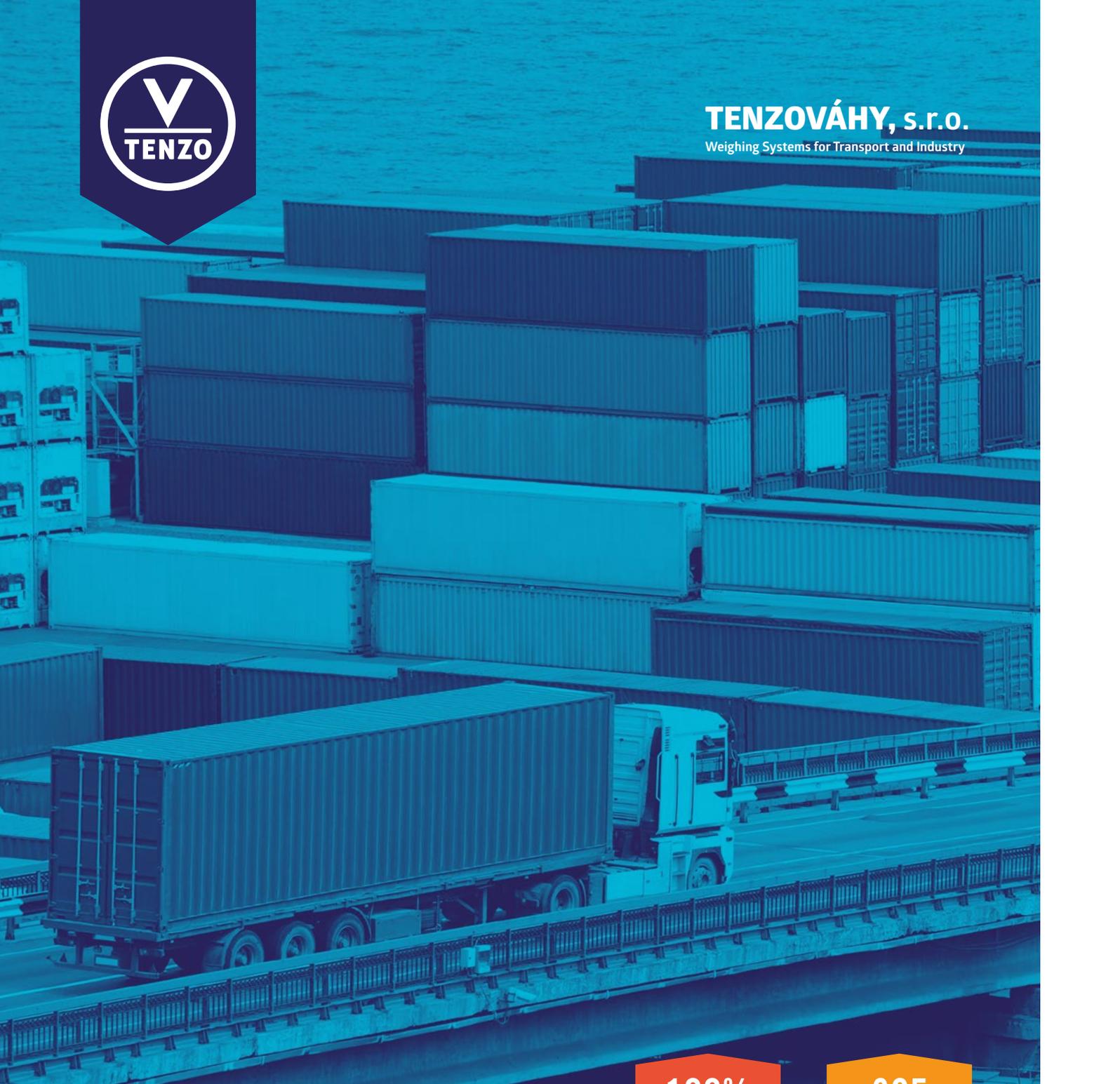




TENZOVÁHY, s.r.o.
Weighing Systems for Transport and Industry



100%

SOLAS
ready

365

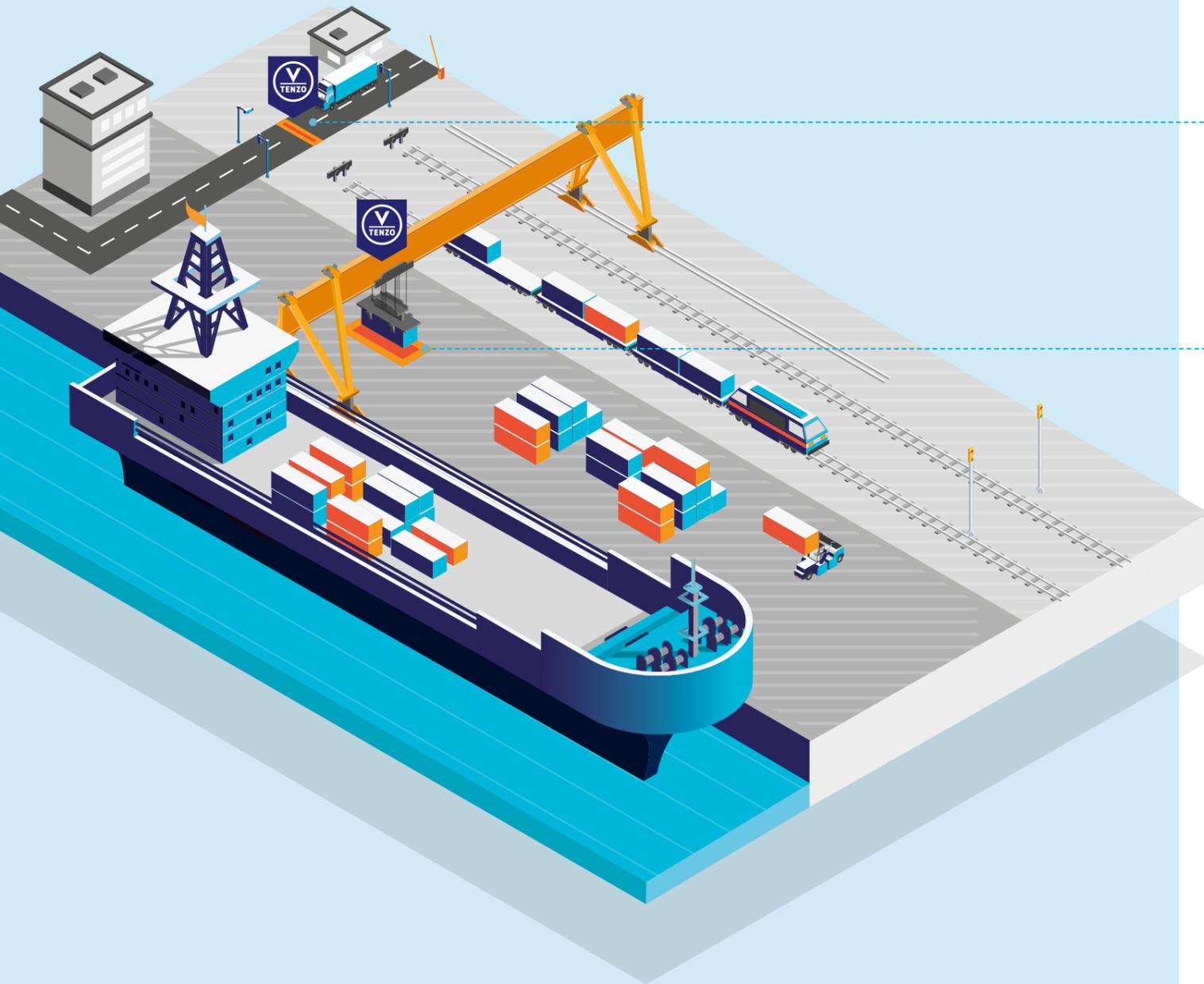
Year-round
operation

**Scales for fast
and reliable weighing
ISO containers**

www.tenzovahy.com

TENZOVAHY is ready to equip your container centre with fast and reliable weighing systems

- automatic operation
- possibility of integration into your enterprise information system
- permanent supervision 24/7
- diagnostics with failure prediction
- equipment for operation in harsh weather conditions
- all weighing systems are officially verified

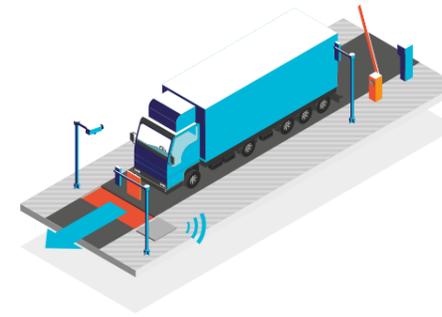


Are you dealing with SOLAS requirements?

