An exceptional design, which is based on the most advanced calculation and construction techniques.

**METALLIC HEAVY-DUTY**

<table>
<thead>
<tr>
<th>Technical specification</th>
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</thead>
<tbody>
<tr>
<td><strong>Length [m]</strong></td>
</tr>
<tr>
<td><strong>Platform</strong></td>
</tr>
<tr>
<td><strong>Capacity [t]</strong></td>
</tr>
<tr>
<td><strong>CLC [K]</strong></td>
</tr>
<tr>
<td><strong>Deflection f [mm]</strong></td>
</tr>
<tr>
<td><strong>Height H [cm]</strong></td>
</tr>
<tr>
<td><strong>Consumptions</strong></td>
</tr>
<tr>
<td>metal [t]</td>
</tr>
<tr>
<td>prefabricated concrete [m³]</td>
</tr>
<tr>
<td>poured on-site concrete [m³]</td>
</tr>
</tbody>
</table>

*Optionally: 9, 10, 12, 14, 20, 22, 24m / Standard active width: 3m

Welded structure with high side beams, longitudinally and transverse flanged. 8mm thick chequer plate running surface. 20cm platform height. No-load middle cover plates.

- **4 modules**
- **6 loadcells**

> remarkable qualities of a fully steel construction, robust and low-profile; H=20cm
> high side beams
> "top" model
WEIGHING PLATFORMS

STRUCTURE

<table>
<thead>
<tr>
<th>CLC</th>
<th>SF</th>
<th>FEA</th>
<th>f</th>
<th>H</th>
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<tbody>
<tr>
<td>Concentrated Load Capacity</td>
<td>Safety Factor</td>
<td>Finite Element Analysis</td>
<td>Platform deflection under maximum load</td>
<td>Platform height</td>
</tr>
<tr>
<td>75K</td>
<td>≥2</td>
<td></td>
<td>1:750</td>
<td>20cm</td>
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</table>

The extended steel I-beam design is recommended as “best practice” by the most qualified international authorities in transportation and road and bridge construction (the weighbridge being similar to a bridge-structure).

Besides, FLINTAB’s weighbridge design excludes closed spaces in which excessive humidity may create corrosion.

The deck’s height is only 20cm and the free space from the ground is maximum 10cm. The steel structure is minimum 20% heavier than that of low-cost competitor’s, providing a deflection less than 1:700. Any other support structure, used by many other manufacturers in order to cut the metal content and implicitly cut the price, results in two negative effects:

- A higher deck (almost the double) which involves longer ramps: increased cost of civil works/larger concrete quantity and a waste of space
- Indirectly, the lack of the side beams, which removes the protection against the vehicle sliding over the side of the platform from a height of approximately 50cm

MODULAR DESIGN

NORMAL TRANSPORT (no special authorized transport)

FAST ON-SITE INSTALLATION

CONNECTING PRINCIPLE BETWEEN MODULES

ACCESS ON THE PLATFORM FROM ABOVE

CLEANING COVERS

PLATFORM WEIGHT:
16m: 9.6t
18m: 11.0t

MODULE WEIGHT:
16m: 2.4t
18m: 2.8t

Metallic covers (end and loadcells above):
- Chequer plate 8mm thick
- Removable, fixed by bolts
### Beam Height:
- 16m: 450mm
- 18m: 500mm

### Anti-Corrosion Protection
- sandblasting grit with GRACO device in a special unique-purpose room
- airless painting, final layer thickness of minimum 120 microns
- 2 primer layers, minimum 60 microns thickness, anti-corrosion epoxy and polyamineamide resin, organic additives and solvents
- 2 ACRILIN E paint layers, final thickness of minimum 60 microns

### Cables
Protected against accidental collisions, rodents, multiple freezing/unfreezing cycles.

### Loadcells and Junction Box
Protection against vandalism or unauthorized access.

### Choosing the Installation Place
All truck or vehicle combinations turn in a circular motion with an outer radius of 12.5m and an inner radius of 5.3m.

### Fixed or Mobile Installation?
The answer lies in the time period in which the weighbridge will be located in the chosen place: fixed means years, mobile means months.

### Above Ground Installation
- a simple foundation, costs less
- round around the platform inspection only
- fast and easy cleaning, with a pressure water hose, from platform side
- simple repair: from above the platform
- ramps occupy supplementary space

### Platform Length
- 16m for articulated vehicles: the maximum distance between the outer axles is 13m
- 18m for vehicle assemblies: the maximum distance between the outer axles is 15.5m (the difference in values consists of needed manoeuvre space)

### Maximum Capacity
- 60t for CLC=75K
- 80t for CLC=85K

### Pages 4/5 deal with this subject in detail.
The FLINTAB weighbridge foundations are designed for normal ground conditions, with conventional pressures $p \geq 250$KPa.

**POS**

POURED ON SITE
GREEN FIELD, COBBLED OR GRAVELED ROAD

Three reinforced concrete beams with metallic elements embedded in the six support points. Thin concrete layer between these concrete beams. The weighing platform is supported on the foundation using special loadcell mounting kits. Concrete ramps.

**PER**

POURED ON EXISTING ROAD
POOR CONCRETE ROAD, CRACKED OR SUBSIDED

Reinforced concrete plate 10..20cm thick with metallic elements embedded in the six support points. The weighing platform is supported on the foundation using special loadcell mounting kits. Concrete ramps.
A well designed and built foundation guarantees the metrological performance of the weighbridge and the integrity of the weighbridge structure. It can be built by the client himself or by a local construction company or be contracted to FLINTAB as part of a TURN-KEY job.

**P+DOR**

**CONCRETE PLATE + DIRECT ON ROAD**

**POOR CONCRETE ROAD, CRACKED OR SUBSIDED**

Reinforced concrete slab of minimum 8cm thickness. On this surface, the support elements for the loadcell special mounting kits are installed using M16 double threaded bolts with chemical fixing. Metallic or concrete ramps.

**DOR**

**DIRECT ON ROAD**

**PLANE CONCRETE ROAD FOR HEAVY TRAFFIC**

Concrete plate thickness: >25cm. Surface level deviation: <5mm. On this surface, the support elements for the loadcell special mounting kits are installed using M16 double threaded bolts with chemical fixing. Metallic ramps.
FLINTAB owns a factory with two manufacturing halls, with precise and tested processes.

The FLINTAB fabrication and assembly site covers an area of 14000m² with two main halls 2000m² each and inside/outside storage areas of 8000m², equipped with 6 indoor and outdoor lifting facilities.

- modern devices for thermal cutting of the sub-assemblies
- manual cutting devices and semi-automatic oxygen and plasma devices
- hydraulic guillotine and abkant
- rolling and straightening devices
- multifunctional machine for cutting, punching (embossing), cutting up metallic sheets and profiles
- automatic saw for cutting metallic profiles
- belt polishing devices
- machine for cutting and bending reinforcement bars
- metallic processing on machine tools: radius perforate machines, universal milling machines and CNC lathes (Computer Numerical Controlled)
- welding equipment with coated electrode and synergic welding wire devices based on inverter technology
- sandblasting machine and airless painting machine