



0.4 percent weighing accuracy for Bombardier Transportation

Bombardier Transportation can now weigh rail vehicles to a high degree of weighing accuracy thanks to a solution developed by Avery Weigh-Tronix's Railweight division.

Gross weight and weight distribution is important since overweight vehicles cost more to run and cause more wear on the wheels, axles, trucks and track, while underweight or imbalanced vehicles can derail.

Rail organizations are setting more stringent requirements to minimize their ongoing running and maintenance costs and also to maximize safety. In order to achieve the high accuracy, Bombardier must test the vehicles in a controlled building on a straight and level track (within +/-0.04 inches) and where external factors cannot affect the results.

A test laboratory at the company's Derby site in the UK, checks the vehicles for gross weight and the weight on each wheel, axle and truck. The Weighline solution from Railweight measures to within 5 lbs loading on each wheel for vehicles weighing up to 45 tons – this means an accuracy of 0.05 percent per wheel, based on a 4 axle car, weighing 45 tons.

Data captured and reported includes the vehicle number, ID input, wheel, axle, truck and total vehicle weight plus the time and date.

Railweight also supplied and installed a PC system with application software called I-Line to printout data as it is needed. This can store the data or transfer it to the site computer system, as required.

Service contracts can be set up with Railweight, which includes recalibration every 12 months.

Weighline benefits:

- Fast installation with no expensive civil and rail costs.
- Provides precision data on train and car weights that can be interfaced with business systems via a PC.
- Meets OIML R60 and R106 requirements for trade weighing applications
- Low ongoing maintenance costs



TECHNICAL

Designed for train weighing applications, the **Weighline transducers** are manufactured from standard rail sections.

These high performance transducers minimize the effects of lateral (side) loading and temperature. They produce highly accurate and repeatable results and can tolerate high dynamic overloads. With an IP67 rating, they are suitable for use in harsh environments.