

 **DINI AR GEO**
Scales - Weighing systems

www.diniargeo.com

Weighing Systems



- Industrial scales
- Mobile weighing systems & logistics
- Over/under tolerance check
- Dosage
- Counting
- Continuous weighing
- Data management & transmission



PRODUCTS WITH GUARANTEED QUALITY

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Dini Argeo is a company specialised in the production of weighing systems well known for their quality and reliability. With its own mechanical, electronic and information system knowledge, Dini Argeo designs and manufactures products which not only weigh accurately, but also dose, count, manage and transmit data, as well as instruments able to control stock, production and conveyor lines.

The contents of this document are indicative and may be subject to variations without prior notice.

Products with guaranteed quality:

The technical features of the DINI ARGEO instruments and scales, not only comply with the internationally recognized quality standards, but are also submitted to the leading independent European certification laboratories.



ATEX
notified company



90/384/EEC
directive



Dini Argeo has a Quality Management System Certification according to the UNI EN ISO 9001:2000 norm for the design, production and post sales assistance of measuring instruments, scales and weighing systems, components and software. (CSQ N° 9105.DINI certificate)

Dini Argeo is an ATEX notified company according to the 94/9/CE directive (attachment VII). The Dini Argeo production process is therefore certified for the production and sale of equipment marked Ex, destined for the use in potentially explosive environments. The Ex logo next to the product indicates the possibility of having the product ATEX certified, upon request. (CESI 04 ATEX 108Q certificate)

The digital **ISOLOAD** technology greatly improves the performance and measuring accuracy in every point of the weighing load surface by allowing to manage, control and independently calibrate each single load cell in the scale or weighing system. This also shortens the time for the following periodic calibration or maintenance checks.

The **CE-M** certification issued by the Metric Central Office attests that the instrument has a CE TYPE APPROVAL CERTIFICATE that certifies the suitability for legal for trade use. This approval is required for all uses in relation with third parties.

The products bearing this mark conform with the recommendations of the International Organisation of Legal Metrology (**OIML**) regarding the standardisation of the approval prescriptions. This certification is made by an internationally recognized laboratory.

IP68

IP67

IP65

IP54

The **IP** classification indicates the protection degrees which the instrument may have in relation to penetration of solid bodies (1st digit) and/or liquids (2nd digit). Many of our weighing systems ensure total protection from dust, humidity, and water sprays (**IP65 and IP67 protection**), up to hermetic sealing in submersion (**IP68 protection**).



The products bearing this mark are available also in **STAINLESS STEEL** for the use in environments with very strict hygiene requirements or for providing greater protection from all types of corrosion.

MULTIFUNCTION BENCH SCALES

for laboratories and production, receiving, and checking departments and raw material distribution

▼ main functions

- weight indication and tare deduction
- formulation
- piece checking
- data transmission

INDUSTRY (ALL FIELDS) •
COMMERCE AND DISTRIBUTION •
AGRICULTURAL AND FOOD INDUSTRY •

Compact High Resolution Balances

TRD



IP65



Laboratory scales particularly suitable in harsh working conditions and in the presence of water, dust and moisture. With 10000e or dual range 2x6000e **CE-M approval**.

- 8-key waterproof keypad
- 7-digit (7 segments) red led display, 15 mm high for weight display and 6 leds for functional indications.
- Entirely in **IP65 stainless steel**
- RS232/C for printer + RS232/C or RS485 for PC or remote display.
- 12 Vdc power supply with fitted 110-240 Vac external power adapter.

Functions: automatic tare. Counting; formulation; +/- check; set point; % weigh.

Extras available: printer; 2 inputs + 2 relay outputs; built-in rechargeable battery.

MOD.	CAPACITY kg	DIV. g (std)	DIV. g (CE-M)	LINEARITY g +/-	PLATE mm
TRD4500	4,5	0,1	-	0,1	190x220
TRD6500	6,5	0,1	-	0,15	190x220
TRD10K2	2 / 10	0,1 / 1	-	0,2 / 1	190x220
TRD6D	3 / 6	0,5 / 1	0,5 / 1	-	190x220
TRD12D	6 / 12	1 / 2	1 / 2	-	190x220
TRD10K	10	1	1	-	190x220

TRB

High Resolution Balances with Independent Indicator

Laboratory scales particularly suitable for production and checking also in harsh work conditions and in the presence of water, dust, and moisture. Available 3000e or 2x3000e dual range **CE-M approval**.

MOD.	CAPACITY kg	DIV. g	DIV. g (CE-M 3000e)	LINEARITY g +/-	PLATE mm
TRB6500	6,5	0,1	-	0,15	230x330x90
TRB12K2	2 / 12	0,1 / 1	-	0,2 / 1	230x330x90
TRB30K	30	0,5	-	0,5	330x330x90
TRB30K2	2 / 30	0,1 / 1	-	0,2 / 1	330x330x90
TRB3D	1,5 / 3	0,2 / 0,5	1	-	230x330x90
TRB6D	3 / 6	1 / 2	2	-	230x330x90
TRB15D	6 / 15	1 / 2	5	-	230x330x90
TRB30D	15 / 30	2 / 5	10	-	330x330x90

- 18-key waterproof keyboard.
- 7-digit (7 segments) red led display, 15 mm high for weight display and 6 leds for functional indications.
- Entirely in **stainless steel**, with **IP65** protection.
- 3m cable between indicator and platform.
- RS232/C or TTL for printer + RS232/C or RS485 for PC or remote display.
- 12 Vdc power supply with external 110-240 Vac power adapter.

Functions: counting, +/- check, formulation, set point, % weigh.

Extras available: printer; 2 inputs + 2 relay outputs; built-in rechargeable battery; stainless steel column.



IP65



"Easy Pesa" Bench Scales

For professional, commercial, or industrial use, with a single-cell platform.

- 5-key easy to use, functional keypad.
- LCD display with 6 digits 25 mm high.
- Stainless steel loading surface.
- Up to 300.000 displayable divisions, or in legal for trade use with 3000e or dual range 2x3000e **CE-M approval**.
- RS232/C for printer + RS232/C for I/O data transmission to PC.
- 12 Vdc power supply with 110-240 Vac external adapter.

Functions: Calibration and digital set-up. Totalisation, formulation, counting. lb/kg conversion.

Extras available: printer; entirely stainless steel and ATEX versions; attached column; cart; built-in rechargeable battery; attached printer.

EP

MOD.	CAPACITY kg	DIVISION g (std)	DIVISION g (CE-M 3000e)	PLATFORM mm
EPT	6 / 15 / 30	1 / 2 / 5	2 / 5 / 10	330x330x90
EPQ	30 / 60 / 150	5 / 10 / 20	10 / 20 / 50	400x400x140
EPX	60 / 150 / 300	10 / 20 / 50	20 / 50 / 100	600x600x150



IP65



MULTIFUNCTION FLOOR SCALES

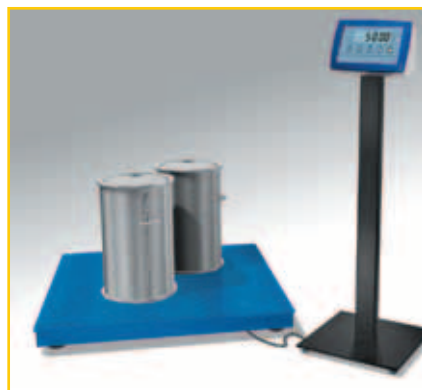
for production, sales, warehouse, shipping and receiving departments

▼ main functions

- weight indication and tare deduction
- counting
- totalisation
- printing and data transmission

INDUSTRY (ALL FIELDS)•
AGRICULTURAL AND FOOD•
COMMERCE AND DISTRIBUTION

"Easy Pesa Floor" Floor Scales



For professional, commercial or industrial use with a low profile 4-cell platform.

- 5-key, easy to use, functional keypad.
- LCD display with 6 digits 25 mm high.
- Painted striated sheet steel loading surface.
- Up to 300.000 displayable divisions, or in legal for trade use with 3000e and dual range 2x3000e **CE-M approval**.
- RS232/C for printer + RS232/C for I/O data transmission to PC.
- 12 Vdc power supply with 110-240 Vac external adapter.

MOD.	CAPACITY kg	DIVISION g (std)	DIVISION g (CE-M 3000e)	PLATFORM mm
EPFLA	300 / 600 / 1500	50 / 100 / 200	100 / 200 / 500	1000x1000x90
EPFLB	600 / 1500	100 / 200	200 / 500	1250x1250x90
EPFLE	1500 / 3000	200 / 500	500 / 1000	1500x1500x110

Functions: Calibration and digital set-up. Totalisation, formulation, counting. lb/kg conversion.

Extras available: attached printer; entirely stainless steel and **ATEX** versions; built-in rechargeable battery; indicator support floor stand.



EPW

Pallet-Weighing Floor Scales

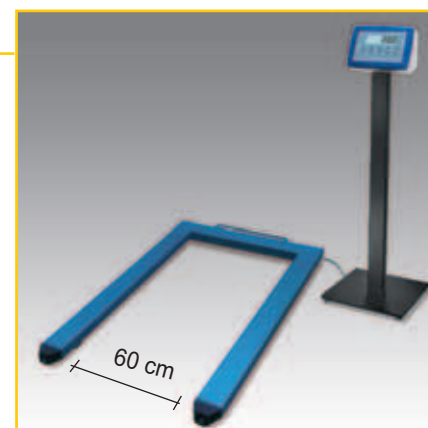
For professional use as a platform for Europallets, quick to use and easy to move, equipped with wheels and handles, with a total weight of about 56 kg.

MOD.	CAPACITY kg	DIVISION g (std & CE-M 3000e)	DIVISION g (CE-M 2 x3000e)	DIMENSIONS mm
EPW6	600	200	100 / 200	1260x820x85
EPW15	1500	500	200 / 500	1260x820x85
EPW30	3000	1000	500 / 1000	1260x820x85

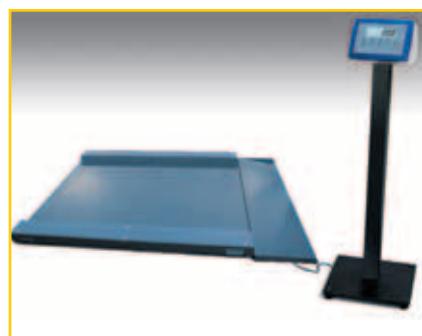
- 5-key, easy to use, functional keypad.
- LCD display with 6 digits 25 mm high.
- Painted sheet steel bearing frame.
- Up to 300.000 displayable divisions, or in legal for trade use with 3000e and dual range 2x3000e **CE-M approval**.
- RS232/C for printer + RS232/C for I/O data transmission to PC, PLC or remote display.
- 12 Vdc power supply with external 230 Vac adapter.

