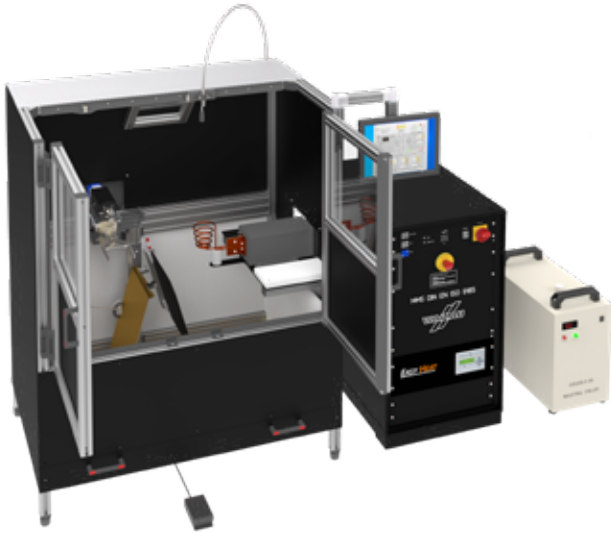


HERMOMETRY

MMS – Molten Metal Splashes

ISO 9185 | ASTM F955



SCOPE

Determination of the material resistance to liquid metal splashes on protective clothing.

PRINCIPLE

The materials test involves pouring defined amounts of molten metal onto the specimen, which is held at an angle to the horizontal on a mounting frame. In ISO 9185 damage is assessed by placing a PVC foil directly behind and in contact with the specimen. The test is repeated using a larger or smaller amount of metal until the minimum amount causing damage to the PVC film is determined. In ASTM F955 the specimen is exposed to the molten metal for 45 s. The temperature rise at the calorimeters is recorded and compared to a "Stoll Curve".

The molten metal is melted in a crucible using a high frequency induction furnace. A high-performance glass fiber ratio pyrometer provides the reference variable for temperature control by determining the pouring temperature. The temperature of the melt is set and controlled from 700 to 1800 °C by a temperature controller. The tilting speed and the tilting angle can be controlled and adjusted via a stepper motor.

SPECIAL FEATURES

Integrated control computer with touchscreen
High frequency induction furnace
Industrial chiller
Enclosure

Safety hinge switches

SCOPE OF DELIVERY

Test chamber with touchscreen, safety hinge switches
Control cabinet
Induction furnace, temperature range 700 -1800 °C
Industrial chiller
Specimen holder
Sensor board with 2 calorimeters
Crucible tongs with coupling
Crucibles
Electrical tilt mechanism, electronically controlled

High-performance glass fiber ratio pyrometer for monitoring the temperature of the melting material

Calibration device DIN EN ISO 9185

Sand tray

Specimen stencil

Foot switch

Software

- ♦ MS Windows 10
- ♦ MCC DAQ
- ♦ DIN EN ISO 9185
- ♦ ASTM F955

Operating manual

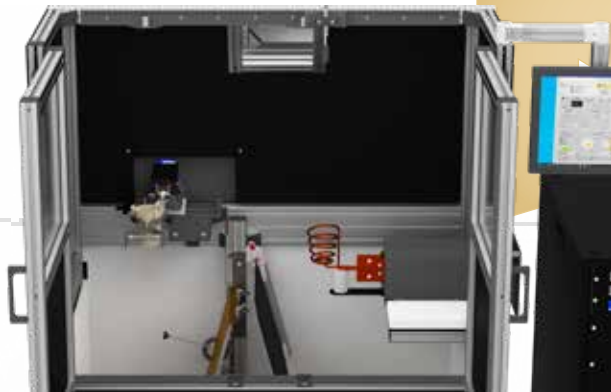
Protective equipment, fireproof

- ♦ hand protection (mittens, gloves)
- ♦ protective mask
- ♦ apron
- ♦ gaiters

DIMENSIONS

Width x depth x height: approx. 1270 x 875 x1550 mm*

Weight: approx. 260 kg*



SUPPLIES

Electric current 230 VAC 50/60 Hz, 6 kVA

TO BE PROVIDED BY THE CUSTOMER

Exhaust system (mandatory for test with cryolite)

PVC foil

Balance, measuring range up to 1000 g, measuring accuracy ± 1 g

Muffle furnace (PVC foils calibration)



* Our products are constantly being further developed. For this reason, the actual dimensions may vary. © 08/2023