TRAILBRIDGE
RAILWAY SCALE

RAILBRIDGE®

SERIES ELECTRONIC RAILWAY SCALES

- Ideal Solution For Railcar Weighing Applications
- Tough Structure and High Performance
- Two Draft or Full Draft Production Alternatives
- Static Weighing or Weigh In Motion
- MultiBridge Series Truck&Railway Scale
- CNC Controlled Production Automation
- High Accuracy Weighing
- Minimum Service and Maintenance Cost

OIML M CE - 044 CE TÜVRheinland® CERT ISO 9001

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RAILBRIDGE®

SERIES ELECTRONIC RAILWAY SCALES

Special design for the attributes of railway lines and railcars, high accuracy weighing

RAILBRIDGE® series electronic railway scales are specially designed and produced for weighing railcars according to railway lines and connection systems as well as railcars attributes. It serves long periods of time with a strong static structure, durability and high performance even the harsh and tough working conditions.

Zero error production with CNC controlled production automation and robotic welding technology is another reason to prefer RAILBRIDGE® series. Stainless steel multiple load cells design contributes superior strength and makes high measurement accuracy guarantee. Moduler structures of RAILBRIDGE® series provides easy loading,unloading and installation operations.

According to the condition of railway lines and installation area, RAILBRIDGE® series electronic railway scales are produced different types like pit, half pit. It is also possible to produce two draft or full draft for weighing different lengths railcars. It is possible to weigh on full draft or two draft for long railcars.

With MULTIBRIDGE® model, it is possible to weigh railcars and trucks on the same surface. All models are connected on the railway line with rails which are placed on the steel scale platform. For all models which are connected railway lines, weighing process is performed while railcars are standing on the scales.

In addition to all models, it is also possible to weigh railcars with locomotive in motion with determined speed limits with RAILBRIDGE® WIM model.

Fast and zero error production...

- Appropriate static design for railway conveyance
- High quality through CNC controlled production automation and robotic welding technology
- Standard delivery up to a length of 22 meter (other lengths are possible on request)
- Appropriate design for rail dimensions with different norms and standards
- Easy truck and container loading with modular structures

National and international

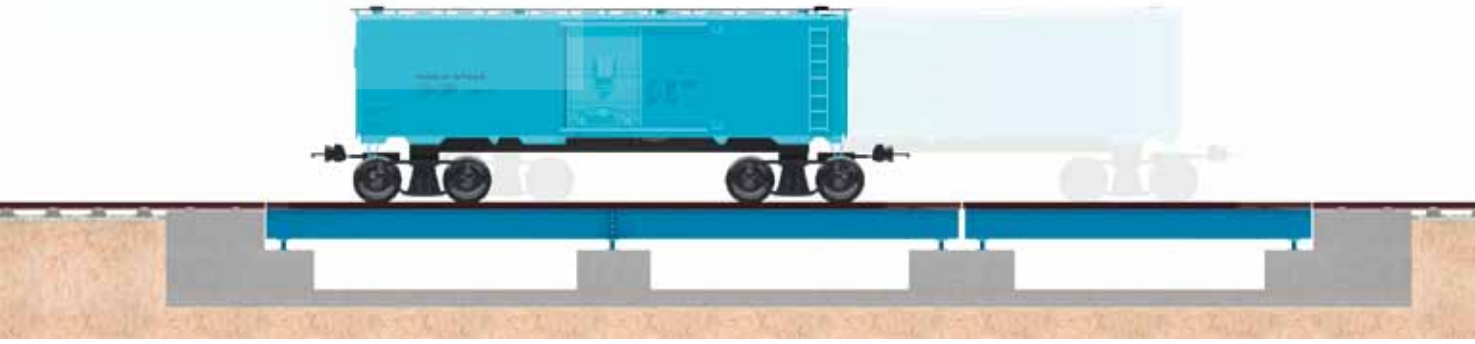
- Legal metrology approved
- 2009/23/EU type approval, OIML R76 and CE digital weighing indicator
- OIML R60 C3 load cells

Strong construction and reliability, long service life, minimum maintenance cost...

- Robust construction and high accuracy with high cross section carrying beams and multiple load cells design
- Stainless steel load cells with IP68/IP69K class and lightning protection
- Stainless steel junction box with IP 67 class and lightning protection
- Steel jacket cable protection
- Load cells with %200 safe, %300 ultimate load limits
- % 100 steel, durable, no replacement costs required mounting kit design

Easy operation of weighing process with standard and optional equipments...

