WEIGHBRIDGES

A COMPREHENSIVE RANGE OF SOLUTIONS
A MANUFACTURER’S EXPERIENCE

PRECIA-MOLEN puts at your disposal a know-how based on more than 40 years of experience in installing tens of thousands of weighbridges throughout the world.

From the design to the manufacture in our Privas (France) manufacturing plants, from the platform to the heart of the system, the load cell and software, to the weighing terminal, PRECIA-MOLEN offers a comprehensive range of solutions for lorry, wagon and road-rail weighing.

COMPETENCE AND CONSULTANCY

Our export managers and our engineers make use of their skills to advice and help you to define and set your plans up. The person you will speak to will be able to inform you on the type of installation, in pit or above ground, on where to install your weighbridge on your site, on the choice of the electronic equipment or system of weighing management, as complex as your needs may be.

PRECIA MOLEN grants technical assistance from the moment plans are delivered to the moment the weighbridge is put into service.

LOCAL SERVICE

The local service is provided by our agents, our subsidiaries and our after sales service.
IMPORTANT POINTS TO REALIZE A GOOD INVESTMENT

As a weighbridge is a long-term investment and an important part of your productivity and as it is submitted to intensive use, it is required to choose a quality and robust product.

- **Metal or concrete platform?**
  Most PRECIA-MOLEN weighbridges are built with precast concrete slabs or heaped on site according to models. This offers numerous advantages:
  - A concrete platform is much heavier than a metal platform. Shocks occurring when vehicles brake are softened due to the weight of the slab.
  - Maintenance costs are reduced, a steel construction requiring sand blasting and paint every 5 to 10 years according to the conditions of use.
  - A weighbridge of concrete slab is much quieter when vehicles use it, which can be an important criterion when the weighbridge is situated near offices.

Metal weighbridges are reserved for uses requiring frequent transfers for which it is nice to have light parts at one’s disposal.

- **Which dimensions?**
  A 8-to-10-m-long weighbridge is enough for the weighing of dump trucks for household waste collection and farm trailers for grape harvests. All semi-trailers can be weighed on a 14-metre weighbridge whereas an 18-metre weighbridge will be chosen for tractor-trailer weighing. According to your needs, PRECIA-MOLEN offers weighbridges of very great length or of a specific width (e.g. loading station, dumper scale).

- **In-pit or above-ground installation?**
  The type of installation, in put or above ground, depends on the site. An in-pit weighbridge fits more easily into the environment and requires a less large footprint. It is often an ideal solution when the weighbridge is situated in a yard. An above-ground weighbridge will be more accessible for cleaning operations, which is pleasant in difficult environment like quarries. This type of installation requires a large floor surface to fit access ramps out. Light civil engineering work is more economical as regards global investment.

- **Which capacity and accuracy?**
  The weighbridges of small dimensions (8 to 10 m) usually have a 30-tonne or 35-tonne capacity with a 10-kg graduation. For other dimensions, the standard is a 50-tonne capacity with a 20-kg graduation.
  Our weighbridges can be supplied with 2 measuring ranges which is very interesting for the weighing of small vehicles. (e.g. 10-kg graduation up to 30 tonnes then 20-kg graduation up to 60 tonnes or 50-kg graduation up to 150 tonnes). The capacity of our special weighbridges up to 400 tonnes.
A COMPREHENSIVE RANGE OF WEIGHBRIDGES
That meets the specific requirements of your line of business and the constraints of your environment.

- **VS 600 CS**
  WEIGHBRIDGE WITH CONCRETE SLAB Poured ON SITE

The VS 600 is a modular weighbridge that is made up of concrete slabs poured on site by yourself into a solid metallic framework from 6 to 24m. Supplied as a kit that includes all the technical parts to assemble on site, it represents an economical solution, without compromising on quality.

Concrete pouring that can be carried out by yourself.

The concept of the VS 600 weighbridge is the ideal solution for export markets. It offers sea transport and handling cost reductions, as three 17.80 m weighbridges can be transported into a 20 feet (open top) container.
**ROC**

**WEIGHBRIDGE MADE OF PRECAST CONCRETE**

The ROC weighbridge is a modular weighbridge in prefab concrete made up of 4, 6 and 7 meter slabs. It is therefore possible to tailor a 4 to 36 meter weighbridge to your needs.

It is definitely positioned as a top of the range, intensive use product.

- Installation in low-depth pit or above ground (height 41 cm).
- Simplified civil engineering.
- Put into service in 24 hours.
- Robustness:
  - resistant to corrosion thanks to its concrete platform cast into industrially vibrated moulds,
  - hot galvanized steel hatches,
  - cable protection from rodents.
- Options:
  - Large-size hatches to ease cleaning operations.
  - Load distribution plate: enables installing the weighbridge onto simplified civil engineering.
  - Wheel guides.
  - 3.30m steel extension.
\textbf{C85 HSDS range}
In-between a standard and a special application, the C85 HSDS comes in different lengths (18 to 36 meters), widths (3 to 5 meters) and capacities (50 to 100 tonnes).
With great robustness, its extra low slab limits civil engineering works.
Its design integrates wheel-guides that make it particularly adapted to an above-ground installation.

