

hanatek



www.hanatekinstruments.com

MFI Melt Flow Indexer

- Precise Measurement
- Fully Automated
- User Certifiable
- Operator Safe

Hanatek products are exclusively
manufactured and distributed by



MFI Melt Flow Indexer

ACCURATE INSTRUMENT • REPEATABLE MEASUREMENT

The Hanatek MFI is used to accurately measure the melt characteristics of thermoplastic polymers.

Understanding melt flow is a key indicator for producers, processors and converters of plastic materials as it dictates the temperatures and pressures required to manufacture consistent quality products.

Test Types

- MFI/MFR
- Melt volume rate
- Melt density
- Shear stress/rate
- Melt viscosity
- Spread values



REPEATABLE MEASUREMENT • EAST TO USE

PRECISE MEASUREMENT

Tri-Zone Barrel Heating and Control

Stable and accurate temperature is maintained across the entire barrel length ensuring exact compliance to all international standards.

Temperature Monitor and Control

The included barrel temperature monitor ensures that every test is made to exact temperature specifications. Deviations in measurement can be quickly identified and fine tuning of the barrel can be actioned.

WHY IS THIS IMPORTANT? Almost 80% of MFI in current use have temperature variations of up to 20°C across the barrel*, leading to inaccurate test results and potential raw material failures.

Accurate Results

The piston travel sensor accurately reports the flow rate of the polymer throughout the test.

FULLY AUTOMATED

Automatic Testing

With pneumatic weight control and displacement sensor every test is fully automated; no user intervention is required to start tests or monitor conditioning times.

(requires an airline of 5 bar / 500kPa / 72.5 PSI).

*Source Hanatek calibration survey 2010

Automatic Calculation

Touch screen control with pre-loaded test routines for MFI / MFR / MVR / melt density / shear rate / stress / melt viscosity / spread values. Automatic calculation of results for every polymer eliminating operator associated errors.



USER CERTIFIABLE

UKAS Certified Calibration Kit

The Hanatek MFI can be annually serviced by the user whilst maintaining full UKAS/ISO 17025 certification, eliminating the cost of an onsite calibration service or return to manufacturer calibration.



User Changeable Barrel Core

This feature eliminates the high cost and inconvenience of an offsite repair due to barrel damage.



A replacement barrel can be fitted to the Hanatek MFI at any time to ensure the instrument fully complies to international standards.

OPERATOR SAFE

Automatic Cleaning Cycle

An automated cleaning process minimises the risk of contact with hot apparatus whilst completely eliminating the risk of RSI injury.



Automatic Weight lift

Built in pneumatic weight handling protects operators from injuries associated with manipulation of heavy test weights.



MFI Melt Flow Indexer

MFI SPECIFICATION

Standards	ISO 1133, ASTM D1238 (Part A, B & C), BS 2782, ASTM 3364.
Range	40 – 400°C
Resolution	0.1°C
Accuracy	0.2°C
Power	120V/230V; 50Hz/60Hz
Weight	14kg
Dimensions	Height: 500mm Width: 350mm Depth: 242mm
Packed weight	14kg
Commodity code	9026 8091

TEMPERATURE PROBE SPEC

Measurement	3 x PT 100 Sensors
Range	0 – 500°C
Accuracy	0.1°C
Calibration	UKAS / ISO 17025

INCLUDED ACCESSORIES

UKAS / ISO 17025 Calibrated

- Temperature probe
- Die
- Piston
- Barrel core



Other Accessories

- Die cleaning tool
- Cleaning patches
- Die retainer
- Heat resistant gloves
- Cleaning probe
- Filling funnel
- 2.16kg weight

OPTIONAL ACCESSORIES

- Test weights, range: 5 – 21.6kg
- Results printer
- MFI mounting kit (required for 10kg+ weights)



UKAS Certified Calibration Kit

- Barrel core
- Barrel changing tool
- Die
- Re-calibration probe
- Calibration activation code



Certificate no: FM 29741
ISO 9001:2008

Calibrated Accessories and Calibration Kits supplied by Micron Metrology Limited (Calibration Laboratory No. 0720) and traceable to UKAS

LOCAL AGENT



hanatek