

V-TECH-PIT®

SERIES PIT TYPE ELECTRONIC TRUCK SCALES



Technical Documentation

- Most Suitable For Places with Limited Space
- Long Service Life
- CNC Controlled Production Automation
- Robotic Welding
- High Accuracy Weighing
- Superior Reliability and Performance
- Easy and Quick Installation
- Minimum Service and Maintenance Cost

V TECH series electronic truck scales are our new product range that design from V form high strength beams which is constructed through robotic welding system. During product development and design all static calculations are done at computer mediated state of the art analysis programme. V TECH series electronic truck scales can be operating at any sector and working conditions with the unique design, material quality and production quality method.

Pit and pitless type alternatives are available for V TECH series electronic truck scales. Those scales can be installed very quickly on a suitable side without any concrete foundation work required. Steel ramps and side rail systems can be delivered as an optional. Especially optional steel ramps are very useful when the scale is required to move one place to another place frequently on the worksite.

LIST OF MATERIALS AND SERVICES

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1	Foundation and Grounding Projects	2 Units
2	Steel Construction Weighing Platform	1 Unit
3	30 Ton Capacity Stainless Steel Load Cell	6 Units
4	LOADGUARD Load Cell Mounting Kit	6 Units
5	Stainless Steel Junction Box	1 Unit
6	Load Line - 2 Truck Scale Management System (Indicator, Computer, LCD Screen, PS/2 Keyboard, Mouse, WinSCALE truck scale programme are included.)	1 Set
7	Ticket / Report Printer, Weighing Tickets (1000 Units)	1 Unit
8	Installation – Start up – Calibration	1 Set
9	Service and Technical Support	
10	Options	

1. Foundation and Grounding Projects

The projects are prepared by our expert engineers and technicians delivered to you after order confirmation. With carefully designed foundation and grounding projects truck scales are installed and serve for your applications many years without any problems.

Foundation Type	: Concrete
Ground Safety Factor	: In our project, ground safety factor is calculated as 2 kg/cm² . Please keep in touch with our company and revise your project If your ground basement has different values.
Location Dimensions	: Location dimensions mentioned on the project is the total value of ramp and truck scale. Vehicle's entering, exiting and maneuvering areas also must be taken into consideration while defining necessary location dimensions.
Environment Arrangement	: Environmental waters should be drained for right weighing operations and serving you many years. There shouldn't be any set around foundation area for vehicle's enter exit, installation and service of the scale.
Weighing Room	: Minimum size for the weighing room must be 4 m ² to control the scale. It can be far away from the weighing platform less than 2 m and must be no more than 25 m. Please call our company for different distances.
Grounding	: Grounding project implementation which is prepared specially for truck scale system must be done during foundation process.



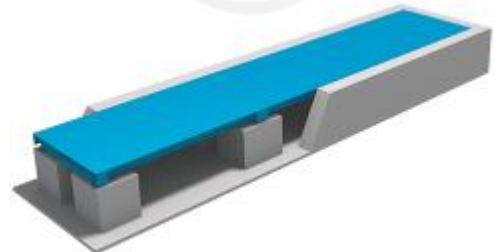
2. Steel Construction Weighing Platform

V TECH are manufactured 4m and 6m length standart modules. The production process of the modules which built scale platform is done on the CNC controlled machineries During production process, V form is given to the raw material after free hand cutting process. Then it is welded continuously through robotic welding machine process. As a result of fully automated manufacturing process V TECH has unrivalled reputation with homogeneous structure, without intermittent welds and lower strength spot.

Weighing Platform	: Steel construction
Max. Loading Capacity	: % 120
Connection	: Interlock mechanism
Welding	: MIG/MAG Robotic
Color Code	: Platform : RAL 5010



- High speed quality production
- High quality welding
- Zero error production
- Excellent surface for dyeing
- Robust construction and



3. 30 Ton Capacity Stainless Steel Load Cell

Stainless steel load cells with IP68 completely hermetic sealed enclosure can be operated within the water of 2 m depth and also washed by pressurized water condition with IP69K protection class provides extended performance in harsh industrial environments.

With matched loadcell outputs, no corner adjustments requirement makes most exact measurement guaranteed at every point. The loadcell lightning protection components on V-BRIDGE® series provide maximum protection from lightning strikes and heavy surges in current.

