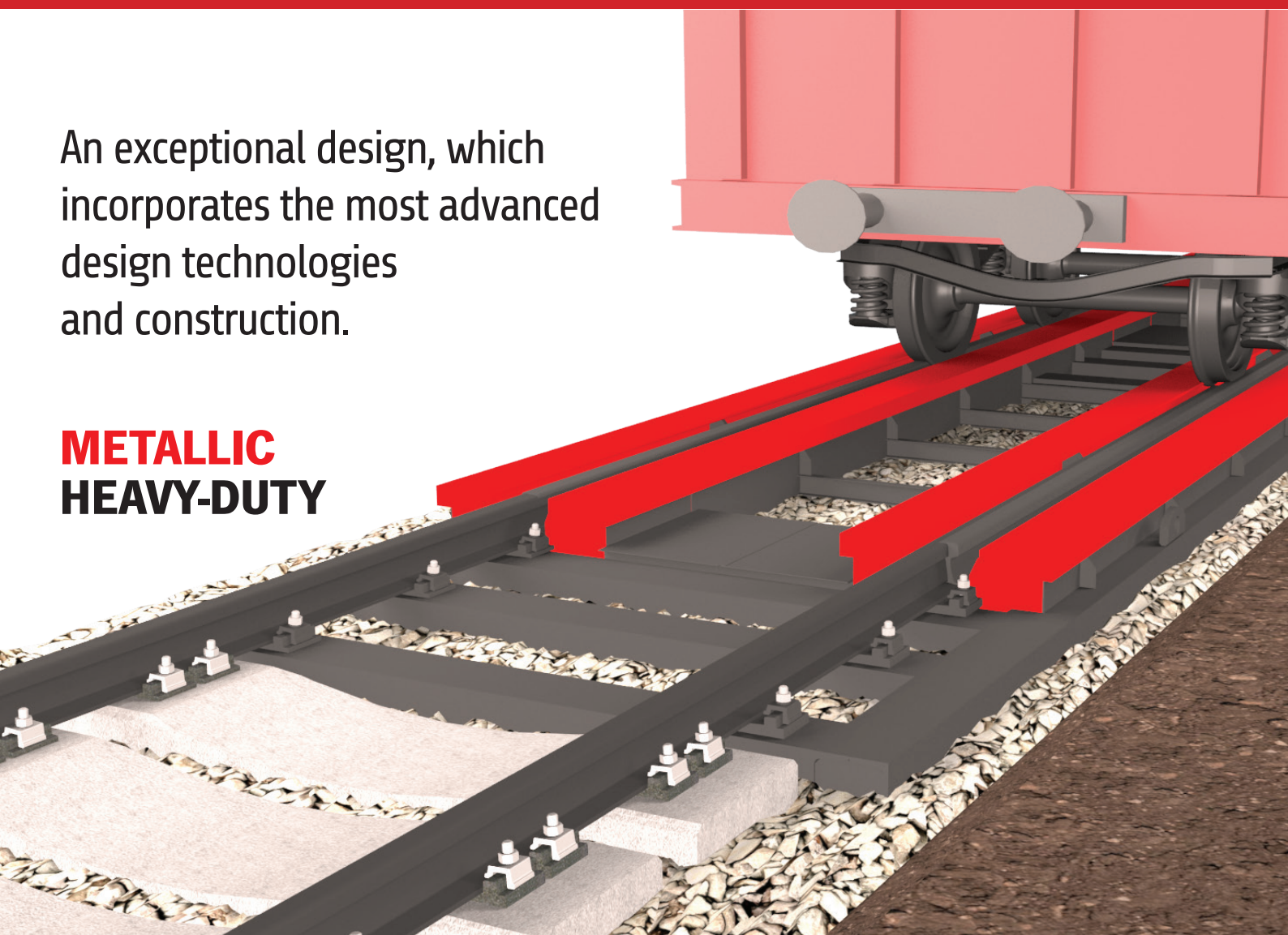


DYNAMIC RAILWAY SCALES

An exceptional design, which incorporates the most advanced design technologies and construction.

METALLIC
HEAVY-DUTY



In what follows, the FLINTAB EVO TRAPPER dynamic railway scale is presented, fully equipped, including interconnection of all electronic equipment.

The structure of the EVO TRAPPER weighing platform is metal with beams - the active weighing component - mounted on a fully metal and robust foundation that is installed directly on the broken stone infrastructure of the railway.

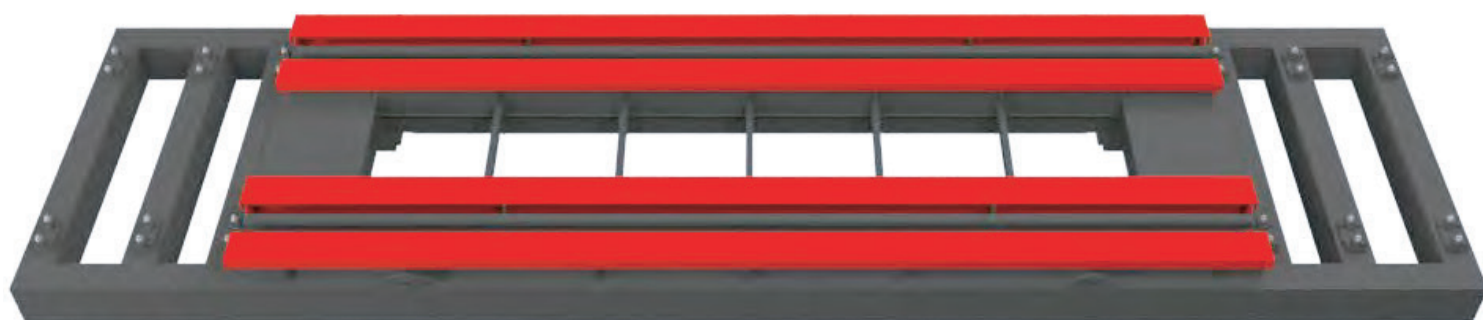
No in-situ concrete pouring works.

