CUSTOMER-SPECIFIC SOLUTIONS

WEIGHING AND MEASURING LOADS ON RAILWAYS HAVE DIFFERENT FUNCTIONS, FROM CONTROL WEIGHING FOR SAFETY REASONS TO COMMERCIAL WEIGHING TO ENSURE ACCURATE AND FAIR TRADE. TAMTRON SERVES ITS CUSTOMERS WITH A WIDE VARIETY OF WEIGHING, FORCE MEASURING AND INFORMATION MANAGEMENT SOLUTIONS FOR RAILWAY NEEDS.
Our expertise covers everything from product development and manufacture of measuring instruments and software to installations, service and maintenance.

**OPTIMISED FOR YOUR OPERATIONS**

Customers' needs are always customer-specific, and so are Tamtron's measuring solutions for them. The final configuration of a solution is affected by various factors, such as the individual characteristics of the customer's operations, train lengths and distances between bogies. The customer is always provided with a train scale system that is optimal in terms of technology, length, functions and price for an individual operational environment.

**MEASURING ENSURES SAFETY**

Information obtained through weighing and wheel impact measuring can be used to ensure railway traffic safety. By checking the loads and weight distribution of wagons, wheels and bogies as well as the balance between bogies, train wagon safety can be ensured before dispatching wagons on the railway. The weighing also ensures that loads carried on the railways are within the allowed weight limits and the wagons have been loaded in a safe manner. The train identification function can be used to compare measuring results with the maximum load allowed for a wagon. The wagon identification and description function can be used to avoid erroneous information caused by issues such as incorrect train lists or wagons removed along the way.

The wheel impact measuring system improves safety, as equipment damage caused by dents and missing wheel pieces can be avoided. Cost management is improved as well, as the railway network stays in good condition by avoiding dented wheels.

**EXPERIENCE FROM A THOUSAND DELIVERED SYSTEMS**

Tamtron is an experienced operator in the industry with experience from approximately a thousand delivered train weighing systems. Our expertise covers everything from product development and manufacture of measuring instruments and software to installations, service and maintenance, all of which are under our own control to ensure quality. Our experienced, international team of experts knows the international requirements for railways and has a wide range of experience with various railway conditions and environments.
The Silverpoint+ weighing system is quick and easy to install. The load cells are installed on the existing track by one person, and no track work is required. There is no need to halt traffic at all during the installation. The scale instruments and measuring electronics containing the measuring software are placed indoors in a control centre or outdoors in a cabinet near the track, from which the information can be transferred wirelessly for business or monitoring use. The separate measurement instrument protects the software from viruses and other external risks.

The system works independently without an operator, sending warnings regarding overloads or incorrectly loaded wagons in accordance with pre-set alarm limits. Error alarms are launched in accordance with the customer's needs, e.g. with a text message.

EASY TO INSTALL, INDEPENDENT CONTROL STATION FOR IMPROVED RAILWAY SAFETY

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Additionally, the system measures the total weight of the train as well as the speed at which it passes the weighing area. The scale is extremely accurate and has been approved for commercial use in the EU. The Silverpoint+ weighing system can also be used for companies' internal production purposes, such as industrial process control.

Monitoring train loads improves railway safety and enables avoiding unnecessary and premature wear to the rails. The Tamtron Silverpoint+ weighing system is used for railway traffic monitoring and overload control. Silverpoint+ weighs trains and wagons while they are in motion. The system weighs every wheel, axle, bogie and wagon and detects imbalances between bogies, making it also suitable for controlling loading errors.

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WEIGHING INFORMATION MANAGEMENT

Information regarding measuring results is collected in an easy-to-utilise format on a train report. The report includes the train number, the number of wagons and their weights, axle weights and any other measured information.

Reliability and safety can be increased with add-on functions to the Silverpoint+ control weighing system, such as the wagon identification and description functions. When wagon numbers and weighing results can be combined reliably, erroneous information caused by issues such as incorrect train lists or wagons removed along the way can be avoided. The train identification function can be used to compare measuring results with the maximum load allowed for a wagon, for example.
The Tamtron Trapper railway weighing system is the best weighing system on
the market that has been approved for commercial use. Large steel mills, national
transport operators and oil refineries across the globe rely on Trapper’s excellent
accuracy. When the scale’s results are used as a basis for payments when buying
and selling valuable materials or products, only a genuinely working solution in the
highest accuracy class can be relied on.

TAMTRON TRAPPER
RAILWAY WEIGHING
SYSTEM

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THE MOST ACCURATE WEIGHING AVAILABLE,
WITHOUT COMPROMISING SAFETY

The Tamtron Trapper railway weighing system is suitable for all kinds
of train weighing needs, as it can be tailored to meet the customer’s
exact needs. Trapper deliveries are always designed customer-
specifically. The final configuration of the scale system is affected by
various factors such as wagon lengths, distances between bogies
and the materials usually transported on the trains. The customer
is always provided with a railway weighing system that is optimal
in terms or technology, length, functions and price for an individual
operational environment.

