

WORLDS FIRST. **WORLDS ONLY.**

*rail*TRA**Q**

Digital Twin-based Wheel-Rail Monitoring System



railTRAQ is a track measurement point that uses a sensor-foil attached to the rail to detect how the rail deforms under each passing wheel. Using a digital twin determines the forces in all three axes, the wheel load, and the actual position of the wheel contact point - all in operational service. Easy installation in less than 3 hours without affecting the track infrastructure.

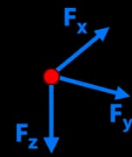
LET'S TALK ABOUT **YOUR TRACK**

Wayside Train Monitoring System

PREDICTIVE MAINTENANCE · WEIGH IN MOTION · CONDITION MONITORING

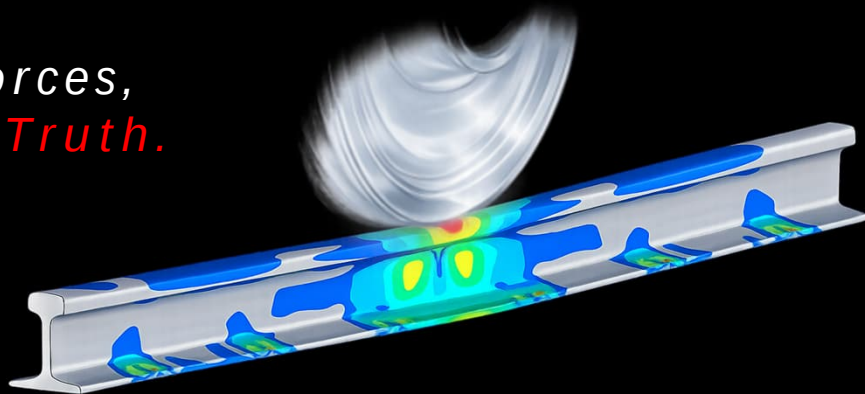
WHAT RAILTRAQ DELIVERS

- Force Triplet $F_z \cdot F_y \cdot F_x$
- Wheel Load
- Axle Load
- Car Weight
- Wheel Contact Point
- Speed
- Overload



- Uneven Loading
- Derailment Risk
- Flat Spots
- Vehicle Identification
- Number of Axles
- Wear Trends
- Condition Reports
- ...

*See the Forces,
Know the Truth.*



about 1 %

accuracy
wheel load

5 – 350+ km/h

km/h speed range

< 3 h

installation time
per check point

PATENDED

measurement methods

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YOUR TRACK



SCAN ME