

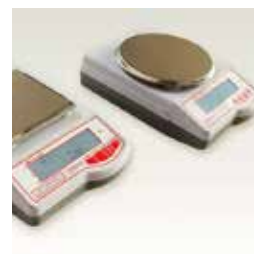
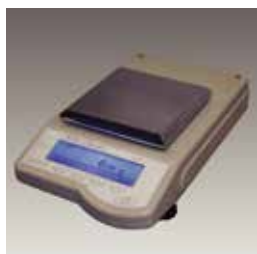


not only **Balances**



Dr. Gisberto Gibertini - Fondatore

A full range of Laboratory Equipment



December 2018

LABORATORY ELECTRONIC BALANCES

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Subject to technical changes without notice.

All our instruments are to be used exclusively for scientific purpose and/or for internal control only.

They must not be used in environments with danger of explosions.

The use of our balances is forbidden in the cases provided by art. 1, point 2, letter a) of directive 2014/31/UE except for those models approved with CE mark (legal metrology).

Electronic balances are sensible to the variation of the acceleration of gravity. They must be calibrated on the working site (2014/31/UE).

All our instruments comply with directive 2004/108 UE (electromagnetic compatibility)



Microbalance

mod. **MICRO 1000**

ON REQUEST:

Ion generator for the elimination of the electrostatic charges

Printer



FUNCTIONS:

- Motorized weighing chamber UP/down button to open and close
- LCD display with small size digits, for easier and more immediate reading
- Waterproof and acid resistant membrane keyboard. Easy to use with the ON/OFF, TARE and MODE keys
- Indication of reached stable weight
- Bar-graph indicator of dosage and remaining capacity of the microbalance
- Parameters configurable by menu: reading in g (grams), lb (pound), oz (ounce), ct (carats), pcs (pieces), % (percentage)

TECHNICAL SPECIFICATIONS:

Capacity: 1000 mg
 Readability: 0.001 mg
 Repeatability: ± 0.001 mg
 Linearity: ± 0.002 mg
 Response time: 6 seconds
 Data output: RS232
 Pan diameter: 20 mm standard and for filters max 60 mm (on request: bigger diameter)
 Automatic calibration with external mass (supplied with standard equipment)
 Functioning temperature: $20^{\circ}\text{C} \div 30^{\circ}\text{C}$ (corrected with a micro-processor)
 Power supply: 100/240 VAC
 Absorption: 200 mA
 Dimensions (WxDxH): 215 x 385 x 230 mm
 Net weight: 5.2 kg



2



3



4



5

1. Microbalance 2. Display and Up/Down button 3. Display with small size digits 4. Stable weight and bar/graph indicator 5. Mass, tweezers and antistatic cloth

STANDARD EQUIPMENT:

Mass in class E1 for the calibration; tweezers for the mass, antistatic cloth.



WATCH VIDEO

MAGNETIC COMPENSATION SEMIMICRO ANALYTICAL BALANCE DUAL RANGE

mod. **E 50 S / 3**

Functions:

Automatic autocalibration with built-in calibration weight

Prepared for weighings under the balance plane

Stable weight determination signal

Acid resistant membrane keyboards. Parameters configurable by menu: reading in g (grams), lb (pound), oz (ounce), ct (carats), pcs (pieces), % (percentage)

Technical specifications:

Reading by LCD display

Bubble and feet for levelling

Pan dimension: diam. 80 mm

Data output: RS232 I/O serial output

Operating temp.: 10°÷ 35°C

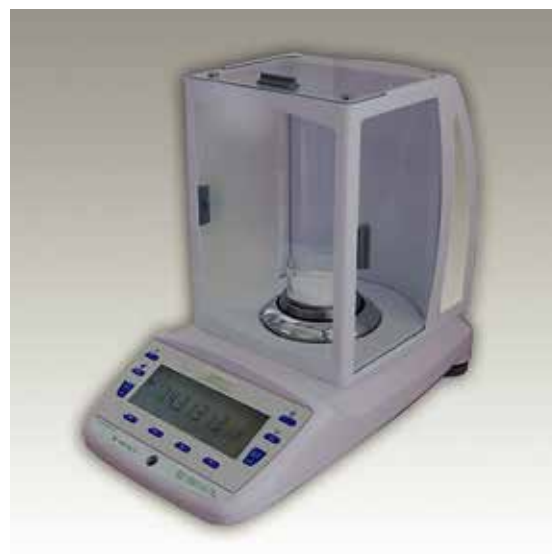
Power supply unit: 230V (-15% / +20%) 50Hz (110V on request)

Absorption: 12 VA

Total dimension: W 210, D 340, H 320 mm

Weighing chamber dim.: W 180, D 170, H 220 mm

Net weight: 6,6 kg



ON REQUEST:

Class E2 masses

Solids density measuring devices

Printer

MODE	CAPACITY g	READABILITY mg	LINEARITY mg	REPEATABILITY ± mg	RESPONSE TIME
SEMIMICRO	100	0.01	± 0.03	± 0.03	6/8 sec.
MACRO	225	0.1	± 0.2	± 0.1	3/5 sec.