Functions: Calibration and digital set-up. Totalisation, formulation, counting. lb/kg conversion.

Extras available: entirely stainless steel and **ATEX** versions; attached printer; built-in rechargeable battery; indicator support floor stand.



Low profile Floor Scales



With 4-cell platform, particularly suitable for weighing lift trucks and pallet trucks.
With 3000e or dual range 2x3000e **CE-M approval**.

- 5-key, easy to use, functional keypad.
- LCD display with 6 digits 25 mm high.
- Painted steel platform.
- RS232/C for printer. RS232/C for PC, remote display.
- 12 Vdc power supply with fitted external 110-240 Vac adapter.

MOD.	CAPACITY kg	DIV. g (std)	DIV. g (CE-M)	DIV. g (CE-M2)	DIV. g (HR)	SURFACE mm
ELPE6	600	100	200	100/200	50	1000x1200x45
ELPE15	1500	200	500	200/500	100	1000x1200x45
ELPF6	600	100	200	100/200	50	1200x1500x45
ELPF15	1500	200	500	200/500	100	1200x1500x45

Functions: Calibration and digital set-up. lb/kg conversion. Weigh totalisation. Formulation; counting.

Extras available: In stainless steel and **ATEX**; attached printer; stainless steel bracket for fixing indicator to the wall; indicator support stand.



ELP

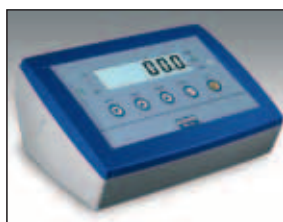
SCALES FOR SPECIFIC APPLICATIONS

▼ main functions

- **weight indication and tare deduction**
- **weigh totalisation**
- **printing and data transmission**

**production, shipping, and receiving departments
meat and maturing industries**

**IRON AND STEEL / ENGINEERING INDUSTRY •
FOUNDRIES, STEELWORKS, DRAWING MILLS •
MEAT INDUSTRY •
COMMERCE AND DISTRIBUTION •**



DFW digital indicator.



IP65

Iron Weighing Scale

Suitable for weighing metal sections, rods, pipes and sheet in industrial and commercial applications.
Available 3000e or 2x3000e dual range **CE-M approved**.

- Easy to use, 5-key waterproof keypad.
- LCD display with 6 digits 25 mm high.
- Painted steel structure with level.
- Loading surface with resting bars, fixed edges, and mobile edges on the operator's side.
- Torsion levers, cutters and bearings in hardened, ground chrome steel.
- RS232/C output for printer; RS232/C bidirectional output for PC, PLC or remote display.

MOD.	CAPACITY kg	DIVISION kg (CE-M3000e)	PLATFORM mm
ESWA	600 / 1500 / 3000	0,2 / 0,5 / 1	1000x2000x650
ESWB	600 / 1500 / 3000	0,2 / 0,5 / 1	1500x2000x650
ESWC	1500 / 3000 / 6000	0,5 / 1 / 2	1000x3000x650
ESWD	1500 / 3000 / 6000	0,5 / 1 / 2	1500x3000x650
ESWE	3000 / 6000 / 10000	1 / 2 / 5	1000x4000x700
ESWF	3000 / 6000 / 10000	1 / 2 / 5	1500x4000x700

Extras available: extractable 50 cm extensions on each side; indicator support column or stainless steel bracket for fixing indicator to the wall; attached printer; date/time; remote repeater display with large digits; special capacities and measurements.

ESW

ECW

Wall Quarter Scales

For professional use, completely in **stainless steel**, fitted with quarter-weighing hook and single-cell platform with foldable top, with 3000e or 2x3000e dual range **CE-M approval**.

MOD.	CAPACITY kg	DIVISION g (std & CE-M)	DIVISION g (CE-M2)
ECWI15	150	50	20 / 50
ECWI30	300	100	50 / 100

- Easy to use, 5-key waterproof keypad.
- LCD display with 6 digits 25 mm high.
- Stainless steel 490x500 mm foldable top.
- **IP65** stainless steel indicator case.
- RS232/C for printer + RS232/C for PC.
- Digital calibration and set-up. lb/kg conversion. Weigh totalisation.
- 12 Vdc power supply with fitted external 110-240 Vac adapter.

Extras available:
attached printer; stainless steel bracket for fixing indicator to the wall.



IP65



Overhead Monorail Scales

Stainless or galvanised steel models, with 3000e or 2x3000e dual range **CE-M approval**, suitable for any type of monorail track system.

- Easy to use, 5-key waterproof keypad.
- LCD display with 6 digits 25 mm high.
- 1 or 2 **IP66 / IP67** load cells.
- **IP67** stainless steel indicator case.
- RS232/C for printer + RS232/C for PC or additional remote display.
- 12 Vdc power supply with fitted external 110-240 Vac adapter.
- Digital calibration and set-up. lb/kg. Weighs totalisation.

MOD.	CAPACITY kg	DIV. g (std & CE-M)	DIV. g (CE-M2)	TRACK LENGTH mm
ETWS15	150	50	20 / 50	300
ETWS30	300	100	50 / 100	300
ETW30	300	100	50 / 100	600
ETW60	600	200	100 / 200	600
ETW100	1000	500	200 / 500	600

Extras available:
attached printer; built-in rechargeable battery; bracket for fixing indicator to the wall.



IP66



ETW

WEIGHING, CODING AND LABEL PRINTING

for packaging and shipping departments

▼ main functions

- Weight, price, and amount indication and tare deduction
- printing of EAN, UPC, 39, bar code labels
- data transmission to and from the host computer
- connectable up to 4 platforms with various capacities and divisions
- Database of products, ingredients, expiry dates, maturing dates

MEAT AND FISH INDUSTRY •
AGRICULTURAL AND FOOD INDUSTRY •
COMMERCE AND DISTRIBUTION •

Professional Pricing-Labelling Scales



KDLS



IP65



ETHERNET
compliant

```

23 ham
99 bacon
27 salami
04 turkey slic
98 smoked Ham
87 ham 11.980
76 bacon 5.550kg
36 salami 6.320kg
32 turkey slic. 670kg
-----
total 97.450kg
DATE
03/03/00 09:19
  
```

Packing List Report



Example of configurable label

MOD.	CAPAC. kg	DIVISION g (C-EM 3000e)	PLATE mm
KDLS	6 / 15	2 / 5	230x330x90
KDLT	15 / 30	5 / 10	330x330x90
KDLQ	30 / 60	10 / 20	400x400x140
KDLX	60 / 150	20 / 50	600x600x150



KDLX with movable cart and roller unit for conveyor lines.

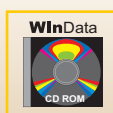


Barcode reader



Printer for packing list report

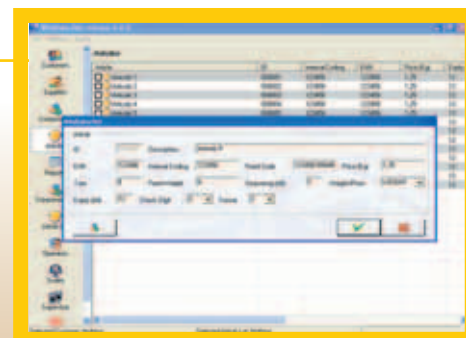
WinData
SOFTWARE



Software for Managing Various Labelling Stations

WINDOWS 2000 / XP Professional software utility for the centralised management of independent weighing and labelling stations.

- Synchronisation of all the databases without duplications.
- Exceeding label size and field format dimension limits for each scale.
- Weighs database storage on each station and printing of general periodic reports.
- Data import / export.



WEIGHING AND QUALITY CONTROL

For production, filling, and packaging lines

main functions

- statistical legal control according to EU directives
- programmable tolerances with 500 recallable articles
- connectable up to 4 platforms with various capacities and divisions
- data transmission to and from the host computer

FOOD INDUSTRY •
PHARMACEUTICAL AND •
CHEMICAL INDUSTRY •
ENGINEERING INDUSTRY •
TEXTILE INDUSTRY •

Industrial Scales for Quality Control

Ideal solution for the the statistical control of the weight or density of prepackaged goods of any nominal quantity with database/storage of up to 500 recallable articles, description, nominal weight, T1-T2-T3 tolerances.

- Extended 24-key alphanumeric and functional keypad.
- Numeric and alphanumeric displays and graph bar.

Functions: Statistical report complete of date/time of control beginning and end, article, nominal weight, nr. of weighs, average weight, standard deviation, weights out of T1, T2, T3 tolerances, max. weight, min. weight and final lot outcome.

Extras available: Precision balance connectable to terminal for operations of controlling packages under 50g. Three-way control light. Printer and bar code reader.

MOD.	CAPAC. kg	DIVIS. (CE-M 3000e) g	PLATF. mm	PACKAGE CHECK min./max. weight
KDQ1	1,5	0,5	150x150	from 50g to 1,5 kg
KDQ3	3	1	230x330	from 200g to 3 kg
KDQ6	6	2	230x330	from 2 kg to 6 kg
KDQ15	15	5	330x330	from 2 kg to 15 kg
KDQ30	30	10	330x330	from 5 kg to 30 kg



Bar code reader



Printer for statistical reports



Three-way control light



ETHERNET
compliant



KDQ

DLW

Checkweigher for +/- Integral Static and Dynamic Control

Automated weighing easily integrable on existing conveyor lines for +/- check of the packaged products.

- Static (stop and go) or dynamic (non stop) weighing.
- Weight and data transmission to management systems.
- +/- weight check or multiple selections, weight totalisation by article and weight class.
- Management of PLC synchronisms and automatisations up and down stream.
- Database / storage of up to 500 articles, with target weight, +/- T1, T2, T3, tolerances 2 descriptions of 20 crt, linkable code and tare.

Extras available: IP65 stainless steel version and special belt sizes. Input, output, deflector belts and roller units. Integrated printer. RS485 or RS422 interface. Ethernet interface. Profibus interface. Alibi memory. 0-10V or from 0 to 20mA analogue output with 16bit D/A converter. Input for PC keyboard. Third RS232 serial port for remote scale management. Control light.

MOD.	RANGE kg	SPEED m/min	STATIC ACCURACY MAX +/- g (standard)	BELT mm	HEIGHT min./max mm
DLW/5080	1-60	12	2	500x800	450/850

24	
25	
26	
27	0
28	6.000g
29	6.005kg
30	6.000kg

END DATE	
04/02/00 12:19	
AVG Weight	6000.165g
STD rounding off.	0g
weighs under T2	0
weighs under T1	0
weighs under T1	0
weighs under T2	0
weighs OK	30
maximum weight	6005g
minimum weight	6000g

Printout of report
of each lot.