- Safe and easy weighbridge operation with Load Line - 2 Railway Scale Management System consists of weigh indicator, computer, windows based WinSCALE programme and printer
- Possibility to be connected to the automation systems, computer and computer network
- Additional accessories such as lights, automatic vehicle remote display, IP Camera and other options depend on your projects



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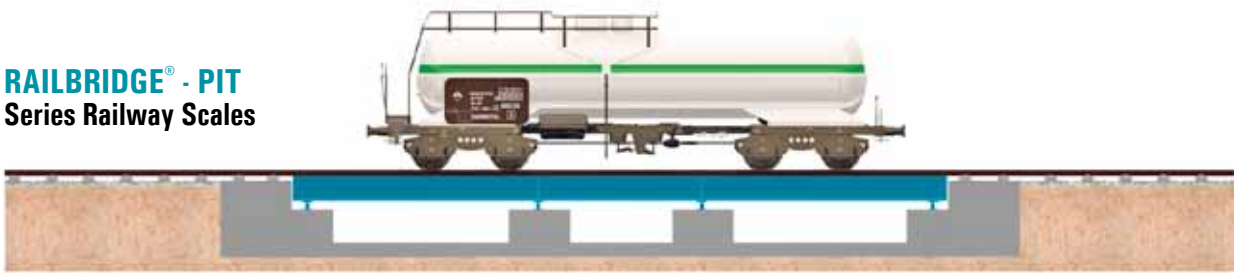
SERIES ELECTRONIC RAILWAY SCALES

RAILBRIDGE® - PIT
Series Railway Scales



RAILBRIDGE® - PIT series railway scales are installed the concrete pit on the railway line where it is performed. With input-output lids which are placed on the surface of scale, it is very convenient to reach scale pit for routine cleaning, maintenance and service operations. RAILBRIDGE® - PIT series railway scale is used for many years without any problems with rain water drainage system and thrown into a healthy infrastructure.

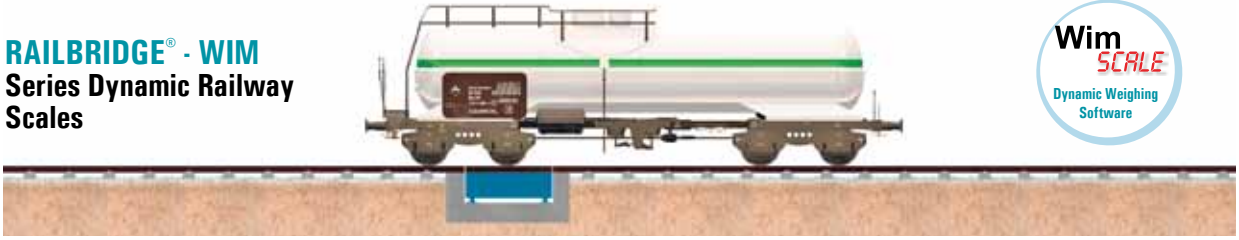
RAILBRIDGE® - HALF PIT
Series Railway Scales

RAILBRIDGE® - HALF PIT series railway scales are preferred when it is not possible to excavate a full pit like pit series applications. In this way, installation period of the scale can be completed in a shorter time. While the cost of foundation is getting down, routine cleaning, maintenance and service operations are much easier completed in a shorter period of time.

MULTIBRIDGE®
Series Truck & Railway Scales

MULTIBRIDGE® series Truck & Railway scales are installed the concrete pit on the suitable place where the scale is performed. MULTIBRIDGE® series are used when it is necessary to weigh the railcars and standard types of trucks and lorries at the same scale. When the bulk goods are loaded on the vehicles, such as especially from the silo both to the load carrying railcars and cement trailers, they provide opportunity for weighing under silo. In the meantime, they prefer to be used at the railway loading terminals and iron-steel production sector. The scale platform is designed in a steel structure that will be able to weigh both the vehicles and railcars.

RAILBRIDGE® - WIM
Series Dynamic Railway Scales



Wim SCALE
Dynamic Weighing Software

RAILBRIDGE® - WIM series railway scales are automatic weighing instruments which provide weighing of railcars with locomotive with a certain speed. With space saving steel weighing platform the installation of the scale is done to the suitable place on the railway line in a very short period of time and less cost. During weighing process, the total brut weight of locomotive and railcars with carrying loads are determined by measuring each axles of the railcars. In the meantime, the datas like weighing values, railcar types and transition velocities which are obtained during weighing process can be transferred to the system computer. During weighing process, each axles weights, general total values, number of axles can be displayed on the screen or can be printed.

