

Description

The **AR-VSD** type static & in-motion railcar scale is the ideal solution for in-motion weighing of trains including coupled wagons on railway stations or sidetracks with heavy traffic and for high accuracy static weighing of wagons.

The customized size sensor area of the broken-rail **AR-VSD** type scale can be equipped with analog or digital shear-beam (SB) or rocker column (RC) load cells. The 400 mm high ready-mounted modules are shipped to the site and installed via normal rail construction methods onto the gravel bed. The track section affected by the scale must be straight and horizontal.

Static weighing of the wagons on the scale is initiated by the scale operator when the scale is in standstill state. The in-motion weighing procedure is really convenient, since trains passing by the scale in the 2 – 20 km/h speed range are measured automatically without user interaction and also the weighing results are provided immediately. The weighing results are identifiable and traceable according to the ISO 9000 quality management systems.

The scale is shipped with **AR-D8203** type weighing indicator that provides a direct network interface to the **AR-UNIDIS** process visualization and the **AR-UNIDAT** weighing management software, to the **ARDIN** integrated systems, to transfer the stored weighing data and the log files and to the OpenVPN-based remote access service (RAS).

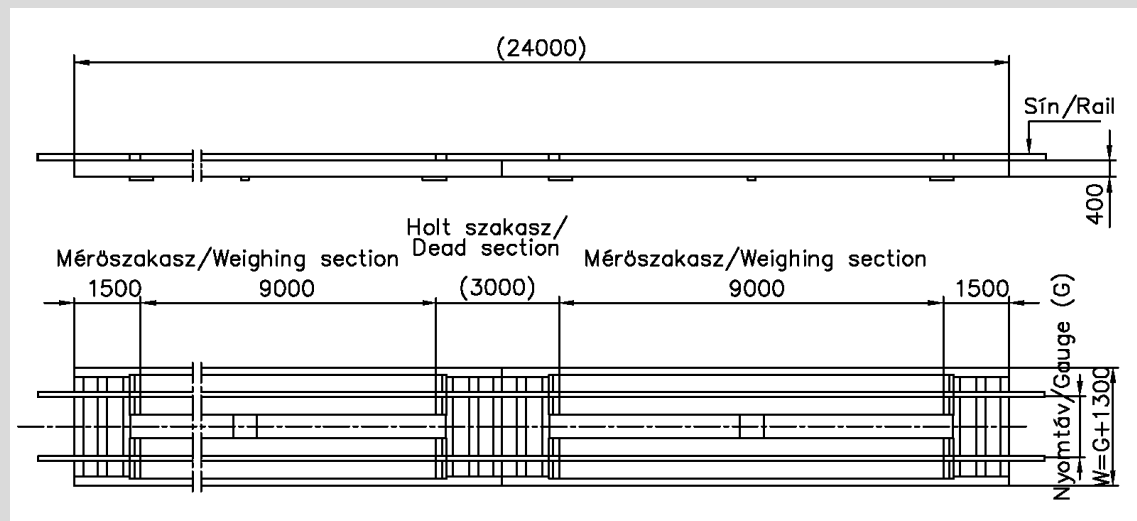
Principle of Operation

The **AR-VSD** type scale records the signals coming from the load cells and evaluates the digital data; provides axle and wheel load, the weight of the wagons and the train, the moving direction and speed, recognizes the wagon type and qualifies the weighing.

Advantages

- Weighing of solid, powder or liquid payload
- One-step in-motion weighing in the 2-20 km/h speed range according to the OIML R106 standard
- Legal for trade accuracy in static mode according to the MSZ EN 45501 and accuracy class III
- In-motion axle-/wheel load
- Quick return of investment: multiple functions in one (static, in-motion scale and axle weigher)

mm high Dimensions: (mm)



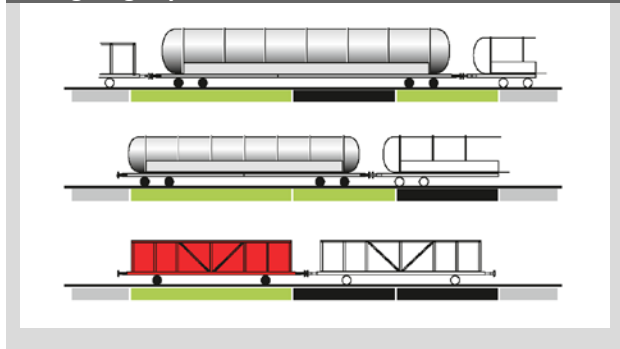
Technical Specification:

Weighing capacity	60 tons per bridge, 120 tons combined
Division	static 20/50 kg, in-motion 100 kg
Accuracy	static according to MSZ EN 45501, acc. class III in-motion according to OIML R106 ± 0,5% between 3-5 km/h ± 1% between 5-18 km/h
Speed range	2-20 km/h, max. ± 15 % speed variation
Weighing mode	both directions, pushed or pulled trains
Payload	solid, powder or liquid
Operating modes	Bridge A, B one-by-one and AB combined static / in-motion, aut. operating mode change
Rail	low-speed station track, broken
Gauge	same as track
Power supply	230V, +10% -15%, 50 Hz, cca. 300 VA
Operating temperature	- 5 °C / + 30 °C operational for indicator - 25 °C / + 50 °C operational for scale

Available layouts:

Axle code	Length [m]	Module [pcs]
7(3)7	2x7	2
9(3)9	2x9	2
10/5	10, 5	2
4/6/12	4, 6, 12	3
5/5/5	3x5	3
5/5(5)5	3x5	3

Weighing layout:



Subject to change without notice.