

ABOUT - EAGLE

At the outset we would like to introduce ourselves as **EAGLE SCALE MANUFACTURING WORKS**, which started operations in **SINCE 1974** Industrial Weigh Bridge, Weighing Systems, Laboratory Balance, Small Scale & Platform Scale etc.

We have **ISO 9001 2008** certified manufacturing Unit at Ahmadabad, Gujarat, India. We are manufacturing all types of Weigh Bridges & Weighing scales under the brand name **"FLYING EAGLE"** Since 1974. We also provide ISO certified products with OIML/ NTPe standards. All of our products are also having CE certification. 'EAGLE' is having its state-of-art manufacturing unit at Ahmadabad, Gujarat, India with full fledge manufacturing facility. 'EAGLE' is having capacity and enough man power to cater the manufacturing of weighbridge as per customer's requirement. It is having the base of more than 12,000 satisfied clients in INDIA and Abroad.

All products offer a complete customized solutions with the basic individual requirements standardized. We offer the most advanced technology to the market at extremely competitive prices. Our emphasis has been on application of Load Cell technology and Process Instrumentation to address various process problems which are so typical as well as rare for every industry. Our relentless efforts in this direction have earned us expertise in these areas.

All of our products offer an on-line documentation with easy computer compatibility. Also the software provided for the automation is programmed within wide range of packages to make it compatible with the current working system of the user organization. The back-end used gives an easy storage and manipulation of the database whereas the front-end provides attractive screens for Graphical User Interface to enter and control various parameters.

CERTIFICATE



We Make Weighing Easy....



MANUFACTURING FACILITY

Our production unit is located at Ahmedabad Industrial Belt with all in-house facilities.

R & D DEPARTMENT, headed by the R & D manager is the most happening place of **EAGLE SCALE MANUFACTURING WORKS**, wherein all attempts are made to add more features to the Product and to make the product more advanced in Technology. There are two engineers in this department for the assistance of the R & D activities.

PURCHASE AND STORES (MATERIALS) DEPARTMENT headed by a Purchase Executive and two Assistants, one for the purchase another for stores. The complete stores and the purchase activities are managed on the basis of the customer requirements by maintaining minimum inventory levels without any loss of goodwill even in time of emergencies. Four people for handling regular work assist this department.

PRODUCTION DEPARTMENT is divided into electronic and mechanical assembly department, which is liaised by the Production Coordinator. One department manages all the electronic components and the final PCB assembly. The other division takes care of the mechanical assemblies. All the mechanical drawings and assemblies are finalized at this stage. Both the electronics and Mechanical department are equipped with all essential equipment with a strong force of Engineers, Mechanics, Wiremen and assemblers.

SERVICE DEPARTMENT is headed by the All India Technical Services Manager, supported by two Asst. Service Managers. There is team of Installation and Maintenance Engineers fully equipped to attend to any kind of problem. We are making sincere efforts to keep our services ON for 24 hours, 7 days a week, 365 days years.

QUALITY CONTROL DEPARTMENT is headed by a Quality Control Manager with four Engineers, two for the incoming raw material and two for the final outgoing product. The raw material as well as the finished goods are subject to stringent quality tests and only then passed.

E.D.P. is the core department of complete processes of the manufacturing vicinity. We have a complete system, which makes the organization almost paperless with a strong database to capture all the data and document flow in the organization. A constant attempt is made to make the system more easy and user friendly.

We have a fairly widespread network across the country.

We look forward to be at your service with long lasting business relationships.

Please feel free to contact us if any further clarifications are required.

We assure you the best service at all times.

Thanking You,

Eagle Scale Manufacturing Works

K.S.PATEL
 Director





FULLY ELECTRONIC TRUCK SCALE

Our steel **weighbridge** decks offer higher strength, greater reliability and faster installation than conventional systems. Their simple foundations, fast, bolt-down sitting and innovative box construction have made them the preferred choice of operators across the country.

