

The Welding Institute

Hephaistos VHM 100/100



Weiss Gallenkamp have secured the first UK order for a Hephaistos Microwave Oven. The Welding Institute have placed only the second order across the Schunk Group for a Hephaistos Microwave.

The order for the VHM 100/100 represents an excellent opportunity for Weiss Gallenkamp as several clauses have been inserted into the contract regarding the promotional use of the oven. Benefits of this include the opportunity to showcase the product at The Welding Institute to potential customers, joint marketing opportunities and reciprocal links to each website.

TWI is one of the world's foremost independent research and technology organisations, and delivers value to its members through research, consultancy and training services in welding and joining, engineering, NDT inspection, materials, surfacing, and lifecycle integrity, and is highly respected for its expertise, professionalism and independence.

Their headquarters are at Cambridge, UK and they also have global offices in Asia, the Middle East and the Americas.



TWI has over 2000 members in over 60 countries, including some of the most influential companies in the world, and have a long history of invention and innovation. They work across all industry sectors and are experts in all aspects of materials joining and related technologies.

Named after the Greek god of handcraft and fire, Hephaistos is a new microwave oven and represents the first time that the advantages of microwave technology have been successfully developed to an industrially mature, high technology level.

The unique nature of the hexagonal shaped oven together with the control systems enables us to produce a homogenous microwave field inside the oven, which produces high quality structures leading the way to stronger products containing less material.. There is no need to rotate the product as is done in a domestic microwave oven.

Benefits of the Hephaistos technology include:

- Significantly reduced cycle time as there is no need to heat the total oven – Hephaistos only heats the product
- Savings in running costs due to shorter heating and cooling times
- Improvements in product quality due to homogenous heating

Specifications of the VHM 100/100

Nominal temperature °C	400
Usable volume ltr	750
Inner dimensions	
Hexagon diameter mm	1050
Width x height x depth mm	1050 x 910 x 1050
Outer dimensions	
Width x height x depth mm	1500 x 1800 x 1470
Weight, about kg	850
Nominal voltage V, Hz	400 V, 50/60 Hz
Microwave power kW	approx. 10 – 14
Energy consumption kW	approx. 22.4
Magnetron frequency GHz	2.45
Type of heating	Microwave
Material of inner tank	Stainless steel 1.4301
Control instrumentation	SIMCON/32* system

