

## VAL Axle Load Scale



- **Compact Prefabricated Concrete Scale**
- **Fast and Straightforward Installation**
- **Static and Dynamic Weighing of Axle Loads**
- **Expandable at any Time**

### Application

The VAL axle load scale was designed for the dynamic recording of axle and aggregated road vehicle loads.

The weight of each axle is recorded as they pass slowly over the scale and the results are subsequently added together.

Among other possibilities, the main applications are

- Rapid overload control in factory outgoing areas
- Weighing operations in agriculture, i.e. construction vehicles and tractors

### Equipment

Thanks to its compact size this scale can be used wherever available space would prohibit or make too costly the installation of a large road vehicle scale.

This scale can be calibrated and is ready for use after a simple hole is dug and the area around the scale is sealed.

The axle load scale is delivered to the location of installation as completely pre-assembled prefabricated concrete parts. The robust ring-torsion load cells and load cell bearings are integrated at the manufacturing stage.

**'Weighing-in-Motion'** Static and dynamic The strongest feature of the scale is its non legal-for-trade ability to weigh statically or dynamically axle loads of trucks and construction vehicles together with the high quality, flexible DISOMAT<sup>®</sup> Tersus weighing console and the application package 'Hermes', completing a system that acts as a self-contained unit.

We also offer an optional flexibly configurable software solution for PCs. We recommend our DISOWARE<sup>®</sup> S weighing and evaluation program.

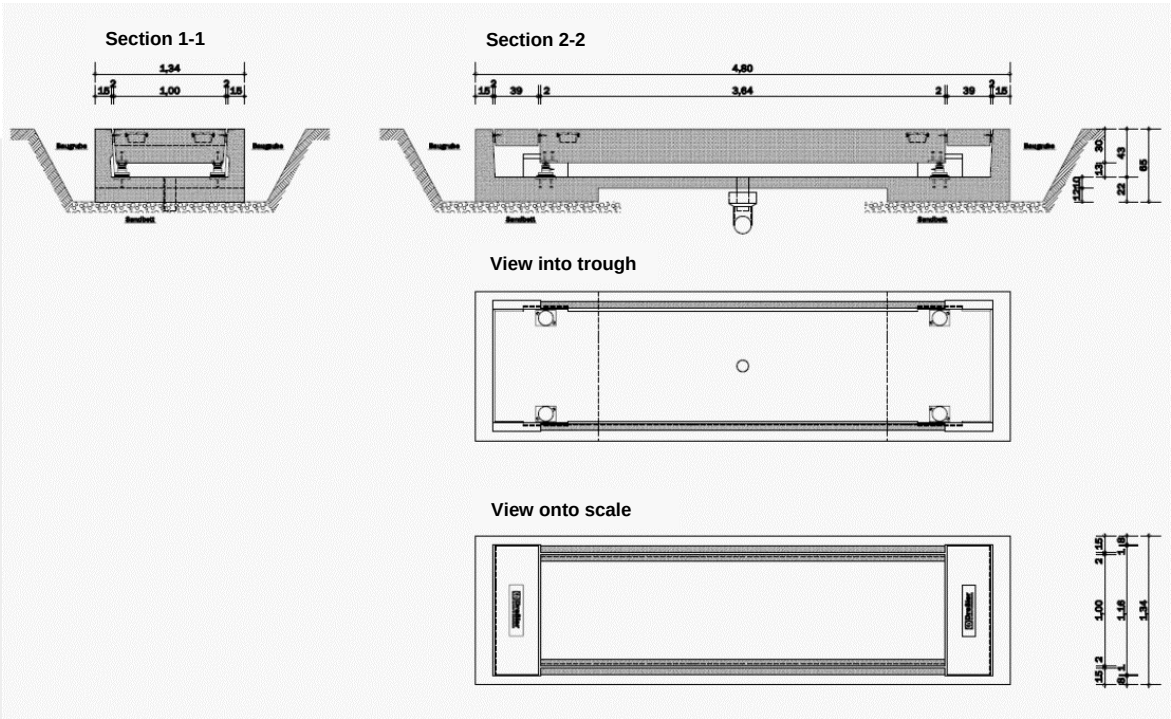
### Function

- Static and dynamic weighing of road vehicles
- Automatic, operator-free weighing that eliminates the need to halt or to alight
- Axle and aggregated loads are measured while the road vehicle is moving
- Weights and speeds are measured independently of the direction of travel
- Axle weights and speeds are displayed on a dialog display
- A stoplight system, printer and other accessories can also be controlled
- Vehicle licence nos. can be entered

