MVS2pro DENSITY

Resolve your density measurement with performance

MVS2pro DENSITY

MODEL: MVS2pro Ver. 01.56.00
SERIAL NUMBER: 012.MVS4.060919.005.0026
www.ortellitechnologies.com
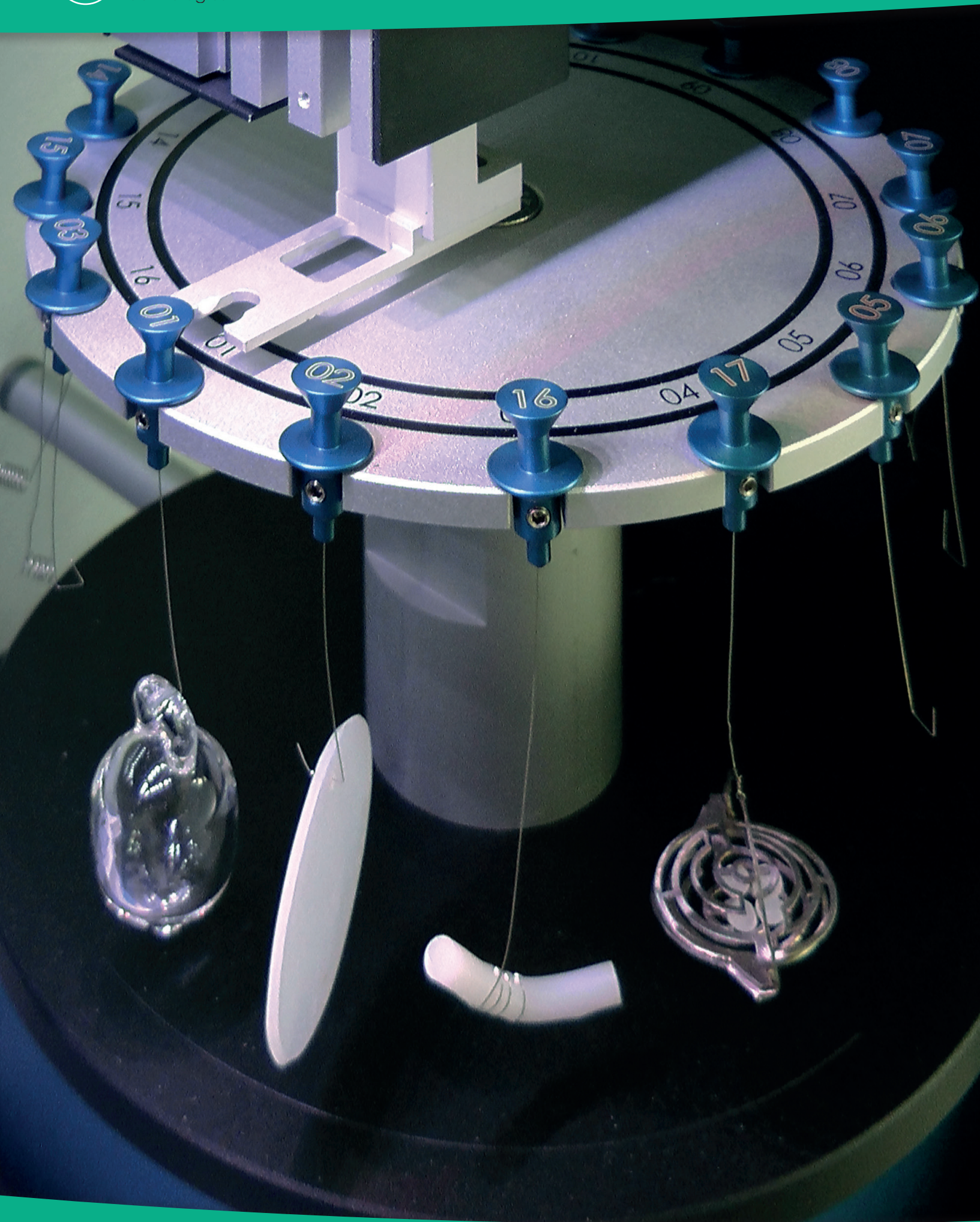MADE IN ITALY

POWER   OPEN FRONT DOOR   FRONT DOOR   REAR DOOR

The Automatic Determination of the Volumic Mass
RELIABLE, REPRODUCIBLE, OBJECTIVE, CERTIFIABLE

ISO 9001
BUREAU VERITAS
Certification

BUREAU VERITAS
1828

Data Sheet

MVS2pro is a robotized system for the determination of the Density or the Standard Absolute Volumic Mass (MVS) of polymers by the principle of the Hydrostatic Push opportunely corrected in order to obtain the result expressed in the MV (S) unit.

