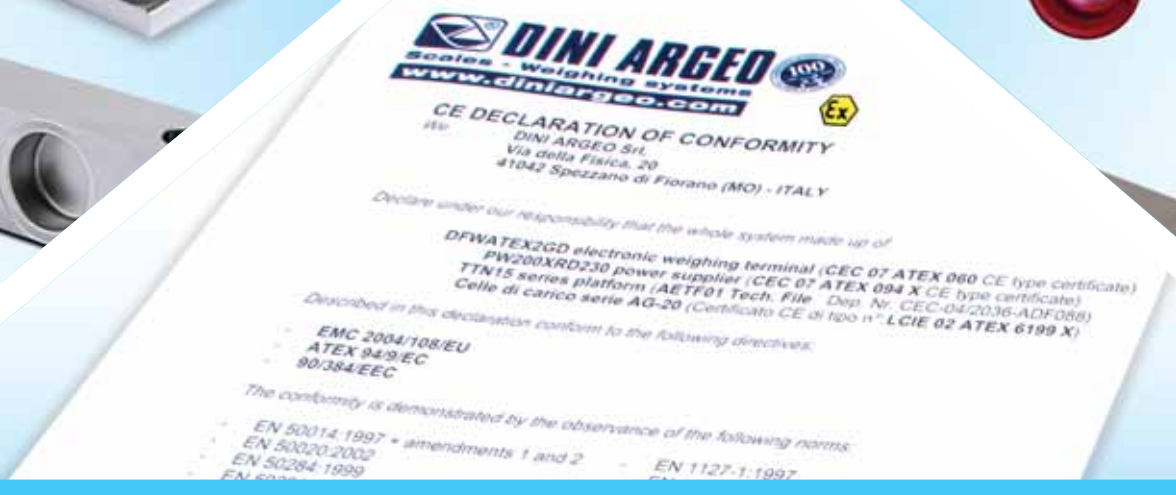


ATEX > WEIGHING IN HAZARDOUS AREAS



DINI ARGED

Scales - Weighing systems



ATEX > WEIGHING IN HAZARDOUS AREAS



Dini Argeo, a company specialised in the design and production of scales and weighing systems, is well-established in the world market for its quality and reliability.

The weighing solutions offered by Dini Argeo cover all industrial weighing applications: from counting pieces to automatic dosages, from logistics weighing (pallet truck scales, palletweighers, weighing forks for lift trucks, suspended crane scales) to labelling, from checking production lines to vehicle weighing.

Dini Argeo also offers a wide range of interfaces and accessories guaranteeing the maximum interfaceability and flexibility of use.

The products, besides conforming to the quality standards recognised at an international level, are submitted to the best independent certification laboratories, accredited at a European level, in order to guarantee the maximum quality to the customer.

Dini Argeo exports in over 60 countries of the world and offers qualified and specialised technical personnel.

To obtain further information regarding our products, do not hesitate to contact us or visit the www.diniargeo.com web site.



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 IV). The Dini Argeo production process is therefore certified for the production and sale of equipment marked Ex, destined for use in potentially explosive environments. The Ex logo next to the product indicates the possibility of having the ATEX product certified upon request. (CEC 07 ATEX 095 I rev.1 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 subsequent periodic calibration or maintenance checks.



Dini Argeo produces instruments approved or approvable for legal for trade use (according to the European standard EN 45501 - Directive 2009/23/EC). 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.