MAGNETIC COMPENSATION ANALYTICAL BALANCES

ETERNITY series

FUNCTIONS AND CHARACTERISTICS

- Large, easy-to use display
- Read in grams or milligrams with reduced decimal places.
- Large, easy-to use display
- Counting of homogeneous pieces
- Calculation of percentage
- Standard deviation
- Density of solids/liquids
- Access for weighing below the floor of the balance

TECHNICAL SPECIFICATIONS

- Data output: RS232 I/O adjustable
- Operating temperature: 10° ÷ 30°C
- Power supply: 100 ÷ 240 VAC
- Power consumption: 200 mA
- Dimensions (W x D x H): 216 x 380 x 360mm
- Weighing chamber dim. (W x D x H): 180 x 170 x 240 mm (models 500SMIC and 500CALC supplied with a glass protection cylinder)
- Net weight: 7 Kg

ON REQUEST :

- Liquids and solids density measuring devices
- Remote command to activate various signals: print, tare, etc.
- Executions with special capacity
- Printer: DP24T-SER; software SCALE COMM



1



2

MODEL	CAPACITY g	READABILITY mg	LINEARITY mg	REPEATABILITY mg	RESPONSE TIME s	PAN mm	CALIBRATION
ETERNITY 500 CAL	510	1	±2	±1	3/6	Ø 110	Internal
ETERNITY 500 SMI	510	1	±2	±1	3/6	Ø 110	External
ETERNITY 500 SMIC	510	1	±2	±1	3/6	Ø 110	External
ETERNITY 500 CALC	510	1	±2	±2	3/6	Ø 110	Internal
ETERNITY 100 CAL	120	0,1	±0,2	±0,05	3/6	Ø 80	Internal
ETERNITY 100 SMI	120	0,1	±0,2	±0,05	3/6	Ø 80	External
ETERNITY 200 CAL	220	0,1	±0,2	±0,05	3/6	Ø 80	Internal
ETERNITY 200 SMI	220	0,1	±0,2	±0,05	3/6	Ø 80	External
ETERNITY 300 CAL	320	0,1	±0,2	±0,05	3/6	Ø 80	Internal
ETERNITY 300 SMI	320	0,1	±0,2	±0,05	3/6	Ø 80	External

1. Balance with printer

2. Software Deviation and Statistics

MAGNETIC COMPENSATION ANALYTICAL BALANCES WITH EUROPEAN METROLOGIC APPROVAL

CRYSTAL series

FUNCTIONS AND CHARACTERISTICS

- LCD display with small decimal digits
- Membrane keyboard, water proof and solvent resistant, easy to use with TARE, ON/OFF, PRINT and MODE keys
- Indication of the reached stable weight
- Bar-graph indicator of dosage and remaining capacity of the balance
- Parameters configurable by menu: reading in g (grams), lb (pound), oz (ounce), ct (carats), pcs (pieces), % (percentage)
- Full scale automatic calibration with internal and external mass
- Weighing underneath the balance
- Selectable response time "fast/slow" (see table)

TECHNICAL SPECIFICATIONS:

- Data output: RS232 I/O adjustable
- Operating temperature: 15° ÷ 25°C
- Power supply: 100 ÷ 240 VAC
- Power consumption: 200 mA
- Dimensions (W x D x H): 216 x 380 x 335mm
- Weighing chamber dim. (W x D x H): 180 x 150 x 200 mm (except for mod. CRY 500 CE/C that has a glass cylinder)
- Net weight: 7 kg

ON REQUEST:

- Liquids and solids density measuring devices
- Remote command to activate various signals: print, tare, etc.
- Executions with special capacity
- Software SCALE COMM for statistical process control



1. Analytical balance mod. CRYSTAL, three sided doors
2. Keyboard 3. Rear side

MODEL	CAPACITY g	READABILITY mg	LINEARITY mg	REPEATABILITY mg	RESPONSE TIME	PAN mm	CALIBRATION
CRYSTAL 100 CAL CE	110	0,1	±0,2	±0,05	6/10 sec.	Ø 80	Internal
CRYSTAL 200 CAL CE	210	0,1	±0,2	±0,05	6/10 sec.	Ø 80	Internal
CRYSTAL 300 CAL CE	310	0,1	±0,2	±0,05	6/10 sec.	Ø 80	Internal
CRYSTAL 500 CE/C	510	1	±2	±1	5/8 sec.	Ø 110	Internal

metrological version according to 2014/31/UE

MAGNETIC COMPENSATION TECHNICAL BALANCES**CENT - 2 series****FUNCTIONS AND CHARACTERISTICS:**

Graphic display of large size

Read in grams or milligrams with reduced decimal places.

Counting of homogeneous pieces

Calculation of percentage

Standard deviation

Density of solids

Access for weighing below the floor of the balance (for models 10000 and 10000HR only on request)

TECHNICAL SPECIFICATIONS:

Data output: RS232 I/O adjustable

Operating temperature: 10° ÷ 40°C

Power supply: 100 ÷ 240 VAC

Power consumption: 200 mA

Dimensions (W x D x H): 215 x 355x 110mm

Net weight: 5,2 Kg

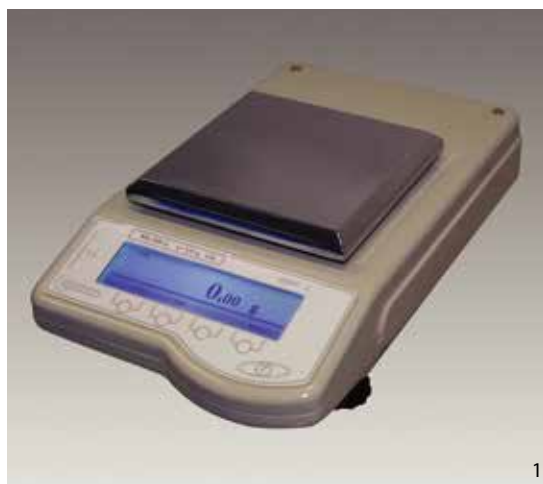
ON REQUEST:

Liquids and solids density measuring devices

Remote command to activate various signals: print, tare, etc.