MVS2pro determines the Volumic Mass in a completely automated cycle that replaces the old system used for this measure (Gradient Columns), that was characterized by typical human errors and slowness in measurement.

MVS2pro System is perfectly integrated in the quality Standard Process ISO9001.

It's already supported by all the control procedures for the carried out measures using five different kinds of Standard:

- 1 certified Density Standard
- 1 certified Mass Standard
- 1 certified Volume Standard
- 1 polymer standard
- 1 standard Temperature (certificated thermometer)

All integrated in a statistical plan of controls to check the validity of the analytical determinations of the samples.

MVS2pro has an Autosampler with a maximum of 16 samples and/or Standard of density, mass or volume.

The system makes the measure of a sample in about than 120 sec.

MVS2pro constantly controls the Temperature to which it comes carried out the measure to have the certainty that will be respected the range of working set in the method.

This **Pt100 probe** can be calibrated using the procedure from the management software with a Corporate primary standard for comparison.

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MVS2pro was born for the determination of MVS on **High Density Polyethylene (HDPE)** but it is obviously usable for the same kind of determination with other kind of materials can be **analyzed with the method of the hydrostatic push**. Integral control of the **MVS2pro** system takes place via LAN from a software console, included in the price, that is installed on a PC in the corporate network (or, if necessary, with a direct connection to the PC). The software console allows you to control the system and keeps DB archive of all historical data and all the measurements made to obtain it. It is possible to recalculate archivied data with other types of applications like Excel, Access and transfer them directly to LIMS.

Technical Data

- **Model:** MVS2pro
- **Reproducibility:** < 0.01%
- **Range of Temperature:** from 10°C to 50°C (usually 23°C)

- **Medium Time of Analysis:** 120 s/sample
- **Sample dimensions:** diam. approx 4 cm
- **Autosampler:** 16

- **The System MVS2pro is compliant to the ISO1183-1, ISO2781, ASTM D792 and ISO 293 for sample preparation.**

Accessories (required)

Support samples series hook and helicoid form

Set of 20 hook shaped support samples.
The kit is composed in this way: 16 hook/helicoid form,
2 helicoid/hook form and 2 basket supports.

Watch the Video!

Basket Support samples

The kit is composed in this way: 16 basket supports, 2 helicoid supports, 2 hook supports. In the perforated basket support you can include some polyethilene spheres or other material like fragments of glass or precious stones (diamonds). These kits can be combined in various ways accordingly to your needs.

Watch the Video!

Mettler Analytical Balance

Analytical Electronic Balance with underplane support weight to position the support sample in the measurement area of the **MVS2pro**. The balance suggested is 5 decimal places in grams like: MS, XSR, XPR series (d= 0,01 mg). The Balance is directly controlled by **MVS2pro** via USB.

Glass Cover Wind Protection Assy

Device perfectly compatible with the **MVS2pro** system allows to protect the balance from interference for example air displacements inside the laboratory, allowing a better stabilization of the balance.

Thermostatic Bath

System of thermostatation for the beker (beker thermostatable). It allows the maintenance of the liquid measurement at the temperature described in the method.
The system has a suction pump to recirculate the thermostated liquid in an external circuit and it is directly controlled by **MVS2pro** via USB.

Certified Density Standard

Certified Density Standard in Glass.

Certified Mass Standard

Certified mass for the adjustment of the analytical balance with external weight to maximize the accuracy of the system.

PC with keyboard mouse and monitor

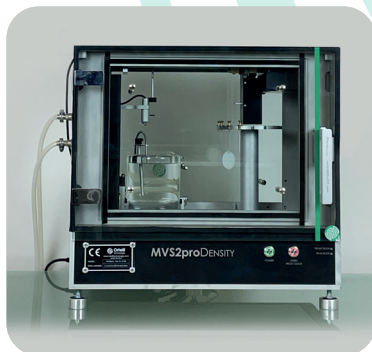**OS:** WINDOWS10 with pre-installed MVS2pro Density Manager Software