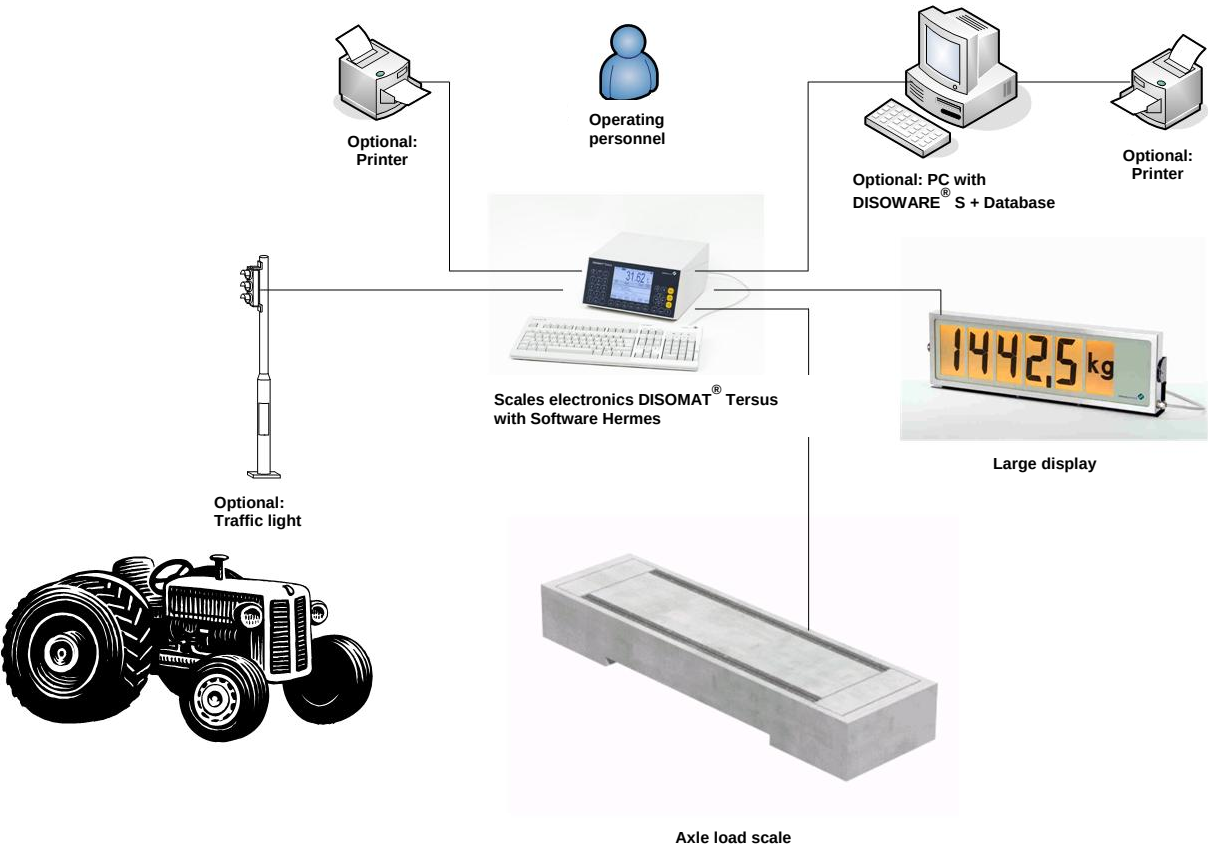
## Technical Data

|                                                                                                                              |                                                                           |
|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|
| Prefabricated concrete parts with a foundation trough and a weighing platform in concrete grade B55 as an installation model |                                                                           |
| Power supply                                                                                                                 | 230 V -10 % +15 %; 47 - 53 Hz                                             |
| Temperature range                                                                                                            | Scale mechanics -10 °C - +80 °C<br>Scale electronics -10 °C - +40 °C      |
| Load-carrying capacity                                                                                                       | 20 t                                                                      |
| Weighing range                                                                                                               | 0.40 t - 20.00 t                                                          |
| Increment value                                                                                                              | 0.02 t                                                                    |
| Speed range                                                                                                                  | 2 - 6 km/h                                                                |
| Platform dimensions                                                                                                          | 3.70 m x 1.00 m (W x D)                                                   |
| Foundation dimensions                                                                                                        | 4.80 m x 1.34 m x 0.65 m (W x L x D)                                      |
| Static error                                                                                                                 | 0.2 %                                                                     |
| Dynamic error                                                                                                                | Typically 3 % if the entrance and exit sections are optimally constructed |
| Material                                                                                                                     | Prefabricated concrete construction                                       |

Mechanical General Assembly Drawing



Components and Overview of Electrical Equipment



### **Weighing Equipment**

The prefabricated concrete scale is completely equipped with

- Load cells model RTN 10, refer to data sheet BV-D2019
- Load cell bearings as per data sheet BV-D2044

### **Weighing Console**

For optimum performance, this scale is equipped with the DISOMAT Tersus weighing console, as per data sheet BV-D2273

### **Software**

The 'Hermes' software package (refer to data sheet BV-D2316) is the optimal software solution for the DISOMAT Tersus and comes into its own in dynamic weighing in particular

### **Options**

- Control via PC with a weighing and evaluation program
- Large display
- Printer
- Stoplights control
- Remote control
- Customer-specific software