RAILBRIDGE®

SERIES ELECTRONIC RAILWAY SCALES

SCALE MASTER MACHINERY PARK

CNC Controlled Production Automation

- High speed quality production
- High quality welding
- Zero error production
- Excellent surface for dying
- Robust construction and long service life

RAILBRIDGE® series electronic railway scales make understanding of performance and accuracy of weighing to the peak point with engineering redesign. Experience and advanced technology are carried out with international standards during manufacturing process. Static calculations were made according to international loading and measurement standards.

During RAILBRIDGE®'s steel construction weighing platform production, all of sheet metals, cutting operations and mounting holes are occurs with CNC controlled machineries. At the end of production, it is welded on the with robotic welding technology.

As a result of "ScaleMaster" fully automated manufacturing process, RAILBRIDGE® has unrivalled reputation with homogeneous structure, without intermittent welds or lower strength spot.

in welding technologies and applications were approved by **DIN EN 15085-2**

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Quality

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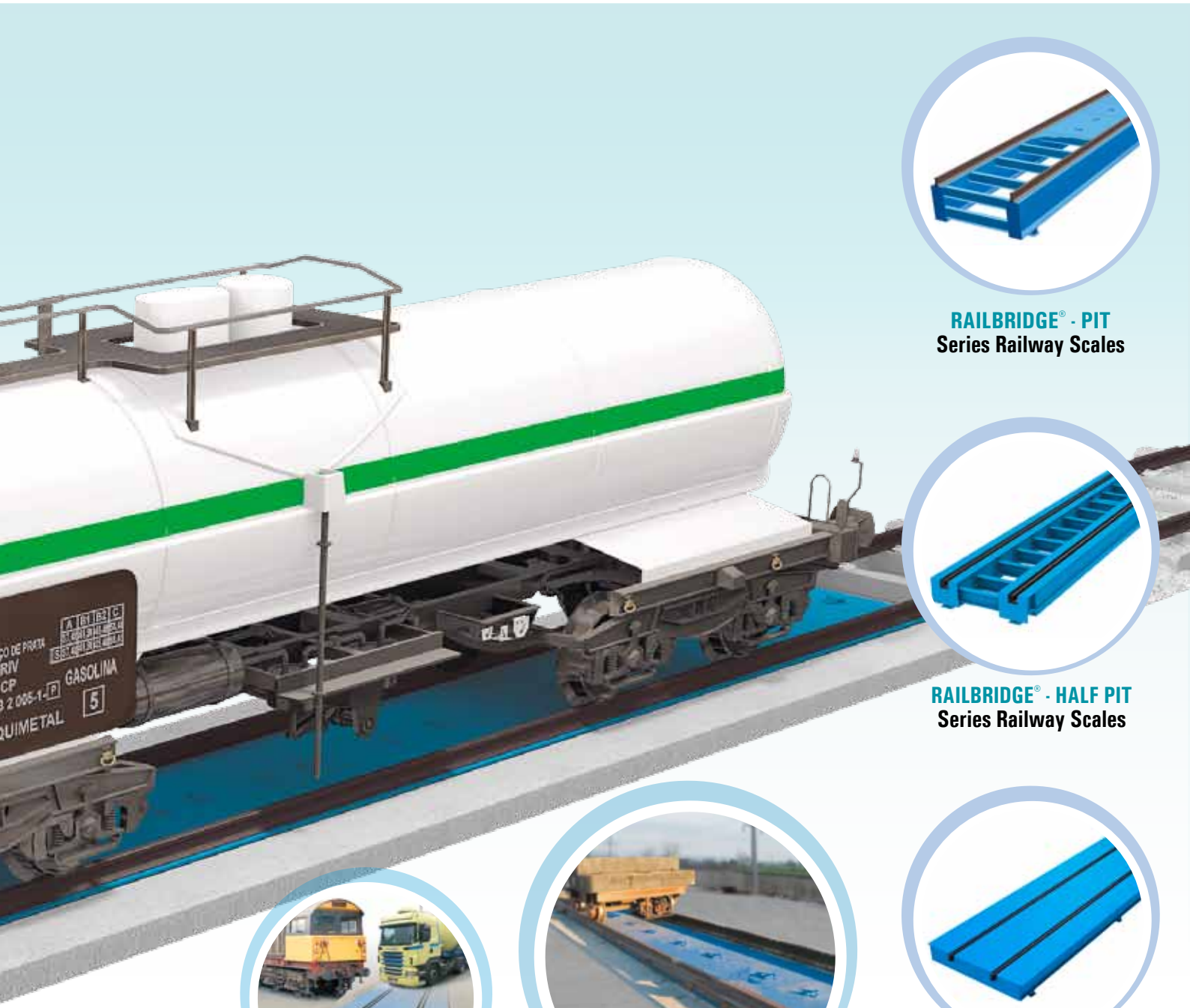
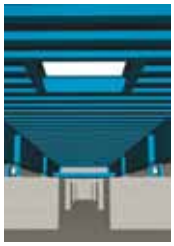