MVS2pro Density Series
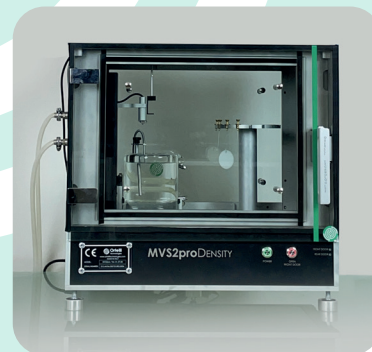
Productivity

CONFIGURATION
- Transporter
- Autosampler 16 positions
- Lift
- Automatic sequence management

Plus

CONFIGURATION
- Transporter
- Lift
- Single sample automatic management

Essential

CONFIGURATION
- Lift
- Single sample manual management

# MVS2pro Density System vs the oldest column gradient method

| MVS pro system	Gradient column system
Direct measure	Indirect measure of the sample
Easiest certificability of the system	Difficult certificability of the procedure
Integrated Statistical Quality Control Plan	External difficult qualification of the measure
Remote Check and Support of Diagnosis	Not available
Very Fast measure(s)	Very Slow measure(h)
Accuracy, reproducibility and reliability of the measurement	Not available
Result not influenced by the technical skills of the operator	Result dependent on the technical skills of the operator
Managed Data compliant with the Transitional Plan 4.0	Not compliant

Our Density Management Software
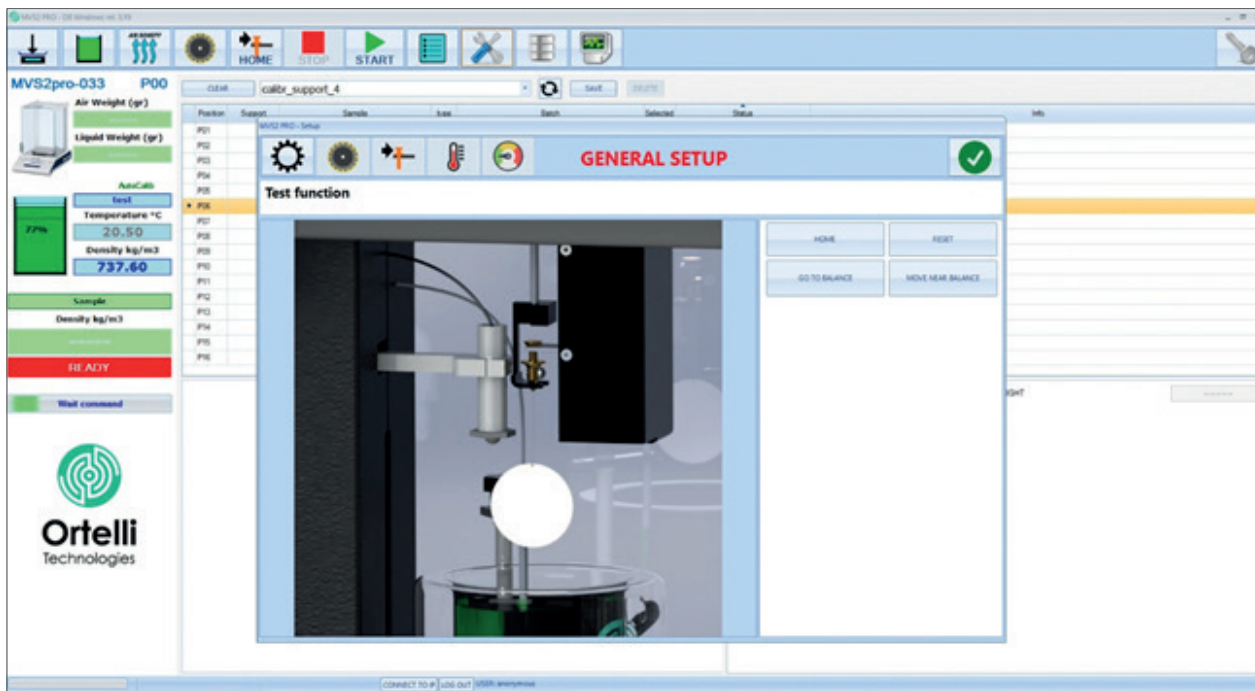
Complete setting and calibration of the instrument from the Windows application