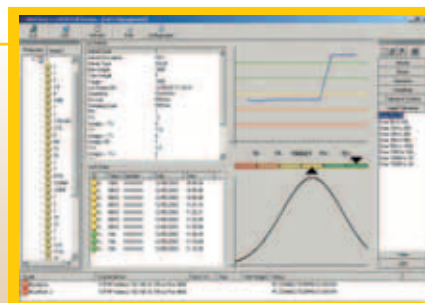
WinCheck SOFTWARE



Software for Managing Statistical Checking for Production Certification

WINDOWS 2000 / XP Professional software utility for the centralised management of each statistical phase. Configurable ethernet or RS485 interfacing

- Online management of the sampling process.
- Sampling plan database linkable to each article.
- Database of articles, production, statistics, operators, tolerance systems, sampling plans and quality levels.
- Weighs database useful for further assessments.
- Printing of lot outcome, with acceptance or refusal details on the basis of an assigned sampling plan and the programmed tolerances.
- Data Import / Export.



ITEM WEIGHING AND COUNTING

for warehouses, receiving and shipping departments,
goods control and distribution

main functions

- weight and item indication, tare deduction
- item counting, over/under checking and set point
- printing of customised tickets and labels
- connectable up to 4 platforms with various capacities and divisions
- data transmission to and from the host computer

MECHANICAL INDUSTRY •
ELECTRONIC INDUSTRY •
PLASTIC MOLDING •
COMMERCE OF SMALL PARTS •

Modular Counting Scales

KDC

KDC3 in a 3 scale configuration, labeller and support frame.



Very high counting resolution (over 300.000 points) and online database of up to 500 articles recallable with their average piece weight.

- Extended 24-key alphanumeric and functional keyboard.
- Numeric 6-digit display for weight and item indication, and secondary backlit alphanumeric LCD display.
- Fitted with 230x330 or 330x330 mm platform, with IP65 stainless steel surface with possibility of adding other platforms with various capacities and sizes.

Functions: zeroing, automatic tare, presettable tare with 500 storages linkable to the article and to the A.P.W. for each connected platform.

Extras available: printer for labels, tickets, and configurable bar code.



IP65



ETHERNET
compliant

KDC - Main unit

MOD.	CAPACITY kg	DIVISION g	COUNT. RES. g	PLATFORM mm
KDC3-6	3 / 6	1 / 2	0,01 / 0,02	230x330
KDC15-30	15 / 30	5 / 10	0,05 / 1	330x330

KDC: CONNECTABLE SECONDARY UNITS (some examples)

MOD.	CAPACITY kg	DIVISION g	COUNT. RES. g	PLATFORM mm
TQN	30 / 60 / 150	10 / 20 / 50	0,1 / 0,2 / 0,5	400x400
TXN	60 / 150 / 300	20 / 50 / 100	0,2 / 0,5 / 1	600x600
ETD	600 / 1500 / 3000	200 / 500 / 1000	2 / 5 / 10	1250x1500



KDC with attached column and printer.



Bar code reader



Thermal transfer labeller



Thermal labeller



Precision balance



Customised ODETTE label



Customised label

WinCount

SOFTWARE



Software for Managing Item Counting

WINDOWS 2000 / XP Professional software utility which allows to connect the KDC to the PC for the centralised management of each item counting phase. Printing of labels and bar code tickets (ODETTE system, code 39, UPC, etc.).

- Saving on PC of: articles, customers, suppliers, consignees, tares, weights.
- Recall of article code with stored average piece weight and tare.
- Item database stockkeeping.
- Data import / export to and from a management system.



VEHICLE WEIGHING AND CHECKING

for receiving and shipping goods and raw materials,
waste disposal and recycling

▼ main functions

- input/output check and weigh totalisation
- barycentre, wheel alignment, and framework check
- printing of tickets and customisable labels
- static or dynamic weighing of any vehicle
- data transmission to and from the host computer

INDUSTRY(ALL FIELDS) •
FOOD AND AGRICULTURE INDUSTRY •
TRANSPORT AND LOGISTICS •

KDT



3590XP03

Electronic Weighing for Weigh Bridges

3590XTAF03 indicator for vehicle input/output advanced applications. Possibility of weighing trailer, axles and multiple platforms. Data management and configurable printouts.

- Database of 500 customers / suppliers.
 - Database of 500 products.
 - Input / output management with linked ID.
 - Gate entrance / exit check with control light.
 - Load cell weigh bridges available in painted, or galvanised steel, or in reinforced concrete
- Sizes from 8x3m up to 18x3m.
Capacities from 30t up to 100t.



Electronic Weighing of Vehicle Wheels and Axles

WWS



- **DFWKR indicator** with 17-key extended keyboard and LCD display 25 mm h. Fitted with built-in rechargeable battery and prearranged for connection from 1 to 4 platforms.
 - **Fitted case**, with space for housing cables and accessories.
- Size: 325x460x170 mm.



IP67



Wheel Weighing System with low profile platforms available in the C version with a 500 x 400 mm size and the D version with a 900 x 500 mm size, connectable to the same digital weight indicator in order to have portable vehicle weighing systems.

The sturdy structure in aluminium alloy makes these light but also resistant in harsh work conditions.

Available also **CE-M approved**.

Functions: possibility of viewing / printing with weight sum function of each wheel, of each axle or diagonal and the total vehicle weight sum, for each type of weight distribution control; possibility of executing tare operations and knowing the barycentre.

Extras available: printer; RF weight transmission; frame for flush floor installation.

MOD.	CAPACITY t	DIVISION kg (std)	PLATFORM SIZES
WWSC	3 / 5 / 10 / 15	1 / 2 / 5 / 10	400x500x51 mm
WWSD	3 / 5 / 10 / 15	1 / 2 / 5 / 10	500x900x55 mm



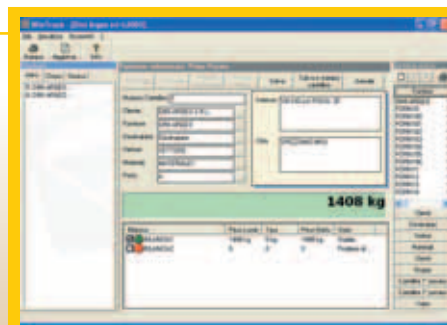
WinTruck SOFTWARE



Software for Managing Input/Output Weighing

WINDOWS 2000 / XP Professional software utility which allows to manage the entire weighing process from PC, storing each operation made with all the relative data.

- Register of customers, suppliers, consignees, materials, carriers.
- Storage of all weighs made with the print option and data export.
- Management and Printing of input/output tickets fully configurable by the user with Windows compatible printers.
- Storage/export of data on any DBMS.



WEIGHING FOR PALLET TRUCKS

for production, warehouse, goods shipping
and receiving departments

▼ main functions

- lot weighs totalisation
- item counting
- dosage, formulation
- printing and data transmission

ALL INDUSTRY FIELDS •
LOGISTICAL UNITS •

Manual Pallet Truck with Built-in Weighing

Pallet truck scale for commercial and industrial use, available in the following versions: **BASIC**, with CE-M 3000e approval, in **IP65 STAINLESS STEEL**, in **ATEX** version for hazardous environments (ZONE 1 and 2).

- 17-key functional keyboard (5 keys basic version).
- LCD backlit display with 6 digits, 25mm high.
- Structure in oven-painted sheet steel with 4 shear beam load cells.
- +/-0,05% accuracy of the applied load (+/-0,1% basic version).
- Digital calibration and set-up.
- Built-in rechargeable battery with a 40-hour operating time.
- RS232/C serial output for printer.
- Bidirectional RS232/C serial output for radio modem, PC.

Functions: Zeroing; automatic tare; tare entry and recall; print command and/or data transmission; function command (totaliser or item counter).

Extras available: printer; swivel head; radio frequency weight transmission; special versions.

TPW



TPWATEX version
for zones 1, 2 and 22

TPW Professional,
with optional printer



TPW stainless steel



IP65

INOX



MOD.	CAPACITY kg	DIVISION kg (std)	DIVISION kg (CE-M)	FORK SIZE mm
TPW15D	600 / 1500	0,2 / 0,5	0,2 / 0,5	1170x550x85
TPW20	2000	0,5	0,5 / 1 / 2	1170x550x85
TPW25D	1500 / 2500	0,5 / 1	0,5 / 1	1170x550x85
TPWL	500 / 2000	0,5 / 1	-	1170x550x85

ELW

Electric Pallet Truck with Built-in Weighing

Electric pallet trucks with built-in electronic weighing for commercial and industrial use, available in the **IP65 STAINLESS STEEL** and **CE-M 3000e approved** versions.

- 17-key functional keyboard.
- Backlit LCD display with 6 digits 25mm high.
- Structure in oven-painted sheet steel with 4 shear beam load cells.
- +/-0,05% accuracy of the applied load
- Digital calibration and set-up.
- Built-in rechargeable battery with a 40-hour operating time.
- RS232/C serial output for printer.
- Bidirectional RS232/C serial output for radio modem, PC.



IP65

INOX

MOD.	CAPACITY kg	DIVISION kg (std)	DIVISION kg (CE-M)	FORK SIZE mm
ELW6M	600	-	0,2	1170x550x85
ELW15DM	600 / 1500	-	0,5 / 1	1170x550x85
ELW20DM	1500 / 2000	-	0,5 / 1	1170x550x85

Functions: Zeroing; numeric and automatic tare; tare entry and recall; print command and/or data transmission; function command (totaliser or item counter).

Extras available: printer; swivel head; radio frequency weight transmission; stainless steel version; special versions.

WEIGHING FOR LIFT TRUCKS

for production, warehouse, goods shipping
and receiving departments

▼ main functions

- lot weigh totalisation
- item counting
- dosage, formulation
- printing and data transmission

ALL INDUSTRY FIELDS •
LOGISTICAL UNITS •

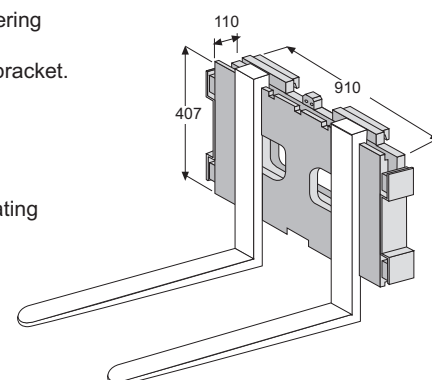
Electronic Weighing for Lift Trucks

LTW

Weighing module adaptable to any lift truck with a FEM2 plate in order to obtain a quick and accurate weighing up to 2500 kg.

- 17-key numeric-functional keyboard for entering and recalling tares, codes, etc..
- LCD display with 6 25mm digits with fixing bracket.
- Bearing structure in extra thick sheet steel.
- 2 **IP67** shear beam load cells.
- +/-0,05% accuracy of the applied load.
- Digital calibration and set-up.
- Built-in rechargeable battery (40-hour operating time) with external 110-240 Vac adapter.

