

M5-iDens is a Balance for density calculation, in particular it is designed to easily determine the Density Index of a solid sample without need of any computer software or external database.

All-in-one product

With M5-iDens, calculating the density index is easy and fast. Without the necessity to connect the balance to computer for using a specific software, all the data and results can be seen directly in the large screen of the balance, with the possibility to print also all the data with an optional printer.

The strenght of technology

M5-iDens is derived from the sophisticated M5 balances family and therefore takes full advantage of all the strenghts of this series, that is, the large 5" color display, the touch-screen interface and the icon-driven menus, which make your work, respectively, intuitive, efficient and user-friendly.

Database

As reference liquid for the density determination of the solid sample, the balance has already stored in the database the density values (at different temperatures) of distilled water or Ethanol so that one less thing for the user to care about; of course the user can use whatever other liquid as reference, provided its density value is known or calculated (thanks to the optional liquid density kit).

Density values of the reference liquid (distilled water or Ethanol) used during density determination of the solid sample are stored in the internal database. The user can choose another liquid as reference, provided its density value is known or he calculates (thanks to the optional liquid density kit).

GLP

Internal Clock, date/time make work easier while GLP capability allow user to record Sample name, Project names and Balance ID, for traceability.



Model	Capacity (g)	Resolution (mg)	Pan (mm)	Repeatability (g)	Linearity (g)	Response time (sec.)
Automatic internal calibration						
M5-iDens	3100	0,01	Ø 80	0,01	± 0,02	≤ 2

Density Index

In foundries, especially for aluminium casting plants, the quality of molten metals is very important to assure the quality of the final cast product. In fact defects created during the melting stage (due to solid and gaseous impurities) could create problems to the final microstructure of the cast.

Density index value of a metal sample is an index of how clean is the metal sample and how much free from pores that may have formed during the melting process. By measuring the density index (DI) of the metal, it is possible to control and optimize the process of production of the cast, improving the overall quality of final metal product, and thus drastically reducing rejection rate.

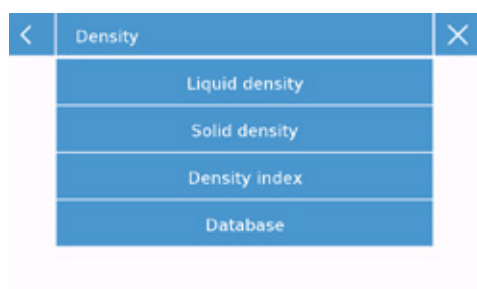


Index > 12%

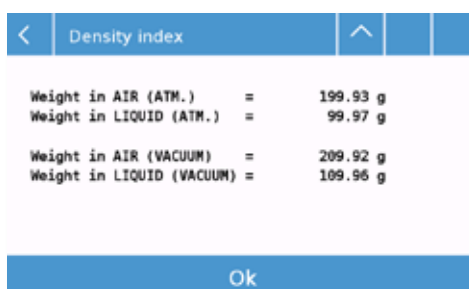
Index 6% - 8%

Index 1%

Touchscreen interface screen shots



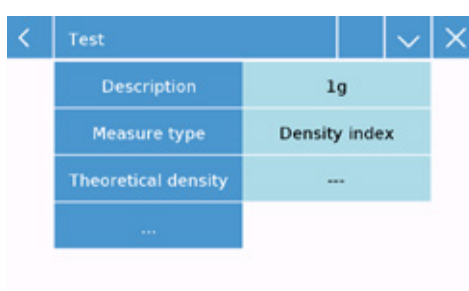
User can start a function or recall data from (internal) database.



Clear report of Density Index calculation is shown.



Instructions on the large display drive the user.



Easy and intuitive menu to insert data.

Internal calibration

As standard feature this balance has internal automatic calibration, to ensure daily accurate measurements also during flow of time or conditions changing. User can also choose to switch to external calibration, using his calibration weight value.

Multi-language and Multi-user

Choice of language among English, French, German, Italian, Spanish, Portuguese. Protection of own settings, preferences and database is ensured by the multi-user structure with password protection

The user has easy and intuitive access to all the functions thanks to the icon-driven menus. This means more efficiency, productivity and interactivity.

A double case structure protects the heart of the balance: an aluminum inner case and a composite plastic external case.

Technical data

- Span drift (+ 10...+ 30 °C): +/- 6ppm/°C
- Dimensions LxWxH (mm): 330x325x245
- Power supply 110-230Vac, 50/60Hz; output 9V 1,2A 10VA
- Net Weight: 6,2Kg