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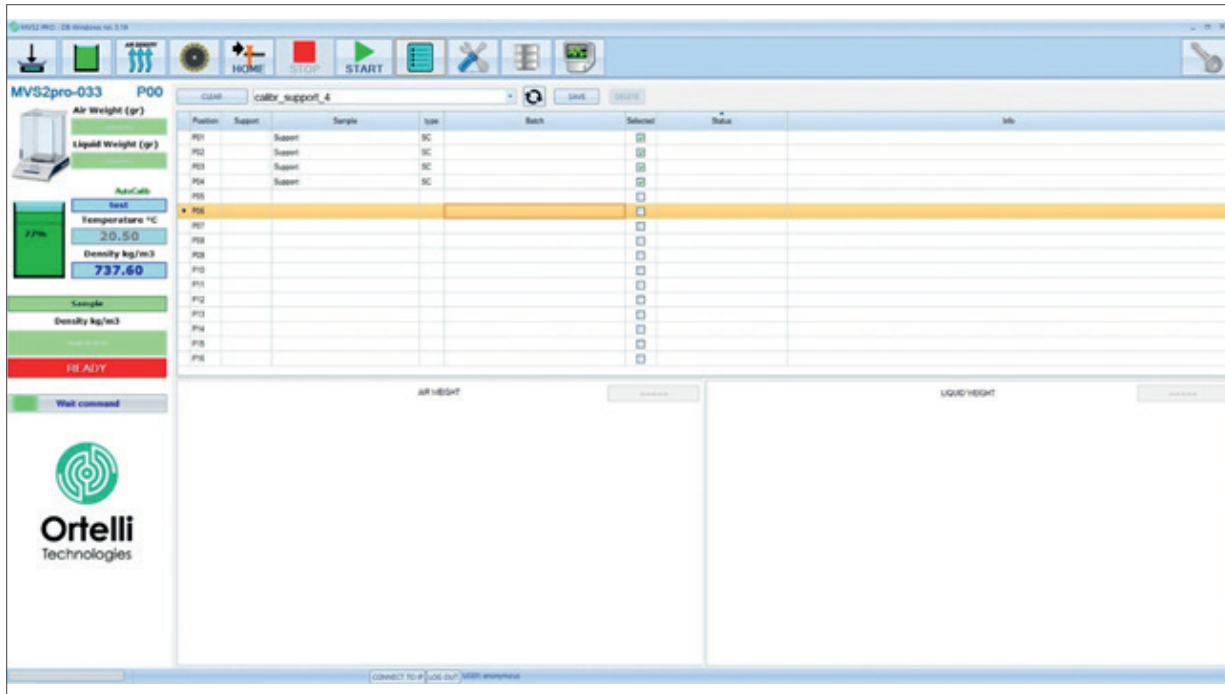
Easy and immediate method setting up to 16 samples (including the use of templates predefined by the manager).
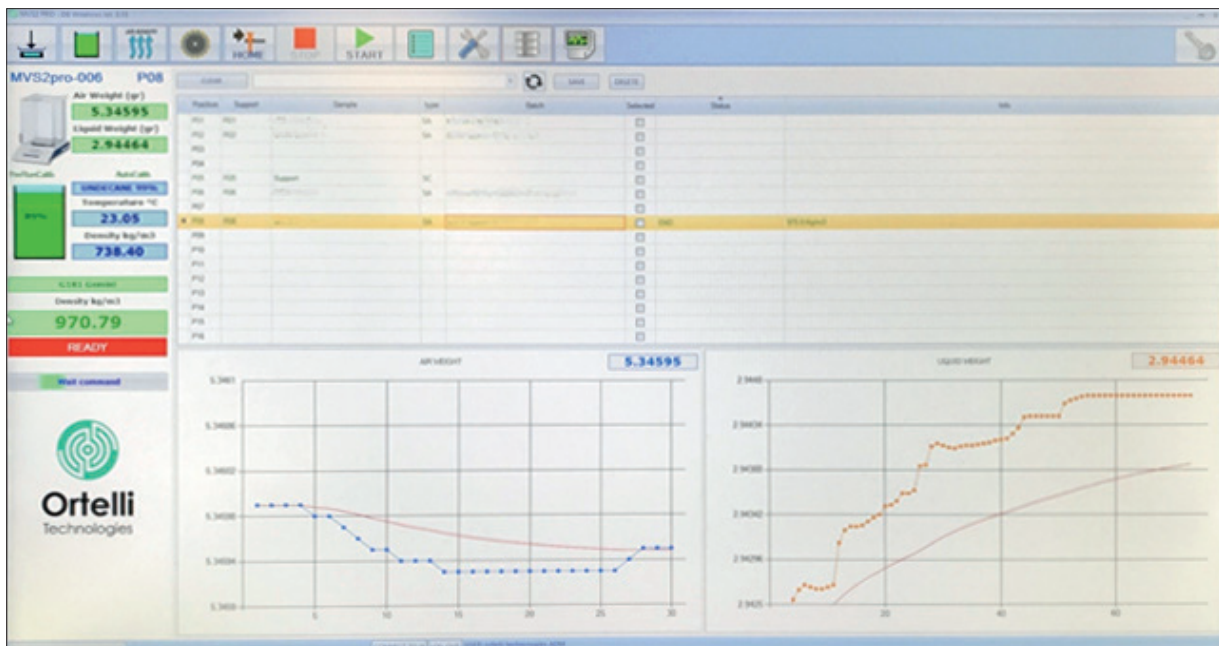
Fully automated sequence reading, including control