Extras available: attached printer.
Reception module and radio frequency data transmission.
DFWATEX indicator for hazardous environments.



MOD.	CAPACITY kg	DIVIS. kg (std)	DIVIS. kg (CE-M)	MODULE SIZE FEM 2 mm
LTW6	600	0,2	1	910x407x110
LTW15	1500	0,5	2	910x407x110
LTW15D	600 / 1500	0,2 / 0,5	1 / 2	910x407x110
LTW25	2500	0,5	5	910x407x110



DFW indicator in cabin,
available also with
attached printer and
radio communication.



LTF

Weighing Forks for Lift Trucks

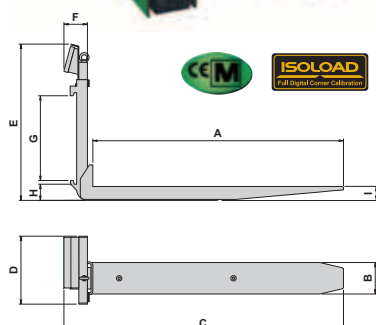
Pair of weighing forks for lift trucks with FEM2A and FEM2B (up to 2500 kg) or FEM3A (up to 5000 kg) plates.

- Indicator directly placed on forks with membrane keypad and LCD display 25 mm h.
- 4 **IP67** load cells. Accuracy: +/- 0,1% of the nominal capacity, with standard 80 x 120 cm europallet.
- Rechargeable battery with an approximate 30-hour operating time.

Functions:
zeroing; automatic tare; totalisation.

Extras available:
radio frequency reception and data transmission modules.

MOD.	CAPACITY kg	DIVISION kg	PLATE
LTF25A	2500	2	FEM2A
LTF25B	2500	2	FEM2B
LTF50A	5000	5	FEM3A



	A	B	C	D	E	F	G	H	I
LTF25A	1160	150	1300	315	720	110	382	76	70
LTF25B	1160	150	1300	315	800	110	382	152	70
LTF50A	1160	190	1300	365	832	110	477	76	80



WEIGHING FOR OVERHEAD CRANES

for production, external warehouse, goods shipping
and receiving departments

▼ main functions

- **PEAK and HOLD functions**
- **weight indication and tare deduction**
- **lot weighs totalisation, identification**
- **printing and data transmission to the host computer**

ALL INDUSTRY FIELDS •
LOGISTICAL UNITS •

Crane Scales and Dynamometers

Dynamometers and crane scales for commercial and industrial use in **IP67 stainless steel** (safety factor K=5).

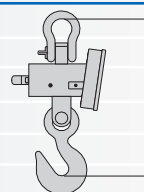
MCW with built-in swivelling hook taking up very little space.

Capacities from 150 to 6.500 kg

CE-M approval available for the capacities from 150 to 6.000 kg.

MCW

MOD.	CAPACITY kg	DIVISION kg (std)	DIVISION kg (CE-M 3000e)	VERTICAL DISTANCE mm	WEIGHT kg
MCW150	150	0,02	0,05	321	11
MCW300	300	0,05	0,1	321	11
MCW600	600	0,1	0,2	321	12
MCW1500	1500	0,2	0,5	390	16
MCW3000	3000	0,5	1	450	16
MCWT6	6000	1	2	450	18



- Easy to use 5-key functional keypad.
- Backlit LCD display with 6 digits 25 mm high.
- Fitted with upper galvanised shackle and swivel hook.
- Infrared ray remote control for remote tare or configurable as 4 keys, 8 m maximum distance.
- Hermetic rechargeable battery (40-hour operating time) with charger. Fitted with external 110-240 Vac adapter.

Functions: Peak (detected maximum value); Hold (lock of the displayed weight).
Weights totalisation. Digital calibration and set-up.
lb/kg conversion. Automatic tare deduction.
Programmable digital filter.

Extras available: printer; RF transmission; remote indicator with printer (RF connection), or giant weight repeater with bright LEDs; swivel hook and connection ring. Red LED Display 20 and 40 mm high.
Thermal shield (only for MCW1500, MCW3000 and MCWT6 models).



The rechargeable battery, fixed to the back panel with handle, is easily extractable for the recharge.
The backup battery kit and battery charger are available.

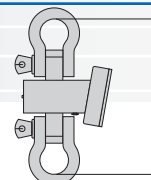
Remote weigh terminal with RF data transmission.

MCW with shackles for high capacities.
12 and 25 t capacities.



Attached optional printer.

MOD.	CAPACITY kg	DIVISION kg (std)	VERTICAL DISTANCE mm	WEIGHT kg
MCWT12	12.000	2	451	31
MCWT25	25.000	5	632	60



IP67



"Hulk" Suspended Crane Scales

High capacity crane scales for commercial and industrial use suitable for harsh environments (safety factor K=5).

Prearranged for mounting upper connection ring and lower hook.

Capacities from 10 to 35 tons

CE-M approval available for the 10 and 15 ton capacities.

MCWHU



MOD.	CAPACITY kg	DIVISION kg (std)	DIVISION kg (CE-M 3000e)	VERTICAL DISTANCE mm	WEIGHT kg
MCWHU10	10000	2	-	431	86
MCWHU15	15000	2	-	431	86
MCWHU25	25000	5	-	431	86
MCWHU35	35000	10	-	431	86
MCWHU10M	10000	-	5	431	86
MCWHU15M	15000	-	5	431	86

- Easy to use 5-key functional keypad.
- 40 mm red LED display.
- Infrared ray remote control for remote tare or configurable as 4 keys, maximum distance 8 m.
- Rechargeable hermetic battery (60-hour operating time with fitted 110-240 Vac charger).

Functions: Peak (maximum detected value); Hold (lock of displayed weight). Weighs totalisation. Digital calibration and set-up. lb/kg conversion. Automatic tare deduction. Programmable digital filter.

Extras available: Connection ring and lower swivelling hook; printer; RF transmission; remote indicator; thermal shield; back-up battery kit.



MCWHU with thermal shield



ATEX versions for operation in hazardous areas are also available (MCWATEX)

MCWL

Portable Crane Scale

Portable, light and reliable crane scale. Fitted with 2 approved shackles, infrared ray remote control and case, for an overall weight of 10kg. Built-in battery with extractable drawer, with long life and easy substitution. The triple reading range allows for the maximum resolution also with low weight values: three scales of various capacities enclosed in a single instrument. Painted steel case.

MOD.	CAPACITY kg	DIVISION kg (std)	VERTICAL DISTANCE mm	WEIGHT kg
MCWL600	150 / 300 / 600	0,05 / 0,1 / 0,2	291	8
MCWLT6	1500 / 3000 / 6000	0,5 / 1 / 2	353	10
MCWLT10	3000 / 6000 / 9500	1 / 2 / 5	419	15
MCWLT5M	1500 / 3000 / 5000	1 / 2 / 5	353	10



Fitted case
size: 41 x 26 x 24 cm.

- 4-key waterproof keypad.
- LCD 25 mm display.
- 0,03% precision class f.s.
- Fitted with galvanized shackles.
- Protection from knocks and overloads (safety factor K=5).
- Infrared ray remote control for remote tare or configurable at 4 keys, maximum distance of 8m.
- Digital calibration programmable directly from the PC with a sample weight. Programmable digital filter and auto switch-off.
- Fitted with alkaline 9 v battery with approximate operating time of 35 hours of continuous use, up to 3 months for typical non continuous use.

Functions: Peak function (maximum value). Hold function (lock of displayed weight).

Extras available: lower swivelling hook and connection ring.



WEIGHING AND BATCHING

main functions

- Indication, data and weight transmission
- Interfacing and data exchange with PLC and supervisor systems
- Database management, printing and configurable interfaces
- connectable up to 4 platforms with various capacities and divisions

production, mixing and raw material checking departments

CHEMICAL INDUSTRY •
STEEL AND IRON INDUSTRY •
CERAMICS INDUSTRY •
AGRIBUSINESS INDUSTRY •

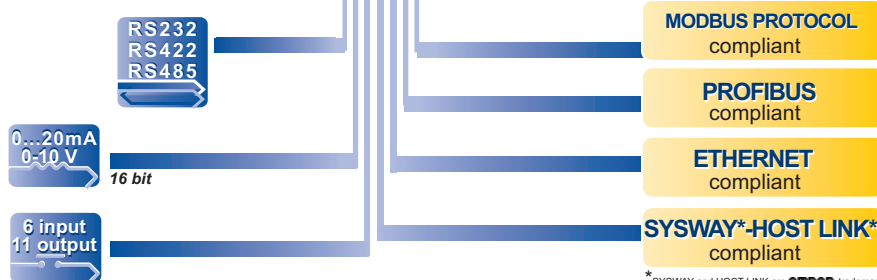
Weighing of Storage Bins, Tanks, Structures

Indicator + load cell system for organizing and managing weighing, dosage, automatic or manual formulation operations - it's also well suitable for existing process systems characterised by high communication flexibility as well as management of the interfaces and the most common communication protocols. Possibility of customising the communication software.

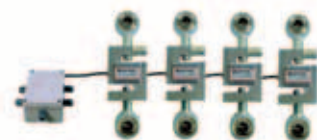


CPW weight indicator CE-M approvable for dosage systems.

Easy interfacing with PLC, PC and other peripheral units: alibi memory, up to 3 serial ports in RS232/C, RS485 and RS422, up to two 4-20mA, 0-10V analogue outputs. 11 relay outputs and 6 programmable optoisolated inputs.

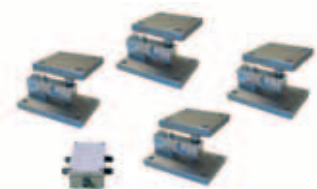


* SYSWAY and HOST-LINK are OMRON trademarks



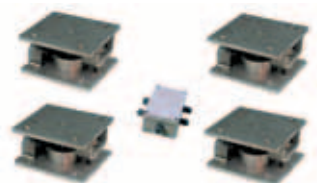
Weighing modules with **"tension"** load cells: the ideal solution for weighing hoppers, silos, and suspended loads.

Measuring field: from 50 to 10.000 kg



Weighing modules with **"shear beam"** load cells: allow for the best accuracy also in the presence of thermal expansions or inflections of the weighed framework.

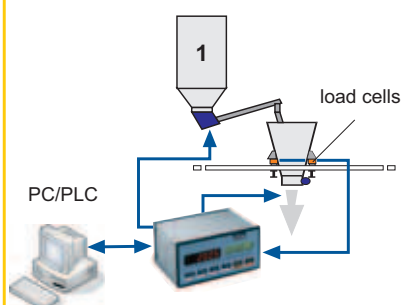
Measuring field: from 250 to 5.000 kg



Weighing modules with **"compression"** load cells: easy to install, take up little space, high protection from humidity and corrosion; the ideal solution for weighing any bearing framework, tanks, and silos also of high capacity.

