

WT-RAIL

IN-MOTION RAILROAD TRACK CALIBRATION

The following is the test procedure WT-RAIL, utilizes when calibrating a In-Motion railroad track scale. All scale reading is to be recorded on **Static / In-Motion Railroad Scale Calibration Report**.

- Complete a visual inspection of the entire scale system (i.e.: Deck, Suspension, Instrumentation, Obstructions, Binds) will be performed and all findings will be noted.
- Visually inspect all cables, connectors and / or conduit.
- An “AS FOUND” test should be conducted before any adjustments or repairs are initiated. Automatic Zero-Tracking Mechanism (AZTM) shall be disabled prior to conducting test.
- An “AS FOUND” zero-balance condition of a scale shall be noted and recorded on test report; prior to any adjustments. Any out of balance conditions shall be corrected and the scale zeroed before placing a test weight load on the scale.
- Zero-load balance shall be observed and recorded each time a test weight load is removed from the scale during the testing process. Zero shall not change more than the minimum applicable tolerance each time the test weight load is removed from the scale. “AS FOUND” and “AS LEFT” zero balance readings shall be recorded.
 1. Sections of railway track scale shall be numbered 1, 2, 3, etc. from left to right when standing at the weight indicator and facing the scale deck.
 2. When testing a two-section scale, the standard combination of normal test car positions is 1, Center, 2.
- Perform an overall calibration test with a **Minimum weight of 80,000 pounds**.
- Coupled In Motion: These weighing systems shall be tested in the mode used either pushing or pulling the cars at the designed speed and in the proper direction.
- Weighing systems used to weigh trains of less than 10 cars: These weighing systems shall be tested using a consecutive car test train consisting of the number of cars weighed in the normal operation and weighed a minimum of five times in each mode of operation following the final calibration.
- Weighing systems used to weigh trains of 10 or more cars: These weighing systems shall be tested using a consecutive car test train of no less than 10 cars weighed a minimum of five times in each mode of operation following final calibration.
- Perform all needed adjustments to the scale system as prescribed necessary.

- If all tolerances are brought up to NIST Handbook 44 standards, a calibration sticker will be placed on the scale showing it to be compliance.
- The traceability to NIST of the weights used for the service will be noted on the Calibration report, along with the last date of certification and the NIST Certificate Number.
- Document Temperature and Humidity with a traceable hydrometer on the calibration report.
- Document weight uncertainties on the calibration report.
- A WT-RAIL Service Report form will be completed reflecting the finding of the calibration procedure and any recommendations. If any recommendations are made that would improve the reliability and accuracy of the scale, they are noted at this time. A copy of this Service Report along with a copy of the **Static / In- Motion Railroad Track Scale Calibration Report** is left with the customer.