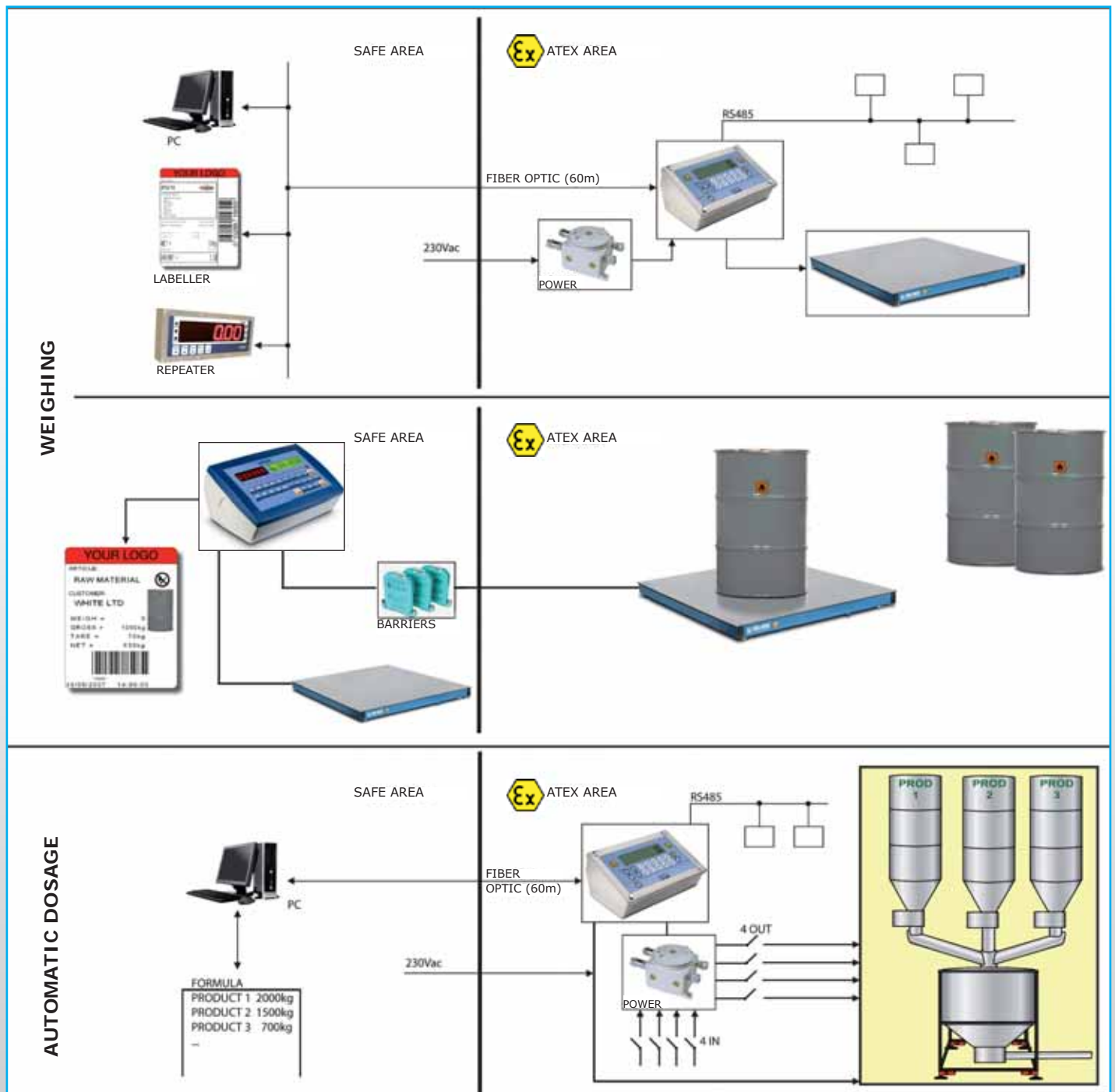
The DINI ARGEO ATEX solutions

Dini Argeo s.r.l offers weighing solutions for hazardous environments classified by the ATEX 99/92/CE directives.

From the design of the electronic boards to the production of indicators, load cells, platforms, pallet truck scales, crane scales, and accessories, Dini Argeo srl offers a wide range of devices for ATEX zones.

Dini Argeo is also able to supply a certification or declaration of conformity of the whole system, guaranteeing to the customer the safety of the purchased system and at the same time supplying a complete service in order to speed up the development or installation time.

EXAMPLES OF SOLUTIONS:



Product Summary Table

PRODUCT	TYPE	PROTECTION DEGREE	GASES			DUSTS		
			II 1G (Zone 0)	II 2G (Zone 1)	II 3G (Zone 2)	II 1D (Zone 20)	II 2D (Zone 21)	II 3D (Zone 22)
MCWX2GD	CRANE SCALE	II 2GD IIC T4 T197°C X		•	•		•	•
MCWATEX2GD	CRANE SCALE	II 2GD IIC T4 T197°C X		•	•		•	•
TPWX2GD	PALLET TRUCK	II 2GD IIB T4 T197°C X		•	•		•	•
TPWX2GDI	PALLET TRUCK	II 2GD IIB T4 T197°C X		•	•		•	•
TPWX3GD	PALLET TRUCK	II 3GD IIC T6 T130°C X			•			•
TPWX3GDI	PALLET TRUCK	II 3GD IIC T6 T130°C X			•			•
DFWATEX2GD	INDICATOR	II 2G Ex ia IIC T4 II 2D Ex tD A21 IP65 T197°C		•	•		•	•
DFWATEX2GDF	INDICATOR	II 2G Ex ia IIC T4 II 2D Ex tD A21 IP65 T197°C		•	•		•	•
3590EXTxxBC3GD	INDICATOR	II 3G Ex nR IIC T6 X II 3D Ex tD A22 IP68 T135°C X			•			•
DGT603GD	INDICATOR	II 3G Ex nR IIC T6 X II 3D Ex tD A22 IP68 T130°C X			•			•
DFWATEX3GD	INDICATOR	II 3G Ex nR IIC T6 X II 3D Ex tD A22 IP68 T130°C X			•			•
DFWLKI3GD	INDICATOR	II 3G Ex nR IIC T6 X II 3D Ex tD A22 IP68 T130°C X			•			•
DFWATEX3D	INDICATOR	II 3D Ex tD A22 IP65 T130°C X						•
PW200XRD	POWER SUPPLIER	II (2)/2 G [Ex ib]/Ex d IIC T4 II (2)/2 D [Ex ib]/Ex tD A21 T140°C		•	•		•	•
DFWBP76ATEXB	RECHARGEABLE BATTERY	II 2G Ex ia IIC T4 II 2D Ex tD A21 IP65 T197°C		•	•		•	•
BP6ESTATEX3GD	RECHARGEABLE BATTERY	II 3G Ex nR IIC T6 X II 3D Ex tD A22 IP65 T130°C X			•			•
PLATFORMS	WEIGHING MODULE	II 2GD c IIC T6 85°C		•	•		•	•
LOAD CELLS	LOAD RECEPTORS	II 1G EEx ia IIC T6 (Ta -20÷+40°C) TX (Ta -20÷+65°C) II 1D tD A20 TX°C (Ta -20÷+40°C) TX°C (Ta -20÷+65°C)	•	•	•	•	•	•
MB4	ZENER BARRIERS	II (1) GD [Ex ia] IIC (-20°C ≤ Ta ≤ +60°C) II (1) GD [Ex iaD] IIC (-20°C ≤ Ta ≤ +60°C)		•	•		•	•
JB4QAI	JUNCTION BOX	II 2G Ex ib IIC T6 II 2D Ex tD A21 IP65 T115°C		•	•		•	•

Electronic crane scales for ATEX 1 & 21, 2 & 22 zones

These are quickly installed on the lifting system (cranes, crane bridges, etc.).
The whole structure is in steel guaranteeing the maximum resistance to accidental knocks.
Great resistance to overloads.
Very little distance between upper ring and lower hook, in order to not reduce the load capacity of the lifting system.