Executions with special capacity

Printer



MODEL	CAPACITY g	READABILITY g	LINEARITY g	REPEATABILITY g	RESPONSE TIME	PAN mm	CALIBRATION
CENT-2 203 (cylinder)	210	0.001	± 0.002	± 0.001	2/3 sec.	Ø 110	External
CENT-2 2000	2200	0.01	± 0.01	± 0.01	2/3 sec.	160x160	External
CENT-2 2000 PT	2200	0.01	± 0.01	± 0.01	2/3 sec.	Ø 150	External
CENT-2 2000CAL	2200	0.01	± 0.01	± 0.01	2/3 sec.	160x160	Internal
CENT-2 2000CAL PT	2200	0.01	± 0.01	± 0.01	2/3 sec.	Ø 150	External
CENT 2000 CE*	2200	0.01	± 0.01	± 0.01	2/3 sec.	160x160	Internal
CENT-2 4000	4200	0.01	± 0.02	± 0.01	2/3 sec.	160x160	External
CENT-2 4000 PT	4200	0.01	± 0.02	± 0.01	2/3 sec.	Ø 150	External
CENT-2 4000CAL	4200	0.01	± 0.02	± 0.01	2/3 sec.	160x160	Internal
CENT-2 4000CAL PT	4200	0.01	± 0.02	± 0.01	2/3 sec.	Ø 150	Internal
CENT 4000 CE*	4200	0.01	± 0.02	± 0.01	2/3 sec.	160x160	Internal
CENT-2 6000	6300	0.1	± 0.1	± 0.05	2/3 sec.	Ø 190	External
CENT-2 6000CAL	6300	0.1	± 0.1	± 0.05	2/3 sec.	Ø 190	Internal
CENT 6000 CE*	6300	0.1	± 0.1	± 0.05	2/3 sec.	Ø 190	Internal
CENT-2 6000HR	6300	0.01	± 0.02	± 0.01	2/3 sec.	Ø 150	External
CENT-2 10000	10200	0.1	± 0.1	± 0.05	2/3 sec.	Ø 190	External
CENT-2 10000 HR	10200	0.01	± 0.05	± 0.02	2/3 sec.	Ø 190	External

CE (metrological version) according to 2014/31/UE



1. New Balance mod. Cent-2
- 2.3. Keyboard new Cent-2
4. Balance mod. Cent-203 (with Cylinder)

SCP II Software for production control according to regulation 690/78 (reduced sampling) To be used only with Gibertini Balances

FUNCTIONS

Products archive management

- Automatic creation of a dynamic products archive, with the same features of a traditional database: item insertion, visualisation, print out, product modification and cancellation. The fields of the single (product) record are known: code, description, nominal value, dimension of the batch.

Stopping management

- Codes management of the stopping for possible production control interruption.

Weighing management

- Control beginning with product code request, parameters verification, options setting, weighing acquisition
- The information of the weighing controls are stored automatically or not, depending on the characteristics of the product line
- Possibility to choose destructive or non destructive control.

Summary

- Control of the production results of still open or closed batches
- Statistical and graphic management of the information.

THE PACKAGE INCLUDES

- CD-ROM with the software and the manual of instruction and self-learning, to be installed on a personal computer
- Cable for balance/computer connection.



Printer



Touch-screen



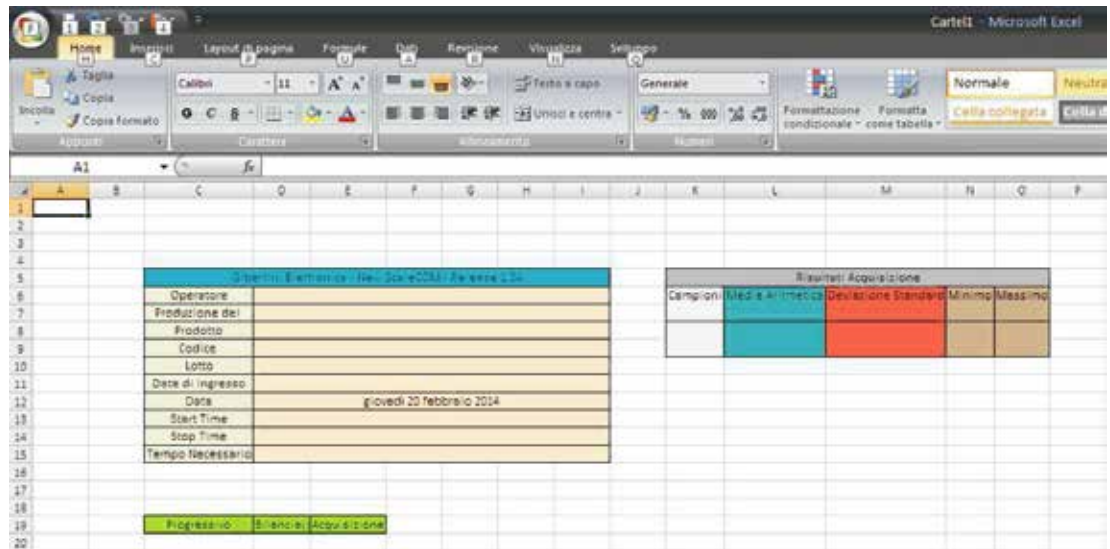
Reading module

Software for statistical control of prepackaged production



Statistical Process Control Software

For balance: ETERNITY, CRYSTAL, CENT, EU-C, CRYSTALTHERM



LOAD CELL TECHNICAL BALANCES

series EU - C LCD

FUNCTIONS:

LCD display with small-size decimal digits, for easier and more immediate reading
 Waterproof and acid resistant membrane keyboard.
 Easy to use with the ON/OFF, TARE, MODE and PRINT keys (RANGE/PRINT for DR model)
 Indication of the reached stable weight
 Bar-graph indicator of dosage and remaining capacity in % of the balance
 Parameters configurable by menu: reading in g (grams), lb (pound), oz (ounce), ct (carats), pcs (pieces), % (percentage)



TECHNICAL SPECIFICATIONS:

Automatic end of range calibration (with external mass supplied on request)
 Memory of the current weight in case of power failure
 Enhanced anti-shock system
 Body made of die-casted alloy and ABS
 Load cell nearly unbreakable and without transportation problems
 Data output: RS232 or USB (see table)
 Operating temperature: 10°C ÷ 40° C
 International power supply unit: 100 ÷ 240 VAC printer
 Battery range: 12 hours ~ (only "BP" models)
 Recharge: 8 hours ~ (only "BP" models)
 Dimensions (W x D x H): 215 x 330 x 95 mm
 Weight: 3 Kg ~

ON REQUEST :

Rigid transparent cover for protection against acids, paints, etc.
 International power supply: rechargeable batteries for models "BP", 12 hours battery life.
 0.5, 1, 2 and 5 kg masses in class F1 for calibration
 Device for the determination of the density of solids
 Special executions on request
 Printer

MODEL	CAPACITY g	READABILITY g	LINEARITY ±g	REPEATABILITY g	RESPONSE TIME	PAN mm	DATA OUTPUT
EU-C 802 USB	820	0.01	± 0.05	± 0.02	2 s	150x150	USB
EU-C 2002 RS	≥ 2000	0.01	± 0.02	± 0.01	2 s	150x150	RS 232
EU-C 2002 USB							USB
EU-C 2002 RS-BP							RS 232
EU-C 4000 USB	4200	0.1	± 0.3	± 0.2	2 s	∅ 190	USB
EU-C 4002 RS	4200	0.01	± 0.02	± 0.02	2 s	150x150	RS 232
EU-C 4002 USB							USB
EU-C 4002 RS-BP							RS 232
EU-C 7500PQ RS	7500	0.1	± 0.3	± 0.2	2 s	190x190	RS 232
EU-C 7500PQ USB							USB
EU-C 7500PQ RS-BP							RS 232
EU-C 7500PT RS	7500	0.1	± 0.3	± 0.2	2 s	∅ 190	RS 232
EU-C 7500PT USB							USB
EU-C 7500PT RS-BP							RS 232
EU-C 7500DR RS	950	0.01	± 0.05	± 0.02	2 s	∅ 190	RS 232
EU-C 7500DR USB	7500	0.1	± 0.3	± 0.2	2 s		USB
EU-C 7500DR RS-BP							RS 232
EU-C 10000PT RS	10200	0.1	± 0.5	± 0.2	2 s	∅ 190	RS 232
EU-C 10000PT USB							USB
EU-C 10000PT RS-BP							RS 232

FOR RELIABLE, RUGGED AND PRECISE BALANCES, YOU CAN PUNCH ON THE PAN, NOT POSSIBLE TO DESTROY THE INTERNAL WEIGHING SYSTEM

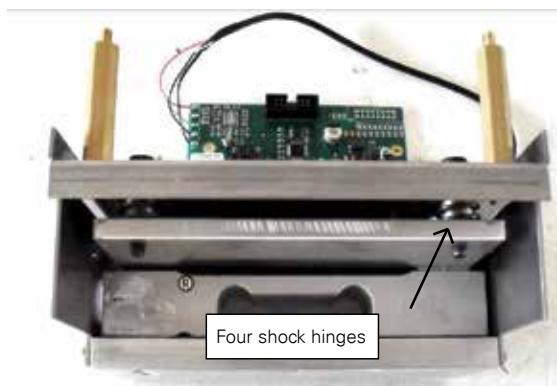


FOR RELIABLE, RUGGED AND PRECISE BALANCES

All Gibertini balances are made with one special ANTISHOCK SYSTEM that allows it the use in hard environments, not need specialized staff

Figure 1 shows how the load cell of our balances are equipped with 4 springs, the shock it is absorbed! These springs not present in the common scales, figure 2, in which the plate is mounted directly to the load cell and the shock can cause damage.

Balance Gibertini



Other Balances not "Gibertini"

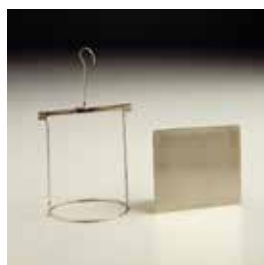


DIGITAL TENSIOMETERmod. **DCA****GENERAL FEATURES:**

- Display of surface tension value expressed in mN/m (dyne/cm) measured with the Wilhelmy method
- Precision: ± 0.02 mN/m (dyne/cm)
- Capacity: $\pm 1-1000$ mN/m resolution 0.01 mN/m
- Max capacity: 110 g
- Autocalibration with internal mass
- Power source: 230 V -15% +10% by external power supply, 50 Hz
- Power consumption: 10 VA
- Dimensions: 210x370x380 mm.
- Weight: 8 Kg

EQUIPMENT

- Manual adjustable lab jack
- Thermometric probe PT 100 1/3 DIN:, temperature range: 0-50°C, Accuracy: $\pm 0.05^\circ\text{C}$, Readability: 0,1 °C
- Glass plates (dimensions 24x24x0.15 mm)
- Suspended system for the arrangement of glass plate
- Glass container for liquid sample

ACCESSORIES ON REQUEST:

- Platinum Wilhelmy plate
Platinum Du Nouy ring
Floater calibrated in weight and in volume and double wall cylinder for density measurement:
- range of measure for the density: $0.5 \div 2.25$ g/cm³
 - readability: 0,00005 g/cm³
 - reproducibility: $\pm 0,00005$ g/cm³



