

WB40L

AXLE WEIGHBEAM



- ROBUST; HEAVY DUTY, STEEL CONSTRUCTION
- DESIGNED TO ENSURE LOAD DISTRIBUTION IS MAINTAINED AT ALL TIMES
- FOUR 10,000KG LOAD CELLS OIML R60 CLASS III APPROVED



OVERVIEW

The WB40L Axle Weighbeam is a robust steel structure supported in each corner by a folded "S" load cell operated in tension and mounted within a specially designed assembly (shoe). The platform itself sits in a sturdy steel pit frame which is set into a flat and level concrete apron (weigh lane).







The weighbeam structure presents a very rigid support to the vehicle axle; it is designed to weigh one axle at a time and has a loading capacity of 40 tonnes.

The weighbeam sits within a steel pit frame which is installed in the concrete weigh lane and is supported within this frame by two 25 thick load bearing plates.

Although the load cell assembly is used in compression, the cell is mounted in a pendulum and operated in tension thus ensuring the load point is always maintained through the centre axis of the cell even when the assembly (shoe) is subjected to considerable movement or misalignment. Each load cell has a 10,000kg capacity with a safe overload limit of 150% without losing calibration.

The load cells are of a fully welded construction sealed to IP68 and approved to OIML R60 C3.

KEY FEATURES

 Weigh-in-Motion	 10,000kg Load Cells	 Range of Sizes	 Structural Strength 70 Tonnes	 Pit Surround Frame	 IP68 Sealed
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BENEFITS

- Rigid and robust steel structure
- Minimum maintenance
- Easy access to junction box and cable connections
- Structural strength to 70 tonnes
- Loading capacity of 40 tonnes
- Load cell safe overload 150% without losing calibration
- Weighing capacity of 30 tonnes
- Lightning protection system and load cell earth bridging as standard
- Four 10,000kg load cells – OIML R60 Class III approval
- Special load cell mounting assembly prevents weighbeam curbing and tilting

INSTALLATION

- Full installation instructions including civil work available.
- NOTE: Installation is weeks depending upon civil works, etc., so there is no point to mention it in terms of hours or days.

SOFTWARE

- LO-WEIGH 100 Compatible
- Site Control, Weighing Operation Control, Data Recording, Report Generation and Diagnostics (Note: PC and Printer required)



TECHNICAL SPECIFICATIONS

ACCURACY

- Dynamic (<5kph) Typically $\leq \pm 2\%$
- Static Typically $\leq \pm 2\%$
- Standard Weight $\pm 10\text{kg}$

Note: Accuracy is dependent upon site construction in accordance to TDC specifications.

SPECIAL SIZES TO ORDER

- WB40LD DUAL 900 x 2000mm
(Wide axle weighing system)
- WB40S 730 x 3000mm

WEIGHING PLATFORM

The weighbeam structure presents a very rigid support to the vehicle axle. It is designed to weigh one axle at a time and has a loading capacity of 40 tonnes. The top surface is a mild steel plate, 16mm thick, and presents a smooth surface to passing axles.

JUNCTION BOX & SUMMATION PCB

A cable junction box, sealed to IP67 rating is located under a removable plate in the top of the weighbeam. All load cell cables are terminated on a summation PCB. The PCB contains protection devices to guard against high voltage transient spikes such as those induced by lightning. A screened low voltage signal cable connects the weighbeam to the weighing electronics. Note: Installation drawings, procedures and photographs can be supplied on request.

ENVIRONMENT PROTECTION

- Junction box sealed to IP67
- Load cells sealed to IP68

DIMENSIONS AND WEIGHT

- Platform size: 900 x 3000mm
- Weighing platform: 900 kg
- Pit frame: 250 kg
- Shipping weight: 1,250 kg

LOAD CELLS

The weighbeam is fitted with four load cells approved to OIML R60 Class III mounted in specially designed shoes, which prevent both curbing and tilting of the weighing platform. Each load cell has a capacity of 10,000 Kg with an over range limit of 150% without losing calibration.

The load cells are sensitivity matched to ensure inter-changeability and are hermetically sealed to IP68 rating to prevent the ingress of dust and moisture. Extensive earthing is incorporated to minimise damage due to lightning.

PIT SURROUND FRAME

The weighbeam pit surround frame is a steel structure installed into the concrete weigh lane. The weighing platform is supported within the frame by two load-bearing plates. The frame provides a solid interface between the weighbeam, the load cells and the concrete apron. The pit is drained via a 150mm drainage pipe.