1. GENERAL

In what follows, the scale is presented FLINTAB EVO TRAPPER dynamic rail, complete equipped, including the interconnection of all electronic equipment.

The described electronic weighing system allows bogie-by-bogie weighing of wagons in motion of railways loaded with solid products, coupled in a train set, pulled or pushed,

in accordance with the imposed speed conditions. The presented weighing system ensures a high degree of robustness and reliability, elimination complete mechanical maintenance of the receiver of load, virtually zero maintenance requirements, all these due to the simplified construction and a electronic components with proven reliability made in GERMANY.



The FLINTAB EVO TRAPPER dynamic rail scale sits directly on the track's broken stone infrastructure railways, without the need to dig a pit. This implies the following advantages:

- > No complicated foundations are required; it is not necessary to pour concrete foundations
- > thanks to the "SLIM LINE" construction, the frame's installation depth on the railway infrastructure is only 34cm below the NST (upper level of the sleeper)
- > the frame is a monolithic construction
- > the scale is manufactured and assembled under controlled conditions in the factory
- > the scale is factory tested and calibrated
- > the modular design allows the scale to be delivered fully assembled and wired, ready to be placed on normal rail infrastructure
- > all parts including load cells are accessible from ground level (maintenance free)

CERINȚE LOC PENTRU MONTAJ

- > the straightness of the sides of both scale rails and the deviations of the upper surfaces of both scale rails must comply with FLINTAB requirements;
- > the braid must not have any curve or deviation for a length of 30m from each side of the scale;
- > if the installation site is subject to flooding, it will be provided with a drainage system to prevent partial or total flooding of the scale;

LUCRĂRI PREGĂTITOARE NECESARE

- > rails and sleepers are removed along one length equal to the length of the scale;
- > the track ballast is excavated (where it is case) until reaching the sand level; sand must be clean (without being impregnated with fuel oil, oil etc.); the track ballast must be redone in compliance with railway regulations;
- > the scale is placed over the ballast restored to the level indicated;

The FLINTAB electronic weighing system has no moving parts and is easy to calibrate accordingly OIML regulations.

The weighing system automatically identifies the locomotive, the carriages, the direction of the train, the number of wagons, the speed of each wagon, the start and end date of the weighing process, all without operator intervention.

The status of the weighing process is transmitted in real time to the remote operator, who can intervene at any time during the weighing process when the travel speed is not respected or when unauthorized maneuvers are performed on the scale (accelerating or braking the train on the scale, stopping of the train during the weighing process and change of direction of travel) etc.

The weighing system measures the mass of each bogie, the mass of each wagon and the total mass of the train/train, automatically excluding locomotives. Mass measurement is done on the go, towing or pushing the wagons across the weigh platform to a maximum traveling speed in time weighing 12km/h.

The maximum capacity is 60t per bogie and the accuracy class for dynamic weighing is class 1 for wagons and class 0.5 for train, according to OIML R106/1993. The weighing system can carry out static weighing according to OIML R76-1/1992, having the accuracy class III.

NOTE: The FLINTAB dynamic rail scale does not require a "by-pass" track for trains that they don't want to be weighed.



