

High Temperature Constant Thickness Film Maker

Enables preparation of reproducible thickness polymer films with melting points up to 400°C.



Transmission measurements on thin films are one of the most efficient ways of analysing polymers and additives in the infrared. Sample preparation for this technique has been the most critical factor in its success. The High Temperature Film Maker is the quickest and most convenient, direct method of solvent free sample preparation.

The High Temperature Film Maker prepares re-producible thickness films from 15 to 500 microns from polymers with melting points up to 400°C. Finished films can be prepared in as little as 10 mins.

The sample is put into a preformed non stick aluminium dish and placed into the accessory.

Pressure is then applied between two heated platens set to the polymer softening temperature. Any excess sample runs into a trough and does not affect the film thickness.

Once the sample is formed it is cooled using the integral

Features

- Controlled temperature up to 400°C.
- Produces 15, 25, 50, 100, 250 and 500 micron films, 29mm diameter.
- Complete film production in typically 10 minutes
- Digital display of sample and set temperatures.
- Integral heating and cooling systems.
- Quick fitting non drip water connections.
- Temperature cut-out switches, guards and low voltage safety.
- Digital sample and set temperature displays.

Applications

- Quality control analysis of polymers.
- Beads, foam, fibres and powders.
- Thermal properties of polymers.

water cooling system. The thin film is placed into a Specacard ready for direct transmission analysis and storage.

The accessory is a lightweight, compact and easily installed system comprising platens with integral heating and cooling. Fully compatible with all Specac hydraulic presses, the film maker has full safety features. Non drip water connections, thermal cut out protection, low voltage heaters, and safety guards are standard.

The High Temperature film maker is the ideal solution for polymer laboratories frequently involved in quality assurance, material control and quantitative measurement. Diverse research laboratory applications can also be handled.

- Illustrations, descriptions and specifications in this data sheet were correct at the time of going to press. However, Specac's policy is one of continuous product development and we reserve the right to change descriptions and specifications at any time. For the latest details please contact your local Specac office or representative.

High Temperature Constant Thickness Flim Maker

Specifications

Temperature range	:	Ambient to 400°C
Pressure required for pressing	:	1 to 2 tons (Maximum load 2 tons)
Nominal thickness of films	:	15,25,50,100,250,500 µm
Diameter of pressed film	:	29mm
Integral heated platens	:	30 volts (low voltage for safety)
Integral cooling system	:	Water cooling using quick-fit non-drip connectors (4.5mm i.d.tubing)
Temperature controller	:	Digital automatic with dual temperature indicators (set and sample).
Heating rate	:	17mins. to 400°C
	:	8mins. to 300°C
Cooling rate at 1 litre/min flow	:	22mins. from 400°C to 60°C
	:	19mins. from 300°C to 60°C

Thermal safety cut-off switches

On cooling blocks	:	70°± 3°C cut-off
	:	55° + 4°C Reset
Weight	:	2.5 kg

Ordering information

GS15800	High Temperature Film Maker (220v, 50Hz)
Includes:	<ul style="list-style-type: none">• 15, 25, 50, 100, 250 and 500 microns spacer rings.• Packet (200) aluminium disc foils.• Stainless steel forceps.• Aluminium foil sample cup making tool.• A packet of 20 Specacards 10mm dia. clear aperture.• High stability (0.25°C) digital automatic temperature controller (ambient to 400°C).• Quick-fit non-drip water connectors.
GS15801	High Temperature Film Maker (110v, 60Hz)

Spares and Consumables

GS15627	Packet (200) aluminium disc foils.
GS3800	Packet (100) of 10mm diameter aperture Specacards.
GS3810	Packet (100) of 10mm x 25mm aperture Specacards.
GS3815	Filing rack for Specacards (holds 36 cards).
GS3820	Magnetic film holder (25mm clear aperture).
GS3805	Packet (20) of teflon retaining rings for supporting elastic film samples.

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