tests and correct detection of measured parameters.
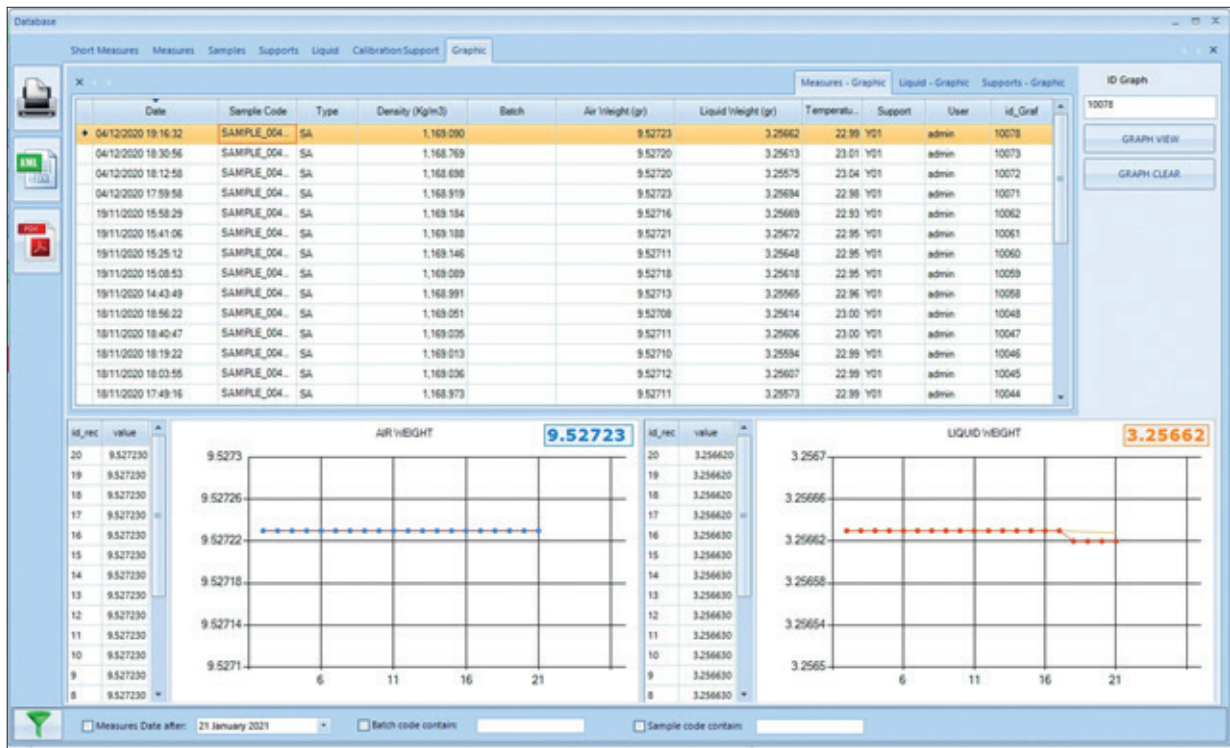
Control of all the set up and all the data analysis phases stored in the software database, including the graphs of the data taking in air and liquid.
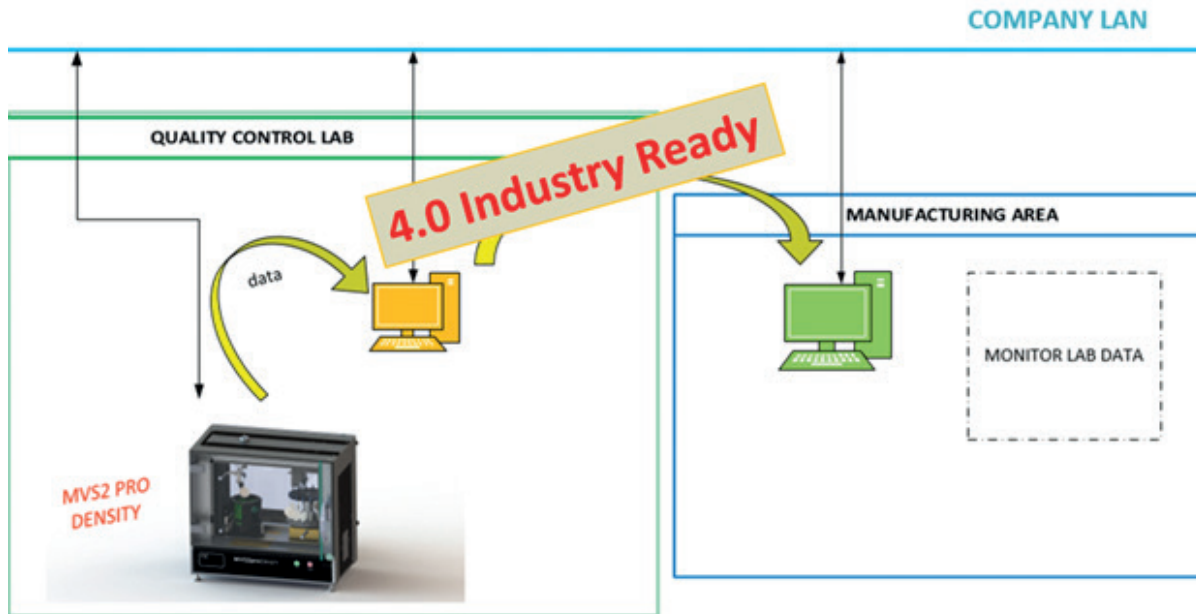
Tax Breaks