SYSTEM CONFIGURATION

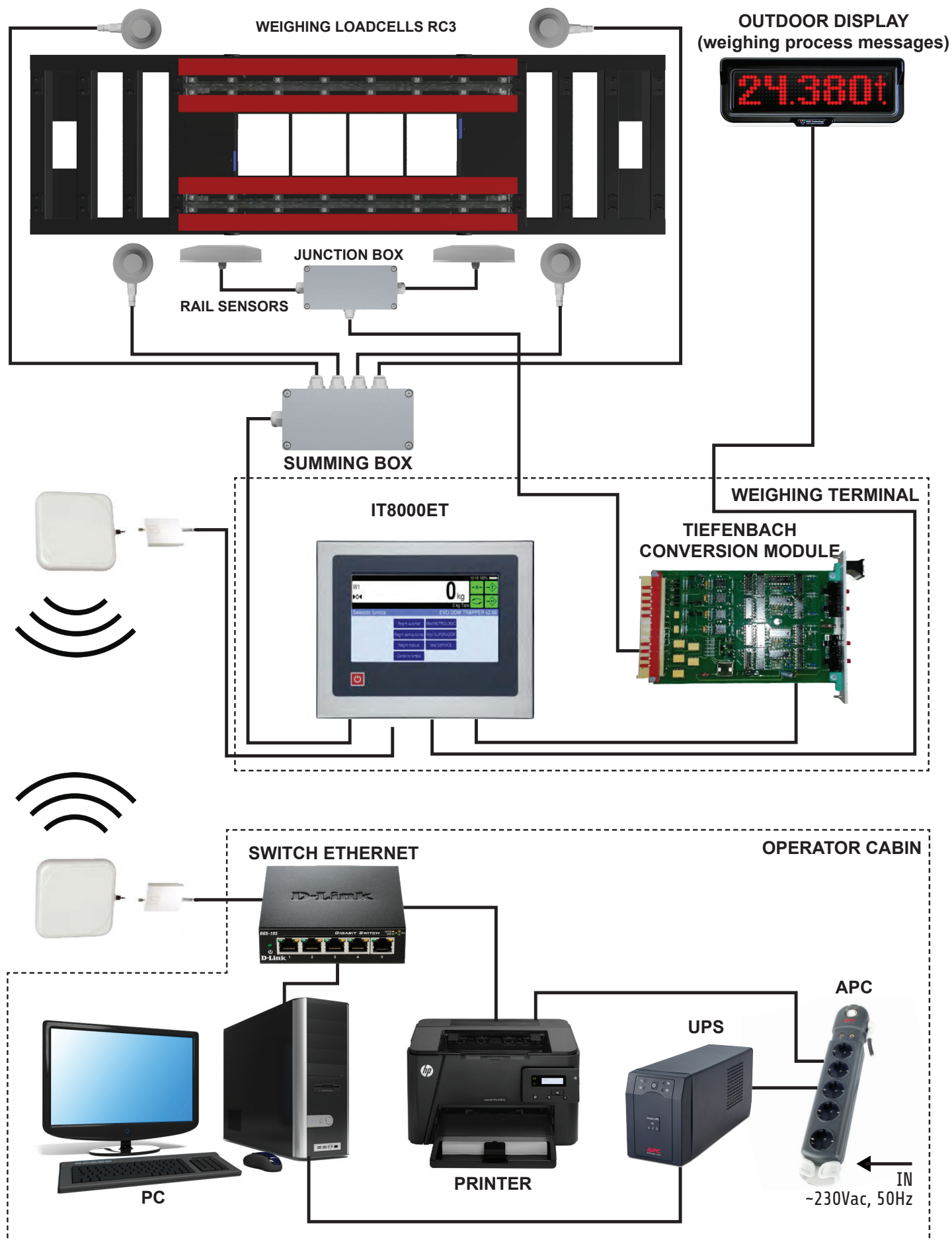
All the electronic equipment in the dynamic weighing system is manufactured german

The system is composed of:

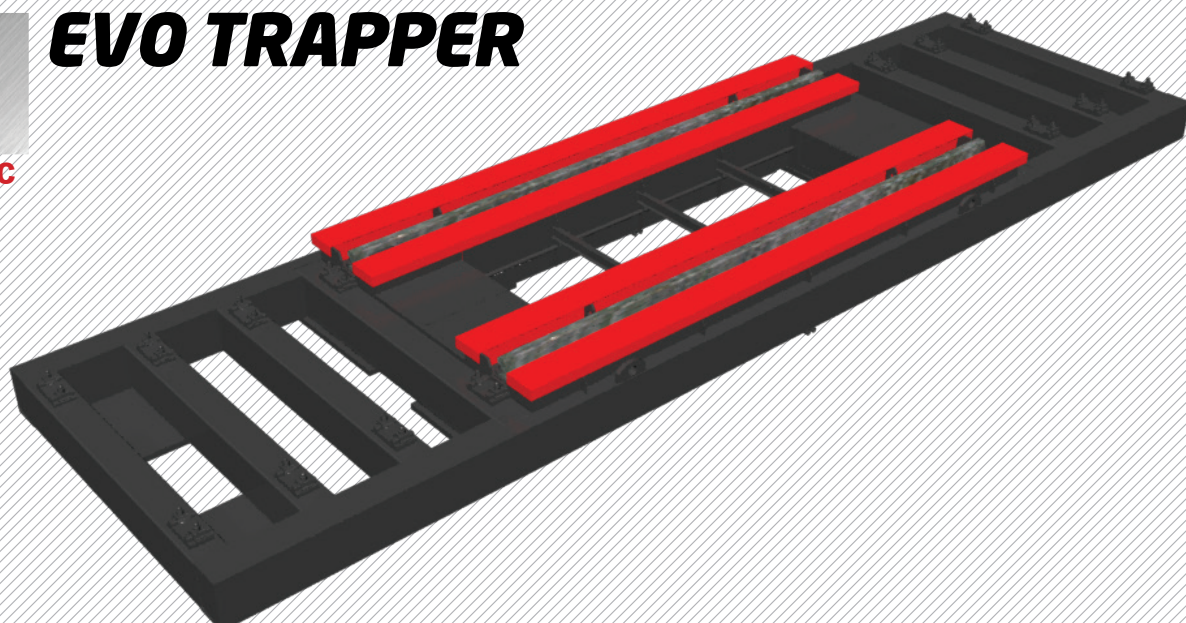
- > weighing platform
- > electronic wagon identification system
- > visual signaling system of the weighing process
- > digital weighing indicator on which the weighing program is running
- > PC station running a special program for remote operation and weighing management

2. CONFIGURATION SYSTEM

STRUCTURE OF THE DYNAMIC WEIGHING SYSTEM OF WAGONS



M **EVO TRAPPER** METALLIC



The weighing platform consists of:

- > Metal frame
- > Two weighing beams
- > Professional limiters
- > Four load cells
- > A summing box

Structure of the EVO TRAPPER weighing platform it is metallic with beams (active component weighing) mounted on a complete foundation metal and robust that installs directly on the broken stone infrastructure of the railway, without concrete pouring works.