MCWX2GD

AREAS
1 & 21

AREAS
2 & 22



INTRINSICALLY SAFE
RECHARGEABLE BATTERY

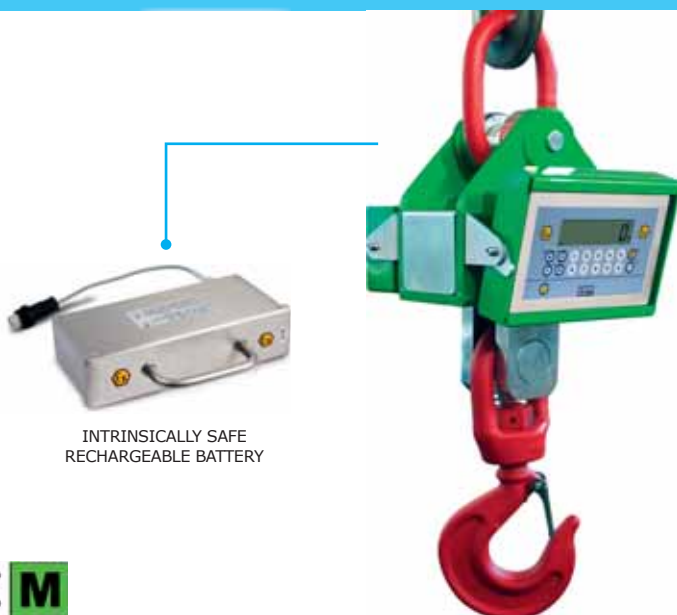
- PROTECTION:** II 2G IIC T4 T197°C X
- CAPACITY:** From 600 to 6000 kg.
- DIVISION:** From 0,2 to 2 kg.
- PRECISION:** ± 0.03 % of the maximum capacity.
- BATTERY LIFE:** About 160 h/4800 weighs.
- STRUCTURE:** Stainless steel.
- FUNCTIONS:** Simple weighing, totalisation, formula weighing, counting, weight hold function on the display.
- ELECTRONICS:** Intrinsically safe.



MCWATEX2GD

AREAS
1 & 21

AREAS
2 & 22



INTRINSICALLY SAFE
RECHARGEABLE BATTERY

- PROTECTION:** II 2G IIC T4 T197°C X
- CAPACITY:** From 15000 to 35000 kg.
- DIVISION:** From 5 to 20 kg.
- PRECISION:** ± 0.03 % of the maximum capacity.
- AUOTONOMIA:** About 160 h/4800 weighs.
- STRUCTURE:** Oven-fire painted steel.
- FUNCTIONS:** Simple weighing, totalisation, formula weighing, counting, weight hold function on the display.
- ELECTRONICS:** Intrinsically safe.



TPWX pallet truck scales for ATEX 1 & 21, 2 & 22 zones

For weighing quickly, directly where it is necessary. The TPWX pallet truck scales are precise, sturdy and easy to use. The dimensions are standardised for EUROPALLETS.

TPWX2GD

AREAS
1 & 21

AREAS
2 & 22



PROTECTION: II 2GD IIB T4 T197°C X

CAPACITY: From 500 to 2500 kg.

DIVISION: From 0,2 to 1 kg.

PRECISION: ± 0.05 % of the maximum capacity.

BATTERY LIFE: About 150 h/4800 weighs.

STRUCTURE: Oven-fire painted steel, stainless steel indicator.

FUNCTIONS: Simple weighing, totalisation, formula weighing, counting, weight hold function on the display.

ELECTRONICS: Intrinsically safe.

TPWX2GDI

AREAS
1 & 21

AREAS
2 & 22



PROTECTION: II 2GD IIB T4 T197°C X

CAPACITY: From 500 to 2000 kg.

DIVISION: From 0,2 to 1 kg

PRECISION: ± 0.1 % of the maximum capacity.

BATTERY LIFE: About 150 h/4800 weighs.

STRUCTURE: Completely in STAINLESS steel.

FUNCTIONS: Simple weighing, totalisation, formula weighing, counting, weight hold function on the display.

ELECTRONICS: Intrinsically safe.

TPWX pallet truck scales for ATEX 2 & 22 zones

The indication of the weight is clear and easy to read.
The electronic parts are protected from knocks, sprays, and dust.

TPWX3GD

AREAS
2 & 22



PROTECTION: Ex II 3GD IIC T6 T130°C X

CAPACITY: From 500 to 2000 kg.

DIVISION: From 0,2 to 1 kg.
(special capacities and divisions upon request)

PRECISION: ± 0.1 % of the maximum capacity.

BATTERY LIFE: About 40 h/1200 weighs.

STRUCTURE: Oven-fire painted steel, stainless steel indicator.

FUNCTIONS: Simple weighing, totalisation, formula weighing,
counting, tolerance check, percentage weighing.

CE M

TPWX3GDI

AREAS
2 & 22



PROTECTION: Ex II 3GD IIC T6 T130°C X

CAPACITY: From 500 to 2000 kg.