The International Convention for the Safety of Life at Sea (SOLAS), which orders the weighing of cargo before loading, came into force on July 1, 2016. This rule increases the safety of maritime transport by preventing overloading of containers in which the actual weight does not correspond to the data provided.

In addition, the vehicles of carriers are increasingly penalised on the basis of weight inspections. The integration of Weighing Systems in logistics centres and/or installation of scales at container handlers is an effective solution for addressing the new standards. In this way, you can significantly increase transport safety and efficiency.

Axle Weighbridge Weighing System TENZOWIM 134

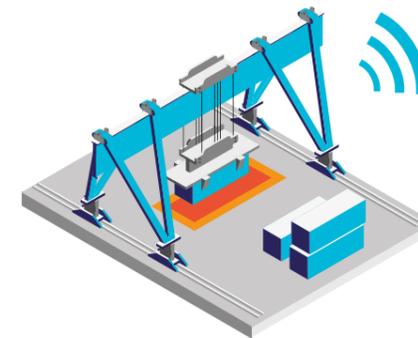


The Axle Scales TENZOWIM 134 determines total vehicle weight, loading of axles and groups of axles, i.e. weight parameters that cannot be determined by usual static scales. Thanks to **the high throughput** of the scales, no congestions are formed at the entrances or exits to/from facilities, which greatly speeds up the whole process of dispatching vehicles.

MAIN BENEFITS

- **Saving time** - fast weighing vehicles at the entrance/exit of container terminals. Possible unattended operation of weighing systems.
- **Traffic safety** - vehicle axles overload protection. This makes road traffic safer. Zero risk of sanctions by control authorities.
- **Saving space** - shorter weighing zone. By comparing axle weighing systems and non-recessed static weighbridges, up to 50% of the space reserved for weighing can be saved.

Container Weighing System



The Container Scales were developed according to the requirements of logistics terminals for handling ISO containers of all sizes. Their capacity is normally up to 60 tons. Weighing is carried out during manipulation with a gantry crane or a reach stacker. The container scales are designed to decrease the risk of shocks when placing containers on the scales.

MAIN BENEFITS

- **Easy, quick a safe weighing containers** during manipulation by a gantry crane
- **Minimizing the risk of shocks** during placing the container on the scale. Protection of weighing load - cells.
- **High weighing accuracy**

Other scales for reliable weighing



ON-BOARD SYSTEMS FOR REACH STACKERS AND FORKLIFTS

Container weighing can also be performed directly on reachstackers or forklifts. Especially in smaller container centers, this is often the only way to weigh containers. Weighing takes place automatically during moving of the spreader. Wireless data transmission to the control center is a matter of course.



STATIC WEIGHBRIDGE FOR ACCURATE WEIGHING

The static weighbridge is used for measuring the total weight of vehicles in motionlessness. That's why we call it the static weighbridge. It excels in high accuracy. It's used in agriculture, food industry, processing plants, etc. It can be operated unattended.



