

The Thermo Scientific HAAKE MiniJet II optimizes your development process, enabling you to test mechanical properties of specimens as small as 5 g. The need to produce various sample geometries coupled with the common reality of limited material quantities can often create great difficulties in a product's development.

Thermo Scientific HAAKE MiniJet II

Sample Specimen Preparation



Efficient Sample Specimen Preparation

The Thermo Scientific HAAKE MiniJet II system allows you to optimize your development process and realize cost reduction opportunities:

- The production of test specimens from as little as 5 g of material
- Test specimens can be produced from various materials: powders, pellets or melts
- Specimen geometries offered from standard to unique, customized molds
- A control and design concept that provides simplistic handling with consistent, reproducible results

The Thermo Scientific HAAKE MiniJet system offers a complementary solution to product development investigations when coupled with the Thermo Scientific HAAKE MiniLab micro compounder, Thermo Scientific HAAKE MARS, or Thermo Scientific HAAKE RheoStress 6000 rheometers.

Applications:

- Sample preparation for rheometry, optical testing and mechanical testing
- Preparation of special specimen for pharmaceutical testing

Main Features:

- Small sample volume
- Quick & easy to use
- Interchangeable molds



Vertical machine design features

- Simple loading of powders and pellets within the system cylinder
- Quick and easy removal of the heated cylinder for melt applications when connecting to the HAAKE MiniLab or other extrusion systems
- Simple design for the exchange of molds with no tools required

Several mold designs are available, allowing for the preparation of many different types of sample specimens. Standardized molds for common mechanical testing are offered (see table), as well as customized solutions that can be produced upon request.

To ensure a consistent and reproducible sample specimen, the HAAKE MiniJet system is equipped with precise microprocessor controls. All processing parameters such as temperature (separate for cylinder and mold), injection pressure and duration, and post-pressure can be controlled and closely monitored. Strict management of the post-pressure during sample creation enables optimum compensation for material shrinkage due to the cooling of the sample. Potential user influences on sample quality also have been eliminated through menu structure and control as well as parameter storage.

State-of-the-art technology driven by customer needs

The HAAKE MiniJet system is designed as a piston injection molding system. Material consumption can be reduced dramatically in comparison with conventional injection molding units due to:

- Reduced cylinder volume, resulting in a smaller quantity of required material
- Almost complete transportation of material into the mold, promoting minimal loss and waste

In addition, an injection pressure of up to 1200 bar can be realized, thus enabling the processing of highly viscous materials.

Technical specifications HAAKE MiniJet II

Injection pressure	max. 1,200 bar
Mold material	1.2767
Dimensions	300 mm x 460 mm x 710 mm
Power	230 V ± 10 %, 3.15 A, 50...60 Hz 115 V ± 10 %, 3.15 A, 60 Hz
Air pressure	max. 10 bar
Mold temperature	max. 250 °C
Cylinder temperature	max. 400 °C

Description

Description	Type
Tensile test	ISO 527-2-A5
Tensile test	ASTM D638 V
Tensile test	Bar type 3
Chapy test	ISO 179
Izod impact test	ASTM 4508
Rheometer probe disc	D = 20, h = 1.5 mm
Rheometer probe disc	D = 25, h = 1.5 mm
Rheometer probe disc	D = 35, h = 1.5 mm
Rheometer probe disc	Custom
DMA test bar	L = 60, w = 10, h = 1 mm
Squared test probe	Custom

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