Strength structure of weighing beams is considered the best support structure of "I" beams (extended steel I-beams), design recommended as "the best practice" by the most competent international authorities in the fields transport and road construction and bridges (the railway scale being assimilated with a bridge structure).

The weighing platform is the load receiver for on-the-go weighing of a single bogie. It consists of a fixed part - the FRAME RECEIVER - and a moving part - THE RECEIVER OF TASK. The load receptor rests on the loadcells, which transforms the mechanical effort (weight) in electrical signal.



Also the FLINTAB platform design exclude closed spaces where excessive humidity can initiate corrosion processes from the inside out outside.

The weighing beams are mounted in a frame metal from U profiles and closed with a labyrinth like this so as not to accidentally penetrate material (ballast, etc.) of the railway infrastructure. Each beam is placed on two cells of weighing, one at each end, and both weighing beams are connected to each other by one moment arm at the ends of each beam. This construction allows the beams to work independent without being exactly at the same level.

2.1. WEIGHING PLATFORM

Notes: Compared to rigid structures mounted on a concrete foundation, which require all four support points to be at the same level, the advantage of the EVO TRAPPER dynamic railway scale, with mounting at surface, is that the support points may not be at the same level, the beams working independently of each other on the other. This is why the structure can be mounted directly on the ballast surface, the precision not being altered by the eventual settling of the ballast. The weighing modules will be delivered to the location assembly, fully equipped with load cells, wired and interconnected.

Professional shock and clearance limiters allow the two to be precisely fixed rails of the scale, but without affecting in any way the process of dynamically weighing the wagons for any permitted running speed.

LOADCELLS

FLINTEC GERMANY load cells are RC3 load cells mounted in mounting kits of special construction. Unique load cell design and mechanical weight transmission assembly through the revolutionary self-aligning ROCKER COLUMN concept lead to excellent load introduction and minimum dimensions of the assembly kit.

The load is transmitted from the load beams to the load cells through the cell cups. These do that the load is correctly applied to the load cells and also allows for thermal expansions in the beams weighing. Each cell is equipped with a shielded cable, completely hermetically sealed by a glass-on-metal watertight gland, used in industrial environments, with IP68/IP69K degree of protection. The cables from the four load cells are connected in a summation box mounted inside the weighing module.

The summation box is made of FRP (fiberglass reinforced polyester), IP66, with IP68 cable glands and contains the standard fitted connection board with protective spark plugs for electric shocks and silica gel for protection anti-condensation.

The FLINTEC calibration technique (in mV/V/Ω) eliminates calibration difficulties a corner calibration in systems with multiple load cells, otherwise, time-consuming metrological checks. Optionally, the RC3 is available for use in hazardous environments explosion 0, 1, 2 (gas) and 20, 21, 22 (dust) according to EEx ia IIC T6..T4 T130°C.

Features of FLINTEC RC3 load cells:

- > remarkable accuracy
- > stainless steel construction
- > perfectly hermetic sealing
- > protection IP68, IP69K
- > protection against electric discharges: electronic tubes with gas discharge
- > high input resistance: 1100 Ohm
- > metrological certification for 4000 intervals



2.2. ELECTRONIC SYSTEM WAGON IDENTIFICATION

EVO TRAPPER

The electronic wagon identification system consists of:

- > two dual inductive wheel sensors installed each at the two ends of the weighing platform
- > a junction box for the two inductive sensors
- > a conversion module that has an electronic signal amplifier for wheel sensors, a trainer of pulses and a simulator for wheel sensor signals (for tests in service mode)

Inductive wheel sensors, for wheel identification wagons, are dual – TIEFENBACH GERMANY brand, so the two pairs of inductive sensors allow:

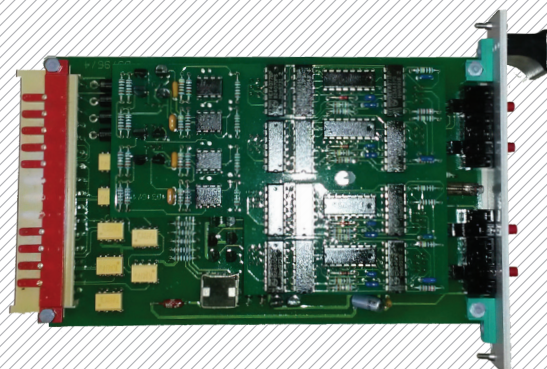
- > directional counting of wagon axles
- > determining the direction of travel of the train
- > measuring the moving speed of the bogie on the weighing platform
- > detection of the change in the direction of travel of the wagon (in this case the weighing process is canceled automatically)

The main advantages of these inductive wheel sensors are:

- > detects without contact the wheel from max. 45mm vertically
- > no adjustment required for the entire wear section of the rail and wheel (max. 50mm)
- > the rail is not affected in any way by attaching the sensor
- > the response signal is in real time
- > has no temperature restrictions ($-30..+60^{\circ}\text{C}$)
- > does not require maintenance (service at 750000h)
- > they are small in size

These wheel sensors monitor the passage of wagons over the weighing platform, commanding the start and end of the weighing process of each individual bogie. The junction box connects the two wheel sensors and the electronic module which processes the four electrical signals.