PORTABLE SCALES PW-10 FOR OCCASIONAL LOADING CONTROL

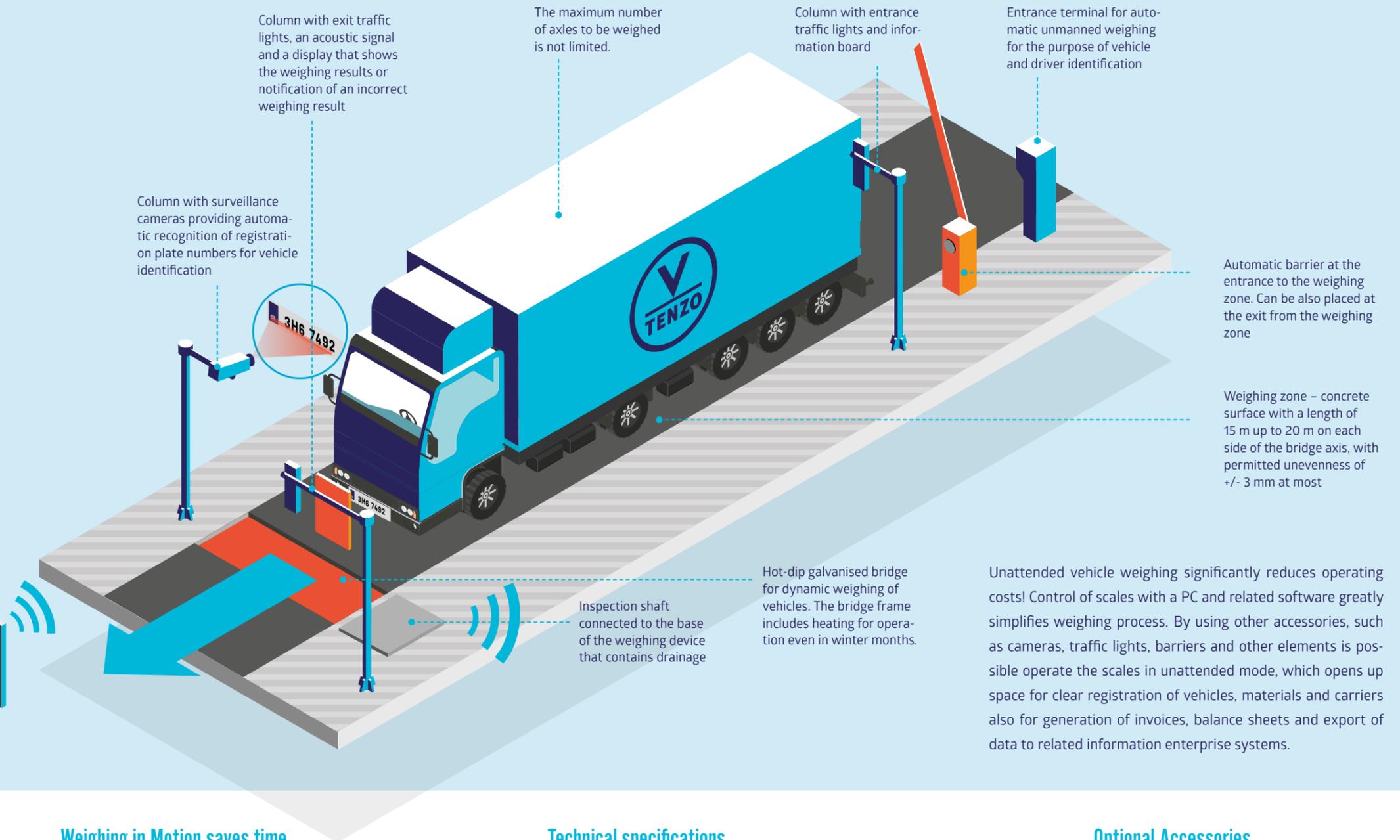
The thin and light weighing device PW-10 combines reliability with high mobility in everyday operation. The system is ready for weighing within minutes. The weighed vehicle is continuously guided by a weighing zone consisting of a pair of weighing pads and four rolling mats.

TENZOWIM 134 Axle Weighing System for Weighing Vehicles in Motion (WIM)

The TENZOWIM 134 Low Speed WIM System is an important tool for weight control in the transport of ISO containers, loading in logistics areas, forwarding, landfills, construction and mining operations, as well as in weighing for law enforcement on roads and motorways. *) That is, wherever their low operating costs stand out, together with the requirements for weighing speed and high reliability in demanding operating conditions.

Note: *) The axle weighing system is certified according to OIML R 134. The type approval number is TCM 128/19 – 5651.

Integration into the enterprise information system



Unattended vehicle weighing significantly reduces operating costs! Control of scales with a PC and related software greatly simplifies weighing process. By using other accessories, such as cameras, traffic lights, barriers and other elements is possible operate the scales in unattended mode, which opens up space for clear registration of vehicles, materials and carriers also for generation of invoices, balance sheets and export of data to related information enterprise systems.

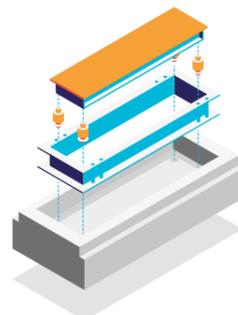


Weighing in Motion saves time in operating the scales

In this way, it is possible to handle many of trucks per hour. Their operation can be unattended.

Easy and cost-effective maintenance

The weighing system is installed in a steel frame embedded into the driveway. The axle weighbridge can be easily picked up by forklift at any time and put back after cleaning the base or other maintenance.