Measuring field: from 2.500 to 30.000 kg.

Batching with CPW Batch1



Automatic Single Component Batching in Loading or Unloading

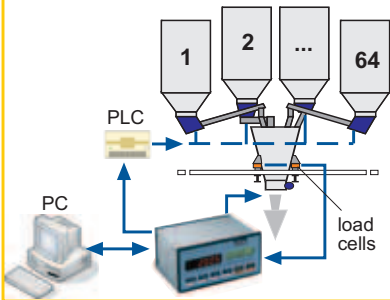
For hoppers, baggers, big-bags, tanks, silos, etc.. The **CPWBATCH 1** microcontroller can be connected to a PLC, PC or printer. The weight target can be set either locally or from PC (multistation batching systems).

Single component batching in unloading is done by enabling extraction and then checking container weight during extraction. The filling is controlled by relay outputs with programmable minimum/maximum thresholds.

In single component batching in loading the container situated on the weighing unit is filled up to the programmed value. Optoisolated digital inputs for Start/Restart and Stop/Pause. Relay outputs for fast and slow batching and end of cycle. Connectable to a PC/PLC and printer for consumption and production reports.



Batching with CPW Batch up to 64 components/activities (with PLC)



Automatic Multi-Component Batching in Loading or Unloading

In this case the 500 (max.) formulas programmable onto the **CPWBATCH** microcontroller can each contain 48 products/activities (without an external PLC) or 64 products/activities (with a PLC). The products/activities may be configured as an automatic or manual dosage, unload, timer, or pause so that also particular and complex batching sequences are possible.

Multi-component batching in unloading is the same as single component unloading batching except that the hopper-empty signal (enabling fill-up) becomes the start of a second, independent batching (in loading) of several components that are mixed only when these arrive in the hopper.

In multi-component batching in loading the formula is formed directly inside the weighed hopper in which the various products can be directed to it through various means.

Optoisolated digital **inputs** for Start/Restart and Stop/Pause. Relay **outputs** for fast and slow batching and end of cycle.

Connectable to a PC/PLC and printer for consumption and production reports.



Guided and/or Automatic Multi-Component Batching in Loading

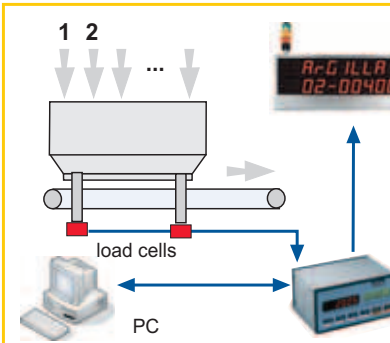
This solution, always using the **CPWBATCH**, is ideal for all batching applications in which the various formula components must be added in a discontinuous manner.

It functions **similarly to multi-component batching in loading** and the operator has to carry out the batching, step by step, following the indications given on the giant display (with control light), respecting the formula's programmed sequence.

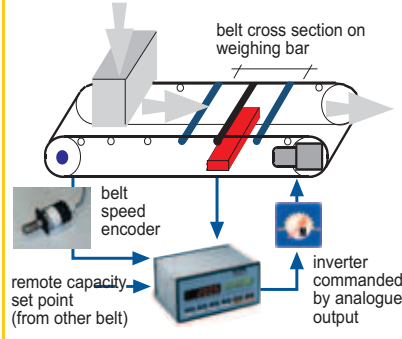
The internal memory can hold up to 99 formulas made up of various product/quantity codes and of desired activity types (manual batching, automatic batching, unload, timer, pause).

Giant display in a sealed box resistant to dust and water sprays; for displaying the Weight, Code, and Name that is batched.

Remote control for starting and advancing the batching process.



Batching with flow Adjustment



Batching with Continuous Weighing on Conveyor Belt

Continuous weighing/batching for **conveyor belts and screws** using the **CPWBELT** batching microcontroller for **flow integration**, and the **CPWBELTAN** for **P.I.D. flow adjustment** varying the feed belt speed.

The flow is determined by the continuous reading of the belt speed and by the weight of the product on the roller which is fixed to the weighing bar.

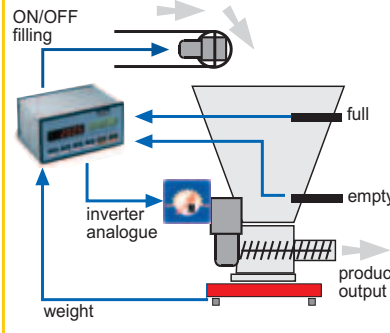
The target flow can be programmed locally or remotely: in the latter case, the flow will be adjusted on the basis of a second remote reference belt with the main component.

Sysway protocol communication for connecting up to 64 instruments to a PLC.

The accuracy obtained depends also on how the product is transported: it's approximately $\pm 0.5\%$ with a flat belt, while in using two or three rollers the tolerance is higher.



Loss-in-weight batching with flow adjustment



Loss-in-Weight Batching

Continuous batching with the **CPWLW** microcontroller (loss-in-weight) is ideal for hoppers and storage bins with **screw or belt extraction, or with a vibrating channel**.

Screw extraction is recommended for **precision microdosing**.

In loss-in-weight continuous batching the container, which is placed on the platform or bars, is gradually emptied and the flow is calculated through the weight trend.

A programmable threshold enables a periodic filling of the hopper. Through the analog variation of the screw speed, it's possible to **adjust the P.I.D. flow** by varying the extraction speed.

Microdosers like the one shown in the picture, ensure a $\pm 0.5\%$ accuracy with approximate flows ranging from 6 to 30 kg/hour. The configuration choices, hopper capacities, and screw types used, can be adapted to the product batched and with the requirements of each specific application.



Guided manual batching

For dosing very accurately numerous components in amounts which differ very much one from another. The system is made up of a **3590 "AF01"** microcontroller, platforms and the **WinSCD** management software which ensures the remote control from PC of all the dosage operations, with saving of the data for each following verification.

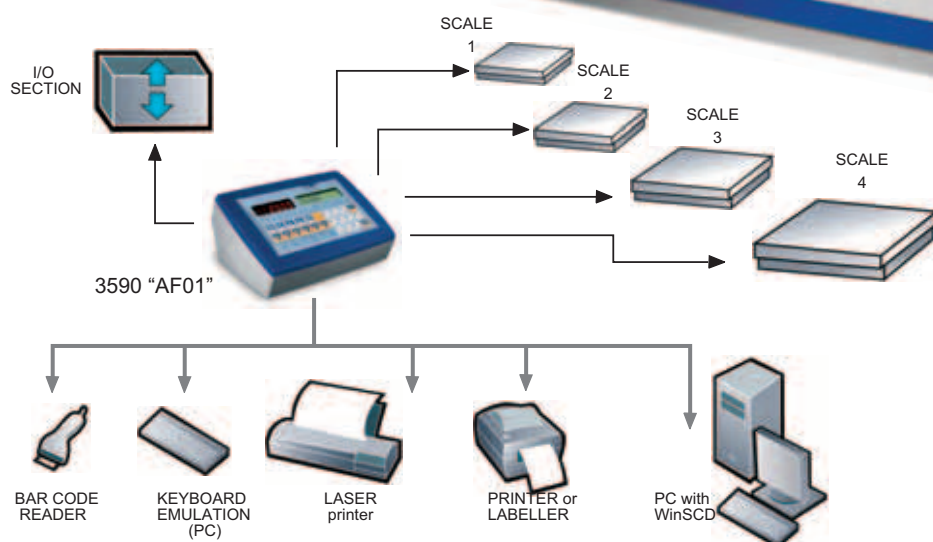
- Changeable weighing accuracy depending on the type of dosage to be made.
- Connectable up to 4 platforms in order to have a better accuracy of each component.
- Clear and thorough messages for the operator in each dosage phase.
- No handling errors (like copying from a sheet of paper to another, not cancelling already dosed components, stock management errors, etc.).



3590 "AF01" for operator interfacing, with dual LED and backlit LCD displays, functional keyboard and RS232C output. Connectable directly to the printer or labeller, bar code reader or a weight viewer/repeater with giant display (visible up to 20 m).



Giant red Led display in stainless steel box resistant to dust and water sprays. Height: 100mm / 2 lines of 10 digits.



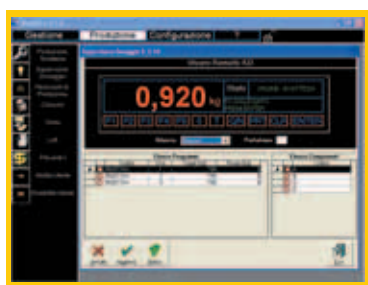
32400800 M. PRIMA SIENITE NEFELINICA
DATE 11-01-1999 LOT 19/99
QUANTITY : 30000 Kg
32400800 19/99 2.12-1/2C

Printout example made by a thermal printer of a self-adhesive label with bar code.

Software for the Manual Dosage

WINDOWS 2000 / XP Professional utility software with the following functions.

- Daily programming of the production and stock availability control.
- Raw materials and consumption database.
- Formula Database Management.
- Check of raw material consumption and quantities produced.
- Consumption estimates for each production plan.
- Printing daily and periodical reports regarding consumption and production.
- Printing the raw materials and formula databases.



WinSCD: Launch into production of the formulas with the set quantities.

WinSCD
SOFTWARE



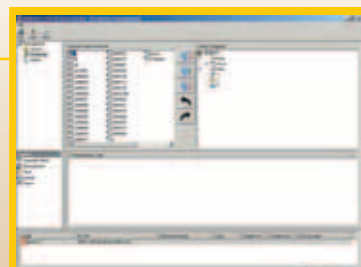
WinBatch
SOFTWARE



Software for Single or Multicomponent Batching Controlled from PC

WINDOWS 2000 / XP Professional software utility for the centralised management from PC of 1 to 64 dosage independent systems with the **CPWBATCH**.

- Simple management of formulas, production activities, operators.
- Launch into production of formulas in sequence with variable target.
- Possibility of consulting and printing production plans and consumption.
- Transfer of formulas onto the CPWBATCH microcontroller and retrieval of all the batching data.



WinBatch: managing the centralised production from PC.

MODULES: WEIGHT INDICATORS

for measuring, checking and industrial automation

▼ main functions

- weight indication, tare deduction
- data transmission
- wide range of applications for each specific use

ALL INDUSTRY FIELDS •
BUILDING SYSTEMS •
AND MACHINES

Multifunction Digital Weight Indicators



DFW



IP65

ETHERNET
compliant

Extremely versatile, multifunction weight indicators suitable for each weighing application and in which it is necessary to carry out additional functions. **CE-M approval** (EN-45501).