The technical characteristics of the system make it purchasable through existing tax breaks, provided by the new 4.0 Transitional Plan.
Rental options are also available for the purchase of this equipment.

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4.0 Transitional Plan

The system can be fully integrated within the company LAN with the ability to transfer analytical data to the areas of competence identified automatically.

On demand services

- Demo in Live Webinar
- In Live measurement of customer's samples

Our Partners representative around the World

Countries	Partner	Address
• **Italy** • **Czech Republic** • **Austria**	**Ortelli Technologies**	601 Pistoiese Street 59100 Prato PO Tel.: +39 0574 668301 www.ortellitechnologies.com www.ortelli.it E-Mail: info@ortellitechnologies.com
• **China**	**Golden Land Technology**	3004, Tower B, U-SPACE, No.8 Guangqumenwai Avenue 100022 Chaoyang District, Beijing Tel.: +86 1058613618/58613619/ 13910605171 www.goldenlandtech.com E-Mail: info@goldenlandtech.com
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• **United States** • **Mexico** • **Colombia** • **Brazil**	**NTS America Corporation**	18 Bridge Street Unit 2A Brooklyn NY 11201 Tel.: +1 (786) 753 7709 www.ntsinter.com E-Mail: info@ntsinter.com
• **Russia** • **Kazachstan** • **England** • **Spain** • **Portugal** • **Albania**	**NTS International Group**	Via dei Navicellari,6 0122 Roma, RM www.ntsinternational.com E-Mail: info@ntsinter.com
• **India**	**ABS Instruments Pvt LTD**	Unit 21, Block 1, SIDCO electronic complex, Thiru Vi Ka Industrial Estate, Guindy, Chennai - 600032 Phone: +91-44-22500305 / 22500009 / 22500346 www.absinstruments.com E-Mail: sales@absinstruments.com NABL accredited calibration lab
• **Saudi Arabia**	**Gulf Bio Analytical Group**	Office 902, Sapphire Tower Al Ittihad Rd, near DNATA Deira Dubai, UAE. Phone: + 971 4 250 7300 www.gulfbioanalytical.com E-Mail: contactus@gulfbioanalytical.com
• **Canada**	**Hoskin Scientific LTD.**	Unit 5, 3280 South Service Road W ON L6L 0B1 Oakville, Canada Phone: (905) 3335510 www.hoskin.ca E-Mail: slewis@hoskin.ca

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