

TM 4500

Hotmelt moulding platform

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Classical hotmelt processing machine with automatic sliding table

The TM 4500 moulding station is designed for low-pressure injection moulding specifically in medium-sized series. The compact size permits productive manufacturing of small to medium-sized coating procedures of inserted parts, e.g. for sensor technology, cable production or electronic components.

The TM 4500 has a three-part tool concept. The complete tool system consists of one top mould and two identical sub-moulds. The gate consists of one or two injection valves positioned horizontally to the rear in the tool separation level.

The lower sub-moulds alternate on an automatic sliding table under the top mould. A Plexiglas safeguard protects the

operator while the procedure takes place. Tool clamping is pneumatic up to a clamping force of 1400 kg with maximum occupational safety thanks to the convenient two-hand control.

The system is devised for one operator. An optional switch box can be added to operate two TM 4500 platforms at one material feed point, thus giving the greatest possible production capacity for one operator with ideal cost effectiveness.

Moulding platform TM 4500 with its unique versatility is the ideal solution, from the series platform with tank unit through to the extruder-fed double moulding station for larger series



1 Material preparation in the tank unit

Tank units for material preparation are the entry-level solution for hotmelt moulding. They process granulated materials. The tank units in the TM 1000 series are all designed for fitting to all WERNER WIRTH moulding platforms. Depending on the specific system type, a range of features are available such as level sensor, weekly timer or temperature reduction.

2 Material preparation in the extruder

Extruding is the most convenient and reliable form of material preparation. The extruder is used for extremely gentle processing of a wide range of different granulated materials. The extruders in the TM 1500 series can be integrated in all WERNER WIRTH moulding platforms and are designed for processing a wide range of materials. Touchpanel control, inverter-controlled drive and optionally integrated material drying together with melting rates coordinated to material demand are just some of the features. Our extruders make it possible use materials with higher viscosity and coloured moulding or injection moulding materials.



3 Material preparation in the bag melter

The TM 1402 bag melter is necessary when processing our high-temperature resistant reactive polyamide materials in the PAR product group. The unit can be integrated in every moulding system. The material is melted by a controlled heating plate under the exclusion of air before being fed into the tool.

4 Two+one operation

With the TM 1300 switch box, two hotmelt stations can be operated at one material feed point, regardless of whether this is a tank unit, extruder or bag melter. The switch box ensures that only one moulding process is running at a time so that the moulding parameters can be provided constantly and exactly as needed by the injection moulding process.





5 Tool holders

The standard TM 4500 moulding station is equipped with a pneumatic sliding table for the lower tool holder so that the sub-form is pushed out toward the operator for optimum handling when inserting and removing the parts being processed. With the vertical adjustment mechanism, the TM4500 can be set up for varying tool heights, thus expanding the scope for cavity size in the tool.

6 Valves

WERNER WIRTH moulding valves are designed for low-pressure moulding systems. The cavity is filled quickly by extra large nozzles, with material cracking reduced by the consistently undercut-free internal structure. The gate point has 1 or 2 moulding valves fitted horizontally in the tool separating level.

