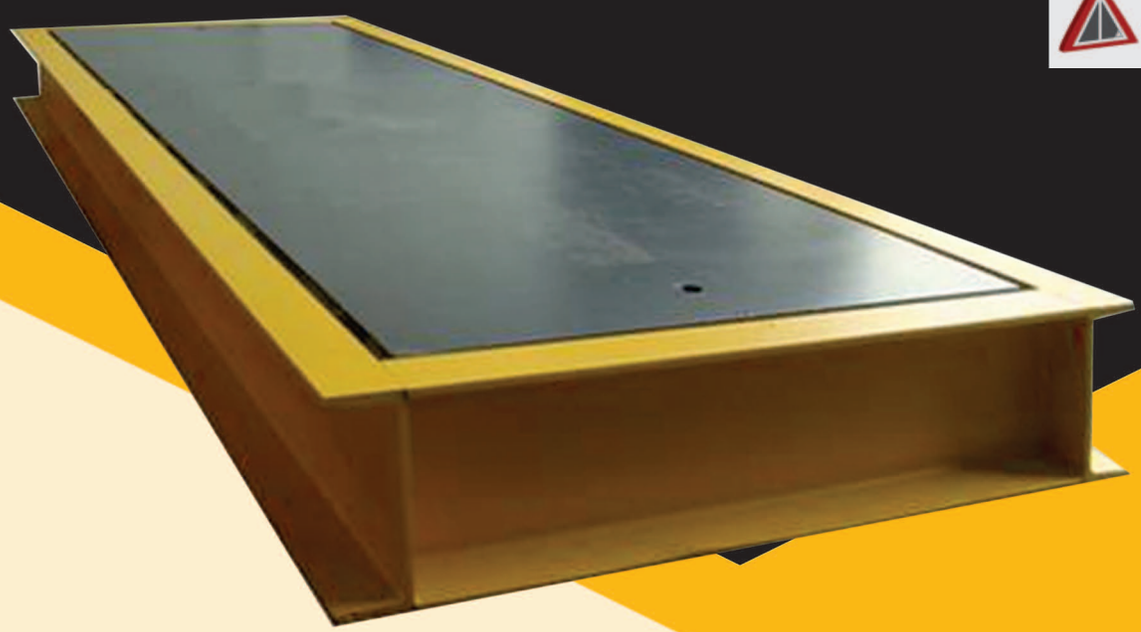
WeighingEngineering

KATASKEVASTIKI J. DIMITRIOU
steel structures | weighing engineering



LESIM IN GROUND AXLE WEIGHER

LESIM - Axle Weigher is designed to provide fast and accurate axle and gross weight information for all vehicle types from light vans to the heaviest multi-axle vehicles.

- It is simple to install and is ideal for sites where space or access is limited.
- It weighs any vehicle up to 30 tonnes per axle.
- It can be used for static weighing operations or for 'in motion' weighing at speeds ~ 5 km/h

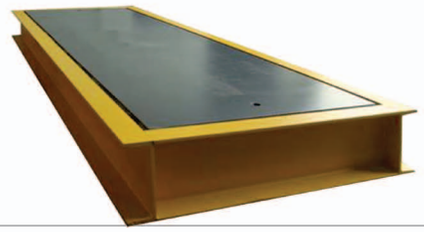
The indicator is compliant with OIML R134 regulations but does not have the approval certificate for dynamic weighing (non-approved yet).

The printouts can be individually configured to the customer's requirements and include information such as time & date, vehicle information together with the individual axle and gross weight details.

Basic features

- Steel, compact, robust and accurate construction
- Completely self-contained and re-locatable
- Minimal yard space required – Simple and straight forward to install
- Idea for large multi-axle and articulated vehicles
- Saves time by weighing vehicles on the move
- Complete with 4 compression type, stainless steel load cells, OIML R60 approved
- Supplied with indicator LD5218, with dedicated axle weighing software
- Special buffering components are integrated in the beam sections in order to limit the horizontal movement of the platform and to keep the platform steady during vehicle passing

Technical Specifications

Parameters	
Scale Size:	3.20m x 1.09m x 0.24m
Operational Platform Size:	3.00m x 0.85m
Maximum Capacity	30 t per axle
Safe Overloading	37t per axle
No. of Load Cells	4
Load cell nominal value	15t
Static weighing accuracy	10 kg (accuracy class III)
Dynamic weighing accuracy	From 10 kg (accuracy class 0,5 or 1)
Maximum Vehicle Speed for in motion weighing	5km/h for compatibility with OIML regulations Up to 10km/h also possible with less accuracy
Construction Material	ST 37 Steel
Shipping Weight:	1200 -1300 kg