DIVISION: From 0,2 to 1 kg.
(special capacities and divisions upon request)

PRECISION: ± 0.1 % of the maximum capacity.

BATTERY LIFE: About 40 h/1200 weighs.

STRUCTURE: Completely in STAINLESS steel.

FUNCTIONS: Simple weighing, totalisation, formula weighing,
counting, tolerance check, percentage weighing.

CE M

INOX
AISI 304

Multifunction weight indicators for ATEX 1 & 21, 2 & 22 zones

Suitable for the creation of weighing and dosage systems in hazardous areas, offering a wide range of functioning modes and interfaces for communicating with external devices, as well as a great versatility of use.

DFWATEX2GD *Weighing in general*

AREAS
1 & 21

AREAS
2 & 22



PROTECTION: II 2G Ex ia IIC T4 for GASES
 II 2D Ex tD A21 IP65 T197°C for DUSTS

FUNCTIONS: Simple dosages (setpoint), totalisation, formula weighing, counting, input / output weighing, data transmission.

INPUT / OUTPUT: 4 inputs + 4 outputs (all programmable).

DATA TRANSMISSION: Through fiber optics, up to 60m (longer distances available upon request). Alibi memory for approved weight transmission.

POWER SUPPLY: 10,5 Vdc with PW200XRD intrinsically safe power adapter or DFWBP76ATEXB intrinsically safe external rechargeable battery.

CELL INPUTS: 4 independent inputs, for managing a single weighing system or for the equalisation of 4 load cells.

CONNECTABLE CELLS: Up to four 350 Ohm load cells.

ELECTRONICS: Intrinsically safe.



DFWATEX2GDF *Weighing and dosage*

AREAS
1 & 21

AREAS
2 & 22



PROTECTION: II 2G Ex ia IIC T4 for GASES
 II 2D Ex tD A21 IP65 T197°C for DUSTS

FUNCTIONS: Single/multi-product in loading or unloading, 16 products/15 formulas (multi-product mode) or 40 formulas (single-product mode).

INPUT / OUTPUT: 4 inputs + 4 outputs (all programmable).

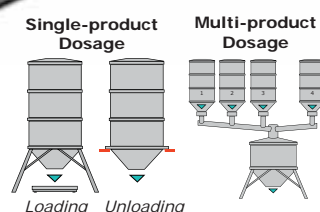
DATA TRANSMISSION: Through fiber optics, up to 60m (longer distances available upon request). Alibi memory for approved weight transmission.

POWER SUPPLY: 10,5 Vdc with PW200XRD intrinsically safe power adapter or DFWBP76ATEXB intrinsically safe external rechargeable battery.

CELL INPUTS: 4 independent inputs, for managing a single weighing system or for the equalisation of 4 load cells.

CONNECTABLE CELLS: Up to four 350 Ohm load cells.

ELECTRONICS: Intrinsically safe.



Accessories for "2GD" instruments

PW200XRD *Intrinsically safe power supplier for "2GD" indicators*

AREAS
1 & 21

AREAS
2 & 22

For powering your weighing system with an intrinsically safe device which guarantees the maximum safety inside the hazardous area.



PROTECTION: II (2)/2 G [Ex ib]/Ex d IIC T4 for GASES

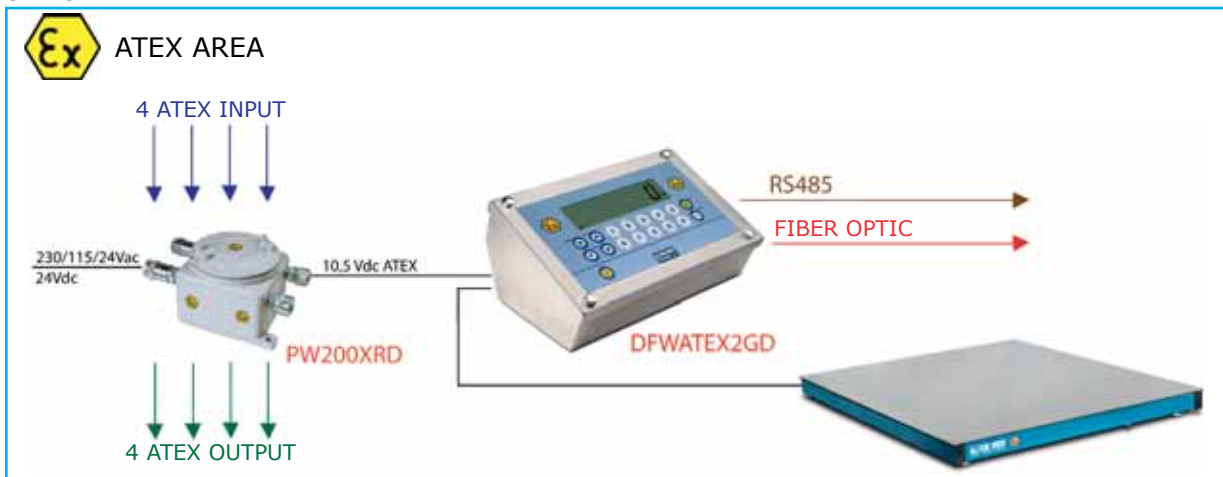
II (2)/2 D [Ex ib]/Ex tD A21 T140°C for DUSTS

OUTPUT VOLTAGE: 10,5 Vdc, for DFWATEX2GD / DFWATEX2GDF indicator.

INPUT VOLTAGE: 24 Vdc, 24 Vac, 115 Vac or 230 Vac.

ELECTRONICS: Intrinsically safe.

