

MELT FLOW INDEXER MFI-100

Basic Extrusion Plastometer for determining the melt flow index in thermoplastic materials (Gravimetric Method)

According to the standards: ASTM D1238 - ISO 1133 in both Procedure A (Gravimetric) ...

The determination of the MFI is essential for the characterization of thermoplastic materials and if required reliability on accuracy and repeatability. Also, this tester is very effective in quality control and research and development

MFI-100 Standard model (need to weigh in the balance Precision extruded material back to calculate the melt flow index.



- ✚ **GRAVIMETRIC** method
- ✚ Low cost
- ✚ Automatic Sample Cutting
- ✚ Robust design with high rigidity
- ✚ PID temperature controller (maintain +/- 0.1 ° C)
- ✚ Time programmer and number of cutting cycles
- ✚ Equipment ready to work with corrosive materials such as PVC

MFI-100 is designed specifically for use in the Quality Control Department as a quick and easy Melt Flow Indexer for thermoplastic materials according to the "A" Method of the international standards of MFI, ASTM D1238 - ISO 1133 in both Procedure A (Gravimetric).

To test Manual (Method A - Gravimetric)

- Standard equipment includes all the tools of labor-cleaning piston and standard Die.
- Standard Temperatures range up to + 325 ° C (*) with a resolution of 0.1 ° C
- Digital Timer: with a range of up to 9999 seconds
- Automatic sample Cutting
- 7 Weights and polished chromed included in the standard delivery:

1.2 kg - 2.16 kg - 3.8 kg - 5 kg - 5 kg - 6.6 and 10 Kg

* The weight of 21.6 kg is achieved by combining the weights of 5 kg, 6.6 kg and 10 kg

Recommended equipment required: Precision Balance with resolution of 0.001 g

- Cod 1878 -. OPTION with range up to + 400 ° C (can be installed only at the factory - not later)



The fluency of the polymer is a function of:

- Pressure used (weight of the piston)
- Diameter of Die
- Viscosity of the material

This index is of vital importance to those who make injection molding, extrusion, rotational molding or other manufacturing process involving a thermoplastic part.

Beginning

The melt index measurement is performed by a meter Flow Index, which operates with a constant pressure exerted by a constant force due to a known weight into a capillary tube whose area remains constant. ASTM-D1238 is commonly used to perform this operation

The melt flow index (MFI) is a measure of the flowability of the resin under controlled conditions and can be easily measured with equipment called plastometer, using very low strain rates, a temperature of 230 ° C and weighing 2.16 kg according to ASTM D 1238 & ISO 1133. This variable is inversely related to the viscosity and molecular weight (MW), that is, with increasing the melt index of the resin, a decrease is obtained in viscosity and molecular weight.



Accessories included in the standard delivery: Tungsten Carbide die of 2,095 mm Ø, Piston, putty knife to take samples, Spanner, bar to introduce samples into the heating barrel, Material charger, funnel, cleaner of the heating barrel, scissors, cleaner of the die.

- **The standard supply includes 7 Weights, chrome and polished:**
1,2 Kg - 2,16 Kg - 3,8 Kg - 5 Kg - 5 Kg - 6,6 y 10 Kg

* The 21,6 kg weight is the combination of the 5 kg, 6,6 kg y 10 kg weights



Auto Cutting System
Included in standard supply

OPTIONAL: For weighing the extruded samples **we recommend using a Precision Scale:**

Capacity 210 g - Resolution 1 mg



POWER SUPPLY:

Electrical: 230 V, 50/60 Hz

WEIGHT AND DIMENSIONS:

Dimensions:
 Equipment: 560 x 560 x 600 mm (W x D x H)
 Transport Box 1: 750 x 750 x 700 mm (W x D x H)
 Transport Box 2: 480 x 460 x 380 mm (W x D x H) (weights & accessories)
 Net/Gross: 70 Kg / 125 Kg

DELIVERY CONTENT:

- > Melt Flow Indexer MFI-100
- > Working and Cleaning Tools
- > Piston
- > Standard Die of 2,095 mm Ø of Tungsten Carbide
- > Set of 7 Weights (1,2 - 2,16 - 3,8 - 5 - 5 - 6 & 10 Kg)

* TECHLAB SYSTEMS, S.L. reserve the chance of modify the technical information without previous

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