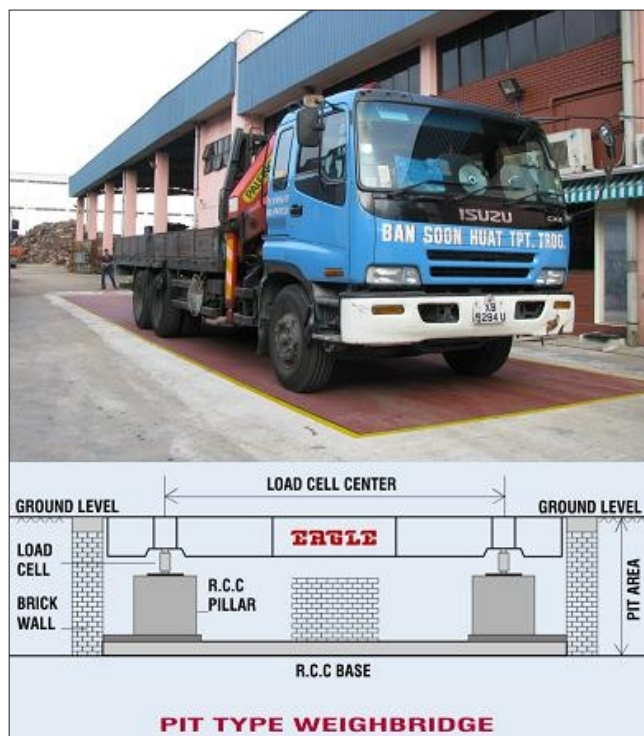
You can choose either a Surface Mounted or a Pit Mounted WEIGHBRIDGE depending on the space availability. The platform of the truck scale is designed to withstand harsh environmental conditions.

PITLESS TRUCK SCALE



This type of weighbridge is most suitable for places with limited space e.g. non-hilly areas where the construction of pit is not a costly affair. Since the platform is in level with the ground, vehicles can approach the weighbridge from any direction. Most public weighbridge prefer this design.

PIT TYPE TRUCK SCALE



This type of weighbridge / Truck scale is most suitable where the excavation work for foundation is difficult or construction of pit is expensive. Since the structure is above ground level, vehicles can approach the weighbridge only from two directions where the ramps are provided. This type of weighbridge requires more space.

BENIFIT

- Lesser Space Required (As it has no ramps)
- Rickshaws & Tractor Trolleys can also be weighed as platform is in flush with ground Level.
- No Ramp require for truck movement because it is installed in land surface level.
- Costly Foundation.
- Costly Pit construction is eliminated.
- Platform above ground level- No water logging during rainy season Problem of pit maintenance is eliminated.
- Easy maintenance since all parts accessible above ground level.
- In Pit less weighbridge RCC ramp work must be required at least 3 meters for both sides for easy movement of vehicle.

EAGLE
SCALE MANUFACTURING WORKS



MODULAR TRUCK SCALE

*No Need to
Make Foundation*



Low civil cost and lesser excavation is required. Very rugged and tough in structure. Come in module form for easy transportation and installation. Surface mounted, hence very economical. The load cells and consequently the top of dock plate, are above the ground level, facilitating easy maintenance. No high water table and drainage problem.

Eagle - Modular weigh bridges can be easily dismantled and re-erected in a new location in a short span of time. Transportation of the modules can be arranged through a normal Truck.

Our Weigh bridges are fitted with load cells which supports the structure through a special arrangement. This ensures the structure swings in order to avoid the shock loading transferred directly to the load cell, on a dynamic force created by a moving truck over the platform and thereby load cell accuracy is sustained for a longer period.

Our Weighbridge is modular in structure, fully welded and strong to take care of the designated load. The loose parts such as girders, plates and transoms in a conventional weighbridge and the main girders in a surface mounted type have a relative movement due to cyclic loading of truck weighing, though they are held by fasteners. In the long run, this effect leads to wear and tear of the parts and the same need replacement. Our weighbridge comprises of modules which are fully welded and have no loose parts, hence the effect of cyclic loading does not cause any problem and thereby keeping your maintenance cost to a minimum.

The conventional weighbridge with Girders and Plates or a surface mounted type has a 4 load cells support in its corners and the girder has long span and hence is subject to bending in the middle. This bending tilts the load cells out of its vertical position, resulting in load loss due to angular force over the load cell.

In a typical surface mounted type, the structure is supported with load cells through rocker assembly which holds the structure rigidly and thereby the shock load due to dynamic force created by a moving truck is directly transferred to the load cells which not only reduces the life span of load cell, but also leads to erratic performance of load cells in due course.

This weighbridge does not require an elaborate civil foundation work as in the case of a Conventional weighbridge. Our weighbridge could also be installed permanently on a hard surface with a concrete mat or on M.S. Plates under the load cell points and the ramps.

