



TM 4500

Moulding unit for medium batch production



Werner Wirth Systems and the Tutankhamun Principle

What has the Egyptian Pharaoh Tutankhamun got to do with moulding technology? – It is quite simple: His mummy remained intact for thousands of years because it had been protected against harmful influences. In line with the Tutankhamun Principle, Werner Wirth Systems protects your electronic components for a short eternity against moisture, fluctuations in temperature, corrosion and shocks and vibrations. The name Werner Wirth Systems signifies innovative moulding materials, engineering services of the highest level and individually adaptable processing machines for mould casting.

TM 4500 series

The processing systems of the TM 4500 series were developed for stand-alone operation. They are designed for small to medium batch serial hotmelt moulding. Accurately regulated injection and cooling times, pumping speeds that are adjustable to match processing steps and adjustable bypass valves in combination with safe and simple handling guarantee a high degree of repeatability with practically no production tolerances. High temperature accuracy, regulated functions such as temperature reduction, pneumatic tool ejectors, excess or insufficient temperature cut-out and the option of partial monitoring all go to ensure reliable processes.

The modular design for several tool holders enables efficient production. A set of tools comprises 2 bottom halves of a mould and one mould top half. While the moulding process is operating automatically on one side of the sliding table, the finished part can be removed from the second bottom part of the mould and a new part inserted. The table is slid manually. The system is supplied with a machining table in which the TM1100 tank system and the TM7010-1 cooling system are already integrated. The tank system is mounted on a pull-out drawer in order to make material replenishing easier. This must be taken into consideration when planning space requirements.

The tools are positioned using adjusting bolts and sensors. The use of aluminium tools keeps tool production costs low.

The exact cooling temperature of the tools is transferred via the toolholder plate and regulated by the TM7010-1 cooling unit. This results in very short tool changeover times. The consistency of the tool temperature ensures constant injection conditions. The low-pressure injection moulding process is carried out within a pressure range of 5 to 60 bar. Whereby the parts to be moulded are exposed to only a very low temperature load. The temperature can be continuously adjusted with an accuracy of $\pm 1^\circ\text{C}$. The modular design facilitates service-friendly processing in order to allow rapid response to the many different demands of the market, e.g. individual dimensioning of the hotmelt moulding unit.

The system is produced in Germany in compliance with all applicable standards of quality. Our service is also “made in Germany”: The Werner Wirth on-site service and our 24-hour hotline are always at your disposal.



Werner Wirth Systems GmbH
Hellgrundweg 111
22525 Hamburg
Germany

Tel +49 (0)40 878 86 89-0
Fax +49 (0)40 878 86 89-26

systems@wernerwirth.de
www.ww-systems.de

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