

IS YOUR LAB READY TO BECOME A LEADER IN MELT FLOW TESTING?

Discover Instron® MFi Series

Selecting the appropriate Melt Flow Tester for your application is of considerable importance to predict the material's performance at different stages of the manufacturing process, preventing issues further down the line. Whether you need to perform quality controls on inbound materials or running R&D activities to predict how a newly developed plastic material will behave, we are the right partner to rely on.

MFI SERIES THE NEW GENERATION OF MELT FLOW INDEX TESTERS

Ideal for performing tests according to ISO 1133 and ASTM D1238 Procedures A, B, and C, the MFi Series provides exceptional performance with unparalleled accuracy and reliability. With a temperature range up to 450° C and piston displacement accuracy down to 0.02 mm our new generation of melt flow testers offers ultimate flexibility for your testing needs. Equipped with a capacitive 7" color touchscreen user interface, easy to use cleaning system, and automatic material compacting and purging, it maximizes lab efficiency while minimizing costly errors.



MFi5

The MFi5 is a compact instrument that allows rapid inspection of the melt mass flow rate of plastics. It is especially designed for different needs, from simple Incoming Material Acceptance to Process Control checks. The manually operated MFi5 tests plastics quickly and reliably thanks to the pre-set methods.

MFi7

The MFi7 is a modular instrument designed to accommodate an increasing volume of testing. Created to improve repeatability and reduce the introduction of operator error, the MFi7 offers a high level of flexibility, accuracy and shorter test cycle times due to automatic material compaction, purging and cleaning.



ADVANTAGES

Bluehill® Melt

Equipped with easy-to-understand icons and workflows, Bluehill Melt makes it simple to train users and set up tests, helping you maximize lab efficiency while minimizing costly errors.

High Flow Solutions

Light piston and automatic die plug opening assist in testing of high flow materials. Different plug tips provide stability and allow the device to work with materials having very high MFR (up to 1600 g /10min)

Smart User Interface

Create a test method with just 3 inputs. Guided by the Bluehill® interface you can set up a method in few, avoiding errors even if you are not an experienced user. Moreover, you can see real time graphs while the test is running (MFR/MVR vs. individual measurements) and test results once the test has ended.

Live Help

Whether you are an experienced user or a new operator, assistance is always available with Live Help. This function has been designed to reduce the number of trainings required for new operators, as well as avoiding costly errors during testing by providing Help on each screen at any time.

MODELS AND AVAILABLE OPTIONS

MF15 is a quick and reliable basic instrument supplied with piston travel transducer as default. In case of specific testing needs, these options are available:

- Automatic Die Plug Opening
- Automatic Cutter
- Light piston for high-flow materials
- Corrosion wear-resistant material for barrel, piston, and dies
- UL/CSA version
- Bluehill® Melt Software

MF17 is a modular instrument for increasing number of tests. It is always supplied with piston travel transducer, motorized weightlifter and emergency stop button as a basis. According to your testing needs, the following options are available:

- Automatic Die Plug Opening
- Automatic Cutter
- Light piston for high-flow materials
- Zero Gravity piston
- Safety Shields
- Unit for automatic compacting and purging
- Manual Test Mass Selector
- Corrosion and wear-resistant material for barrel, piston, and dies



TECHNICAL SPECIFICATIONS

	MFi5	MFi7
Type of Test	Methods A, B, C	Methods A, B, C
Test Temperature Range	50°C – 450°C	50°C – 450°C
Piston Travel Transducer	✓	✓
PTT resolution	<0.005 mm	<0.005 mm
Test Mass Range	0.100 kg, 0.325 kg, 0.500 kg, 1.000 kg, 1.050 kg, 1.200 kg, 2.160 kg, 3.800 kg, 5.000 kg, 6.480 kg, 10.000 kg, 12.500 kg, 15.000 kg, 20.000 kg, 21.600 kg	0.100 kg, 0.325 kg, 0.500 kg, 1.000 kg, 1.050 kg, 1.200 kg, 2.160 kg, 3.800 kg, 5.000 kg, 6.480 kg, 10.000 kg, 12.500 kg, 15.000 kg, 20.000 kg, 21.600 kg
Test Masses Motorized Lifter	-	✓
Automatic Compacting and Purging	-	Optional
Motorized Melt Cutter	Optional	Optional
Test Masses Manual Selector	-	Optional
Die Plug Automatic Opening	Optional	Optional
Temperature Accuracy	<0.3°C	<0.3°C
Barrel Type	STANDARD: Nitrided Steel with Superior Wear Resistance	STANDARD: Nitrided Steel with Superior Wear Resistance
	OPTIONAL: Special stainless-steel for corrosive materials	OPTIONAL: Special stainless-steel for corrosive materials
Temperature Resolution	<0.05°C	<0.05°C
User Interface	7" Capacitive touch display	7" Capacitive touch display
Other Facilities Required to Operate Basic Machine and Options	Only Electrical supply	Only Electrical supply
Additional Safety Shields	-	Optional
Bluehill Melt Software	Optional	Optional
Export Interfaces	USB, LAN for Bluehill Melt Software	USB, LAN for Bluehill Melt Software
Basic Machine Dimensions (w × d × h)	510 x 370 x 600 mm	510 x 370 x 850 mm
Machine Dimensions with Options (w × d × h)	510 x 370 x 700 mm	775 x 440 x 1200 mm
Basic Machine Mass	60 kg	70 kg
Power Supply	660 W	780 W
Electrical Supply Only	115 or 230 115 V Hz 50/60	115 or 230 115 V Hz 50/60

PROTECT YOUR INVESTMENT

Preventative maintenance and accredited verification of your Melt Flow Testers help avoid potential risk exposure from inaccurate test results that can affect the quality of your product to market, extend the life of your investment, minimize the cost of ownership and downtime.

Performance verification, maintenance, adjustment to manufacturing specifications and NVLAP accredited verifications in compliance with ISO and ASTM standards are among Instron Professional Services helping to ensure that testing systems are operating at peak performance.

www.instron.com



Worldwide Headquarters
825 University Ave, Norwood, MA 02062-2643, USA
Tel: +1 800 564 8378 or +1 781 575 5000

European Headquarters
Coronation Road, High Wycombe, Bucks HP12 3SY, UK
Tel: +44 1494 464646