- Keyboard: 5-key functional or 17-key numeric and functional.
- Display: 25 mm LCD backlit, or 20 or 40 mm LED
- Protection from dust and humidity: **IP65** case available in ABS or in stainless steel
- Case/dimensions: metal-plastic or stainless steel, 265x140x175 mm.
- Divisions for CE-M legal use: 10.000e or 3 x 3.000e @ 0,3 μ V/d
- Displayable divisions: more than 600.000d
- Internal resolution: more than 3.000.000 points (3mV/V)
- Linearisation: up to 3 points
- Filter: dynamic, configurable in 5 different types.
- A/D conversion: 24 bit sigma-delta with 1 channel or 4 channels, up to 200 conv./sec.
- Data Output 1: configurable RS232/C, ASCII protocol for printer or remote display.
- Data Output 2: configurable RS232/C or RS485, ASCII protocol for PC or PLC.
- Calibration and configuration from keyboard or from PC with DINITOOLS
- Load cell connection: up to 8 cells of 350 Ohm each 1+3 mV/V with 1 channel (4 or 6 wire connection); with 4 channels (only XL version, 4-wire connection).
- Power supply: 12 Vdc or 110-240 Vac with external or internal adapter.

Functions:

BASIC: (DFW/DFWK/DFWD) weight indication, zeroing, automatic tare, presettable tare, data transfer, heading, programmable printout, auto switch-off; (DFWK) entry of numeric ID codes, tare database, quick keyboard lock/unlock, metric data visualisation, multirange functioning.
SELECTABLE: 10x displayed division, net/gross, kg/lb, counting, formulation, totalisation, input/output, threshold check (only with optional board), hold, peak, master/slave up to 4 instruments, alibi memory (only with optional board).

Extras available:

OPTIONS: built-in rechargeable battery, date/time; alibi memory; attached printer or control light, dual display, 2 inputs and 2 logic outputs, 0-5, 0-10V, and 0-20, 4-20 mA analogue output (16 bit), ethernet interface, WI-FI interface, IR function keys' remote control.

ACCESSORIES: table printer, labeller, fixing bracket, weight repeater, radio frequency module.

DFW



DFWK



DFWD

Weight Indicator for Hazardous Areas



DFW ATEX



IP68



Weight indicator with **IP68 stainless steel** case, suitable for installing in areas classified as **ATEX II2G, EEX ia IIC T4**.
(CESI 04 atex 102 approval certificate).

- 16-key numeric-functional keyboard.
- Display: LCD 6 digits 25 mm
- Stainless steel case, size 265x140x175 mm.
- Divisions for CE-M legal for trade use: 10.000e or 3 x 3.000e @ 0,3 μ V/d
- Displayable divisions (internal factory use): more than 300.000d
- Internal resolution: up to 3.000.000 points
- Linearisation: up to 3 points
- Filter: dynamic, configurable
- A/D conversion: 24 bit sigma-delta with 1-4 channels, up to 200 conv./sec.
- Data Output 1 (optional): RS232/C in configurable fiber optics.
- Data Output 2 (optional): RS485 barriered for hazardous area, configurable.
- Calibration and configuration: from keyboard or from PC with DINITOOLS
- Load cell connection: 4 or 6 wires with remote sensing, up to 4 cells of 350 ohm 1 + 3 mV/V
- Power supply: 12 Vdc; optional external 230 or 24 Vac adapter or rechargeable battery.

Functions:

BASIC: zeroing, automatic tare, presettable tare, data transfer, heading, programmable printout, auto switch-off, entry of numeric ID codes, tare database, quick keyboard lock/unlock, metric data visualisation.
SELECTABLE: 10x displayed division, net/gross, kg/lb, counting, formulation, totalisation, input/output, threshold check (only with optional board), hold, master/slave up to 4 instruments.

Extras available:

OPTIONS: external battery or adapter, alibi memory, 4 inputs and 4 barriered digital logic outputs.
ACCESSORIES: fixing bracket, table printer, labeller and weight repeater
(only for safe area)

DFWATEX

ATEX battery
size: 107x223x55 mm

3590/TRS Weight Indicators / Terminals with Advanced Functions

TRS / 3590



TRS



IP65

INOX



ETHERNET
compliant

PROFIBUS
compliant

Multifunction weight indicator and operator terminal.

Suitable for carrying out weighing operations, data management and advanced automations. The specific programmes available, allow to carry out each application in an optimal manner.

CE-M approval (EN-45501).

- Keyboard: (3590) alphanumeric and functional with 24 keys; (trs) functional with 6 keys.
- Display: LED 15 mm 6 digits, LCD backlight 2 x 16 crt and 16 LEDs, graph bar.
- Protection from dust and humidity: **IP65**
- Case: in metal-plastic or stainless steel size: 265x140x175 mm (l x p x h).
- Divisions for CE-M legal for trade use: 10.000e or 3 x 3.000e @ 0,3 μ V/d
- Displayable divisions (internal factory use): more than 600.000d
- Internal resolution: up to 3.000.000 points with field of measure of at least 3mV/v
- Linearisation: up to 9 points
- Filter: dynamic, configurable in 5 different modes, for each specific application.
- A/D conversion: 24 bit sigma-delta with 4 channels, max. 200 conv./sec.
- Data output 1: configurable RS232/C, ASCII protocol for printer or remote display.
- Data output 2: configurable RS232/C or RS485 or RS422, ASCII protocol for PC or PLC.
- Data output 3 (optional, only for AFXX versions): configurable RS232/C (for PC keyboard, bar code reader or remote scale) or PROFIBUS-DP.
- Data output 4 (optional): CAN BUS (for connection of I/O peripheral units and digital load cells)
- Inputs/outputs: 2 opto inputs and 3 relay outputs (up to 6 inputs and 11 outputs, optional)
- Calibration and configuration: from keyboard or from PC with DINITOOLS
- Load cell connection: up to 8 cells of 350 Ohm 1+3 mV/V with 1 channel (4 or 6 wire connection); with 4 channels (4 wire connection).
- connectable load receptors: up to 4 different platforms or weighing systems.
- Power supply: 12 Vdc or 110-240 Vac with external or internal adapter or 24 Vdc (optional).

3590/TRS STANDARD VERSION

Functions:

BASIC: zeroing, automatic tare, presettable tare, data transfer, programmable printout, date&time, screen saver, calibration warning, auto switch-off, entry of numeric ID codes, database of 200 articles, database of 100 tares, database of 15 free texts, keyboard lock/unlock, diagnosis functions, remoting function keys, metric data visualisation.

SELECTABLE: 10x displayed division, net/gross, kg/lb, counting, formulation and totalisation (10 storages), input/output, threshold check, hold, peak, master/slave up to 4 instruments.

OTHER MODELS WITH ADVANCED FUNCTIONS:

3590 AF01: totalisation, formulation and PC terminal; databases: 500 articles with relative totals, 300 tares, 100 customers.

3590 AF02: counting of quantities (pieces, litres, and other sizes); databases: 500 articles with relative totals, 100 customers / suppliers, 300 tares.

3590 AF03: input/output weighing for managing vehicles (simple, with trailer, static or dynamic axle totalisation); databases: 500 customers / suppliers, 500 articles.

3590 AF04: statistical check (destructive, non destructive, personalized) according to E.U. norms, in weight (kg, g, lb, t) or in volume (ml); databases: 500 articles.

3590 AF05: management and printing of labels for all types of prepackaged goods; databases: 1000 articles with relative totals, 1000 ingredients, 100 customers / suppliers, 20 tares.

3590 BATCH: automatic multicomponent dosage in loading / unloading; database: 100 formulas and 100 components.

3590 BATCH1: for automatic single component dosage in loading / unloading; database: 100 formulas.

TRSBATCH: automatic multicomponent dosage in loading / unloading; database: 100 formulas and 100 components..

TRS BATCH1: for automatic single component dosage in loading / unloading; database: 100 formulas.

Extras available:

OPTIONS: built-in rechargeable battery, alibi memory, attached printer or control light, 0 + 5/10V and 0/4 + 20mA analogue output (16 bit), ethernet interface, WI-FI interface.

ACCESSORIES: table printer, labeller, fixing bracket, weight repeater.



3590XT



IP68

INOX



RS232
RS422
RS485

ETHERNET
compliant

PROFIBUS
compliant

Digital Weight Indicators

LCS



LCS



IP65

INOX

RS232

Versatile and compact digital weight indicators. Suitable for simple industrial and commercial applications.

CE-M approvable (OIML R-76 / EN 45501).

- 4-key waterproof and functional keypad.
- LCD display with 6 high contrast 25mm digits with indication of active functions.
- IP65 stainless steel metallic case
- Angled either to be set on a table or a wall.
- Dimensions: 235x125x60 mm.
- Up to 3.000e or multirange 3 x 3000e @ 0,8 μ V/d for CE-M approved legal for trade use.
- Up to 30.000 divisions displayable for internal factory use
- Up to 9 signal linearisation points (through PC)
- A/D sigma-delta conversion with 4 channels
- Digital calibration through PC
- Instrument management and configuration from PC
- Management of a single channel or multichannel (from 2 to 4) scale through digital equalisation
- 12 Vdc power supply with 110-240 Vac external adapter
- Connection with up to 4 load cells with 350 Ohm input resistance.

Functions:

BASIC: zeroing, automatic tare, manual tare, activation of the selected function, print, ON/OFF.

Print layout with: gross weight, tare weight, net weight

SELECTABLE: simple viewing and/or with HR sensitivity x 10, net/gross viewing, PEAK (maximum value detected), totalization, or HOLD (block of displayed weight)

DGT60

Giant Digital Weight Repeater/Indicator

Multifunction weight indicator/repeater in stainless steel with large digit display. Suitable for all types of industrial and commercial applications. **CE-M approved** (EN-45501).

- Keyboard: functional with 5 keys
- Display: SMD LED with 6 very bright digits, 60 mm high and 6 LEDs for indication of active functions.
- Protection from dust and humidity: **IP68**
- Case: in stainless steel with fixing brackets.
- Divisions for CE-M legal for trade use: 10.000e or 2 x 3.000e
- Displayable divisions (internal factory use): up to 800.000d
- Internal resolution: up to 3.000.000 points
- Linearisation: up to 8 points with DINITOOLS
- A/D conversion: sigma-delta 24 bit with 4 channels, up to 200 conv./sec. with automatic selection
- Data Output 1: configurable RS232/C, ASCII protocol for printer, PC or other external units.
- Data Output 2: configurable RS485, ASCII protocol for PC, PLC or other external units
- 2 configurable relay outputs and 2 optoisolated digital inputs; MODBUS serial protocol.
- Calibration and configuration: from keypad or from PC with DINITOOLS
- Load cell connection: 4 or 6 wires with remote sensing, up to 16 cells of 350 ohm 1 ÷ 3 mV/V
- Power supply: 110-240 Vac with internal adapter.