All the weighbridges available today whether pit or pitless requires civil foundation costing at least Rs. 4 lakhs to Rs.6 Lakhs. This could be minimized to a great extent by installing our weighbridge. Our weighbridge could be installed as a pit mounted or pitless type permanently in a site if need arises. We hope that your choice of adapting a latest technology in weighing solution is much brighter and hence, we kindly request you to consider our offer favorably.



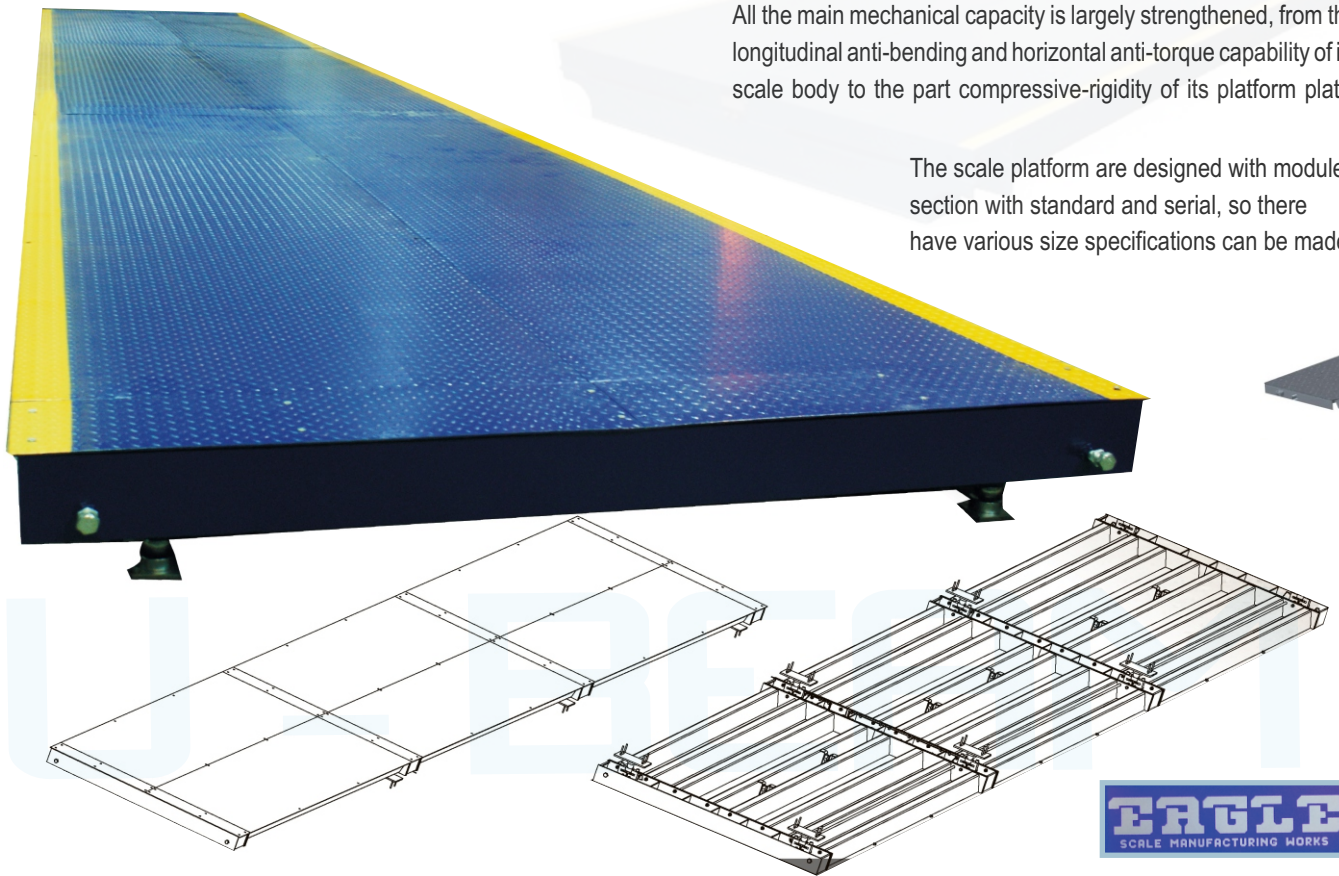
MODULAR (U - SHAPE) TRUCK SCALE

Eagle truck scales series which is new generation products with stronger and durable platform structure of U beam, the main beam is made of rigid sections modular like I-Steel, and more than 6mm beam thickness bending by machine to ensure the complete structure of platform is durable and good quality.