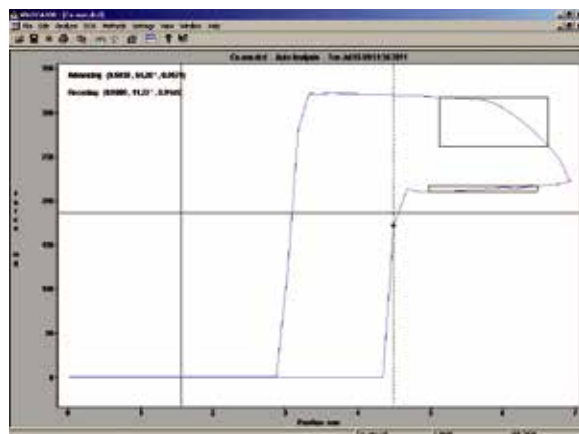
- Specific container for sample thermostatisation
special pan for metrological control

DIGITAL TENSIO METER

mod. **DCA 400**



Automatic feature allow you analyze a dynamic hysteresis curve, complete with on-screen advancing, receding and zero depth of immersion results for contact angle or surface tension



DIGITAL TENSIO METER

Display of surface tension value expressed in mN/m (dyne/cm) measured with the Wilhelmy method

Precision: ± 0.02 mN/m (dyne/cm)

Capacity: 1-1000 mN/m resolution 0.01 mN/m

Max capacity: 110 g

Autocalibration with internal mass

Contact angle 0-180 degrees

Dimensions: 210x370x380

Weight: 8Kg

Power supply 100/240 VAC by external power supply, 502 Hz

Consumption: 10 VA

EQUIPMENT

Glass plates (dimensions 24x24x0.15 mm)

Suspended system for the arrangement of glass plate

Glass container for liquid sample

manual adjustable lab jack

Software with the following performances:

contemporaneous display on PC:

- force changes during the measurements
- past time
- surface tension value

data recording (useful for other elaborations)

changing value of perimeter plate (if different from the standard)

Automatic jack with programmable speed (from 21 to 1000 $\mu\text{m/s}$)

ACCESSORIES INCLUDED:

Platinum Wilhelmy plate

Platinum Du Nouy ring

Floater calibrated in weight and in volume and double wall cylinder for density measurement:

- range of measure for the density: $0.5 \div 2.25$ g/cm³
- readability: 0.00005 g/cm³
- precision and reproducibility: ± 0.00005 g/cm³

ON REQUEST:

- Specific container for sample thermostatisation
- Special plate for metrological control

mod. GSA – GRAIN SIZE ANALYSER

New patented instrument GSA (grain size analyser) wich allows particle size characterisation of soil by sedimentation accordig to astm d 422 and uni cen iso7ts 17892 – 4. paricularly the gsa measures the finer fraction of soil from 0.1 to 0.001 mm. the GSA is projected for realising multiple units till 12.



The software of G S A , easy and friendly , displays in real time the trend of the test through a grafic , giving to the operator before the end of the test , a reliable forecast of a trend useful in many cases to establish in advance the characteristic of the soil under test.

1 mod. GSA – GRAIN SIZE ANALYSER

PRINCIPAL CHARACTERISTICS:

- 1-Range of density (specific gravity) from 0,9000 to 1,0500 with real four decimal figures.
- 2-Automatic compensation of variation of temperature and Stokes law.
- 3-Repeatability better than 2 % .
- 4-All the variable parameters , density of soil, acceleration of gravity, times of data acquisition etc. are programmable by the operator.

We have a unit of G S A available for testing any soil.

In addition see the report written by University of Modena using our G S A and an example of Excel test.

Testing a new instrument for particle-size analysis

GSA (Grain Size Analyzer) allows particle size characterization of soils by measuring the progressive reduction of density in a soil suspension, following particle sedimentation during a given standard time of observation. This instrument makes use of the procedure prescribed by ASTM D422 standard norms applied to a modified hydrostatic balance for measuring density rather than by utilising standard 151H or 152H hydrometers.

In order to assess the correctness of this method, various comparative tests were carried out using the 152h standard hydrometer, according to the ASTM D422 norms, and GSA, the latter both in the 1000 ml and 500 ml version.

Considering the different capacity of the two vessels, the amounts of material used were proportionally adjusted. The dispersing agent utilised is sodium hexametaphosphate at 40‰ concentration in a mixture of 125 ml of Na + 875 ml of distilled water for the 1000 ml GSA – as recommended by the standard norms – whereas for the 500 ml GSA these values were proportionally reduced to 62 ml of Na + 438 ml of distilled water.

The hydrometer particle size test was carried out by acquiring data at 1, 2, 4, 8, 16, 30, 60, 120, 240, 480, 1440 minutes, respectively, whereas GSA makes use of an automatic method for continuous data acquisition.

All tests were carried out in order to verify several aspects:

- correspondence between the two methodologies
- assessment of the effects of the reduction of the volume of suspension utilised
- assessment of the effect of the vessel bottom on particle size distribution
- assessment of the sand fraction
- repeatability of the tests

Giovanni Tosatti (Professor of Engineering Geology)

Simona Marchetti Dori (Graduate Laboratory Technician)

Fausto Melotti (Graduate Laboratory Technician)



MOISTURE BALANCEmod. **CRYSTALTHERM****General main characteristics:**

- Capacity 200 g
- Readability 1mg
- Repeatability +/- 1 mg
- Moisture accuracy +/- 0,01 % with minimum weight of 10g
- Pan diameter 120mm (3 pans)
- Calibration mass 100g class F1
- User friendly graphical display for results and product set up
- Programmable sampling time from 1 minute to 8 hours
- Oven temperature from 40 to 200° C
- Fahrenheit/Celsius selected from keypad
- Memory to store 10 product testing parameters
- RS 232 for printing, PC connection etc
- Dry residual result selectable
- Beeper alarm indicates end of test
- Second set time: also possible with heating element working once the test finished.
- On/off oven

Technical characteristics:

Power 230 volts / 50 Hz
110 volts on request

Dimensions 21x36x30 cm

Net weight 9 Kg

Ambient working temperature 10/40°C

Standard equipment:

- 100 aluminium foil disks, forceps, 3 pans of 120 mm diameter
- Mass 100g F1

ON REQUEST:

Software "SCALE COMM" for store data and statistics

Printer



1. Moisture balance crystaltherm with oven open
2. Oven closed 3. Keyboard

PLATFORMS PTF-C series

Gibertini Italy is launching brand new industrial scale for paint mixing and general weighing.