Technical specifications

| | |
|--|---|
| Weighbridge | dimensions from 2,900 x 700 mm up to 4,000 x 900 mm, the surface is zinc galvanized |
| Load sensors | 4 x 20.000 kg, OIML R 60, class C3, stainless steel, protection IP 69 K |
| Operating temperature/humidity | -40 °C to +70 °C/ 70%, non-condensing |
| Verified weighing capacity per axle | 200 to 20,000 kg |
| Accuracy class in static mode | III |
| Accuracy class in dynamic mode according to OIML R 134 | 1% for total weight, 2% for axle weight, i.e., 1 B (at speeds up to 6 km/h) |
| Weighing in motion | yes, up to 50 km/h |
| Frost protection | heating of the weighing system frame with temperature control |

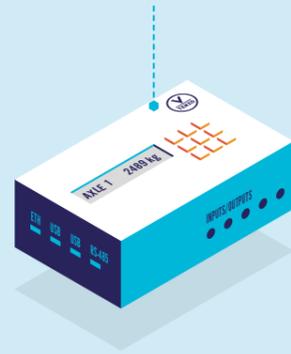
Optional Accessories

-  Weighing system frame heating for comfortable year-round operation
-  Set of traffic lights for entry and exit
-  Automatic entrance barrier
-  High visibility outdoor display
-  Camera system for reading vehicle registration plates

Container scales - a tool for accurate weighing of ISO containers

The system of container scales is designed for accurate and safe container weighing in container centers and transhipments. Weighing is performed during handling by a gantry crane. Container scales are structurally prepared for the increased risk of shocks when laying heavy containers. Eventual camera surveillance and immediate transfer of weight parameters to the information system significantly increases the efficiency of transhipment in the container center.

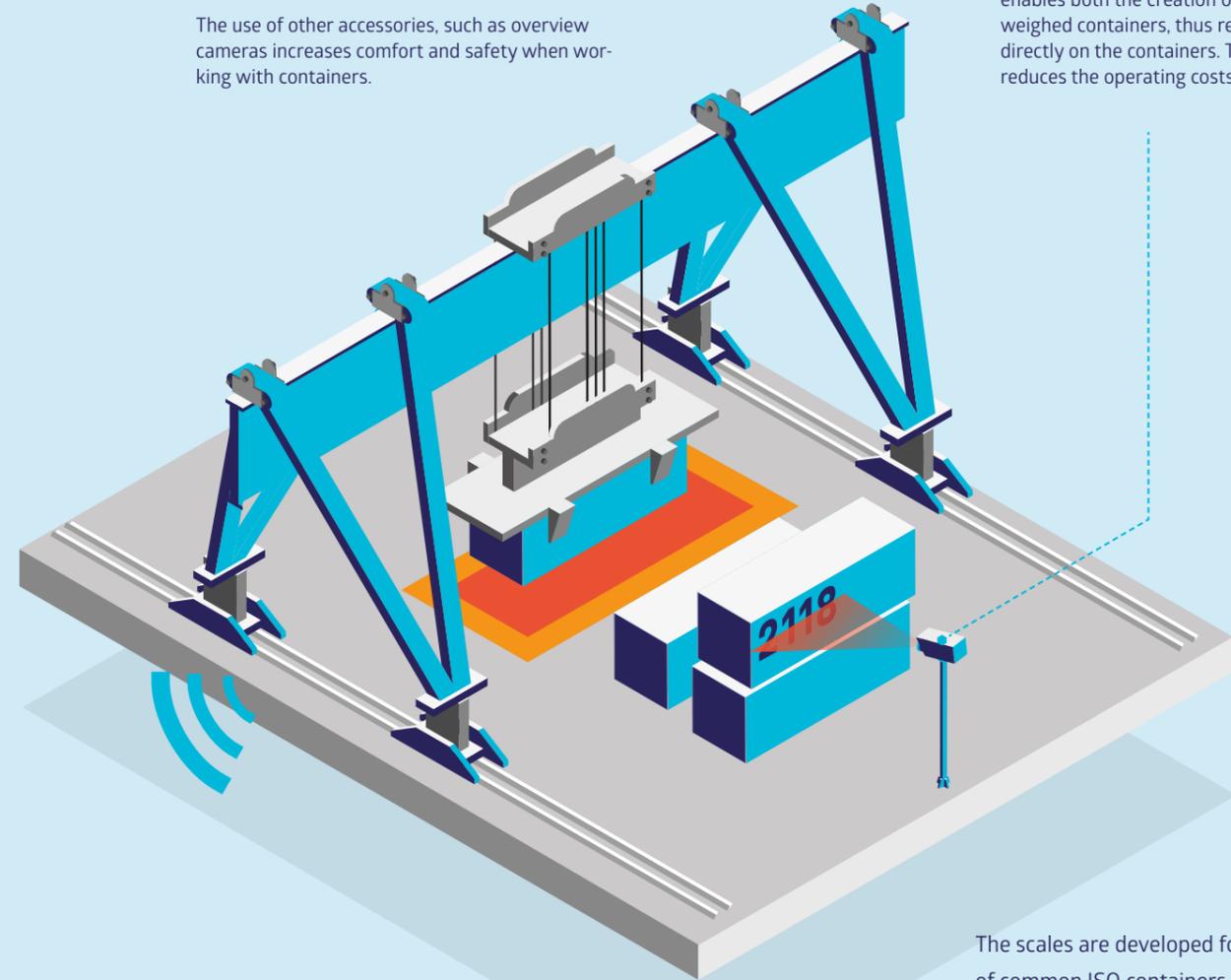
The basic part of the balance evaluation system is the indicator, which is equipped with other diagnostic functions in addition to the weight display.



