service life of a locomotive by up to 20 years. Repower packages can also be tailored for customer installation with the latest EMD® or Cat® engines and choice of control systems.

In addition to purchase options, we offer locomotive leasing solutions to fit individual customer needs.

#### **NEW & RECONDITIONED LOCOMOTIVE COMPONENTS**

Our genuine EMD® OEM components are available for locomotive, marine and power generation applications. All EMD parts are backed by a comprehensive warranty to ensure long-term, dependable service. Our EMD® OEM parts are available as new or UTEX® (Unit Exchange). Available components include, but are not limited to:

#### **EMD® OEM PARTS**

Air compressors

Main generators

**Engines** 

Traction motors

Turbochargers

Power assemblies

Wheels, axles and combos

As a leading global supplier of reconditioned and core locomotive components, Progress Rail offers an integrated network of reconditioning services, coupled with new parts availability, to enable companies to reduce their annual fleet maintenance costs.

Available components include, but are not limited to the following:

#### **PARTS**

- Accessory racks
- Air brakes
- Air compressors
- Air dryers
- After-cooler
- Angle cock
- Aux Gens
- Bell
- Control Panels
- Cooling Systems
- Draft Gears
- Emergency valves
- Engines
- Equipment Rack

- Event Recorder
- Fuel monitoring systems
- Journal boxes
- Main generators
- Pneumatic horns
- Power assemblies
- Radiators
- Sanitation systems
- Speed indicators
- Traction motors
- Trucks
- Vent valves
- Wheels, axles & combos

#### **LOCOMOTIVE SERVICES**

Contract maintenance ensures your locomotive fleet is not only expertly maintained to OEM standards, but also meets proper regulatory requirements. Progress Rail currently performs locomotive maintenance service around the world.

Our diversified services include, but are not limited to:

#### **LOCOMOTIVE SERVICES**

Technical support

Maintenance management

Materials management

Labor management

Workforce training

## NEW AND RECONDITIONED FREIGHT CARS & COMPONENTS

Our integrated business model has been built on our thorough recycling operations. As a leader in freight car recycling, we provide a steady supply of reconditioned freight car components, including wheel sets, side frames, bolsters, couplers, yokes and more. Customers also have the option to purchase new components. Our team ensures that, regardless of selection, reducing annual maintenance costs remains top of mind. Progress Rail also has an extensive inventory of new and used freight cars, with a network of car repair facilities that will convert a car to your application requirements.

#### FREIGHT CAR LEASING & SERVICES

Progress Rail offers a wide variety of freight cars and leasing options to meet customers' specific transportation requirements. Lease options include: full service leases, net leases, per diem leases or purchase leasebacks.

We specialize in large volume program work, complete refurbishment, major rebuilds, warranty repairs and routine repairs. We are also a key partner with North American Class I and regional railroads, providing essential repairs, maintenance and inspection services at various intermodal facilities and repair-in-place (RIP) track operations.

<sup>\*</sup> applicable to certain model locomotives if properly maintained.