High quality steel plates are selected and used for its top platform, and the scale platform is reasonably pieced into 6 pieces beam in closed frame. Platform welding with special technique CO2 carbon dioxide gas arc welding and auto submerged arc welding, precision measure the space positioning and advanced welding technique to ensure the platform space geometry-dimension and the rational distribution of weld stress.

All the main mechanical capacity is largely strengthened, from the longitudinal anti-bending and horizontal anti-torque capability of its scale body to the part compressive-rigidity of its platform plate.

The scale platform are designed with module section with standard and serial, so there have various size specifications can be made.



The electronic/digital system consists of high-precision bridge-type double shearing-beam or high-precision column-type load cells with stable and rich functions. The high-storage indicator can work with storage battery when power is cut. It also has shield signal cable and a high-accurate, low zero-drift, high anti-interference, strong surge-proof and excellent water-proof junction box. Therefore it is a multi-function weighing and measuring system with superior measuring capability, high accuracy, strong long-stabilization, simple installation and maintenance.

MAIN FEATURES :

1. U-shape beam structure, scientific and reasonable, strong and durable;
2. Undersurface uses high quality antirust paint so as to increase its service life;
3. Modular, sealed cavity, anticorrosion, convenient installation.
4. Use imported A/D conversion chip, which has rich practical experience in the market
5. High resolution, can reach 1/500000;
6. Self fault diagnosis function and tare two-way recovery function
7. GRAPHICAL Display with USB Data Backup Facility
8. Easy and Simple to install
9. Container shipping is very convenient
10. Stable Performance
11. Competitive Price

GRAPHICAL DISPLAY



MOBILE TRUCK SCALE



With Steel Ramp



Without Steel Ramp

Mobile weighbridge needs no foundation, just smooth hard surface on which the load cell plates rest. This saves lots of cost and time. Standard weighbridge foundation and installation takes 2-3 months while mobile weighbridges can be installed in 2 hours. These weighbridges can also be shifted to another site easily. The modular design helps in easy cost effective transportation and re-installation.

These are steel fabricated modular platform supplied complete with ramps. The top plate is steel checkered. Machine comes with the bottom frame which is steel fabricated. The load cells are installed between the bottom frame and the top frame. The bottom frame substitutes the traditional foundation. The bottom frame just needs a smooth hard surface on which it rests.

BENEFIT

- Modular Design- Machine supplied complete with platform, bottom frame and ramps
- Needs no foundation
- Installation in hours
- Can be shifted to another site easily
- Keeps vigil on costly materials
- Significantly saves time & construction costs
- Most suited for temporary site.

PRODUCT FEATURE

- Heavy Duty "C" Channel Box Type Hollow Structure
- Fully Welded Checkered Plate & Cross Beam
- Heavy Duty Load Cells Base Frame
- In built Load Cell Protection
- Low Profile Only 10 Inch Height
- "Eagle" Make Load Cells with Surge & Lightning Protection



*No Need to
Make Foundation*

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"EAGLE" - LOAD CELL

Key Features:

Capacity from 7.5t to 100t
 Remarkable accuracy
 Alloy Steel / Stainless steel design
 True hermetic sealing
 IP-68K & IP69K protection
 Lightning protection: electronic gas discharge tubes
 Metrological certification for 3000/4000 intervals
 Inbuilt Lightning & Surge Protection



LIGHTNING
& SURGE



MOISTURE



DUST & DIST

The welded construction and built-in surge protection ensure that this product can be used successfully in harsh environments.



DOUBLE ENDED SHEAR BEAM

Double Ended Shear Beam Ball and Cup Load cells surpass Its Competitors in Terms Of Resistance against Side Forces. It Is a Fact That the Major Reason behind Load cell Manufacturing Is the Horizontal Side Forces Created by the Vehicles during Brakes and Sudden Start-Ups. That is why; Scales with Column Type Load cells require Construction Absorbing Side Forces. However, Such Construction As Rocker Supports, Tensions Rods, Buffers, Etc Need Maintenance And Have An Adverse Impact on Weighing Accuracy.