The indicator can be supplemented by direct integration into the company information system containing software for managing the operation of scales and their accessories, database of records, balances, printouts, etc.

Weighing is fully unattended. Container weight data is automatically transferred to the appropriate control center of container transport.

The use of other accessories, such as overview cameras increases comfort and safety when working with containers.



An optional part of the scales, which improves the handling of the container and simplifies the subsequent registration, is a surveillance camera system, which enables both the creation of overview images of weighed containers, thus reading registration numbers directly on the containers. The camera system also reduces the operating costs of any scales.

The scales are developed for weighing all sizes of common ISO containers, i.e. from 20' up to 45'



Protection against careless handling

Container scales are equipped with a damping device that protects them from higher shocks during regular handling of containers at transhipment points.

The construction of these dampers is designed to prevent the destruction of strain gauges stored inside the scales.

Special dampers absorb possible dynamic shocks when placing the container on scales.

Technical specifications

| | |
|-------------------------|--|
| Dimensions | length 6 up to 12 m, width 3 m, for containers 20', 40', 45' |
| Construction | metal design |
| Weighing capacity | 30/40/60 t |
| Accessories | optionally |
| Scale resolution | 10/20 kg |
| Accuracy class | III |
| Trade weighing approval | yes |

Optional Accessories



Reference international project - implementation for the container transport company METRANS, a.s.

The METRANS, a.s. Company is a Central European leader in container transportation with main headquarters in Prague in the Czech Republic. TENZOVAHY has been cooperating with METRANS in the field of vehicle and container weighing since 2013.

First step - weighing trucks leaving the terminal

In 2013, the client first tested a Low-Speed Dynamic WIM system (LS WIM) in Dunajská Streda, Slovakia.

After the first successful installation the investor decided to gradually equip the other relevant node points with these weighing systems.

A key moment for further investments was the introduction of the SOLAS standard issued by the IMO (International Maritime Organization) in 2016 for the protection of sea transport.



Low Speed WIM System in METRANS Dunajská Streda

Next locations

Gradually, five other sites in Praha, Plzeň, Zlín, Ostrava and Česká Třebová were fitted with these systems.

The Low-Speed Dynamic Weighing System allows the client to check out trucks significantly faster at the terminal exit.

After exit clearance, vehicles are equipped with a message proving that their total weight does not exceed the permissible total weight or the permissible weight of the individual axles.



Low Speed WIM System in METRANS Česká Třebová

Successful continuation - new direct weighing system for handling containers

It has been shown that further streamlining of containers shipping can be achieved by their direct weighing during their handling.

Therefore the TENZOVAHY has developed the so called "Container weighing system".

After the testing phase, the client used these systems at three locations in the Czech Republic, Slovakia and Hungary.



Installation of the Container Weighing System in METRANS Prague, Czech Rep.