APPLICATION EXAMPLE:



DFWBP76ATEXB *External rechargeable battery*

AREAS
1 & 21

AREAS
2 & 22

Studied for mobile weighing systems or for 1 and 21 zones in which there is no possibility to power the scale with a mains voltage.



PROTECTION: II 2G Ex ia IIC T4 for GASES

II 2D Ex tD A21 IP65 T197°C for DUSTS

OUTPUT VOLTAGE: 9,6 Vdc.

OUTPUT CURRENT: 7,6 Ah.

BATTERY LIFE: Up to 160 h (depending on the system configuration).

ELECTRONICS: Intrinsically safe.

Multifunction weight indicators and accessories for ATEX 2 & 22 zones

AREAS
2 & 22

3590EXTxxBC3GD *Advanced industrial applications*

For industrial applications in which, in addition to the simple weighing, one needs the advanced management of the databases, totals and printouts. Particularly suitable for interfacing with PC software.



PROTECTION: II 3G Ex nR IIC T6 X for GASES
 II 3D Ex tD A22 IP68 T135°C X for DUSTS

DISPLAY: Red LED display for clear visualization of the weight and LCD display for visualizing the user messages.

PROGRAMS: "AF01" Totalisation and simple dosage.
"AF03" Input / output weighing.
"BATCH1" Single-product dosage.
"BATCH" Multi-product dosage.

INPUT / OUTPUT: Up to 8 inputs and 16 outputs (all programmable).
16 bit programmable analogue output:
0...10 Vdc, 0...20 mA and 4...20 mA.

DATA TRANSMISSION: RS232 / Ethernet / RS485 serial ports for connection to printer (in safe area), PC or PLC.
Profibus, to install in safe area.
Alibi memory for approved weight transmission.

POWER SUPPLY: From 6 to 12 Vdc with internal power adapter or external rechargeable battery (upon request).

CELL INPUTS: 4 independent inputs (up to 2 in the AF03 version), for managing up to 4 weighing systems or for the equalisation of 4 load cells.

CONNECTABLE CELLS: Up to sixteen 350 Ohm load cells.



DGT603GD *Weighing in general / Weight repeater*

AREAS
2 & 22



PROTECTION: II 3G Ex nR IIC T6 X for GASES
 II 3D Ex tD A22 IP68 T130°C X for DUSTS

DISPLAY: Maxi 6-digit 60mm display made up of highly efficient SMT LEDs, clearly visible from a distance and from all angles. Brightness: 750mdc.
Brightness intensity adjustable directly through the software.

FUNCTIONS: Simple dosages (setpoint), totalisation, formula weighing, counting, input / output weighing, data transmission.
Weight repeater with configuration of the input string.

INPUT / OUTPUT: 4 inputs + 4 outputs (all programmable). 16 bit, programmable analogue output: 0...10 Vdc, 0...20 mA and 4...20 mA.

DATA TRANSMISSION: RS232 / Ethernet and RS485 ports for connection to printer, or other external units (in safe area), PC. PROFIBUS. Available Modbus RTU protocol.
Alibi memory for approved weight transmission.

POWER SUPPLY: 12 Vdc with internal power adapter.

CELL INPUTS: 4 independent inputs, for managing up to 4 weighing systems or for the equalisation of 4 load cells.

CONNECTABLE CELLS: Up to sixteen 350 Ohm load cells.



DFWATEX3D and DFWATEX3GD

Weighing in general / Weight repeater

AREAS
2 & 22



DFWATEX3GD PROTECTION: II 3D Ex tD A22 IP68 T130°C X for DUSTS

DFWATEX3GD PROTECTION: II 3G Ex nR IIC T6 X for GASES
 II 3D Ex tD A22 IP68 T130°C X for DUSTS

FUNCTIONS: Simple dosages (setpoint), totalisation, formula weighing, counting, tolerance check, percentage weighing, input / output weighing, data transmission.
Weight repeater with configuration of the input string.

INPUT / OUTPUT: 4 inputs + 4 outputs (all programmable). 16 bit programmable analogue output: 0...10 Vdc, 0...20 mA and 4...20 mA.

DATA TRANSMISSION: RS232 / Ethernet for connection to PC. RS232 for data transmission to printer or labeller in safe area. Alibi memory for approved weight transmission.

POWER SUPPLY: From 6 to 12 Vdc with internal power adapter and rechargeable battery (internal for DFWATEX3D and external, upon request, for DFWATEX3GD).

CELL INPUTS: 4 independent inputs, for managing a single weighing system or for the equalisation of 4 load cells.

CONNECTABLE CELLS: Up to eight 350 Ohm load cells.



DFWLKI 3GD

Weighing in general / Weight repeater

AREAS
2 & 22



PROTECTION: II 3G Ex nR IIC T6 X for GASES
 II 3D Ex tD A22 IP68 T130°C X for DUSTS

FUNCTIONS: Totalisation, formula weighing, counting, tolerance check, percentage weighing, input / output weighing, data transmission. Weight repeater with configuration of the input string.

DATA TRANSMISSION: RS232 / RS485 for connection to PC. RS232 for data transmission to printer or labeller in safe area. Alibi memory for approved weight transmission.

POWER SUPPLY: From 6 to 12 Vdc with internal power adapter or external rechargeable battery (upon request).

CELL INPUTS: 4 independent inputs, for managing a single weighing system or for the equalisation of 4 load cells.

CONNECTABLE CELLS: Up to eight 350 Ohm load cells.



