

TAMTRON

WEIGH TO KNOW

SCALEX RDW

STATIC WHEEL LOAD DIAGNOSTIC SYSTEM

SCALEX RDW electronic weighing system is designed for measuring wheel and axle loads of railway vehicles as well as their total weight. The basic element of the weighing system is the SCALEX steel weighbridge for measuring/weighing individual wheel loads. The system is designed for rolling stock manufacturers and rolling stock maintenance shops.

ADVANTAGES

- excellent accuracy
- type approved according to EN 45501
- scale for static weighing of the load of individual wheels of the vehicles
- also available in versions for several rail gauges



SPECIFICATIONS OF SCALEX RDW

The length of the weighbridge and its weight capacity shall be chosen with regard to the range of railway vehicles on which wheel/axle loads are to be measured. SCALEX steel weighbridge is equipped with measuring elements - **4 pcs of Scalex SB load cells and together with weighing instrument create scale.**

The weighbridge construction height is 400 mm, and the width of the weighbridge is 360 mm. This means that it requires virtually no maintenance requirements under normal operating conditions (e.g. outdoors or in an assembly hall, test facility, etc.). In comparison with the so-called hybrid systems (classic mechanical scale with one or two electromechanical load cells), where sensitive mechanical elements are a source of frequent failures and require constant maintenance, the SCALEX RDW electronic weighing system guarantees **high reliability with minimal operating costs.**

The signal from load cells is evaluated in the **weighing instrument SCALEX 1900P**. This device supplies the load cells with DC voltage. The total analogue measuring signal of the load cells is digitized, and the weighbridge load (wheel pressure) is shown on the instrument display. In a multi-weighbridge system, each weighbridge is equipped with its own evaluation unit built into a 19" steel cabinet.

WEIGHING RESULTS

The weighing/measuring accuracy complies with the international OIML recommendation and EN 45501 (Metrological aspects of scales of non-automatic weighing instruments). These scales have an European-type approval (EC-type approval valid in all EU countries under TCM 128/20 - 5753). The weighing capacity of an individual weighbridge is 15 tonnes (weighing capacity is based on the parameter of maximum wheel pressures of the railway vehicles). According to the above-mentioned standard, the maximum permissible deviation (measurement/weighing error) is allowed:

SCALEX RDW DIAGNOSTIC SYSTEM

ACCURACY

LOAD RANGE

up to 2.5 t
from 2.5 t to 10 t
from 10 t to 15 t

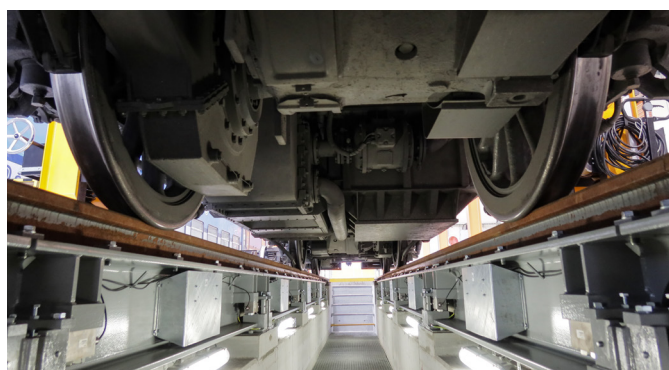
PERMISSIBLE DEVIATION (ON OFFICIAL VERIFICATION)

± 2.5 kg (up to 2.5 t)
± 5 kg (from 2.5 t to 10 t)
± 7.5 kg (from 10 t to 15 t)

PERMISSIBLE DEVIATION (IN OPERATION)

± 5 kg (up to 2.5 t)
± 10 kg (from 2.5 t to 10 t)
± 15 kg (from 10 t to 15 t)

The SCALEX RDW weighing system includes a terminal with instrument for each weighbridge and a SCALEX PC computer. The evaluation and processing of additional and weighed data (printout reports, HRV database, archive - storage of weighing results, creation of reports and statistics, possibility of connection to the company information system, etc.) takes place on the connected computer with the supplied data processing program.



TAMTRON

TAMTRON s.r.o.
Milady Horákové 75/105, Hradčany
160 00 Praha 6
Czech Republic
tel.: +420 271 733 201
obchod@tamtron.cz
WWW.TAMTRON.CZ

Tamtron is a leading supplier of advanced weighing solutions, offering innovative weighing and dosing technologies, comprehensive lifecycle services, and modern cloud-based digital services. Supporting industries such as construction, mining, wood processing, waste management, logistics, and manufacturing, Tamtron operates globally with its headquarters in Finland. The company has a strong presence across Europe through its subsidiaries and worldwide partner network.