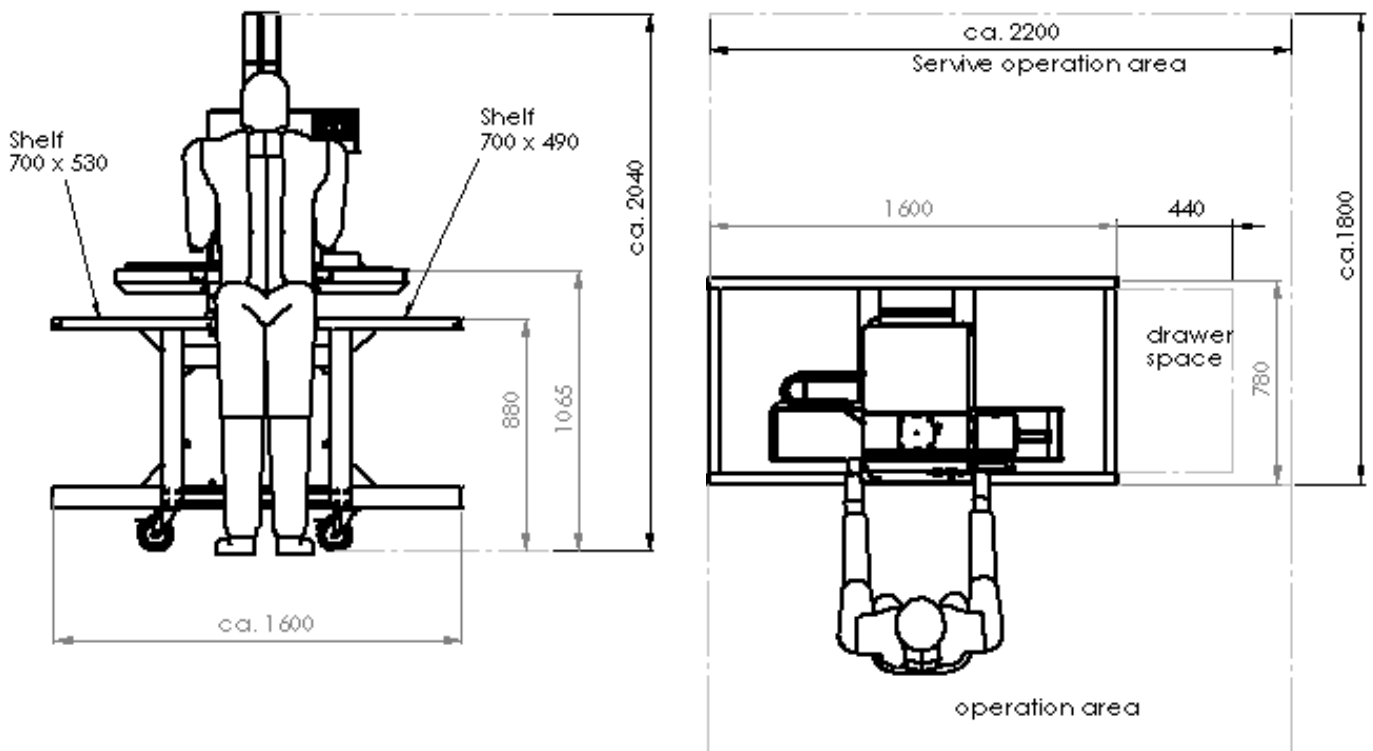
7 Cooling or heating units

One of the crucial criteria in a constant moulding process consists in controlling the tool temperature. Certain applications need the tool to be heated. Temperature control is provided indirectly through the tool holders so that the tool itself needs no extra connections or devices. The standard TM 4500 moulding station is fitted with the TM 7100 cooling unit, which can be replaced by the TM 7030 heating unit as an option.



TM4500 | Specifications

Deutsch	English	Bezeichnung
Programmspeicher	programstorage	10 Programme / programs
Vergussdruck min/max	Meltingpressure min/ max.	5 - 50 bar
Material Temperaturbereich	Material Temperature range	0 - 240 °C
Standart Formengröße	standard mould size	H x B x T 120 x 130 x 120
Max. Formgewicht	Max. mould Weight	20 kg / auf Anfrage/ on inquiry
Sonderformaße möglich	special mould sizes possible	auf Anfrage/ on inquiry
Werkzeugtemperierung	Tool tempering	5 - 90 °C
Betriebsspannung AC	operation voltage AC	230 V -50/60Hz
Leistungsaufnahme max Abhängig v. Aufschmelzeinheit	power input max. depending on Meltingunit	400 V 50-60 Hz 13 KW 16 A
Eingangsluftdruck min/max	input airpressure min/max	6 bar
Schließkraft pneumatisch	clamping force pneumatic	14 KN (6 bar)
Gesamtgewicht Maschine ohne Aufschmelzeinheit	total weight machine without meltingunit	370 kg



Werner Wirth GmbH

Hellgrundweg 111
22525 Hamburg
Germany

Tel +49 40 75 24 91-0
info@wernerwirth.com
www.wernerwirth.com

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