Technical characteristics:

Division 0.1g all over the scale

Stainless steel pan

To computerized paint mixing system RS232 (USB on request)



MODEL	READABILITY g	CAPACITY kg	LINEARITY g	PAN mm
PTF 7500 - C	0,1	7,5	± 0,3	300x340 ø 190
PTF 15000 - C	0,1	15	± 0,3	300x240
PTF 36 - C	0,1	36	± 0,5	330x330



ON REQUEST:

USB Output

Power supply with rechargeable battery

PLATFORMS WITH COLUMN-MOUNTED READING UNIT

series **PTF-B200**

FUNCTIONS:

- Weight readout
- Percentage weight
- Stainless steel weighing platform
- Painted steel frame and structure
- ABS terminal structure
- Reading unit with 52 mm backlit LCD display and 7 command key
- 230V electrical power adapter included
- Built-in rechargeable battery provides power for 90 hours continual use



ON REQUEST:

- Serial output RS232
- Piece-counting function

MODEL	CAPACITY kg	READABILITY g	INOX PAN mm
PTF BA200/32	32	1	300x400
PTF BA200/75	75	5	400x500
PTF BA200/150	150	10	400x500
PTF BA200/300	300	20	400x500
PTF BA200/600	600	50	600x800

Attention:

- Capacity, readability and dimensions of the pan are susceptible to change

LOAD CELL TECHNICAL BALANCES

series EU-C "ATEX"

These instruments are dedicated to the usage in environments with risk of explosion, classified as ZONE 2. Gas group IIC or IIB and temperature class T4 (135°C) according to regulation 2014/34/UE.

FUNCTIONS:

LCD display with small-size decimal digits, for easier and more immediate reading

Waterproof and acid resistant membrane keyboard.

Easy to use with the ON/OFF, TARE, MODE and PRINT keys (RANGE/PRINT for DR model)

Indication of the reached stable weight

Bar-graph indicator of dosage and remaining capacity of the balance

Parameters configurable by menu: reading in g (grams), lb (pound), oz (ounce), ct (carats), pcs (pieces), % (percentage)

TECHNICAL SPECIFICATIONS:

Automatic end of range calibration (with external mass supplied on request)

Memory of the current weight in case of power failure

Enhanced anti-shock system

Metallic body with epoxide protection

Load cell nearly unbreakable and without transportation problems

Data output: I/O RS232 adjustable

Operating temperature: 10°C ÷ 40° C

International power supply unit: 100 ÷ 240 VAC

Dimensions (W x D x H): 215x355x120 mm (Mod.

PTF 36-C 330x330x130 mm)

Weight: 4,5 kg ~ (Mod. PTF 36-C : 9 kg ~)



ON REQUEST :

1, 2, 5 and 10 kg masses in class F1 for calibration
Special executions



MODEL	CAPACITY g	READABILITY g	LINEARITY g	REPEATABILITY g	RESPONSE TIME	PAN mm
EU-C 2002X	≥ 2000	0,01	± 0,02	± 0,02	2,5 s	150x150
EU-C 4002X	4200	0,01	± 0,02	± 0,02	2,5 s	150x150
EU-C 7500PQX	7500	0,1	± 0,3	± 0,3	2 s	190x190
EU-C 7500PTX	7500	0,1	± 0,3	± 0,3	2 s	Ø 190
EU-C 7500DRX	950 7500	0,01 0,1	± 0,05 ± 0,1	± 0,05 ± 0,1	1 s	Ø 190
EU-C 10000PTX	10200	0,1	± 0,3	± 0,3	2 s	Ø 190
PTF 36 C ATEX	36000	0,1	± 0,5	± 0,2	1 s	330x330

IF THE INSTRUMENTS WERE NOT USED IN ACCORDANCE WITH THE BINDING REQUIREMENTS WHICH THEY ARE INTENDED TO, THE RESPONSIBILITY IS ASCRIBABLE ONLY TO THE CUSTOMER/USER.

HIGH PRECISION SCALES and PIECE-COUNTING

mod. PTF-D e CPZ-D

Functions:

Automatic calibration of full-scale by external mass (optional)

Programmable functioning parameters locally and by means of RS232: speed of reading, type of stabilisation, etc

Easily adaptable to environment thanks to a digital filter selectable by the user

Bar-graph indicator for remaining capacity of the balance even after zero taring over the whole range

Sampling: with 10 pieces and multiples up to 100 pieces

Technical specifications:

Solvent proof and easy to use membrane keyboard with ON/OFF, MODE and TARE keys. CPZ-D models also with GRAMS/PIECES commutation key

7 segments display

Stainless steel pans

Structure and base manufactured with oven painted structural steel

Zinc plated mechanical parts

Levelling feet

Magnetic load cell of our production, set on a levers system, protected from dust and splash proof

Data output: RS232 I/O interface

Operating temp.: 10°÷ 40°C (optimum 15°÷ 30°C)

External power supply: 220 VAC (-15% / +10%) - optional 110 VAC

Power consumption: 14 VA

Net weight: 36 kg



ON REQUEST:

Extensible stainless steel column for reading unit (not available for models CPZ35 ARD and CPZ50 ARD)

Device to store in memory the last data in case of power failure

Reading subdivision (with computer, via RS232, it allows the reading with one more decade)

Stainless steel execution, calibrated masses, specially shaped bowls for powder, animals etc. Printer

