

Track Inspection Vehicles



China Ministry of Railway's Comprehensive Inspection Train.

Fully integrated, turnkey track inspection vehicles for a variety of inspection requirements

Through state-of-the-art engineering, ENSCO, Inc. designs, builds, operates and delivers world class, turnkey track inspection vehicles and systems that monitor comprehensive performance indicators reflecting track quality and safety. ENSCO has delivered solutions on more than 50 inspection cars throughout the world to meet the needs of the railroad industry.

Flexible scope of work

ENSCO can facilitate the refurbishment of existing vehicles or design new vehicles to be equipped with the latest track inspection technology to address the customer's range of requirements. ENSCO can fulfill the complete scope of work from procuring to configuring a vehicle, or take primary responsibility in the instrumentation and work in conjunction with independent vehicle suppliers to develop the appropriate layout and the necessary support facilities.

The ENSCO Advantage

Track geometry measurements are ideally made under wheel loads that represent dynamic track loads typically produced by loaded railbound vehicles. However, many railroads and transit properties acquire lighter vehicles such as hi-rail trucks for cost and operational advantages. To meet the wide range of inspection requirements, ENSCO offers customized solutions for new and customer-provided vehicles to transform the vehicle into a suitable platform for track inspection operation.

ENSCO applies over 40 years of daily operational experience to develop inspection solutions that are functional, operator friendly and designed to meet the customer's needs. ENSCO works with each customer to make the best decisions regarding that railroad's track inspection needs based on individual budgetary constraints and data use scenarios.



Federal Railroad Administration's (FRA) DOTX 218 Deployable Gage Restraint Measurement Vehicle.



FRA's DOTX 219 Track Geometry Measurement Vehicle.



ENSCO equipped Hi-Rail inspection truck.

Access to diverse inspection vehicles

ENSCO can offer its customers access to a diverse inventory of track inspection vehicles including:

Self-propelled vehicles

Through its relationships with track maintenance machinery manufacturers, ENSCO has designed a variety of self-propelled rail vehicles that serve as track inspection platforms, from small 20-ton class converted work crew carriers to custom 100-ton high-speed rail cars. Each is based on customer system constraints and data volume requirements.

Towed coaches

As railroad traffic density increases, it becomes difficult to find adequate time for both track inspection and maintenance. On high-speed rail lines, the challenge is even greater. Towed coaches provide cost-effective solutions to railroad track inspection needs. Whether implemented in revenue trains or behind dedicated locomotives, towed coaches can be configured for high-speed and long-haul track inspection operations, eliminating the need for special inspection trains and improving the capacity of the rail network.

Hi-rail vehicles

ENSCO maintains long-standing relationships with hi-rail vehicle manufacturers to allow for the design and construction of specialized equipment to meet the customer's inspection and testing needs. ENSCO's solutions can be applied to light duty, medium duty and heavy duty trucks to address a full range of inspection and operational requirements.

Comprehensive Inspection Vehicles

ENSCO-equipped inspection vehicles provide for a full range of track inspection systems, including those focusing on:

- Track geometry
- Rail profile
- Third rail geometry
- Machine-vision based track imaging
- Track strength/gage restraint capabilities
- Catenary wire location



800-ENSCO-VA
rail@ensco.com
www.ensco.com