WEIGHING INFORMATION MANAGEMENT

The customer can decide which file format is used for the weighing
information in the Tamtron Trapper railway weighing system. The
information can be transferred via an Internet connection as an .xml
or a text file, for example. If necessary, the information transfer can
also be integrated to the customer’s ERP or other system.

Reliability and safety can be increased with add-on functions to the
Trapper railway weighing system, such as the wagon identification and
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SOLUTION TAILORED TO THE
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QUICK INSTALLATION FACILITATES ALMOST
UNINTERRUPTED PRODUCTION

The Trapper weighing system is installed directly onto a gravel bed,
making the scale platform as elastic as the rest of the track and thus
resulting in highly accurate weighing. Large-scale track work can
also be avoided, which makes the installation quick and facilitates
almost uninterrupted production.

The load cells are protected inside the scale structure. Thanks to its
structure, the Trapper weighing system works reliably in challenging
weather conditions, from harsh northern winters to tropically hot
and humid southern environments.
The Tamtron Scalex RDW weighing system can be used to ensure train wagon safety before dispatching wagons on the railway after manufacturing or repairs. The RDW scale weighs all wagons, wheels, axles and bogies as well as their loads and weight distribution. The scale also provides information regarding how well bogies are balanced in relation to one another.

TAMTRON SCALEX RDW WEIGHING SYSTEM

The Tamtron Scalex RDW weighing system is a highly accurate control scale for stationary weighing that can also be verified for commercial use. Scalex RDW is primarily used indoors in facilities such as workshop halls, train depots and train wagon manufacturing operations, often placed in a repair pit on a concrete floor.

- Excellent accuracy, can be verified for commercial use
- For stationary weighing often carried out indoors
- Also available in versions with several track widths side by side

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SOLUTION TAILORED TO THE CUSTOMER’S NEEDS

The Tamtron Scalex RDW weighing system is tailored for each customer with the customer’s operational environment and needs in mind. The scale can be built into very long configurations for weighing wagons of varying lengths and their loads. The solution can also be made into versions with several track widths side by side, making it possible to use the same scale for weighing the loads of wagons manufactured for different geographical areas.
WHEEL IMPACT MEASURING IMPROVES SAFETY AND COST MANAGEMENT

Scalex Wild detects wheel defects that can damage railway equipment or rails by monitoring the forces between rails and wheels. The measuring system improves safety, as equipment damage caused by dents and missing pieces can be avoided by stopping defective wagons before damage occurs. The railway network will stay in good condition as defective wheels can be prevented from damaging it, which also improves cost management.

Error alarms are launched in accordance with the customer’s needs, e.g. with a text message. After the alarm, the traffic controller can take necessary measures to stop the train or reduce its speed in order to minimise the risks and damage. Different warning levels enable the traffic controller to react to each alarm appropriately.

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Wheel defects detected by Scalex Wild trigger an automatic alarm when pre-set alarm limits are exceeded. The measuring system indicates which wagon houses the wheel(s) that triggered the alarm.

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HIGHLY ACCURATE MEASURING RESULTS

Scalex Wild has a very high measuring frequency. The system measures each wagon wheel for two complete revolutions, ensuring that the measuring result is reliable. This is necessary, as lateral movement of railway equipment affecting the measuring results cannot be avoided. Any alarms are launched based on the highest measured value.

WEIGHING INFORMATION MANAGEMENT

The Tamtron Scalex Wild wheel impact measuring system can be integrated to the customer’s own information system to ensure fluent information transfer, or it can be used in real time via the Internet through Tamtron’s service.
Tamtron is an advanced product manufacturer and service provider in the weighing industry that is committed to high-quality and responsible service. The company’s success is based on the ability to produce some of the most innovative and competitive weighing solutions in the industry. The weighing solutions provided by Tamtron make customers’ everyday operations easier and more efficient not only in transport and logistics but in industries such as construction and mining industry, manufacturing, seaports, forestry and timber as well as recycling and waste management. ISO 9001:2008 Quality Management System certified competence guarantees the premium quality of deliveries.

Tamtron operates internationally and employs 140 professionals. The company headquarters is located in Finland and it has subsidiaries in Sweden, Poland, Germany, the Czech Republic and Slovakia. In addition to strong domestic trade, Tamtron exports globally to more than 60 countries. The company has a turnover of EUR 22 million. Tamtron is a reliable partner in weighing solutions with expertise and know-how of over 40 years, since 1972.