BP6ESTATEX3GD

External rechargeable battery

AREAS
2 & 22

Studied for mobile weighing systems or for 2 and 22 zones in which there is no possibility to power the scale with a mains voltage.



PROTECTION: II 3G Ex nR IIC T6 X for GASES
 II 3D Ex tD A22 IP65 T130°C X for DUSTS

OUTPUT VOLTAGE: 6 Vdc.

OUTPUT CURRENT: 12 Ah.

BATTERY LIFE: Up to 100 h (depending on the system configuration).



WEIGHING PLATFORMS

AREAS
1 & 21

AREAS
2 & 22

Dini Argeo offers a complete range of bench or floor weighing platforms, designed for use in hazardous areas. Capacity from 1,5 kg to 10 t, divisions starting from 0,05 g.

PROTECTION:  II 2GD c IIC T6 85°C





LOAD CELLS

AREAS
0 & 20

AREAS
1 & 21

AREAS
2 & 22

The range of load cells certified for hazardous environments allows to create weighing systems for applications which range from dosing to logistics, from lifting to high precision, with capacities from 3kg to 80t. The assembly KITS are also available, simplifying the installation of the cell; these are also certified for ATEX zones.

LOAD CELLS PROTECTION:  II 1G EEx ia IIC T6 (Ta -20 ÷ +40°C) TX (Ta -20 ÷ +65°C) for GASES
 II 1D tD A20 TX°C (Ta -20 ÷ +40°C) TX°C (Ta -20 ÷ +65°C) for DUSTS

CAPACITY: From 3 kg to 80 t.

KIT PROTECTION:  II 2GD c IIC T6 85°C



MB4 *Passive safety Zener barriers*



AREAS
0 & 20

AREAS
1 & 21

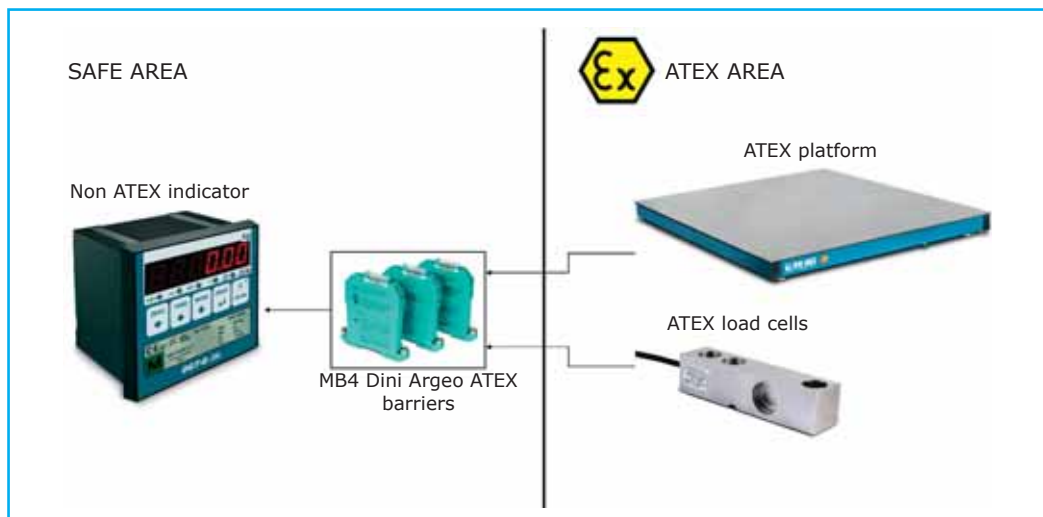
AREAS
2 & 22



Intrinsic protection barriers to use for carrying the signals in a safe area from a hazardous zone.

PROTECTION:  II (1) GD [Ex ia] IIC (-20°C ≤ Ta ≤ +60°C)
 II (1) GD [Ex iaD] IIC (-20°C ≤ Ta ≤ +60°C)

APPLICATION EXAMPLE:





JBOAI *Equalised junction box*

AREAS
1 & 21

AREAS
2 & 22



To be used for the creation of load receptors for 1, 2, 3, or 4 load cells.

PROTECTION:  II 2G Ex ib IIC T6 for GASES
 II 2D Ex tD A21 IP65 T115°C for DUSTS

CASE: IP66 stainless steel.

ELECTRONICS: Intrinsically safe.

Analysis of the system, certificates, and declarations of conformity

Besides the range of devices for weighing in hazardous areas, Dini Argeo offers also a free pre-sales service with the purpose of creating a custom-made price estimate according to the customer's needs.

Once one has identified the classification of the hazardous area in which the scale will be installed as well as the desired weighing application, our authorised technical personnel will suggest the best solution for satisfying your requirements with our products.

Each single scale or component for weighing is accompanied by the relative certificate or declaration of conformity, as a guarantee of safety.