MODEL	CAPACITY kg	READABILITY g	LINEARITY g	REPEATABILITY g	RESPONSE TIME	PAN DIM. mm
PTF 25 D	25	0,5	± 1	± 0,5	3 ÷ 4 sec.	400x500
CPZ 25 D						
PTF 35 ARD	6,5 / 35	0,1 / 1 autorange	± 0,2 / 2	± 0,1 / 1	3 ÷ 4 sec	400x400
CPZ 35 ARD						
PTF 50 ARD	5 / 50	0,1 / 1 autorange	± 0,2 / 2	± 0,1 / 1	3 ÷ 4 sec	400x500
CPZ 50 ARD						
PTF 50 D	50	1	± 2	± 1	3 ÷ 4 sec	400x500
CPZ 50 D						
PTF 26 D CE*	26	0,5	± 1	± 0,5	3 ÷ 4 sec	400x500
CPZ 26 D CE*						
PTF 52 D CE*	52	0,1 crossed	± 0,2	± 0,1	3 ÷ 4 sec	310x310 (base 400x500)
CPZ 52 D CE*						

*CEE metrologic version according to EEC Directive 2014/31/UE

ACCREDITATION

Center **LAT N. 094**
RMP N. 094

Since 1997 the ACCREDIA LAT calibration Center operates within the Gibertini Elettronica. In 2017 the Center obtained the extension to certified reference material producer (hydroalcoholic solutions), adding the RMP scheme.



LAT N. 094
RMP N. 094

The law 273/91 has created the National Service for Calibration (S.N.T.) thus confirming the National Service primary Metrological Institutes the tasks of:

- observing the national standards;
- disseminating the units of measure, of the International System of Unit Measure (SI), thus assuring the indispensable metrological reference for industrial and commercial activities. The dissemination may occur directly by the Institutes or through the accredited Calibration Services in Italy (LAT Center).

LAT centers are therefore laboratories equipped with reference standards (because complying with the national standard) responsible of performing calibration, issuing the relative certificate of calibration.

ACCREDIA LAT centers activity is recognized by EA (European co-operation for Accreditation) because ACCREDIA is signatory of multilateral agreements for recognition of calibration certificates.

ACCREDIA LAT center n. 094 issues calibration certificates for electronic balances up to 30 kg and pipettes from 1 ul to 10 ml.

ACCREDIA RMP center n. 094 produces certified reference materials (hydroalcoholic solutions from 5 % vol to 60 % vol).



ACCREDIA LAT Center n. 094 is accredited for balances and microdosimeters calibration.
ACCREDIA RMP Center n. 094 is accredited as reference material producer (hydroalcoholic solutions).
For details consult the accreditation tables on www.accredia.it.

masses and set of weights

Masses and set of weights Certificate to OIML norms Calibrated masses and set of weights with EA legal certificate

The International Organization of Legal Metrology (OIML) is a world-wide inter-government organization in which the primary aim is the harmonization of the rules and of the metrological controls applied by national metrological bodies, or from similar organizations of its member States.

Conventional mass

The conventional value of the result of the weighing in the air, in conformity with international prescription OIML R 111.

"The conventional value of the result of the weighing in air of a body is equal to the mass of a sample, with a density 8000kg/m³ at 20°C, that equalizes the body to room temperature of 20°C in air with density of 1,2kg/m³."

Classes of minimal precision of the masses used with weighing instruments

The classes of precision of the masses used with weighing instruments must be chosen in conformity with the R 76 of the OIML "Instruments of weighing with non automatic functions".

Class E1-E2-F1: masses suitable to being used with weighing instruments of class I (our precision balances).

Construction:

The masses of the classes E1 and E2 must be solid and without cavities opened towards the atmosphere. Their construction must be integral, that is they must be constituted from a single piece of material.



Mass nominal value	Max Error allowed						
	± mg						
	Class E1	Class E2	Class F1	Class F2	Class M1	Class M2	Class M3
50 kg	25	75	250	750	2500	7500	25000
20 kg	10	30	100	300	1000	3000	10000
10 kg	5	15	50	150	500	1500	5000
5 kg	2.5	7.5	25	75	250	750	2500
2 kg	1.0	3.0	10	30	100	300	1000
1 kg	0.5	1.5	5	15	50	150	500
500 g	0.25	0.75	2.5	7.5	25	75	250
200 g	0.10	0.30	1.0	3.0	10	30	100
100 g	0.05	0.15	0.5	1.5	5	15	50
50 g	0.030	0.10	0.30	1.0	3.0	10	30
20 g	0.025	0.080	0.25	0.8	2.5	8	25
10 g	0.020	0.060	0.20	0.6	2	6	20
5 g	0.015	0.050	0.15	0.5	1.5	5	15
2 g	0.012	0.040	0.12	0.4	1.2	4	12
1 g	0.010	0.030	0.10	0.3	1.0	3	10
500 mg	0.008	0.025	0.08	0.25	0.8	2.5	-
200 mg	0.006	0.020	0.06	0.20	0.6	2.0	-
100 mg	0.005	0.015	0.05	0.15	0.5	1.5	-
50 mg	0.004	0.012	0.04	0.12	0.4	-	-
20 mg	0.003	0.010	0.03	0.10	0.3	-	-
10 mg	0.002	0.008	0.025	0.08	0.25	-	-
5 mg	0.002	0.006	0.020	0.06	0.20	-	-
2 mg	0.002	0.006	0.020	0.06	0.20	-	-
1 mg	0.002	0.006	0.020	0.06	0.20	-	-

Certificato di taratura N°: Z01 4381
Certificat d'étalonnage N°:

RISULTATI DI TARATURA RÉSULTATS D'ÉTALONNAGE				
Massa nominale Masse nominale	Marcatatura Marquage	Massa convenzionale Masse conventionnelle	Incertezza in ± Incertitude in ±	Operatore(i) Opérateur(s)
1 kg	ZK 47	0,999 999 6 kg	1,5 mg	WURMSER B.
CALIBRATURA DAL 28/06/01 Étalonnage du				
Indicazione diversa Renseignements complémentaires				

1. Set of weights from 10 mg to 5 kg in class M1 2. Set of weights from 1mg to 100g in class E2 3. Masses from 500g in class F1 4. Masses from 200g e 1kg in class F1 5. Certificate example.



