Holland's 400-Series TrackSTAR® vehicles are the largest and standard unit in our track testing fleet.

Unique to TrackSTAR® is the GRMS strength measurement data for identifying weak issue in track complying before static and dynamic track measurements giving a comprehensive assessment of your track condition to keep your track up and running safely and efficiently.

400-Series TrackSTAR® Specifications

- **Maximum testing speed:** 25mph (limited by regulation, track conditions)
- **Minimum testing speed:** 6 mph geometry; 0.1 mph rail profile, gauge, and cross-level
- **Track Gauge Capability:** 56-1/2" (standard) up to 62" (broad gauge capable)
- **Gradient capability:** Typically 6%, dependent on rail surface condition
- **GVW:** 77,000 lb
- **GAWR Front:** 29,700 lb
- **GAWR Rear:** 31,300 lb
- **Length:** 40 feet
- **Height:** 13' 5"
- **Width:** 96"
- **Hi-rail wheel base:** 25' 6"
- **Guide wheel equipment:**
    - Wheel diameter: 28"
    - Positive drive differential (wet rail traction; steep grade capability)
    - 6-wheel anti-lock brakes (wet rail and steep grade capability) / Rail brakes on hi-rail

- **Crew:**
    - Driver   Driver seat
    - Operator   Passenger seat/observation seat in body
    - Observer   Observation seat in body / passenger seat
- **Rail Profile Measurement (RP):** Argus®
- **Track Geometry Measurement:** Argus®
- **Loaded Gauge Measurement**
    - Applied Vertical Load: 14,000 lb per rail
    - Applied Lateral Load: 9,000 lb between rails
- **Shunting capability:** Positive shunting through guide wheels

Reports Generated from Track Testing
- Exception locations tagged with DGPS data, ALDs, and/or MP + footage
- Printed reports available in real-time for geometry
- Printed reports available in real-time for exceptions
- Rail profile reports available in 3 days

hollandco.com
sales@hollandco.com
708.672.2300

Holland®

Holland LP
1000 Holland Drive
Crete, IL. 60417

Reporting Storage

- **All reporting for rail profile and track geometry is stored in electronic form for comparison with successive run data over several years.**
    - Wear rates and rail replacement planning is available through Rangecam software application.
    - Comparison profile views over successive runs shows rail wear progression over time.
    - Comparison strip charts graphically show wear change over time and geometry changes over time.
    - Database query capability allows location of complex combinations of conditions using conditional query.
    - Parameters available from track measurement can be displayed in metric or imperial units.
    - Distance measurement units can be miles, kilometers or engineering station (chains) units.

Rangecam Software

Rangecam software is capable of presenting the following measured or calculated parameters. Limitations may exist related to collected rail profile images, track testing speed, or other various impacts to data collection and imaging.

- **Rail Type** (section is automatically calculated by software, but dependant on "seeing" full sectional view of rail)
- **Vertical Wear**
- **Gauge Face Wear**
- **Field Face Wear** (locates all transposed rail)
- **Gauge Face Angle** (user programmable measurement points; find wheel climb risk locations)
- **Rail Cant** (degrees)
- **Gauge Lip**
- **Field Lip**
- **Combined Wear**
- **Hi-Gauge Wear** (referenced to new rail profile instead of gauge point)

- **Rail Wear Classification**
    - User defined number of classifications
    - User defined wear classification names
    - User defined wear limits for each rail type
    - Parameters used for rail wear class calculation (any combination of one or more)
        ◦ Vertical wear
        ◦ Gauge Face Wear
        ◦ Field Wear
        ◦ Combined Wear
        ◦ Percent Head Loss
        ◦ Gauge Face Angle
        ◦ Or Complex macro capability with user defined formula
- **Geometry Defects**
- **Rail Defects** (current version of software imports this data)
- **Geometry Defect Index** (calculated)
- **Rail Defect Index** (calculated)
- **Unloaded Gauge**
- **Loaded Gauge**
- **Delta Gauge**
- **Curvature**
- **Cross level**
- **Testing Speed**
- **Surface**
- **Alignment 31**
- **Alignment 62**
- **Twist – Variable**
- **Warp 31**
- **Warp 62**
- **Transport Canada Warp 31**
- **Transport Canada Gauge Change**
- **Max Velocity Freight**
- **Max Velocity Passenger**
- **Track Class Posted**
- **Track Class Safe**