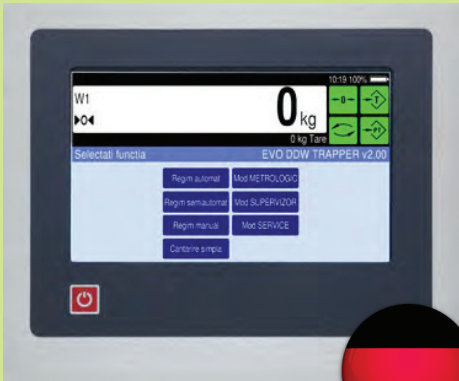
To amplify the transmitted electronic signals, inductive sensors connect to a conversion module. It performs signal amplification and formatting. outputs digital inputs of the conversion module are connected to the digital inputs of the I/O modules of the IT8000ET digital weighing indicator, where they are compared to each other as phase for determining the direction of travel and the position of the wheels on the load receiver.



2.3. DIGITAL WEIGHING INDICATOR

Digital weighing indicator

SysTec GERMANY IT8000ET



- > **Certification:** CE examination certificate issued by PTB GERMANY, notified body in the European Union
- > **Case material:** stainless steel
- > **Alphanumeric display:** 5.7" color
- > **Standard communication interface:** Ethernet
- > **Digital interface:** 4 optically isolated digital IN/OUT
- > **Fast signal processing:** up to 800 readings/s
- > **Calibration:** digital, through a dedicated menu
- > **Keyboard 62 keys:** On/Off, Sum, Zero, Loud, Print, Function, alphabetical, numerical

- > **Adjustable electronic filters** to attenuate oscillatory signals from the weighing platform or a any other parasitic signals. Limited displacement of the zero point to compensate for deviations caused by snow, mud or accidental deposits on the platform
- > **Diagnostics:** Remote via Ethernet
- > **Stored data protection:** by system password and supervisor password
- > **Configuration and options:** flexibility thanks to the modular concept
- > **Integration:** Linux operating system with integrated web server

The digital weighing indicator (IDC) has a CE certificate and makes up to 800 readings/s of the load cells. weighing, for accurate reading of the moving bogie mass according to real-time reading algorithms. The IDC has an automatic zeroing function to compensate for deviations due to mud build-up, snow etc. on the weighing platform. This function is automatically canceled during the process of weighing.

The digital weighing indicator IT8000ET receives and processes the signal received from the cells of weighing and the signals received from track sensors. By processing them, it simultaneously obtains, stores, displays, prints and transmits through the Ethernet interface, to the PC station, the results of the weighing process.

The weighing program, running in the IDC, performs the dynamic weighing of the set of wagons, weighing each individual bogie and calculates the mass of each wagon and the total mass of the train, travel speeds, etc. It stores in the IDC memory the data corresponding to the weighing process for the entire train and communicates with the operator's printer via the Ethernet interface. Data transmission from the weighing terminal is wireless, using an Ethernet access point industrial ADVANTECH with the power of 26dBm and with built-in 8dBi directional antenna, which ensures a secure data connection for the industrial environment. The wireless connection is secured using the latest encryption technologies. Using the STP, WMM and IGMP protocols, a reliable wireless connection is ensured.

PC and printer station



Average market configuration with pre-installed operating system:

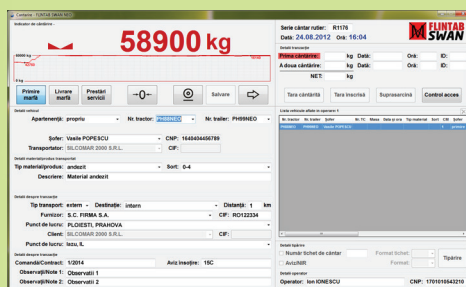
- > 2.0GHz processor
- > Memory 2.0GB
- > HDD 20GB
- > Monitor with native resolution 1280x1024 or 1440x900
- > RS232/USB serial interface or an ethernet interface TCP/IP
- > Microsoft Windows XP SP3 operating system, Microsoft Windows Vista SP1 or Microsoft Windows 7
- > HP LaserJet PRO P1102 black and white laser printer

EEP additional electrical protection package



- > Socket with spark plugs and quick fuses for surge protection and electric shocks in the power supply network
- > Uninterruptible power supply UPS minimum 500VA
- > Extension cord with the necessary sockets for the system as a whole

Software



Business transaction management software system:

- > Easy operation based on windows, menus and lists
- > Real-time weight monitoring
- > Printing, including viewing of issued weighing notes
- > Management of weighing data with issuance of weighing notes and saving them in databases (date, time, COUNTRY, GROSS, NET, product, etc.)
- > Commercial transaction reporting for selectable time periods
- > Protection against the intention of fraudulent use of data by weighing

2.3. DESCRIPTION OF THE WEIGHING SYSTEM

The following describes the operating principle and operating procedures of the weighing system dynamics of wagons with solid products. The system performs:

- > The association between the serial number of the wagon of a train/convoy (whose weighing data were acquired and processed by the weighing system via the IT8000ET terminal) and the unique series of the wagon;
- > Management of pending, operating, completed and canceled trains;
- > Chronological and systematic management of tickets scale from the database;
- > Programming known trains that will be weighed automatically;
- > Automatic weighing of passing trains railway scale and separate train rescue scheduled and unscheduled trains;
- > Automatic terminal resynchronization of weighing with database from PC/server station, in in case of interruption of the data connection;
- > Signaling of status parameters during carrying out the weighing process;
- > Printing train/wagon scale tickets and detailed reports by time period, company, product, etc.

