PROGRESS RAIL

INVESTING IN INNOVATION

Throughout our history, our iconic product portfolio has been at the forefront of railroad innovation. With organic growth and more than 35 strategic acquisitions, we have expanded our support to ensure we're meeting customer expectations in every corner of the world, delivering reliable, high performance products and quality services.

ADVANCED RAIL TECHNOLOGIES

- ENERGY MANAGEMENT & TRAIN AUTOMATION
- PREDICTIVE ANALYTICS & CLOUD-BASED COMPUTING
- ASSET PROTECTION
- BATTERY POWER
- FATIGUE & DISTRACTION MONITORING
- END-OF-TRAIN & HEAD-OF-TRAIN DEVICES

ENERGY MANAGEMENT & TRAIN AUTOMATION Progress Rail's TALOS® Energy Management system leverages machine learning and massive computing power to analyze and optimize train routes – resulting in significant improvements for fuel and time.

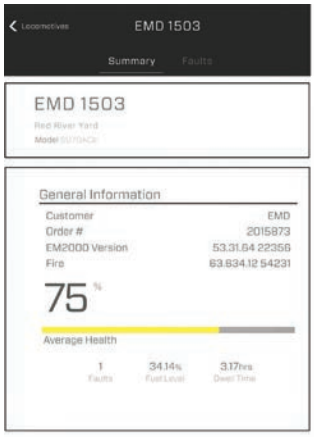
By adapting to train behavior, TALOS® delivers higher fuel savings, reduced emissions, improved train handling for safer operation and increased network capacity to impact railroads' bottom line. For full optimization, our Automatic Engine Start/Stop solution – or AESS™ – monitors critical operating parameters during locomotive idle operation, safely and effectively shutting down the engine once all factors are satisfied.

TALOS® Train Automation leverages machine learning and artificial intelligence to optimize train operation.

COMPLETE CONDITION-BASED MAINTENANCE Leverage operational data to reinvent how your railroad runs. Move from time- to condition-based maintenance, reduce costs and increase productivity with PR Uptime® Suite to more effectively manage your operations. Advanced asset monitoring combines with our own Locomotive Monitoring Center (LMC) expertise to offer customized reports and streamline data delivery.

As part of the PR Uptime® Suite, Uptime Cloud offers secure data storage and distribution, easily integrated with railroad ERPs. Uptime Connect helps to bridge data collection and transmission safely, while providing an electronics platform to integrate on-board and off-board solutions. Uptime Analytics uses data to create troubleshooting recommendations before a potential problem occurs, translating to measurable value in the shop, in the yard and on the track.

Together, these tools form the Uptime Suite to deliver the right insights to the right people, at the right time. The platform seamlessly integrates within existing day-to-day processes, and can offer coverage for your complete rail network.



PR Uptime® serves as a next generation analytics platform to monitor locomotives and fleets.

PROGRESS RAIL

INVESTING IN INNOVATION

FATIGUE MONITORING

Progress Rail offers computer-vision based fatigue and distraction monitoring technology for use in locomotives. The technology is based on patented eye-tracking and analytics that detect driver distraction and fatigue while on the job. The integration of this technology in locomotive cabs significantly reduces distraction events and helps monitor fatigue, increasing safety and accident avoidance.

The underlying Driver Safety System (DSS) technology is based on patented eye-tracking and analytics that detects driver distraction and fatigue while on the job.

REAL-TIME DATA FROM CAB TO END OF TRAIN

Progress Rail's End-Of-Train (EOT) devices transmit real-time, vital information from the end of the train to the locomotive cab by way of our Head-of-Train (HOT) device or locomotive control unit. This technology contributes to improved operational safety, accident investigation, security and vandalism prevention. Additionally, it has been designed to incorporate video and other technologies to facilitate automatic train operation. Compared to other products available today, Progress Rail EOT devices offer a more modern design with improved reliability, ergonomics, lighter weight and advanced power management. The end of train coupler mount makes an EOT faster and safer to apply — a characteristic train operators can appreciate.

End-Of-Train (EOT) devices transmit real-time, vital information from the end of the train to the locomotive cab.

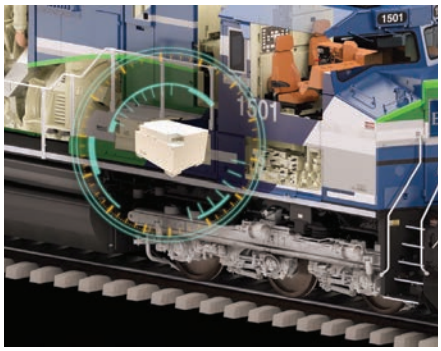
ASSET PROTECTION

Our train inspection systems have a wide range of track-mounted equipment to aid in defect detection, diagnostics and monitoring. From protecting the ties and track to high value assets, Progress Rail can design an asset protection solution to meet customer needs. The company also offers a state-of-the art grade crossing obstacle detection system, where through the use of radar, the system can detect objects in the intersection of road and track, and alert the operator, or in some cases, stop the train automatically.

In addition to wayside products, PowerView is a next-generation, crash-hardened Locomotive Event and Video Recorder. It provides synchronized recording and playback of multiple data sources and can replace multiple locomotive recorders into a single unit. It is also a complete processing platform that supports edge computing for local analytics, alarming and other applications. PowerView integrates across most OEM locomotive types, as well as various third-party systems.

BATTERY POWER

Save fuel and enhance safety with an EMD lithium-ion battery. Lithium-ion chemistry meets the highest demands for locomotive starting in a single battery enclosure. Choose from 15kWh, 30kWh or 45kWh, depending upon application. Advanced battery technology significantly lessens maintenance and dead battery issues. With the latest drop-in, 64 volt replacement batteries for battery power a single lithium-ion battery replaces two lead-acid batteries on a locomotive.



A single EMD lithium ion battery replaces two traditional lead-acid batteries on a locomotive.