



SmartConsist Fuel Management System

Freight trains are typically dispatched with enough locomotives in consist to make the “ruling grade” – often resulting in surplus power for most of the trip, with trailing locomotives operating at the same throttle setting as the lead unit.

The new EMD SmartConsist™ Fuel Management System automatically sets each locomotive to its optimal throttle position – improving fuel economy, cutting emissions, and reducing noise in the lead locomotive.

SmartConsist is fully integrated within the EM2000™ locomotive control system and its operation is transparent to the crew. The engineer simply selects the desired throttle notch in the lead locomotive, and the most fuel efficient power settings are activated for each unit. SmartConsist continuously monitors and sets the most fuel efficient combinations to achieve the required power and tractive effort.

The EMD SmartConsist Fuel Management System can be applied to the in-service EMD locomotive fleet and is offered as an option on all new EMD locomotives. And with fuel savings of 1-3% per locomotive, railroads can expect an early payback on their investment.

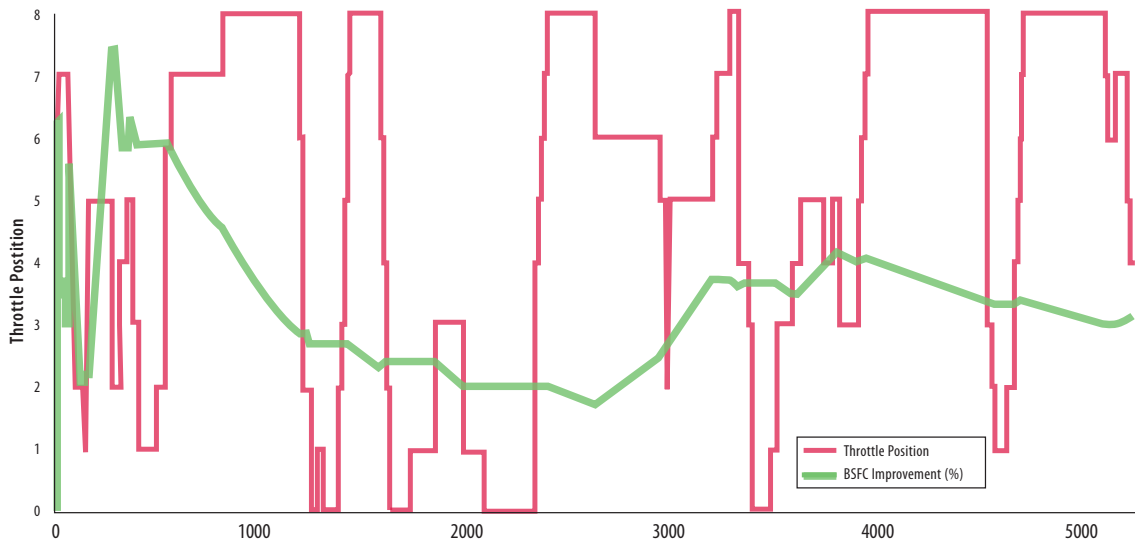
Smart Consist Features

- Suitable for both two-and three-unit locomotive consists, without unit isolation.
- Installation is simple and quick.
- Required only on the lead locomotive to achieve savings from all units.
- Trailing units can be any vintage or manufacturer.

Smart Consist Benefits

- Fuel savings of 1-3% per locomotive in typical line haul operation.
- Extended overhaul cycles from reduced power settings.
- NO_x and CO₂ emissions reductions up to 3%.
- Added crew comfort with reduced noise in the lead unit.

SmartConsist™ Field Test Data



The EMD OEM Advantage

EMD replacement parts are the result of extensive development and testing in the same engineering facilities where new EMD engines are designed, built, and tested. This OEM focus ensures the same performance, reliability, and durability for which EMD engines are legendary.

- OEM fuel injectors are fully remanufactured to precise internal specs vs. partially rebuilt retrofits. This ensures sustained fuel economy and emissions performance over their full useful life and avoids the operating penalties and expense of non-compliance.
- Power Assemblies and all emissions critical components are the result of fully integrated OEM design vs. partial substitution of non-optimized third party components.
- Engines and critical subsystems are carefully calibrated to optimize performance, reduce emissions, and minimize fuel consumption.
- EMD emissions kits require no cumbersome catalyst retrofits which can suffer from excessive backpressure, ash fouling, and extreme temperatures.
- EMD has stood solidly behind its products since 1922. As the EPA certificate holder for its engines and kits, their in-use emission compliance and engine performance is covered by the EMD OEM factory warranty.