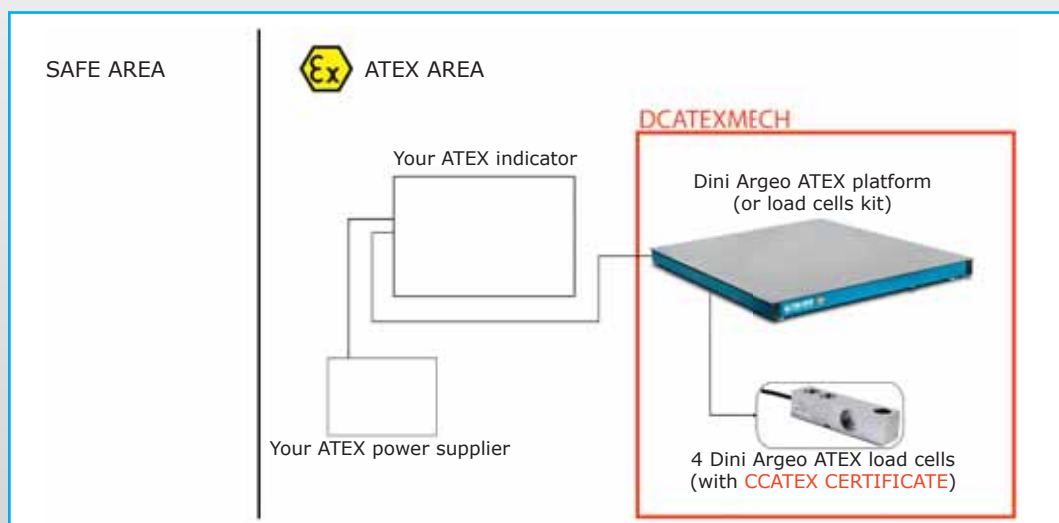
Each weighing system can also be supplied with a relative declaration of conformity of the whole.

The main available declarations of conformity are:

- *ATEX declaration of conformity of the whole system which allows to use the mechanical structure in the hazardous area. (DCATEXMECH)*
An example of a mechanical structure can be a KIT for installing a cell with a relative ATEX load cell or a platform, with a junction box and 4 ATEX load cells.
This certification is useful, when, for example one purchases from Dini Argeo only the load receptor (i.e. the platform).
- *ATEX declaration of conformity of the whole system which allows to install the platform or the load cells in a hazardous area and the weight indicator in the safe area, with the aid of the ZENER barriers. (DCATEXMB4)*
- *ATEX declaration of conformity of the whole system for a weighing system completely installed in a hazardous area. (DCATEX2GD)*
An example of a weighing system is a weight indicator powered by battery or power supplier, connected to a junction box with 4 load cells or to a weighing platform.

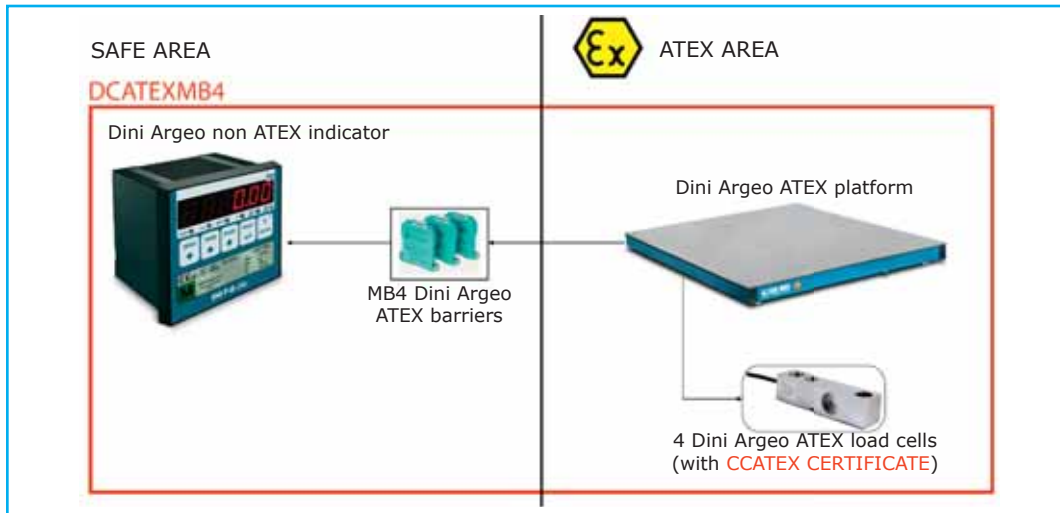
DCATEXMECH (for gases and dusts)

Declaration of ATEX conformity of the whole Ex II 2GD IIC T6 T125°C X system, with relative label of the whole system, for the mechanical structure (platform or assembly kit) with ATEX load cells and junction box of the Dini Argeo range.



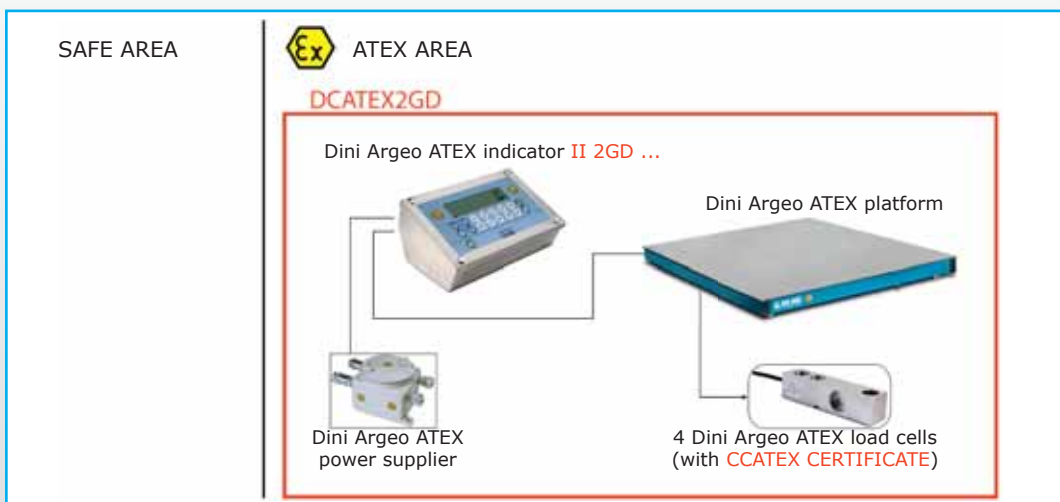
DCATEXMB4 (for gases and dusts)

Declaration of ATEX conformity of the whole Ex II 2GD IIC T6 T125°C X system, with relative label of the whole system, for NON ATEX weight indicator connected to MB4 Dini Argeo zener barriers, connected to a mechanical structure with ATEX load cells and junction box of the Dini Argeo range.