For medium to high capacity applications, the double ended shear beam offers a number of advantages over other designs. Units like the one shown opposite have built-in jacking bolts which can be used to support the weighing structure during installation thus allowing the live load cells to be fitted just prior to commissioning, avoiding damage. The load cell is designed to rock on its mounting base to accommodate misalignment in mounting surfaces whilst still being retained. The mounting arrangement also permits limited movement to allow for thermal expansion and contraction as well as lift off protection.



COMPRESSION TYPE

Compression load cells are designed for the accurate measurements of compressive loads, weights and forces. They can be used in silo tanks, tank farms, vessels, weighbridge and truck weighing. When a compressive force or load is applied, a load cell will produce a change in output.

Our load cells are designed to provide exceptional performance in a safe and predictable manner making them suitable for use in the toughest industrial environments. The compression load cells are easy to install and can be supplied with the relevant load mounting assemblies. They are also hermetically sealed to ensure optimum performance.

We supply three different types of column compression load cells, made from alloy steel or stainless steel, available in capacities from 2.5 tonnes to 1000 tonnes. All models will produce outstanding results in weighing applications, as well as the measurement of compressive loads and forces.



"EAGLE" UK - MAKE LOAD CELLS

3 YEARS
WARRANTEE

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Brief details for each load cell product are given below. For more information please click on the relevant link or image.

The Model T34 **stainless steel** high accuracy compression column cell is designed specifically for weighbridge applications, but also has applications in tank and silo weighing.

LOAD CELL FEATURE

1. Stainless Steel Load Sensor
2. True Hermetically welded
3. In-built surge arresters for lightning protection
4. Self-centering column design with anti-rotation pin
5. High accuracy 4000 divisions OIML R60 Class C and NTEP Class III L
6. Pre-corner adjustment optimized for multi-cell systems
7. Built to last – robust design
8. **IP69K** ideal for harsh environments
9. Outstanding accuracy & performance
10. Retrofit able design
11. Accuracy 5000d as standard
12. 100% stainless steel construction
13. 25 meter cable length
14. Option : High temperature version (p to 150 degrees C) is available
15. Option : ATEX approved version



why are the load cell hermetically sealed ?

Loadcells function principle is based on strain gauges. The resistive strain gauges are fixed on the maximum effort surface and a Wheatstone bridge circuit realises the voltage-resistivity conversion. Strain gauges are sensitive components, so they must be protected from mechanical deformations, humidity and chemical substances. Although a reasonable protection is possible using modern cases, it's known that the best solution is hermetic sealing to protect both strain gauges and the compensation elements. RC3 loadcells, through their stainless steel design and true hermetic sealing, are the right choice for using in harsh working environments.

what is true hermetic sealing ?

Hermetic sealing related to loadcell is accomplished when all loadcell elements are completely isolated into a case. This quality is ensured through some welding points strategically positioned relative to the housing and through the stainless steel qualities and compensation elements.

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DIGITIZER



Latest
Micro-Controller



"EAGLE" - ELECTRONIC DIGITIZER

EAGLE intelligent terminal is a rugged and sleek system specially designed for use in harsh and dusty environments. The software has been developed in such a way that it fulfills most of the requirements of weighbridge data management. This is a RAM/ Rom based system and does not have any rotating parts such as hard disc and hence gives you trouble free / reliable performance. This intelligent Terminal can drive any size of LCD/LED/CRT monitors and is suitable for all weighbridge platform sizes.

DIGITIZER FEATURES

- USB port for Keyboard / Pendrive facility
- Memory for 2,00,000 records
- Facility to send SMS for weighment record
- Field programmable 10 subtitles for ticket data entry
- Coding facility (100 codes for 4 entries)
- Field Programmable Pre-printed tickets
- Vehicle-wise data entry and report printing
- Multi level passwords for security
- 240x64 Graphic LCD display for weight / weighment data
- Optional LCD with back light control for data entry
- LED display with brightness control for weight display



