SCS-M

Steel Deck Road Weighbridge

Technical Specification

DESCRIPTION

General

- Non-self contained, fully modular road weighbridge of steel construction is designed for in ground or surface mounting.

Features and Benefits

FEATURES	BENEFITS
Chequer Plate Deck	Full 8mm + 2mm Chequer Plate Deck for strength, traction and grip.
U Beams	8 x 6mm x 250mm U-Beams contribute to rigid modules.
Deck Boxes	Deck boxes permit access to loadcells from above, and allow a shallow pit design.
Low Profile Design	Low Profile designed modules produced with 33% more steel, than many other weighbridges. This ensures high strength and long product life.
Stainless Steel Loadcells	OIML R60 Approved Zemic BM14G Stainless Steel Loacells with anti rotation properties and internal lightning protection. Suitable for damp or hazardous environments.
Quality Paint Finish	All weighbridge surfaces are shot blasted, and two coats of primer epoxy paint and one coat of alkyd enamel finish paint are applied. This protects the fabrication and extends the life of the bridge.
High Axle Loading	Axle loading of 20,000kg
Concentrated Load	Concentrated Load Capacity of 20, 000kg
Low Span Deflection	Span deflection ratio of 1 : 600. The very rigid modules help assure long product life.

SPECIFICATION

Weighbridge Sizes & Capacities

Platform Size	Capacity	No. of Modules
8m x 3m	30 000kg	2
10m x 3m	30 000kg	2
12m x 3m	40 000kg	2
14m x 3m	60 000kg	3
16m x 3m	80 000kg	3
18m x 3m	80 000kg	3
20m x 3m	80 000kg	4
22m x 3m	80 000kg	4
24m x 3m	80 000kg	4

Platform Structure

The Kejie SCS-M weighbridge, is available in 8m, 10m, 12m, 14m, 16m, 18m, 20m, 22m, and 24m standard lengths, with a 3m wide vehicle deck, or 3.5m wide as an option.
The structure is designed to fit into a container at the works and when the container arrives on site, the main structures can be bolted together. The two sections of the bridge module, width 1.5m, bolt together along the length to achieve a completed width of 3m.
Each module is fabricated with U shape beams that run longitudinally and are held together in position by welding to reinforced plates on either end. Pre-fabricated box sections are bolted to each end of the modules using M27 x 60 bolts. Each of the box sections is designed to incorporate two compression cells.
The loadcells are positioned into mounting kits incorporated into the box sections.

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Environment

Resistance to Dirt and Moisture -
Consistent with conditions pertaining to well drained outdoor installation.

Resistance to Electrical Disturbances
The BM14G loadcell Complies with the requirements of
EN61000-6-3:2001
EN61000-6-1:2001
EMC Directive 2004/108/EC

Operating temperature Range -
-10° C to +40°C.

Installation and Access
Either surface or pit mounting foundations can be supplied for these weighbridges.

Options
- Suitable Steel Ramps, 4 pieces (in one set). Full chequer plate deck, thickness 8 + 2mm. Dimensions of each ramp: 3900 x 1100 x 370mm.
- Guide Rails
- A 3.5m width is available if required.

Loadcells
BM14G, 30t capacity, stainless steel, loadcells are fitted. See separate specification sheet for further details.

The high capacity of the loadcell at 30t provides a more than adequate safety factor against the possibility of overloading or shock loading on all cells. These load cells are also fitted as standard with surge arrestors - the most effective system of lightning protection.

Indicator Systems
All Avery Weigh-Tronix, and Rinstrum standard indicators designed for weighbridges are suitable to use with this range of weighbridges.

Indicator options
The SCS-M can be linked to the latest Avery Weigh-Tronix indicator systems, data systems and printers to provide the most versatile and advanced weighbridge system available.

Free Motion
BM14G loadcells have the free motion characteristics incorporated in the design.

Approvals
The SCS-M weighbridge is approved as suitable for trade use in New Zealand by the Ministry Of Business, Innovation & Employment, Certificate 1975.2.

Galvanised Curbing (Channel)
Our foundation plans specify the use of special galvanised channel section curbing, which forms and protects the edge of the pit (or of the ends in the case of above-ground installations).

This curbing **must** be fabricated so as to be a precision fit around the edge of the platform deck. For this reason, we strongly recommend that the curbing be ordered with the platform for fabrication in the same factory, which will guarantee the accuracy of the fit. In any case, it is unlikely that another engineering firm could improve on the price we are able to offer, as our factory has become efficient at fabricating the special sections through long experience.

T Section (T7060) Thermoplastic Rubber Extrusion
We recommend the use of the optional T-section *Santoprene* Thermoplastic Rubber extrusion, slipped into and over the gap around the edge of the platform deck. This minimises the ingress and build-up of foreign matter into the pit area, reducing the need to clean out the pit and avoiding the eventual blockage of the pit drain which can develop in some sites.
Another benefit of installing the T-section rubber is that it prevents "clashing" of the deck edge against the steel curbing as the platform floats on its load cell struts. Over time, this can lead to a certain amount of damage due to braking and accelerating forces, so we also recommend the inserts for the ends of above-ground installations.

Digital Indicator Lightning Protection
The LCP-01/A/01 protection system provides protection to the digital indicator from lightning induced transients.