

PORTABLE

INSPECTION SYSTEM



Equipped with Argus® Track Measurement Technology

Argus® Track Inspector can be mounted to any conventional hi-rail vehicle with a standard hitch receiver, converting it to an inspection vehicle within minutes.

TRACK INSPECTOR MODES / SOFTWARE OPTIONS

Track Inspector is a real-time track geometry and rail profile measurement system, equipped with a non-contact encoder. This system can be folded up for highway travel without disassembling from the hitch receiver and folded back down to return to track measurement without calibration. A single operator can operate Track Inspector (weighs approximately 50 lbs.), deploy or remove it within a minute, store and ship it in a luggage-size case.

The system is available with three different software options:

Attended Operation, Heads-Up, or Autonomous

ATTENDED OPERATION

- Attended software provides real-time testing with comprehensive test reporting and data storage for analytics.
- User-friendly for all types of railroads and transit systems. Ability to be used on heavy haul, high-speed to low-speed tracks, in yard settings, and more.
- Foot-by-foot geometry data, geometry exception lists, rail profile data and rail size/weight identification can be exported in csv format after each inspection.



HEADS-UP OPERATION

- Heads-Up software gives visual and audible alerts for any track geometry exceptions, such as gauge, crosslevel, surface, warp, etc., given the thresholds for that track class.
- Can complement
 regulatory FRA inspections
 without storing data by alerting operators of any
 track geometry defects near-real-time. Web
 interface will show exact vehicle and defect
 locations along the track route allowing the
 operator to stop and back up to the defect location.
- Operator does not need to configure the software, enter mile post information, watch the data stream, perform defect vetting or reporting. It is completely track-class-driven.
- User-friendly for all types of railroads and transit systems. Ability to be used on heavy haul, high-speed to low-speed tracks, in yard settings, and more.



AUTONOMOUS OPERATION

- Completely autonomous operation with data and defect delivery to customer servers or by email notification to the designated personnel, if requested.
- Same working principles as Holland's locomotive or boxcar UGMS/ATGMS but deployed from a hi-rail vehicle.
- Ideal for key routes, frequent geometry, and rail profile data collection for predictive maintenance and analytics.
- User-friendly for all types of railroads and transit systems. Ability to be used on heavy haul, high-speed to low-speed tracks, in yard settings, and more
- The following foot-by-foot track geometry measurements are provided:
 - Track gauge and change rate (tight gauge, nominal gauge, wide gauge)
 - Cross level/superelevation
 - Surface and alignment (varying chord lengths up to 124 ft)
 - Warp and twist (varying chord lengths)
 - Runoff
 - Degree of curvature
 - Vmax and unbalance
 - Additional custom geometry channels
- Processed rail profile measurements by Rangecam™ algorithms to provide:
 - Rail cant angle
 - Rail weight / size
 - Vertical and gauge face wear
 - Total wear or loss area
 - Rail head slope
 - Gauge face angle
 - Base-to-height ratio