\textbf{SPECIAL WEIGHBRIDGES (up to 400t)}
PRECIA-MOLEN can meet specific needs for loading stations requiring large-dimension or large-capacity weighbridges (e.g. dumper weighing).

\textbf{RAIL-WEIGHBRIDGES}
Weighbridges suitable for wagon or lorry and wagon weighing.
- Composed of a mechanically welded steel construction entirely factory mounted and of a concrete platform poured on site...
- Simplified civil engineering.
- Access to load cells.
- Rails fitted with expansion distribution devices.
Option: approach and departure rails to bring running track rails to a standstill.
**Galvanized C85**

Concrete weighbridge full galvanized equipped with Stainless steel load cell environments. The best solution for industrial sites handling corrosive product or located in a saline environment.

**C85 using existing prefab platforms**

PRECIA MOLEN is able to adapt the structure of a new weighbridge using some existing parts of the old weighbridge (in this case, using small prefab concrete platforms) even keeping the dimension of the current civil work.

**C85 36m length under silo**

For this site, the challenge was to remove the old weighbridge, clean the civil work, reinstall the new Three platforms weighbridge of 36m length under silos and finalize the legal trade control using only the 2 days of during the weekend to avoid to disturb the production. Challenge successful!
LOAD CELL: HEART OF SYSTEM

The load cell is the heart of your weighbridge. Our load cells, whose design and manufacture we master, are made of stainless steel and perfectly meet very difficult running conditions on weighbridges. The small dimensions of our load cells allow to design weighbridges of small height.

Analogue or digital technology?

**SCL analogue load cells**: analogue strain gauge load cells have commonly been used on electronic weighbridges for many years. This traditional technology has proven its worth in terms of performance and reliability.

**CDL digital load cell**: get to new functionalities with digital technology. Information is secured from any external interference (overvoltage, lightning, etc.) and a self-diagnosis device warns you in the event of an error, therefore guaranteeing reliable weighing each time. Its fieldbus architecture enables your installation to be extremely flexible, the connection of weight slave displays to any point of the network being possible.

**AUB/DJB junction boxes** in IP68 stainless steel: enables connecting 4 to 8 load cell per box.

Load cells are also available in Ex version for the weighbridges installed in potentially explosive zones.

INSTRUMENTATION: A RANGE OF HIGH-PERFORMANCE TERMINALS

**i30**

A prominent interface between the measurement unit and the management system, the i30 indicator offers multiple connections with the industrial PCs on the market and weight remote displays, in compliance with trade use aspects. Thanks to its power level, it can supply up to 18 analogue or digital PRECIA MOLEN load cells, and thus manage high-length weighbridges.

**i35**

To weigh product inputs and outputs on weighbridge, the i35 indicator along with its simple, user-friendly and efficient application software can meet any need for entirely autonomous weighing. Coming with a label printer (sold separately), it is also able to communicate with PCs and weight remote displays through multiple connections. Economical and innovative, it monitors two weighbridge input/output traffic lights locally. It is moreover equipped with a cunning blocking system that prevents the weighbridge from being used outside working hours.

**I 410**

The I 410 terminal is an efficient and comprehensive weighing data management tool for weighbridges. Endowed with a graphical screen, it offers great ease of use and performances yet unknown at such prices.

- 5 configurable files,
- weighing diary saving,
- cross totalling on two files from date to date,
- automatic vehicle loading,
- light management,
- file and weighing data downloading on PC.
**WEIGHT REMOTE DISPLAYS**

Remote displays show the weight to the driver at distance.

- **d20 - proximity read**
  - 25 mm high digits
  - 7-colour configurable backlighting
  - d20 IP69 K model

- **D 570 - long distance read**
  - 57 mm high digits
  - High productivity red LED displays that are very readable
  - Adapted to outdoor use
  - Multi-protocol. It can be connected to PRECIA MOLEN or other brands’ indicators.
  - Option: double sides.

**PERIPHERAL EQUIPMENT**

- **BI 410 and BI WIN weighing terminals**
  The self-service weighing terminal allows to carry out the weighing without any constraints of time and without any operator. It guarantees the traceability of weighing operations automatically.

  Our weighing terminals are equipped with a man-machine interface (alphanumeric keyboard dynamic function keys, backlit graphical screen), badge reader, printer, intercommunication system...

  BI 410 and BI WIN weighing terminals can be connected to a PC equipped with a PRECIA-MOLEN software program or to your computer system via the Ethernet network.

  We propose to study the best options to optimize your traffic and weighing management.
ACCESSORIES
To layout your site, our offer can be complemented with numerous accessories. Automatic barriers, guardrails, video and photo cameras, traffic lights and other decelerators can complete your installation.
A MOST INNOVATIVE WEIGHING MANAGEMENT SOFTWARE

TRUCKFLOW: A COMPLETE AND MODULAR SOFTWARE OFFER
From a basic solution to a sophisticated architecture, it can meet all vehicle weighing needs on weighbridges.

Driven by our know-how and experience of industrial weighing applications installed all over the world, we can offer professional solutions as software modules for various industries: environmental protection, gas, extraction, etc.

- Entirely configurable
  - File configuration
  - Report configuration

- Modular and upgradeable
  Adding extra weighbridges, weighing terminals, and peripherals is extremely easy and can be performed with a mere new system configuration.