AUTOMATIC TITRATOR FOR SO₂ SO₂ GRAVIMETER

AUTOMATIC TITRATOR FOR THE ANALYSIS OF THE SUPHUR DIOXIDE ON WHITE, ROSE' AND RED WINES.



SILENT CHILLER

THE CHILLER CAN BE USED FOR TEMPERATURE CONTROL OF OTHER DEVICES, MICROSCOPES, REFRACTOMETERS AND OTHER IF IS NECESSARY TO MAKE PRECISION MEASUREMENTS IN A CONTROLLED ENVIRONMENT OF TEMPERATURE.



THERMOSTAT

PROPORTIONAL DERIVATIVE ELECTRONIC TEMPERATURE CONTROL FROM -10 to +50 ° C WITH ACCURACY ± 0.1 ° C.
USEFUL SPACE OF STAINLESS STEEL TANK 30X35X19CM (9 BOTTLES).



WINEMATIC

**Multiparametric Analyzer For Oenology
For Proper Control Of The Vinification Processes**

Acetic Acid	So ₂ Total
L-malic Acid	Chloride
L-lactic Acid	Magnesium
D-lactic Acid	Iron (Ionic)
Citric Acid	Calcium (Ionic)
Tartaric Acid	Copper (Ionic)
Pyruvic Acid	Potassium
Ammonia	Anthocyan
A-amminic Nitrogen	Catechins
Acetaldehyde	Total Polyphenol (Folin-ciocalteus)
Glucose+fructose	Total Polyphenol Index (lpt.At 280nm)
Glucose	Colour (420 – 520 – 620 Nm)
Glycerol	Sucrose
So ₂ Free	Urea



DIGITAL DISTILLING UNIT SUPER DEE WITH OR WITHOUT VADE

REGULATION OIV FOR THE DETERMINATION OF THE ALCOHOLIC STRENGTH BY VOLUME IN WINES, SPIRITS AND THE VOLATILE ACIDITY.



ELECTRONIC HYDROSTATIC BALANCE SUPER ALCOMAT

Alcoholic strength by volume (ASV)

Reading range 0,13÷99,98% vol

Readability: 0,01% vol

Readability and reading repeatability: $\pm 0,03\%$ vol (between 15 and 25°C)

Density

Measurement range for the relative density: 0,5÷2,25 (d20/20)

Readability and reading repeatability 0,00005 \pm 0,00005

Total Dry Extract

Range of values: 0,0÷505,8 g/l of sucrose

Readability and reading repeatability $\pm 0,3$ g/l

Musts evaluation

Relative density (d20/20) range 1,04÷1,16



DENSIMETER DENSI ALCOMAT

Alcoholic strength by volume (ASV)

Reading range: 0,13÷99,98% vol

Readability: 0,01% vol

Readability and reading repeatability: $\pm 0,03\%$ vol (between 15 and 25°C)

Density

Measurement range for the relative density: 0,5÷2,25 (d20/20)

Readability and reading repeatability: 0,00005; \pm 0,00005

Total Dry Extract

Range of values: 0,0÷505,8 g/l of sucrose

Readability and reading repeatability: $\pm 0,3$ g/l

Musts evaluation(d20/20)

Relative density: (d20/20) range 1,04÷1,16

Customized services

Calibration reports

All types of technical and analytical balances

Scales and industrial platforms

Inox Vessels

Other instruments on request

LAT Characterization

All types of technical and analytical balances

Scales and industrial platforms

Inox Vessels

Other instruments on request

Scientific metrology and legal laboratories, a complete supply from A to Z.

Gibertini is the distributor for Italy of the soc. **SELECTA**, Historical Spanish company, basic laboratory production covering technical service, installation and warranty.

The general catalog can be downloaded from www.grupo-selecta.com



STIRRERS
PUMPS
AUTOCLAVES
LOW
TEMPERATURE
FILTRATION
REACTORS

ANALYTICAL
TECHNIQUES
CENTRIFUGES
IMMERSION
THERMOSTATS
AND DRY BLOCKS
VISCOMETERS
HAEMATOLOGY

OVENS,
INCUBATORS AND
FURNACES
BATHS
INSTRUMENTS
FOR BIOLOGIE AND
HISTOLOGIE
HEATING MANLES

AND HOTPLATES
NUTRITIONAL AND
WATER ANALYSIS
MONITOR AND
CONTROL
APPARATUS
ANALITICAL
CONSUMABLES

Inox vessels and accessories

series MDC

Standard capacity measures for testing
measuring systems for liquids other than water

Model	Capacity
Product code	litres
MDC 1	1
MDC 2	2
MDC 5	5
MDC 10	10
MDC 20 MID	20
MDC 50 TL	50
MDC 100 TL	100
MDC200	200
MDC 1000	1000

Other capacities on request



Technical specifications:

Robust and antishock main body in AISI 304 stainless steel
Graduated scales suitable to indicate the permitted limits of error

ON REQUEST:

Certificate by referenced laboratory
Shockproof wooden case for transport
Stainless steel cart with pivoting wheels

**MADE IN
ITALY**

European quality
Gibertini
a green company



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LAT N. 094
RMP N. 094

ACCREDIA LAT Center n. 094 is accredited for balances, microdosimeters and hydroalcoholic solutions calibration.
For details consult the accreditation tables on www.accredia.it

12-2018