LOCAL OPERATION



The weighing terminal can be operated:

- Local: from the alphanumeric interface of the IDC
- Remotely: via IDC's Ethernet interface

Locally, the operator is guided through the color interface intuitive interface of the IT8000ET terminal.

The data is entered through the touchscreen keyboard of the terminal IT8000ET.

Typical weighing operations using the IDC interface are:

- > Select the "START" function key on the keyboard
- > Enter operator ID
- > Introduction train series

- > Start weighing process
- > The system weighs all wagons and displays the weighing data
- > The system stops weighing
- > The scale ticket is printed (automatic printing active)
- > The data is transmitted to the PC station
- > End of weighing process; the system is waiting for the next train

The weighing data for each train is automatically saved in the FIFO memory of the weighing terminal. The weighed train automatically exits the operating state. Depending on the weighing result, it switches to completed trains or to canceled trains (accessible from the "Records" submenu). In the case of completed trains, the values for each wagon in the train are updated accordingly. When pressing the "CANCEL" function key, the operator manually cancels the train in operation. The proper performance of the weighing operation is signaled by a signaling system (traffic light, traffic light, outdoor alphanumeric display, etc.) positioned next to the weighing platform, according to the chosen option.

Submeniul "Setări"

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg
W1	0 kg	
Tare	0 kg	
Settings		
1 General 2 Simple Weighing 3 Train Log Memory 4 Configuration		
Exit		

Trenuri aflate în operare

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg		
W1	0 kg			
Tare	0 kg			
Available Trains				
#	ID	Train SN	Engine	Wagons
1	100	12345	0	22
2	101	23456	0	34
3	102	34567	0	42
4	103	45678	0	40
5	104	56789	0	36
Start New Return				

În așteptarea trenului

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg
W1	0 kg	
Tare	0 kg	
Train 101 — 23456		
Start	End	Train total 0kg
Wagon	V [km/h]	1Bogie [kg] 2Bogie [kg] Total [kg]
Stop Abort Trains Log Metrol		

În timpul operației de cântărire

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg
W1	34250 kg	
Tare	0 kg	
Train 109 ← 12345		
Start 13:25	End	Train total 205500kg
Wagon	V [km/h]	1Bogie [kg] 2Bogie [kg] Total [kg]
1	2.38	34250 34250 68500
2	2.15	34250 34250 68500
3	1.40	34250 34250 68500
Abort Trains Log Metrol		

Ecrane metrologice

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg
W1	0 kg	
Tare	0 kg	
Metrological Data		
03.03.15 12:44 Page 1/4		
CE M 14 1799 EC type examination certificate No. RO-T059-M1006 Model EVO TRAPPER Serial No. F118 Manufacturer FLINTAB		
Next Return		

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg
W1	0 kg	
Tare	0 kg	
Metrological Data		
03.03.15 12:44 Page 2/4		
Weighing mode Partial weighing Accuracy class Wagon 1 Train 0.5 Capacity Max 60000kg Min 6000kg Scale interval d= 50kg		
Prev Next Return		

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg
W1	0 kg	
Tare	0 kg	
Metrological Data		
03.03.15 12:45 Page 3/4		
Operating speed Max 10.00km/h Min 0.20km/h Number of wagons Max 30 Min 1 Wagon weight Max 120000kg Min 10000kg Partial weight per wagon 2		
Prev Next Return		

W1	Max 60000 kg Min 1000 kg	e= d= 50 kg
W1	0 kg	
Tare	0 kg	
Metrological Data		
03.03.15 12:45 Page 4/4		
Direction of weighing Bidirectional Wagons pushed/pulled Not to be used to weigh liquid products Maximum transit speed 30km/h Electric power supply 230V/50Hz		
Prev Return		

3. DESCRIPTION OF THE WEIGHING SYSTEM

REMOTE OPERATION

The weighing program installed on the station PC allows the management of waiting trains, in operation, completed and cancelled. The program allows the weighing of wagons (full and empty) from the composition of the trains in operation, they can be grouped in convoys for shunting.

The weighing program allows two distinct modes of operation:

- > Train operation
- > Convoy operation

There can only be one train or one at a time single convoy in operation.

Convoys can be parts of a particular train or a string of full/empty wagons from one or more trains in operation. Each convoy will be weighed only once for determination of the TARE/GROSS values of the wagons from composition. These wagons are characterized by the series of wagon, the train series they come from and the weighing number (can be at the first weighing - C1 - or at the second weighing - C2 -).

The convoy is characterized by the number of wagons, by the position of the locomotive and the train ID (automatically generated by the system of weighing for each individual weighing).

Each train is characterized by the series of the train and the list of wagons from composition. The order of the wagons does not is important because each wagon is identified by the wagon series. After that each wagon is weighed by two times - full and empty - a ticket will be issued of scales on the train that will include the list to all wagons identified by their number, GROSS/TARE/NET values. When printing the scale ticket, the order of the wagons in the train will be the one corresponding to their

After the full/empty weighing is completed for each wagon - identified with the wagon series - from the composition of a train (apart from wagons canceled by the operator that appear by default with the value zero to TARE and GROSS), this train can be passed by the operator to completed trains. A ticket can be printed scale only for trains that are completed and have all mandatory fields filled in.