DGT60



Functions:

BASIC: zeroing, automatic tare, presettable tare, data transfer, programmable printout, auto switch-off; net/gross, check of thresholds.
SELECTABLE: 10x displayed division, counting, formulation, totalisation.

Extras available:

OPTIONS: date/time; alibi memory, ethernet interface.
ACCESSORIES: attached printer, radio frequency module.

TRI

Digital Weight Indicators

Compact multifunction weight indicator in stainless steel. Suitable for all types of industrial and commercial applications. **CE-M approved** (EN-45501).

- Keyboard: numeric and functional with 18 keys
- Display: very bright LEDs with 7 digits 13mm high and 6 LEDs for indication of active functions.
- Protection from dust and humidity: **IP65**
- Case: in stainless steel, size of 196x120x60 mm with adjustable resting bracket.
- Divisions for CE-M legal for trade use: 10.000e or 3 x 3.000e @ 0,3 µV/d
- Displayable divisions (internal factory use): more than 600.000d
- Internal resolution: more than 3.000.000 points with measuring field of at least 3mV/V
- Linearisation: up to 3 points
- Filter: dynamic, configurable in 5 different modes.
- A/D conversion: sigma-delta 24 bit with 1 channel, max. 200 conv./sec.
- Data output 1: configurable RS232/C, ASCII protocol for printer or remote display.
- Data output 2: configurable RS232/C or RS485, ASCII protocol for PC or PLC.
- Calibration and configuration: from keyboard or from PC with DINITOOLS
- Load cell connection: 4 or 6 wires with remote sensing, up to 8 cells of 350 ohm 1 ÷ 3 mV/V
- Power supply: 12 Vdc or 110-240 Vac with external or internal adapter.



TRI



ETHERNET
compliant

Functions:

BASIC: zeroing, automatic tare, presettable tare, data transfer, programmable printout, auto switch-off; entry of numeric ID codes, net/gross, check of thresholds (only with optional board).
SELECTABLE: 10x displayed division, % weigh, counting, formulation, totalisation, +/- tolerance check.

Extras available:

OPTIONS: built-in rechargeable battery, date/time; alibi memory, 2 + 2 inputs and 2 + 2 relay outputs, ethernet interface.
ACCESSORIES: table printer, weight repeater, radio frequency module.

Microcontroller for Automation

Multifunction microcontroller / weight indicator for dosage up to 64 components, continuous weighing, flow adjustment, also with 10.000e **CE-M approval** for legal for trade use in relation with third parties.

- Easy to use, 6-key waterproof keypad.
- Numeric LED alphanumeric display with 6 digits of 15 mm and graph bar.
- Panel case in aluminium according to DIN norms, size of 193x97x140 mm.
- Up to 800.000 displayable divisions (up to 10.000e for **CE-M** legal for trade use).
- RS232/C for printer + configurable RS232/C for I/O data transmission.
- 11 configurable relay outputs, 6 optoisolated digital inputs, optional analogue output.
- Calibration with up to 9 linearisable points and digital set-up.
- A/D 24 bit sigma-delta conversion, max.200 conv./sec. autoselect
- Connectable up to 8 standard load cells with 350 Ohm input resistance.
- 12 or 24 Vdc or 100-240 Vdc power supply with external adapter (optional).

Functions: counting with maximum resolution of 1.500.000 divisions. Totalisation, formulation, +/- check, programmable weight thresholds, gross/net, storage of 100 recallable tares, Control of synchronisms for automatic transport lines.

Other models: **CPW** for formulation, counting, +/- check, programmable weight thresholds
CPWCHECK for automatic selection and dynamic weighing with extended I/O
CPWBATCH for automatic dosage in loading or unloading
CPWBELT for flow control / adjustment with continuous weighing
CPWLW for continuous loss-in-weight dosage with extended I/O



CPW



ETHERNET
compliant

PROFIBUS
compliant

MODBUS PROTOCOL
compliant

CPW

Digital Indicator/transmitter

DGTQ



DGTQ



4...20mA
0-10V

RS232
RS485

2 input
2 output

Multifunction weight transmitter for mounting on panel board. Ideal as 4-channel digital junction box, allowing direct reading and diagnostics of each connected load cell. The wide range of available interfaces, makes it easy and safe to integrate the weighing to any automation system. **CE-M approval.**

- Keypad: functional with 5 keys
- Display: 9 mm LED and 6 LEDs for indicating active functions.
- Divisions for CE-M legal for trade use: 10.000e or 3 x 3.000e @ 0,3 μ V/d, for internal factory use: more than 800.000d
- Internal resolution: more than 3.000.000 points with measuring field of at least 3mV/V, up to 9 linearisation points
- A/D conversion: sigma-delta 24 bit with 1 channel or 4 channels, up to 200 conv./sec., configurable filter
- Two data outputs: RS232/C and RS485 configurable, ASCII protocol, RTU modbus or PROFIBUS
- Inputs/outputs: 2 inputs and 2 configurable logic outputs and analogue output: 0 ÷ 5/10V and 0/4÷20mA (16 bit)
- Calibration and configuration from keyboard or from PC
- Connections: up to 4 dependent channels or 4 independent channels with digital equalisation (up to 8 350-Ohm load cells).
- Power supply: 12 ÷ 24 Vdc

Functions:

BASIC: zeroing, automatic tare, presettable tare, data transfer, threshold check.
SELECTABLE: 10x displayed division, net/gross, kg/lb, counting, formulation, totalisation, hold, peak.

Extras available:

date/time; alibi memory

Digital Indicator/transmitter

DGT



DGT



RS232
RS485

4...20mA
0-10V

2 input
2 output

MODBUS PROTOCOL
compliant

PROFIBUS
compliant

Multifunction weight transmitter for mounting on panel board on DIN bar. Ideal as 4-channel digital junction box, allowing direct reading and diagnostics of each connected load cell. The wide range of available interfaces, makes it easy and safe to integrate the weighing to any automation system. **CE-M approval.**

- Keypad: functional with 5 keys
- Display: 9 mm LED and 6 LEDs for indicating active functions.
- Divisions for CE-M legal for trade use: 10.000e or 3 x 3.000e @ 0,3 μ V/d, for internal factory use: more than 800.000d
- Internal resolution: more than 3.000.000 points with measuring field of at least 3mV/V, up to 9 linearisation points
- A/D conversion: sigma-delta 24 bit with 1 channel or 4 channels, up to 200 conv./sec., configurable filter
- Two data outputs: RS232/C and RS485 configurable, ASCII protocol, RTU modbus or PROFIBUS
- Inputs/outputs: 2 inputs and 2 configurable logic outputs and analogue output: 0 ÷ 5/10V and 0/4÷20mA (16 bit)
- Calibration and configuration from keyboard or from PC
- Connections: up to 4 dependent channels or 4 independent channels with digital equalisation (up to 8 350-Ohm load cells).
- Power supply: 12 ÷ 24 Vdc

Functions:

BASIC: zeroing, automatic tare, presettable tare, data transfer, threshold check.

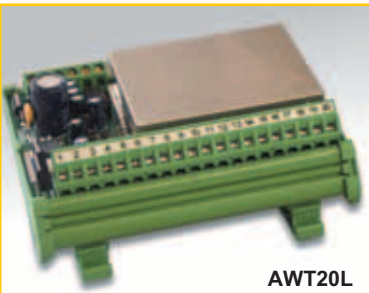
SELECTABLE: 10x displayed division, net/gross, kg/lb, counting, formulation, totalisation, hold, peak.

Extras available:

OPTIONS: date/time; alibi memory

Analogue Weight Transmitter

AWT20L



AWT20L



0...20mA
0-10V

Weight transmitter with analogue output which can be either 0-20mA, 4-20mA, 0-10Vdc or +/- 5Vdc. Suitable for mounting on rear of panel board or in tin box on omega bar. Normally used with 12 bit analogue/digital boards installed on the PLC.

- Case in plastic for mounting on DIN bar, size of 113x93x60 mm.
- Analogue filter for reducing the weight oscillations by adjusting the trimmer
- Approximate zero through 4 dip-switches from - 2,4 to 17 mV.
- Approximate full scale through 4 dip-switches from 3,5 to 24 mV.
- Fine zero through 10-turn trimmer, 10% of the field.
- Fine full scale through 10-turn trimmer, 10% of the field.
- Precision: 0,25% f.s..
- Non-repeatability: 0,01% f.s.
- Thermal stability: 0,01% F.S. /10°C
- Operating temperature from -10 to + 50°C
- Measuring field from 3,5 to 24 mV
- Cell input: 10 Vdc
- Connectable up to 6 load cells of 350 Ohm.
- Analogue output 0-20mA, 4-20mA or 0-10V at choice.
- Alternatively, +/- 5 Vdc output.
- Power supply from 20 to 28 Vdc - Absorbed power of 6VA.

MODULES: BARS AND PLATFORMS

for measurement, control and industrial automation

▼ main features

- very accurate and sturdy
- easy to install
- highly versatile
- no moving parts

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BUILDING SYSTEMS AND MACHINES •

Weighing Bars

BP

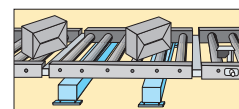
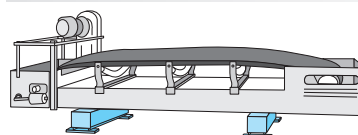


Their sturdiness and versatility make these ideal for weighing hoppers, conveyor belts, and roller units. Installing the framework to be weighed is made simple and quick thanks to the wide surface available for mounting it.

- Off center or shear beam load cells.
- Articulated compensation joints for bending and expansion of the framework to be weighed.
- Mechanical overload protection from accidental bumps and overloads.
- **IP68** protection.

Extras available: stainless steel version; high resolution; with 3000e or 2x3000e **CE-M** approval for legal for trade use.

MOD.	CAPACITIES kg	DIVISIONS g (std)	RESTING SURFACE mm	HEIGHT mm
BPSI	15/30/60/150	2/5/10/20	400x80	85+20
BPM	60/150/300	10/20/50	600x105	130
BPX	150/300/600	20/50/100	800x135	130
BPL	600/1500/3000	100/200/500	1200x150	120
BPL	6000	1000	1200x150	120



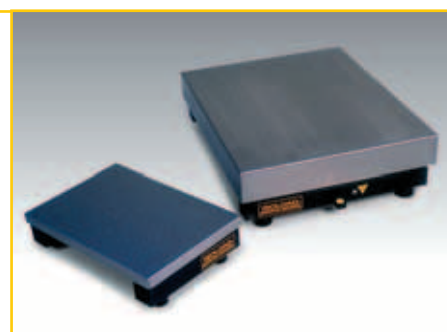
T

Single-Cell Platforms

Electronic platforms for small and medium capacity scales or item counters, suitable for installing on counters, raising frames or on the floor.