RAILBRIDGE® - PIT
Series Railway Scales

RAILBRIDGE® - HALF PIT
Series Railway Scales

MULTIBRIDGE®
Series Truck & Railway Scales



Easy to Clean and Maintenance

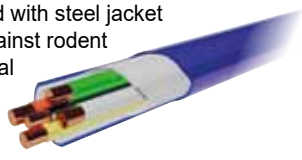
With the wide input-output covers which are located on the RAILBRIDGE® - PIT series's platform surface, it allows to reach the pit of scale very easy for periodic cleaning, maintenance and service applications.

Easy Loading/Unloading, Quick Installation

RAILBRIDGE® series railway scales were designed to be mounted with modular structure. Moduler structures of scale make loading to the truck, unloading to the install area and installation process much easier.

Steel Jacket Cable Protectors

All cables at RAILBRIDGE® series railway scales are sheathed with steel jacket cable protectors against rodent damage and external shocks.



RAILBRIDGE®

SERIES ELECTRONIC RAILWAY SCALES

High Quality and Accuracy Load Cells

Truck scales are weighing devices operating harsh and tough working conditions. The load cells used are not affected from major and sudden forces with their superior geometries during vehicle movements. Their ability to work under water and washed by pressurized water condition tructures provide longterm performance under harsh environmental conditions and corrosive substances. With standardized loadcell outputs, no corner adjustments requirement makes most exact measurement guaranteed at every point.

IP68 High Protection Class

OIML R60 Class C3

Minimum Service and Maintenance Cost

Stainless steel load cells with IP68/IP69K protection class with completely hermetic sealed enclosure provides extended performance in harsh industrial environments.

With these superior properties of load cells, it signi
importantly, it eliminates weighing failures that occurs on the truck scales unlike other load cells which are not equipped with completely hermetic sealed enclosure on the market place.

Lightning Protection

The loadcell lightning protection components on provides maximum protection from lightning strikes, and heavy surges in current.

% 150 SAFE

Overload Protection

Load cells are protected of % 150 safe load and % 300 ultimate load limits. This feature is another reason to perform without any problem for many years.

"Rocker Column" Self-Centering Design

Rocker Column design contributes self-centering during trucks weighing and forces acting in a number of
ensure high measurement accuracy.

Interlock Mechanism Against Axial Movements

Interlock mechanism is standard feature for load cells that are used. This special feature prevents rotating around its own axis caused by forces acting in a number of different directions during entry-exit of the vehicles and it eliminates problems such as cable twisting, breaking and incorrect weighing.

LoadGuard Special Design Mounting Kits

LoadGuard mounting kits work in full compatible with load cells' "Rocker Column" feature to compensate the disturbance of side loading on weighing performance. This superior combination eliminates the need for equipments such as check rods and bumper bolts which are used for getting more accurate weighing results from platform and load cells.

It is made of 100% steel. It doesn't creep over time like the other mounting kits using rubber and caoutchouc due to external factors and conditions. Thus, weighing errors end and service costs go down to zero caused by the deformation of mounting kits.

With low degrees of freedom, it reduces the resonance period of forces from directions. It allows faster and more accurate weighing measurements.

Mounting kits which are specially designed to allow oscillation within certain limits provide a perfect weighing performance by taking control of the forces caused by movement of vehicles on the platform and thermal expansion.

IP67 High Protection Class

Junction Box

High quality and long lasting performance with IP67 protection class including lightning protection structures. No maintenance required.

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SERIES ELECTRONIC RAILWAY SCALES

Load Line - 2 Railway Scale Management System

Load Line - 2 "Railway Scale Management System" consists of Weight Indicator, Computer, Windows based WinSCALE programme and printer. It is very easy to use with visible LED indicator, colorful monitor, PC keyboard, mouse and intelligible menu structure that guides operator. It meets all expectations with standard and optional software-hardware alternatives.

Safety of the weighing and registering are in the prominent features for Load Line - 2 railway scale management system, as well as offers a choice of using 6 different languages. Alphanumeric data can be accessed to the by the user or they can be coded and selected from the tables. Daily, monthly or any two dates based detailed reports with respect to any data railcar no, customer and all other informations can be displayed on the screen or can be printed.