If all wagons in an operating train are completed and reweighing is not desired no wagon, the operator can switch the selected train to completed trains by pressing the button "Completion". Canceled trains are those trains which, for various reasons, can no longer be weighed. The selected train can be canceled by the operator by pressing the "Cancel" button.

Notes:

- > The wagon series will be inserted completely to avoid operating errors; the weighing program will check the correctness of the wagon series;
- > Statistical reports/situations can be generated from the operator's PC station or from any PC station in network that has access to the weighing program database.

Tren curent

Serie:

ID:

Nr. vagoane:

Nr. axe locomotiva:

Vagon curent

Serie:

Nr. crt.:

Nr. axe:

Sens: -->

Viteza:

km/h

Masa:

kg

Data ora:

0 kg

→0←

Start cantarire

Anulare cantarire

Vagoane tren curent

Nr. vagon	Boghiu1	Boghiu2	Masa	Viteza	Data ora	Sens	Nr. axe	Se
-----------	---------	---------	------	--------	----------	------	---------	----

Serie cantar feroviar:

F888

Data:

17.11.2010

Ora:

07:52

Trenuri in operare (0)

Trenuri in asteptare (0)

Trenuri finalizate (0)

Nr. ordine	ID	Serie tren	Nr. loco	Tip loco	Pozitie loco	Nr. axe
------------	----	------------	----------	----------	--------------	---------

Detalii vagon tren selectat

Serie vagon:

Nr.:

Tara inscrisa:

kg

/ tren

Delegat:

CNP:

/ tren

Tip tranzactie:

/ tren

Cod:

Produs:

Cod:

Descriere:

/ tren

Furnizor:

CIF:

Locatie:

Cod:

/ tren

Client:

CIF:

Locatie:

Cod:

/ tren

Dista:

km

/ tren

Scrisoare trasura:

/ tren

Aviz insotire:

/ tren

Comanda:

/ tren

Observatii:

/ tren

Prima cantarire:

kg

Data ora:

A doua cantarire:

kg

Data ora:

NET:

kg

NETAviz:

kg

Vagoane tren selectat

Serie vagon	Tip	Nr. axe	Cod	Tip tranzactie	Produs	Descriere
-------------	-----	---------	-----	----------------	--------	-----------

Ordine vagoane conform tren ID:

directa

inversa

Aplica

Detalii tiparire

Numar tichet de cantar:

Format tichet:

Tiparire

Detalii operator

Operator:

Ion IONESCU

CNP:

PH012345

Configurare

Detalii firma

Particularizare

Administrare

Descriere cantar terminal 1

Tip IDC (indicator digital de cantarire):

IT9000E - Port serial RS232 IDC: COM1 -

Serie:

F117

Max:

80000 kg

Min:

400 kg

Supraincarcare axa vagon:

30000 kg

Locatie:

Ploiesti, PH

Eticheta:

Cantar 1

Descriere cantar terminal 2

Tip IDC (indicator digital de cantarire):

IT9000E - Port serial RS232 IDC: COM2 -

Serie:

F118

Max:

80000 kg

Min:

400 kg

Supraincarcare axa vagon:

30000 kg

Locatie:

Ploiesti, PH

Eticheta:

Cantar 2

Descriere documente de cantarire

Numar curent	Format tiparire	Numar copii	Imprimanta implicita	Model
Tichet de cantar (TC):	1 A4	1	Epson LX-300+	model 1
Rapoarte si statistici:	A4	1	Epson LX-300+	

Tip tranzactie implicita:

primire marfa

Rezolutie monitor:

1280x1024

Accept

Renunt

Configurare

Detalii firma

Particularizare

Administrare

Denumire:

DEMO S.R.L.

Locatie:

Ploiesti, PH

Nr.Reg.Com.:

J09/09/1999

CIF:

RO1235688

Telefon:

0265 512362

Fax:

0265 511481

Web:

www.demo.ro

Email:

demo@gmail.com

Logo:

DEMO

Antet TC:

Rand 1

Rand 2

Subsol TC:

Rand 1

Rand 2

XXXXX.XXXXXX.XXXXXX.XXXXXX.XXXXXX

Cod activare:

3C1F3-AB2H8-2A4FC-3B8J2-FA9J3

(Inlocuitor de departina sau fi adaugate sufixe)

Accept

Renunt

13

3. DESCRIPTION OF THE WEIGHING SYSTEM

03.11.2010 08:42

Raport centralizat: 01.11.2010 07:00 - 03.11.2010 08:36

Tip tranzactie: livrare marfa

Firma: toate

Produs: toate

Grupare pe produse

Desfasurare pe vagoane

Produs: CARBUNI

Firma	Serie tren	TC	Data si ora C1	Data si ora C2	Serie vagon	NET
FIRMA2 S.R.L.	43888-5/1	4204	2.11.2010 7:26	2.11.2010 8:47	33 84 4796 100-8	23400
					33 84 4796 101-0	22680
					33 84 4796 102-2	23100
					33 84 4796 103-4	22380
	43889-6/1	4206	2.11.2010 21:09	2.11.2010 22:11	31 51 3320 198-6	23100
					31 51 3320 197-8	24880
					31 51 3320 198-0	24040
					31 51 3320 199-2	22180