DCATEX2GD (for gases and dusts)

Declaration of ATEX conformity of the whole Ex II 2GD IIC T4 T197°C system, with relative label of the whole system, for ATEX Ex II 2GD weight indicator connected to the mechanical structure with ATEX load cells and junction box of the Dini Argeo range.



DCATEX3GD (for gases and dusts)

Declaration of ATEX conformity of the whole Ex II 3GD IIC T6 T130°C X system, with relative label of the whole system, for ATEX Ex II 3GD weight indicator connected to the mechanical structure with ATEX load cells and junction box of the Dini Argeo range.

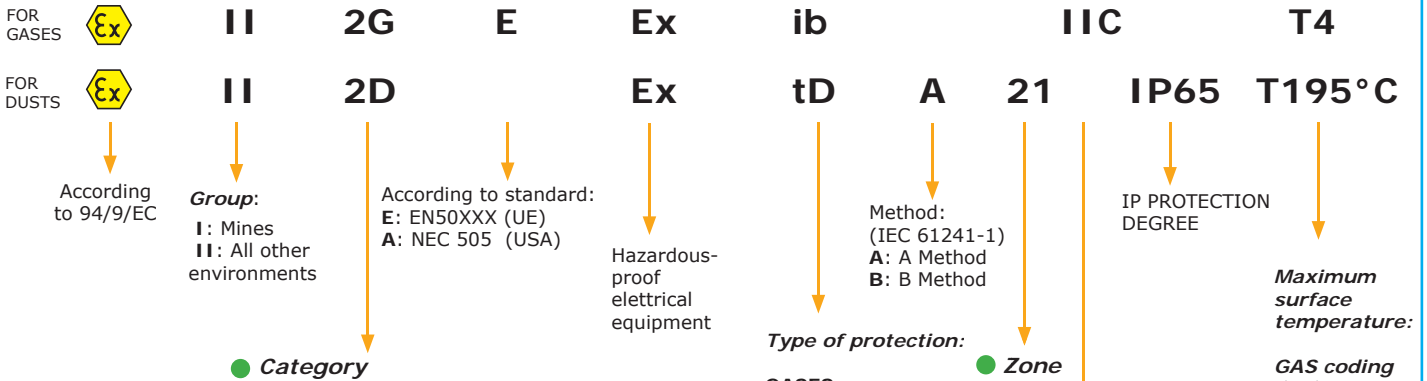
DCATEX3D (for dusts)

Declaration of ATEX conformity of the whole Ex II 3D T130°C X system, with relative label of the whole system, for ATEX Ex II 3D weight indicator connected to the mechanical structure with ATEX load cells and junction box of the Dini Argeo range.

DCATEX3590E3GD (for gases and dusts)

Declaration of ATEX conformity of the whole Ex II 3GD IIC T6 T135°C X system, with relative label of the whole system, for 3590EXT3GD weight indicator connected to the mechanical structure with ATEX load cells and junction box of the Dini Argeo range.

Decoding example of an ATEX marking:



Instrument Category:	Atmosphere G = gases D = dusts	Instrument to be used in
CATEGORY 1 Very high protection, for areas which are permanently or highly probable to be hazardous (zones 0 & 20).	G D	Zone 0 Zone 20
CATEGORY 2 High protection, for areas that are probably hazardous (zones 1 & 21).	G D	Zone 1 Zone 21
CATEGORY 3 Normal protection, for areas which are unlikely to be hazardous (zones 2 & 22).	G D	Zone 2 Zone 22

Type of protection:

GASES:
ia/ib: Intrinsic safety
q: Filling of dust
m: Encapsulation
o: Immersion in oil
e: Increased safety
d: Flameproof
p: Pressurisation
nA: Non sparking
nC: Sparkling protected
nR: Limited respiration
nZ: Type n pressurisation

DUSTS:
pD: Internal overpressure
tD: Through case
iaD/ibD: Intrinsic safety
mD: Encapsulation

UE coding:
Type of GAS:
I: Methane
IIA: Propane
IIB: Ethylene
IIC: Hydrogen

USA coding:
Category:
I: Mines (methane)
II: All other environments
III: Fibers

Gases:
A: Acetylene
B: Hydrogen
C: Ethylene
D: Propane

Dusts:
E: Metal dust
F: Coal dust
G: Wheat dust

GAS coding (UE):
T1: 450°C
T2: 300°C
T3: 200°C
T4: 135°C
T5: 100°C
T6: 85°C

GAS coding (USA):
T1: 450°C
T2: 300°C
T2A: 280°C
T2B: 260°C
T2C: 230°C
T2D: 215°C
T3: 200°C
T3A: 180°C
T3B: 165°C
T3C: 160°C
T4: 135°C
T4C: 120°C
T5: 100°C
T6: 85°C

NOTE: in the marking, eventual brackets (...) or [...] indicate an associated electrical apparatus.



SALES AND TECHNICAL ASSISTANCE SERVICE



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