Load Cell Specifications

Parameters	
Model	RC 3 Flintec
Type	Compression Load Cell
Approval	OIML R60
Protection Class	IP68
Rated Capacity	15 t
Accuracy Class	C3, 3.000 divisions
Rated Temperature Range	-10… + 40 °C
Operating Temperature Range	-40… + 80 °C
Storage Temperature Range	-40… + 80 °C
Input Resistance	1150Ù ± 50 Ù
Rated Characteristic Value	2 mV/V
Min. Verification Interval	Emax/15 000
Sealing	Complete hermetic sealing; cable entry sealed by glass to metal header

Weighing terminal Specifications

Parameters	
Model	LD5218 with Axle Software
Type	Desk Mounted
Protection Class	IP 40
Housing	Powder coated aluminium (Dimensions mm):206(L)x140(H)x135(W)
Display	16 character, LCD, backlit display, 14.5mm digit height
Keyboard	Pseudo-alphanumeric membrane keyboard of 27 keys, with tactile feedback
Serial communication	RS232 , RS485 standard
Digital I/O	1 x digital input, 2 x digital outputs (set points)
Functions	Automatic zero tracking, no motion detection, auto-zero on power-up, zero, tare (max tare effect =-Max), preset tare, net mode, multiple test functions
A/D Converter Type	Sigma-Delta radiometric with analogue and digital filtering (FIR & post filtering, rolling average)
A/D Conversion Rate	3 up to 70 measurements per second (set-up selectable)
Operating Temperature	-10 oC to +40 oC
Storage Temperature	-10 oC to +70 oC
Humidity ,%	40- 90% RH, non condensing
Data Management Software	Flash, tally-roll (Alibi) memory capable of 10,000 weight registrations (64KB). Real-Time-Clock.

Analogue Junction Box Specifications

Parameters	
Enclosure (IP protection)	Stainless steel IP65
Dimensions in mm (external)	199 (L)x106(W)x43.7(H)
Cable fittings	St. st. glands PG9 (acceptable cable diameter 3-9mm)
Surge protection	20k A standard

BRIEF SOFTWARE DESCRIPTION

Operation and programming of weighing data (vehicle code, operator code, instrument id)
Or instant key in codes possibility

·The truck file in the LD5218 can store up to 250 records in total. Each record has following data:

- Truck Id
- Material
- Customer
- Tare weight, Date, time
- No of Axles

·Possibility to detect vehicle driving direction

·Weigh tickets programmable according to requirements

2 Different Software Versions

Axle weighing mode
for check and control of axle loads, with print outs of individual axle weights, total weight, date, time, vehicle speed.

Sample Axle weighing ticket
(control of axle loads)

* WEIGHING TICKET * N:00001
DATE:14-01-13 TIME:09:31:05
INSTRUMENT I.D: 123456
OPERATOR CODE : ABCDEF
VEHICLE REG.Nr: AB 1234

AXLE:01 26680kg
AXLE:02 15110kg

AXLES:02 41790kg 8km/h
DIRECTION: RIGHT
DATE:14-01-13 TIME:09:31:38
SIGNATURE:

Weighbridge simulation mode
(totalisation of axle weights, 1st and 2nd weighing process) for non legal for trade applications.

Sample ticket Weighbridge mode (1st, 2nd weighing)
1st Weighing ticket
DATE: 16-05-13 15:46 N:00125
AXLE 01: 3000kg
AXLE 02: 4000kg
AXLE 03: 4000kg
AXLE 04: 4000kg
1st WEIGHT :<15000>kg
VEHICLE : AB1234 MF:054
CLIENT : SMITH
PRODUCT : SAND BB
2nd Weighing ticket
DATE: 16-05-13 16:00 N:00126
AXLE 01: 6000kg
AXLE 02: 8000kg
AXLE 03: 9000kg
AXLE 04: 9000kg
2nd WEIGHT : <32000>kg 16-05-00
1st WEIGHT : 15000 kg 16-05-13 15:46
NET WEIGHT: 17000 kg
VEHICLE : AB1234 MF:054
CLIENT : SMITH
PRODUCT : SAND BB