Total firma: 185760 kg

Nr. inregistrari produs: 8

Total produs: 185760 kg

Produs: FIER

Firma	Serie tren	TC	Data si ora C1	Data si ora C2	Serie vagon	NET
FIRMA2 S.R.L.	43888-5/2	4205	2.11.2010 8:50	2.11.2010 9:52	33 84 4796 104-6	45120
					33 84 4796 105-8	43880

Total firma: 89000 kg

Nr. inregistrari produs: 2

Total produs: 89000 kg

Nr. inregistrari: 10

Total: 274760 kg

S.C. DEMO S.R.L.
Punct de lucru: Ploiesti, PH

21.09.2011 09:12

Tichet de cantar nr. 1

Serie tren: 111, convoi: 1, nr. vagoane: 2, data ora cantarire: 16.09.2011 17:03 - 16.09.2011 17:04

Furnizor: FIRMA S.R.L.

1250 kg

- Produs: pirita

1250 kg

Nr. vag	Serie vagon	Tara inscrisa	Masa C1	Masa C2	Tip tara	NET cantar	NET aviz	Dif. aviz	Scrisoare Trasura	Aviz Insotire
1	21 53 9123 381-0		21550	21100		450		450	123456	888888
2	21 53 9123 382-2		21350	20550		800		800	123456	888888
Subtotal (kg):			42900	41650		1250		1250		
Total (kg):			42900	41650		1250		1250		

Cantar feroviar FLINTAB seria: F888

Locatie: Ploiesti, PH

Operator: Ion IONESCU

CNP: 1701010543210

Tip cantarire: dinamica

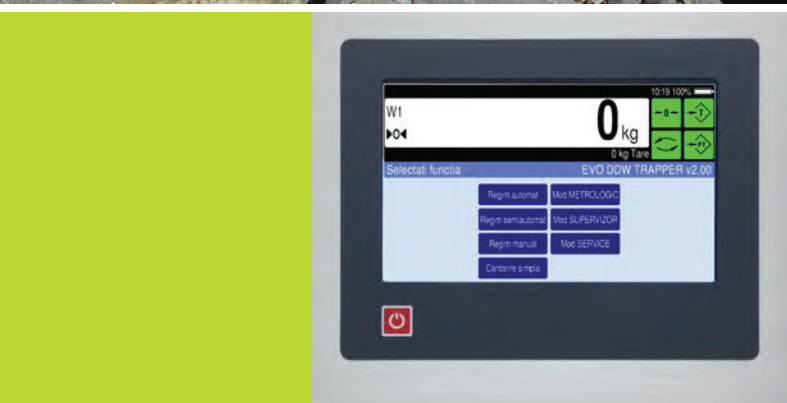
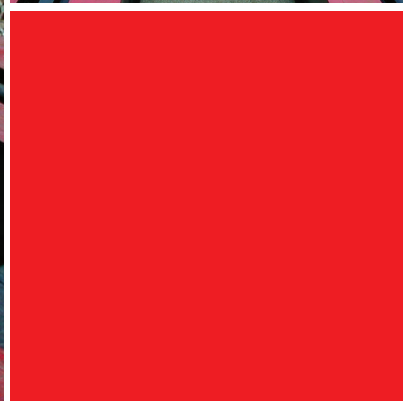
Clasa de exactitate: 1

TECHNICAL DATA	
Number of modules	1
Weighing platform length	8.2m: 2m [inactive] + 4.2m [active] + 2m [inactive]
Weighing method	Bogie with bogie
Accuracy class	Dynamic weighing: class 0.5 for wagons according to OIML R106
	Dynamic weighing: class 0.2 for trains according to OIML R106
Division	50kg
Maximum capacity	60000kg
Weighing area	6000..60000kg
Weighing cells	RC3-30t-C4, RC3-40t-C4
Proximity sensors	Inductive (IP67)
Addition box	IP66
Weighing sense	BI-directional
Maximum number of wagons	40 wagons
Train speed during weighing	0.2 .. 10km/h
Duration of operation	continuous: 24 hours a day, 7 days a week
Maximum number of registered trains	100
Transmission of data from the terminal weighing to the operator PC station	Wireless, IEEE 802.11b/g compatible and IEEE 802.11n draft 2.0
Operating temperatures	Platform: -40..+60°C
	Loadcells: -40..+80°C
	Electronics: -10..+40°C
	Relative humidity (without condensation): 40..80%
Supply voltage	~230Vac ±10%, 50 Hz ±2%
Electric power	max. 450VA

EXCLUSIONS FROM FLINTAB SUPPLIES

- > The customer ensures the alignment of the C.F. rail. on a length of at least 3 wagons
- > Approvals and building permit (if applicable)
- > Cabin for the railway scale operator
- > Supply voltage of ~230Vac, 50Hz, with protective neutral connected to earth, available for powering the weighing terminal positioned next to the weighing platform and the power supply equipment in the operator's cabin
- > A train available for bogie-by-bogey weighing tests (with a minimum of 10 wagons)

Experience **30** years
Warranty **10** years
References **>250** railway scales



www.flintab.ro

FLINTAB
Carpenului no. 22 street.
100430 Ploiești, România

+30 years
FLINTAB
Performance in weighing