A-MELT for MVI - MFR

TECHNICAL DATASHEET

This equipment is necessary to determine the Melt Flow Rate of thermoplastic materials.

Plastometer A-MELT uses a linear sensor to detects the piston displacement acquiring up to 100 values in a known time, and the microprocessor elaborates the acquired data calculating MVI values.

(Volumetric method)
All values are monitored on the 5" Touch TFT digital colour screen of the built-in control panel.
It is also possible to measure MFR values (Gravimetric method) with easy and convenient operation putting in use the automatic cutting device. The test is completed by weighing the extruded cut pieces of tested material with an analytical balance (not included).



Main specifications:

- Metal frame and case painted with epoxy resins
- Built-in rack for accessories
- 5" TOUCH TFT digital Screen, microprocessor controlled and resolution of 0.1°C for temperature setting and data input
- Heating system by dual resistances
- Operating temperature range: 50 to 400°C
- Thermal stability: within ± 0.2°C in the testing area
- Test chamber: ∅ 9.55 mm, made of steel (52/55 HRC)
- Piston: ∅ 9.474 mm, height of the pressing part 6.35 mm, made of steel (60/62 HRC). Overall weight 325 g, complete with weight support head and flag's arm
- Die: internal ∅ 2.095 mm, height 8 mm, made of steel (60/62 HRC)
- The instrument is equipped with an electromechanical device for the cutting of the extruded material, controlled by timer which operates the blade either automatically (at preset intervals as per ASTM D1238) or operating manually
- End of test mode: moving (mm) or timed (sec)
- The microprocessor acquires and processes the data and determines up to 50 acquisitions automatically, and the results: MVR, MFR, Dev.STD
- Set of 4 adjustable feet for instrument levelling, assembled
- Control mirror, assembled

Standard Tools:

- *Sample loading funnel*
- *Pressing tool for compressing the material in the test chamber*
- *Die cleaning tool*
- *Test chamber cleaning tools (3 different shapes)*

General:

- USB interface to PC
- Power supply: 230V, single phase, 50/60Hz; 0.5 kWA
- Dimensions (WxDxH): mm 420x330x530
- Weight: approx. 30 kg

Reference standards				
ASTM	D1238 Meth. A-B	D2116	D3159	D3364
ISO	1133			
UNI	5640			

Main specifications of A-MELT Hastelloy for measurements of corrosive plastics (i.e. PVC)
This unit has the same design as the std AUTO Index but all parts in contact with the tested material – test chamber, piston and die – which are made of Hastelloy, a corrosion-proof metal alloy.

Accessories:

- Interchangeable add-on weights set to match conditions as per Standards: kg 1,000 – 1,050 - 1,200 - 2.160 - 3,800- 5.000 - 10.000 - 12.500 20.000 - 21.600
- Go-no-go gauge for die

Software:

Dedicated software, operating under

Windows XP,7,8,8.1,10 o.s. It allows full programming of the instrument from PC, survey of test results and data collection.

Data filing and report printing are also possible. However, even when A-MELT is connected to PC, the test can be run by manual control on touch screen.

Code	Description
10002410	A-MELT Index Automatic cutting
10002412	A-MELT Index Automatic cutting - Hastelloy
00100107	Software and interfacing cable (optional) A-MEP/A-MELT
10002074	Go-no go gauge with report (optional)