

## function

The **SCITEQ MFI-450** is used to determine the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of a wide range of thermoplastic raw materials (granulate) by extruding it in a molten state through a calibrated die using a reference weight. It offers easy operation with colour touch screen control for fully automatic testing.

## highlights

full touch screen

robust construction

micro-printer

high accuracy

quality product

weight loading device  
(standard on model C)

## features

Three models are available: C, C1 and C2

The user-friendly MFI combines high accuracy and precision essential for quality control and R&D.

Complies with BS 2782 Part 7: Method 720A, ISO 1133 and ASTM 1238 Methods A and B.

Calculates melt mass-flow rate (MFR), melt volume-flow rate (MVR) and melt density/viscosity.

Touch screen with simple set-up of test and operation. Test results can be viewed and printed on included micro-printer.

Heavy-duty, robust construction which is easily cleaned.

Supplied with fully equipped weight kit up to 21,6 kg and full accessory kits.

Model 450C has a weight loading device.



*SCITEQ MFI-450 - touch screen*

We wish to give our partners the tools to produce to the highest standard, while helping them to produce as cost-effectively as possible with Q.C. tools throughout the factory.

## construction

The MFI-450 series is a rigid constructed table apparatus using the latest touch screen controller technology with a very intuitive software. It has audible prompts at the correct time and results calculated and displayed at the end of the test. With the displacement transducer (standard on model C and C1) MVR testing can be performed. Weight loading device is standard on model C improving usability and ensuring weight is loaded evenly.



*SCITEQ MFI-450 with touch screen controller and micro-printer.*

**model range:** 450C (MFR, MVR and weight loading device)  
 450C1 (MFR, MVR)  
 450C2 (MFR)

**temperature range:** 120°C to 450°C (248°F to 842°F)

**temperature accuracy:** ±0.2°C

**timing accuracy:** 0.01s

**displacement error:** ±0.1mm (MVR)

**heating rate:** ≥12°C/min.

**warm up time:** approx. 16 minutes (190°C)

**electrical supply:** Single phase 230V ±10% AC 50-60Hz. 6 Amps

**maximum power required:** 0,65kW

**international standards:** BS 2782 Part 7: Method 720A, ISO 1133 and ASTM D1238 Methods A and B

**corrosion resistant barrel and pistons:** tungsten carbide for testing of corrosive materials such as PVC and abrasive glass filled materials

**temperature measurement:** PT 100 sensor

**die:** tungsten carbide 2.095±0.005mm

**piston length:** 193mm full length (effective length 175mm)

**piston head length:** 6.35±0.10mm

**piston rod diameter:** 9.475±0.015mm

**cylinder diameter:** 9.550±0.025mm

**dimensions:** 550x435x880mm (length x width x height)

**net weight:** 62 kg

**accessories:**

2.095 mm die  
 standard piston  
 circular spirit level  
 charging tool  
 die ejector tool  
 barrel cleaning tool  
 die broach  
 cleaning patches  
 filling funnel  
 piston support sleeves  
 die tweezers  
 hexagonal key  
 die retaining plate  
 ceramic die retaining bush

Complete weight set box consisting of one of each weights:  
 0.030kg  
 0.600kg  
 0.875kg  
 0.960kg  
 1.000kg  
 1.200kg  
 1.640kg  
 2.000kg (eight)



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