Confirmation by the Customer

Content of this letter

"Our company METRANS Danubia, a.s. uses at its intermodal combined container terminals weighing systems from the company TENZOVAHY, s.r.o. The cooperation is based on many years of positive experience with technology, warranty and post-warranty service. The quality and trouble-free operation of the scales, the quick response to our requirements and the positive for client-oriented communication are proven advantages of the company TENZOVAHY with the support of which services we provide for our customers are at a higher level."



Recommendation letter

Overview of installed systems in METRANS

| Location | Type of weighing system | Year |
|-------------------------------|------------------------------|------|
| Dunajská Streda, Slovakia | Low Speed Dynamic WIM System | 2013 |
| Praha, Czech Republic | Low Speed Dynamic WIM System | 2015 |
| Česká Třebová, Czech Republic | Low Speed Dynamic WIM System | 2016 |
| Zlín, Czech Republic | Low Speed Dynamic WIM System | 2016 |
| Plzeň, Czech Republic | Low Speed Dynamic WIM System | 2016 |
| Ostrava, Czech Republic | Low Speed Dynamic WIM System | 2016 |
| Budapest, Hungary | Static Weighbridge | 2016 |
| Praha, Czech Republic | Container Weighing System | 2017 |
| Dunajská Streda, Slovakia | Container Weighing System | 2017 |
| Budapest, Hungary | Container Weighing System | 2018 |
| Žilina, Slovakia | Container Weighing System | 2021 |

METRANS container transshipment network and TENZOVAHY weighing systems



The map of installed weighing system from TENZOVAHY for the METRANS Company

Introduction of the company TENZOVAHY, s. r. o.

Weighing systems from TENZOVAHY have been operating reliably for more than 25 years both in the Czech Republic and in other countries in Europe, Asia and Africa. In the Czech Republic, we supply turnkey weighing technologies. Abroad, we support technically local companies that implement the construction and installation of weighing technologies, including the provision of regular maintenance. The common goal of such cooperation is to ensure the permanent operability of the systems we supply and thus the satisfaction of the users of these devices.

TENZOVAHY products have been meeting for a long time national and international standards valid in the EU, including strict international recommendation OIML R. 134 et seq standards.

Therefore, our clients have the certainty that the scales we supply and installed will help them not only with the correct registration of loaded raw materials, but that they will also reliably protect them from possible sanctions for overloaded vehicles.

Our stable business partners in the country include both private companies and state supervision institutions dealing with weighing for law enforcement in transport - Police of the Czech Republic, Customs Administration of the Ministry of Finance, Road Maintenance Administration, a number of regional authorities of the Czech Republic and other state institutions such as the Administration of state material reserves. We implement similar cooperation through the network business partners abroad.

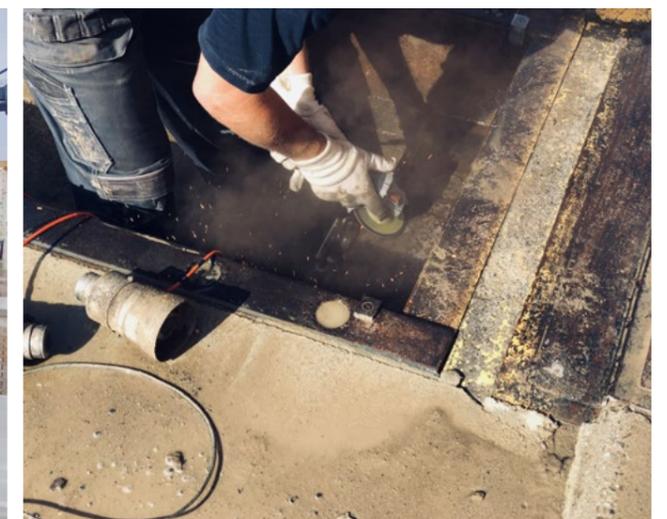
TENZOVAHY works with 100% care, subsequent support in 24/7 mode

Construction and implementation of every weighing system is provided with maximal care. Therefore these systems are characterized by maximum reliability even in demanding environments.

TENZOVAHY annually performs regular maintenance of all installed systems.

However, since container transport is a year-round, daily, never-ending process whose disruption would mean the loss of many millions of crowns, TENZOVAHY provides 100% 24/7 service.

The company technicians are ready to repair any defect in the device in a very short time.