- Functions with an off-center OIML R60 approved cell for direct loads without levers.
- Fitted with satined AISI 304 stainless steel surface.
- Protection from overloads, adjustable feet and level.
- **IP65** protection.

Extras available: versions entirely in stainless steel with **IP68** load cells, high resolution, 3000e or 2x3000e **CE-M** approvable for legal for trade use.



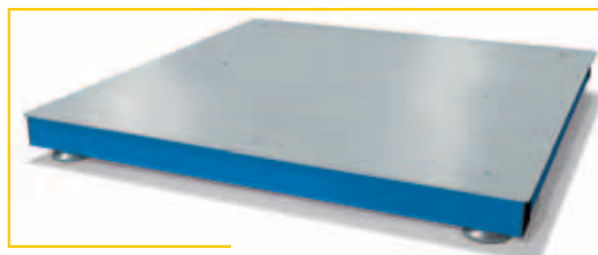
MOD.	CAPACITIES kg	DIVISIONS g (std)	PLATFORM mm
TRNI	0,6/1,5/3	0,1/0,2/0,5	150x150x50
TSN	3/6/15	0,5/1/2	230x330x90
TTN	6/15/30	1/2/5	330x330x90
TQN	15/30/60/150	2/5/10/20	400x400x140
TMN	30/60/150	5/10/20	400x500x140
TCN	30/60/150	5/10/20	500x500x140
TLN	60/150/300	10/20/50	500x600x150
TXN	60/150/300	10/20/50	600x600x150
TGN	150/300/600	20/50/100	700x700x165



Platforms with 4 Load Cells

Low profile electronic platforms for all types of industrial and commercial scales.

ET



- Functions with 4 approved shear beam load cells for direct loading without levers in **IP68** stainless steel.
- Removable galvanized sheet iron loading surface.
- Adjustable, shockproof flexible feet and level.

Extras available: stainless steel surface or versions entirely in stainless steel; high resolution; 3000e or 2x3000e **CE-M** approvable for legal for trade use; access ramps; frame and plates for flush floor installation.

MOD.	CAPACITIES kg	DIVISIONS g (std)	PLATFORM mm
ETC	300/600/1500	50/100/200	800x800x90
ETA	300/600/1500	50/100/500	1000x1000x90
ETM	300/600/1500	100/200/200	1000x1250x90
ETB	300/600/1500	50/100/200	1250x1250x90
ETD	600/1500/3000	100/200/500	1250x1500x110
ETE	600/1500/3000	100/200/500	1500x1500x110
ETF	600/1500/3000	100/200/500	1500x2000x130
ETG	6000	1000	1500x2000x130
ETH	3000/6000/10000	500/1000/2000	1500x2500x180
ETL	3000/6000/10000	500/1000/2000	2000x2500x180

MODULES: LOAD CELLS

for measurement, control and industrial automation

▼ main features

- high precision and linearity
- low sensitivity to lateral loads
- high protection from dust and humidity
- compatibility with the most common models on the market

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BUILDING SYSTEMS AND MACHINES•
ENGINEERING STUDIES•

off-center

Low Capacity Load Cells for Platforms, Bars, Hoppers, etc.

The "off center" feature makes these load cells accurate and reliable also with off center loads whose barycentre is within the approximate size of the platform or hopper suitable for each model.



SPO

- Capacities from 3 to 35 kg.
- Max. platform size: 300x300 mm
- In aluminium, **IP65**.
- Sensitivity: 2mV/V.
- Impedance: 350 Ohm
- **OIML R-60** approval.



IP65



SPG

- Capacities from 10 to 100 kg.
- Max. platform size: 400x400 mm.
- In aluminium, **IP65**.
- Sensitivity: 2mV/V.
- Impedance: 350 Ohm
- **OIML R-60** approval (ATEX optional).



IP65



SPBC

- Capacities from 100 to 630 kg.
- Max. platform size: 700x700 mm.
- In aluminium, **IP65**.
- Sensitivity: 2mV/V.
- Impedance: 350 Ohm
- **OIML R-60** approval (ATEX optional).



IP65

tension

Low, Medium and High Capacity Load Cells for Suspended Weighing with Tie Rods, Ropes, etc.

Suitable for transforming mechanical scales into electronic ones - measures transmission lever forces - weighing of hoppers, containers, etc.



STC tension cell



IP67



STC:
mounting set

STC tension load cells:

- Capacities from 50 kg to 250 kg.
- In nickel-plated steel with **IP67** protection.
- Sensitivity: 3mV/V.
- Impedance: 352 Ohm
- **OIML R-60** approval.



STE tension cells



IP67

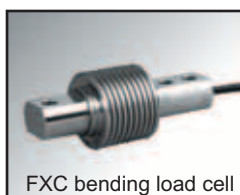
STE tension load cells:

- Capacities from 500 to 10.000 kg.
- In nickel-plated steel with **IP67** protection
- Sensitivity: 2mV/V
- Impedance: 350 Ohm
- **OIML R-60** approval.

bending beam shear beam

Low and Medium Capacity Load Cells for Weighing Platforms, Hoppers, Tanks, etc.

These can be used both for weighing suspended frameworks as well as supported ones, with the relative mounting sets. The bending beam load cells allow to obtain good results in the lower capacities; the shear beam load cells are often preferable, since these are less sensitive to non perpendicular stress components.



FXC bending load cell



IP68



FXC bending load cells:

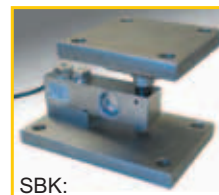
- Capacities from 10 to 200 kg.
- In stainless steel, **IP68** protection.
- Sensitivity: 2mV/V.
- Impedance: 350 Ohm.
- **OIML R-60** approval (ATEX optional).



SBK shear beam cell



IP68



SBK:
mounting set



SBK shear beam load cells:

- Capacities from 300 to 5.000 kg.
- In **IP68** stainless steel.
- Sensitivity: 2mV/V.
- Impedance: 350 Ohm.
- **OIML R-60** approval (ATEX optional).

double shear beam compression

High Capacity Load Cells for Weighing Platforms, Silos, Hoppers, etc.

These are highly accurate and sturdy, equipped with very practical mounting kits, easily installable also under already existing frameworks.



Double shear beam
with mounting sets



IP67

Double shear beam load cells:

- Capacities from 10.000 to 25.000 kg.
- In nickel-plated steel, **IP67** protection.
- Sensitivity: 2mV/V.
- Impedance: 350 Ohm.
- **OIML R-60** approval.



CP compression

IP68



CP with
mounting set

CP compression load cells:

- Capacities from 2.500 to 30.000 kg.
- In stainless steel, **IP68** protection.
- Sensitivity: 2mV/V.
- Impedance: 700 Ohm.
- Made according to **OIML R-60** norms.



ACCESSORIES AND PERIPHERAL UNITS

for slips, labels, tickets,
bar codes,
increase of instruments' functions,
specific applications

THERMAL PRINTER

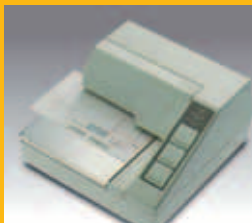
Thermal printer for printing slips and reports on thermal paper or on tickets. CE-M APPROVED.



DFW OBTPR

IMPACT PRINTERS

Impact printers for printing slips and reports on tickets. CE-M APPROVED.



TM295



LX300

LABELLERS

Thermal transfer labellers. Max. label width: from 55 to 104 mm. Possibility of printing bar codes and label personalisations.



LP542PLUS



SMT280

EXPENDABLE MATERIALS

Thermal paper rolls



PRECISION SCALES

Analytical scales
Electromagnetic compensation thermal scales



OTHER PERIPHERAL UNITS

- Bar code readers
- Weight repeater
- Control light
- Remote control



WEIGHT REPEATERS

Weight indicators with alphanumeric red LED display 6 digits - 40/60 mm or large matrix display with very bright 60mm SMD LEDs



DGT60



R71620

INTERFACES

- RS232/C, RS485, RS422
- 0-10V, 0-5V, 4-20mA - -
- Ethernet
- WLAN RF 802.11b
- RF 403 Mhz modem
- Profibus, modbus
- USB, bluetooth
- input/output in binary logic



INDICATOR SUPPORT STANDS

Indicator support stands on the floor or attached to the platform. Swivelling or fixed brackets for indicators on the wall.

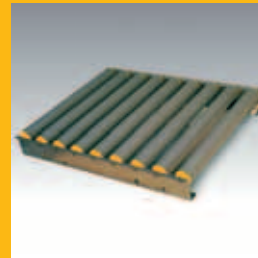


CSP



ROLLER UNITS

- Roller units for transporting materials
- Conveyor belts



CARTS AND FRAMES

- Columns and brackets
- Conveyor belts
- Carts
- Raising frames

Various sizes, in painted metal or stainless steel.



TB60



SGAX

WALL BOX

Electric wall panel board predisposed for holding a weight indicator, printer, and control electromechanics.

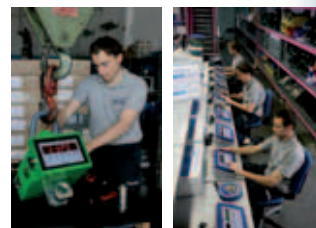




SERVICE AND ASSISTANCE: A GUARANTEE OF CONSTANT QUALITY

Your checking, weighing or automation requirements demand specific applications: we will study the best hardware and software solutions for your task. Our services include:

- ▶ **EXECUTION** of complete measuring and checking stations, which may be independent or integrated with production lines, along with instrument adaptation and personalisation according to the customer's specifications.
- ▶ **ADVICE AND SUPPORT** for integrating weight detection systems with existing automation and management systems, customised software development for the varied interfaces and communication protocols.
- ▶ **INSTALLATION** at customer's premises.
TECHNICAL ASSISTANCE AND SERVICE on all types of mechanical or electronic instruments.
- ▶ **RENTAL** of scales and item counters for inventories or other specific requirements.
- ▶ In order to guarantee high quality for your control requirements we offer the **CONTROL AND CALIBRATION SERVICE** for any weighing instrument with release of test report according to the EN45501 norms. We also offer an advantageous contract for the periodic calibration service with certified weights at the customer's premises, with an optimised verification calendar depending on the type of use.



For Sales and Technical Assistance please contact:



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www.diniargeo.com



Dini Argeo S.r.l.

Via della Fisica 20
41040 Spezzano di Fiorano (MO)
ITALY

Tel. +39 0536 843418 - Fax +39 0536 843521
email: info@diniargeo.com

Dini Argeo GmbH

Hauptstrasse, 2
74889 Sinsheim
GERMANY

Tel. +49 07261 40538-0 - Fax +49 07261 40538-99
email: info.de@diniargeo.com