With these superior properties of load cells, it significantly reduces maintenance costs. Most importantly, it eliminates weighing failures that occur on the truck scales unlike other load cells which are not equipped with those features on the market place.

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

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

The feature of interlock mechanism against axial movements 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.

Model	: SP-A-SS
Accuracy Class	: OIML C4 4000 D
Nominal Capacity	: 30 Ton
Number of Load Cells	: 6
Certified Standard	: OIML R60 / EN 45 501
Protection Class	: IP68/IP69 K EN 60529 / DIN 40050
Minimum Load Cell Verification Interval	: Emax / 14000
Operating Temperature Range	: - 40 C° / + 80 C°



**OIML
R60
Class C4**



4. LOADGUARD Load Cell Mounting Kit

LOADGUARD® mounting kits work in full compatible with load cells' "Rocker Column" feature to compensate the disturbance effects 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 different directions. It allows faster and more accurate weighing measurements.

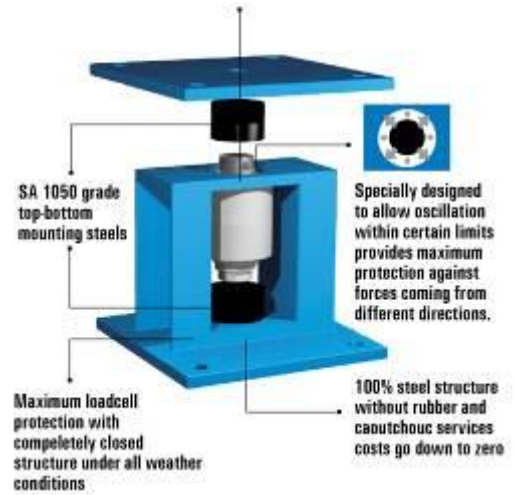
Mounting kits which are specially designed to allow oscillation within certain limits provides a perfect weighing performance by taking control of the forces caused by movement of vehicles on the platform and thermal expansion.

50 hours of **salt spray test** is applied to check corrosion resistance of varnish coated SA1050 grade top-bottom mounting steels. This is another reason to ensure high measurement accuracy.

Model	: CMP-MA 30 T
Nominal Capacity	: 30 Ton
Number of Kits	: 6
Material	: Steel
Color Code	: RAL 5009

LOADGUARD

LOADGUARD® mounting kits work in full compatible with load cells' "Rocker Column" feature to compensate the disturbance effects of side loading on weighing performance.



5. Stainless Steel Junction Box

High quality and long lasting performance with **IP67** protection class including lightning protection with structures. No maintenance required. The connection cable provides communication between weighing indicator and junction box.

Model	: WA-JB-6
Number of J-Box	: 1
Protection Class	: IP 67



IP67 YÜKSEK
KORUMA SINIFI



YILDIRIM
KORUMA

6. Load Line - 2 Truck Scale Management System

Load Line – 2 “ Truck 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 LL 2 truck scale management system, as well as offers a choice of using 6 different languages. Alphanumeric data can be accessed to the data fields defined 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 fields numberplate, customer and all other informations can be displayed on the screen or can be printed.

Model	: Load Line 2
Type Approval - Documents	: 2014/31 AB- DK 0199.512 / OIML R 76 / CE
Approved Accuracy Class	: CLASS III 10 000 D
Display	: 6 Dijit 20 mm. LED display
Warning Symbols	: Zero, tare, standstill, net, pcs, kg, weighing area
Keyboard	: Membrane type, 8 function touch-key for zeroing and calibration
Serial Communication	: RS232
Operating Voltage LL 2	: 12V DC 5W
Operating Temperature Range	: -10C° / +40C°
Protection Class	: IP 54
Dimensions & Material LL 2	: 21x15x16 cm aluminium cast boxing

PC System Configuration

CPU - Intel PD.CORE E5500 2.80 GHz
Memory- DDR 2 GB
Hard Drive – 160 GB SATA2 7200 RPM HDD
Operating System - MS Windows 7 Home Basic
32 Bit
Standard PS/2 keyboard, mouse ve 18,5" wide screen colorful LCD monitor
Power Supply – 300 Watt
“ The current system configuration can be changed according to current technology.”