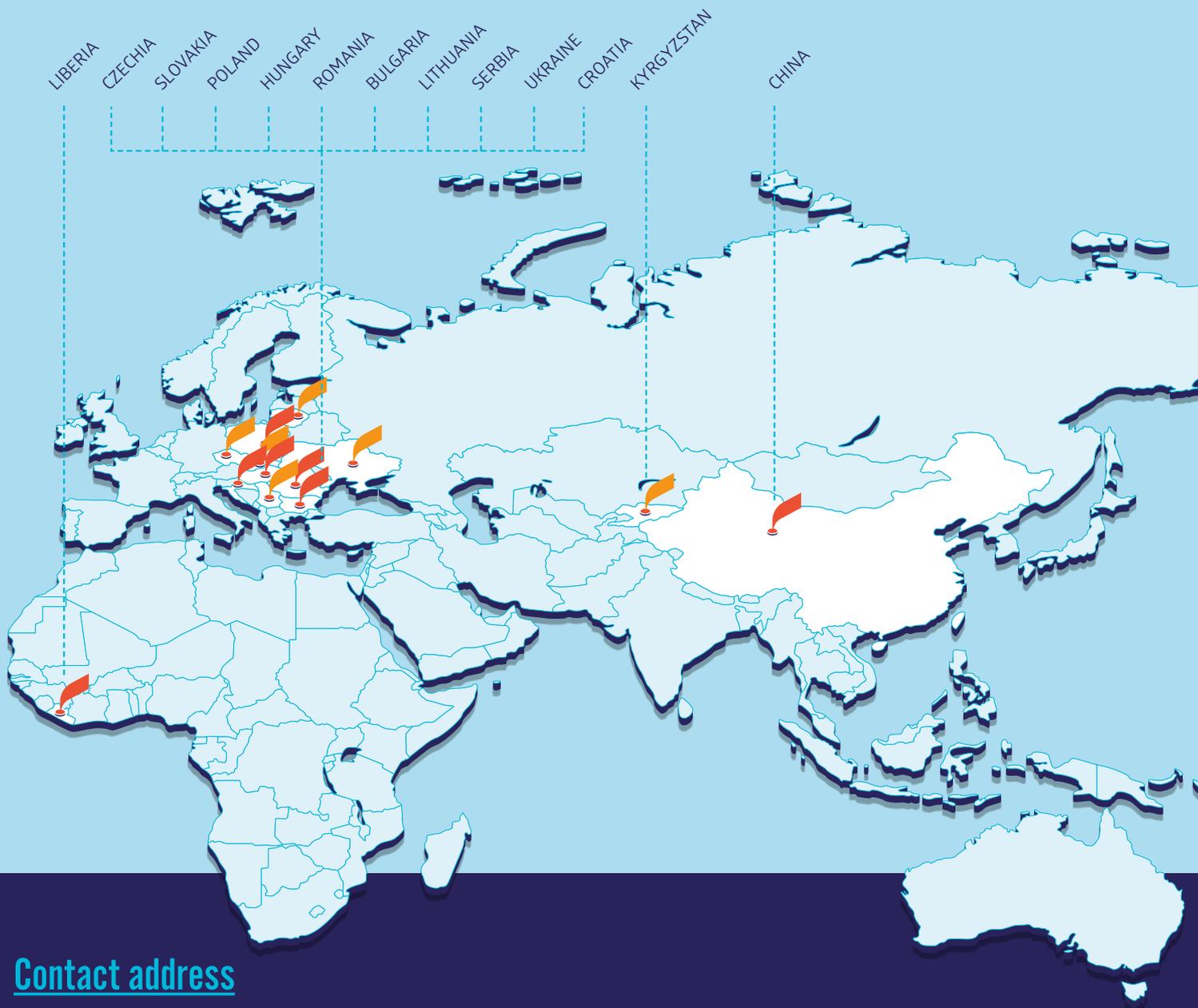


Details from a thorough reconstruction or maintenance of scales

Services for System Partners

- **Selection of the fitting product** including extensive documentation and sample project documentation for planning, installation and operation of weighing systems
- **Production and supply of standard weighing systems**
- **Product customization** as may be needed according to client or project requirements
- **Software** for installation and diagnostics
- **Online or on-site training, including support** with first-time installation of weighing systems
- **Warranty and post-warranty service** including technical support with official verification
- **Helpdesk**
- **Remote diagnostics** of supplied equipment
- **On-call service, including on a 24/7 basis**

In which countries do our systems work?



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Don't wait,
start weighing!