TECHNICAL SPECIFICATION

Processor	: 32bit Processorr
Processor clock frequency	: 50 MHZ
Real time clock	: On board battery backed RTC
Memory	: Capable of storing 2,00,000 records
Power supply	: SMPS power supply
Input Voltage	: 90V to 270V AC @ 50Hz
A/D Converter	: 24 Bit Sigma Delta type
Load cell exciation	: 8V DC, Can drive upto-12 load cells of 350 ohms each
Protection	: (A) 2.5A fuse for input AC mains (B) Input line filter for EMI and RFI suppression (C) Spike suppressor for input transients (D) Opto-isolation of signals for high immunity from Electrical noise
Power Consumption	: 10 VA
Display (standard)	: 240x64 Graphic LCD
Display (optional)	: 16 characters x 2 line LCD display with backlight for displaying numerals and alphabets for data entry and 6 digit ½" RED LED numeric display for weight
Keyboard port	: 101-key with USB compatible keyboard
USB Port	: USB Port configured for connecting Pen Drive
Printer port	: Centronics compatible printer port provided on rear panel for connecting 80-column dot matrix printer for printing of weighment records and reports.
Serial port	: RS-232 serial port is provided for computer interfacing, remote displays or modem
Remote Display Port	: Remote display port is provided to connect optional LED display (various size)
RF com port	: RF Transmission facility to connect wireless peripherals
Environment	: Operating temperature: 0° to 55°C
Humidity	: up to 95% RH non-condensing
Mechanical	: Dimensions: 250 mm (w) x 280 mm (D) x 80mm (H)
Weight	: 2.5 kg (approx.)



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Slow - High
Speed WIM

"EAGLE" - TRUCK WEIGH - IN - MOTION

Key Features :

- o Maximize Operational Productivity and Cost Savings
- o Accuracy of $\pm 1\%$ to $\pm 2\%$
- o Weighing data reports can be interfaced via PCs, Ethernet or Internet
- o Design, manufacturing, installation and after-sales support all over India.

IRREFUTABLE SOLUTION FOR TRUCKING TERMINALS

Trucks with axle load higher than legal limits cause a disproportionately higher percentage of damage to the infrastructure and adverse impact on traffic safety. Eagle Truck Weigh in motion System (TWIM) is a robust, reliable, maintenance-free weighing mechanism designed for use on highway entries with non-stop heavy traffic. Weighing accuracy and performance are approved for trade use and for law enforcement purposes.

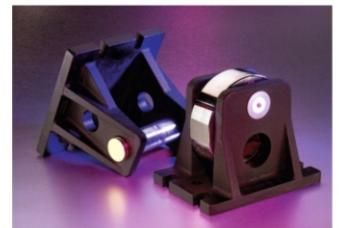
When speed is critical and vehicle weighing is an integral part of the operation, Eagle TWIM system provides significant cost savings over full-platform and axle scales. The vehicle loads (wheel, axle, GVW, load ratios) are automatically analyzed, compared to legal limits and results are displayed on operator's PC monitor, the driver gets the corresponding printout and the data are also recorded for further reporting or can be sent via LAN or Internet to the server.. This minimizes operator's mistakes, offers inbuilt data protection and allows vehicle throughput up to 180 vehicles per hour.

EAGLE Automatic Truck WIM weighing system

Its rigid construction significantly improves scale reliability in heavy-duty operation and helps to achieve precise positioning into the road during installation thus reducing the installation costs. The weighbridge is connected to traffic lights and signal horn to control vehicle movement. Video camera for vehicle detection and vehicle image capturing can be delivered as optional equipment.

Key Benefits

- Instant check for road legal weight
- Fully unattended weighing operation
- Weighs hundreds of vehicles daily
- Daily reporting measures vehicle productivity
- Automatic recording of weight and images of vehicles
- Gross weight, axle weights, numbers of axles can be recorded
- Data records can be stored for future use or can be sent via LAN or Internet to the server.

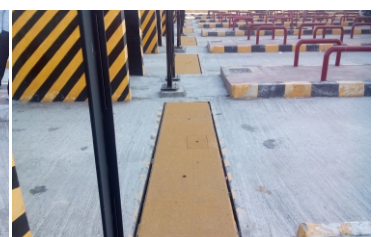


TWIM for Toll Plaza, Toll Roads and Bridges

The vehicle weight, not the number of axles, determines wear and tear of roads. Toll authorities now use weight-based tolling, which relies on weigh in motion technology to determine the proper toll classification while keeping the traffic moving.

TWIM for Border Crossings

To protect highway infrastructure and maintain safety, it is essential to ensure that vehicles entering the country are of legal weight. Eagle TWIM system allows for screening of overweight vehicles efficiently at high volume border crossings.



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