Windows Licensed Operating System

Win SCALE Railway Scale Software

Standart Features

- 2009/23/EU type approval, OIML R76, CE
- Standard pc keyboard, 18,5 " wide colorful LCD monitor and easy operation with intelligible menu structure
- Static memory unaffected by power failures
- Automatic date - time and serial number
- High disc capacity and extensive weighing memory
- To be able to use in 6 different languages
- Connection to computer or another weighing terminal
- Identifying printer separately for ticket and report
- Ethernet, analog, digital and serial outputs for automation and industrial applications
- 4+5 programmable data can be by the user
- Rapid usage with coding for all data
- Preset tare record memory for regular railcar which are constantly weighed
- Wastage weighing opportunity
- Print out consignment note option with a different printer
- Daily, monthly or any two dates based general or detalied reports with respect to any data can be displayed on the screen or printed out
- Possibility to receive the reports to MS Excel
- Saving weighing reports as txt
- Automatic weighing without operator with RFID, multi-scale integration and other automation options depends on your projects

Ticket and Report Printer

It is connected to computer. Printing possibility for carbon copy and A4 forms. With high speed and high quality features, it also enables to printing of tickets and reports.

Ticket Print Data

- 3 lines 255 characters company and address information
- 15 characters railcar identity number
- 50 characters content on the programmed 9 data (material name, company name , ext)
- Register no, date and time informations
- Functions like 1st weighing, 2nd weighing and preset tare weighing

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SERIES ELECTRONIC RAILWAY SCALES

OPTIONS

Automatic Railcar SystemSystem

With RF transmitter information of the railcar is transferred to the computer without an operator. It allows quick and safe weighing operations

IP Camera

IP Camera is used for weighing security or transferring photos to the database for the railway scales operated far away from weighing cabin. Recorded photos and data can be displayed on the screen or they can be printed.

Remote Display

It is used for observing the value of the railcars weight outside of the cabin. It can be mounted on weighing cabin or any suitable place which can be seen from outside. Display is clearly visible with 6 digits red LED indicator.

Lights

It is used for the organization of the railcar's scale entry and exit by the commands received from the weight indicator. It can be mounted to the scale area or weighing cabin.

Message Terminal

It is used to guide and inform the driver visually at the railway scales with automation applications and automatic railcar system. It can be mounted to the scale area or weighing cabin.

Ex-Proof

Railway Scales can be produced with ex-proof featured instruments and ATEX approved for the facilities located in

CAPACITY & DIMENSIONS

MODEL	MODEL CODE	MAXIMUM CAPACITY (ton)	MINIMUM CAPACITY (kg)	DIVISION (kg)	DIMENSION (m)	LOADCELL QUANTITY
RAILBRIDGE®-PIT SERIES RAILWAY SCALES	WB-R-PT-1.8x7-120T.4L	120	1000	50	1.8 X 7	4
	WB-R-PT-1.8x14-120T.6L				1.8 X 14	6
	WB-R-PT-1.8x16-120T.8L				1.8 X 16	8
	WB-R-PT-1.8x18-120T.8L				1.8 X 18	
	WB-R-PT-1.8x21-120T.10L				1.8 X 21 (14+7)	10
	WB-R-PT-1.8x22-120T.10L				1.8 X 22 (14+8)	
RAILBRIDGE®-HALF PIT HALF PIT SERIES RAILWAY SCALES	WB-R-HP-2.1x7-120T.4L	120	1000	50	2.1 X 7	4
	WB-R-HP-2.1x14-120T.6L				2.1 X 14	6
	WB-R-HP-2.1x16-120T.8L				2.1 X 16	8
	WB-R-HP-2.1x18-120T.8L				2.1 X 18	
	WB-R-HP-2.1x21-120T.10L				2.1 X 21 (14+7)	10
	WB-R-HP-2.1x22-120T.10L				2.1 X 22 (14+8)	
MULTIBRIDGE® SERIES TRUCK & RAILWAY SCALES	WB-M-3x16-120T.8L	120	1000	50	3 X 16	8
	WB-M-3x18-120T.8L				3 X 18	
	WB-M-3x21-120T.10L				3 X 21 (14+7)	10
	WB-M-3x22-120T.10L				3 X 22 (14+8)	
RAILBRIDGE®-WIM SERIES DYNAMIC RAILWAY SCALES	WB-R-WIM-1.2x1.9-30T.4L	30	200	10	1.2 X 1.9	4

* Some of the products in this brochure are manufactured with respect to costumer requests, so they may have some differences from our standard products. T

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