7. Ticket / Report Printer

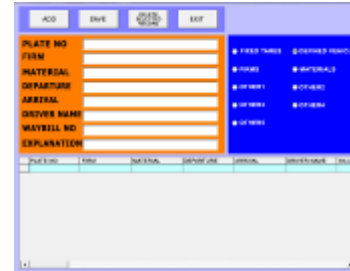
Printing possibility for carbon copy and A4 forms. With high speed and high quality features, it also enables printing of tickets and reports.

TICKET / REPORT PRINTER FEATURES

Brand	: Xerox
Model	: 3020
Printing System	: 600 x 600 dpi
Connectivity	: Wi-Fi b/g/n, High-Speed USB 2.0

TICKET PRINT DATA

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



8. Installation – Start up – Calibration – Inspection and Registration

Installation, start-up and calibration procedures are performed by trained technical staff for truck scales completed production of the highest quality and standards. If it is necessary, inspection and registry of truck scale by authorized bodies of that country will be covered by your company.

Visa, taxes, all transportation, accomodation expenses and daily requirements of our technical staff, all food and beverages (3 meals on a day) will be covered by your company. Installation and commissioning date of the scale will be determined, after sending confirmation papers for foundation and grounding projects to our company. Unloading of truck scales to the area of install, lifting equipments like 2 ton capacity crane and forklift, 2 employees who assist to our supervisor during insallation will be covered by your company

Calibration of truck scale will be performed by our company with necessary reference blocks or weight value is known load which will be supplied by your company for calibration. Then, weighing performance, such as eccentricity and repeatability tests will be performed to the truck scale.

On request, installations carried out in EU member states, calibration and verification of scales for using in commercial activities can be fulfilled by our company according to the 2014/31/AB regulation and EN 45501 technical standards. Accordance with the relevant regulations and standards, your truck scale is ready to use with GREEN M mark indicating the weight indicator. In case of such a request please contact with our sales representative for further information and pricing.

EU Type Approval	: DK 0199.512
Initial Verification	: CE – 044 – NMI (0122)
Regulation - Standard	: 2014/31/AB- EN 45501
Calibration Method	: With necessary reference blocks or weight value is known load









9. Service and Technical Support

Our company has the principle of always ensuring the customer satisfaction and support after sale of weighing devices and systems. The weighing devices and systems are long term investments. When a weighing device or system is bought, they will serve you for a long time. With our well-supported service organization, specialist well trained crew and potent spare part support, we are able to create solutions to solve your problems in a short time.

As being one of the most important truck scale manufacturers in the industry, installation and service operations can be carried out just in time with our own crew in different countries at the same time. Some of the failures that may occur during operation can be eliminated by remote communications with the our central service or produce solutions by stepping into the where the problem occurs.



10. Options

<p>10.1 Automatic Vehicle Identification System</p> <p>With RF transmitter mounted on the truck, information of the vehicle is transferred to the computer without an operator. It allows quick and safe weighing operations where car traffic is intensive with serial weighing facilities.</p>	
<p>10.2 Automatic Vehicle Identification Terminal</p> <p>It is mounted at entry or exit of scale. When the vehicle access into the scale, without the driver's getting out of the vehicle the card is read on the vehicle identification terminal and all information are transferred to the computer. It allows making the process of weighing without an operator. Preferably and according to the process one or two terminals can be used.</p>	
<p>10.3 Remote Display</p> <p>It is used for observing the value of the vehicle 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.</p>	
<p>10.4 Message Terminal</p> <p>It is used to guide and inform the driver visually at the truck scales with automation applications and automatic vehicle identification system. It can be mounted to the scale area or weighing cabin.</p>	
<p>10.5 IP Camera</p> <p>IP Camera is used for weighing security or transferring photos to the database for the truck scales operated far away from weighing cabin. Recorded photos and data can be displayed on the screen or they can be printed. In addition, the camera software and hardware can be added to read vehicle numberplates automatically and transfer them to the database.</p>	
<p>10.6 Barrier</p> <p>It is mounted on scale entry and exit. It prevents vehicle accessing, while the other one is weighing on the scale, and doesn't let the vehicle exit the scale before the end of process.</p>	
<p>10.7 Traffic Lights</p> <p>It is used for the organization of the vehicle's scale entry and exit traffic by the commands received from the weight indicator where the serial and intensive weighings are valid. It can be mounted to the scale area or weighing cabin.</p>	