

MAGNA L

X-Move Gantry HF Welder 360° workspace access

■ MAGNA L linear X-Move HF welder (gantry style RF heat sealer) was specifically designed to weld / seal large shape objects (spherical tent windows, tent walls, truck covers, swimming pool liners, inflatable toys or specialty membranes) with single or multiple programmable cycles. The welding head moves along the X-axis with multipoint pressure on electrode. A special control software, HF weld head driven on X-linear robotic beam, 360° access to workspace allows to make unlimited large platen or curved, angular or repeated parallel straight weld joints.

■ 25kW Hi-Q Gen5 RF generator is capable of providing stable output power for seams up to 1000cm² (155 sq inch). The dimensions of the welding/work table are custom made in accordance with the welding electrode length. Machine allow open and easy access to the work table and the welding head.



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HF Welders - Impulse Welders - Heat Sealers - Boxmakers - Die Cutters
Thermoformers - Hydraulic and Pneumatic Presses - Custom machines

CE Made in EU



Quick overview

■ The MAGNA L Gantry HF Welders have output power of 15-25kW, pneumatic press, programmable PLC and touch screen controls. The machine is suspended from a gantry-system that is designed (height and width) according to conditions and requirements of each manufacturer factory. It is equipped with X-Move traveling HF welding head and large pressing plate. The free standing support pillars allow easy 360° access to the work area, which in turn is protected by horizontal and vertical light curtains during operation of the machine. The dimensions of the welding/work table can be customized in accordance with individual requirements.

■ The MAGNA L Gantry machines allow open and easy access and are used in the production process of spherical tent windows, tent walls, high speed doors, tensile and membrane structures, advertising billboards, oil-booms, water and fuel bladders, pool liners, portable satellite dishes, etc.



HF welder head and table

- Precision X-Move robotic drive HF welding head
- Movement controlled by servomotor, precision of positioning $\pm 0,5$ mm
- HIWIN linear guides for effective and precise movement
- Ability to set weld head track movement along any X axis parameters
- 2 stand-alone support pillars independent of the work table
- Open 360° access to work area
- Work table (HF welding area) 1350x3200mm (or by request)
- Pneumatic welding press 1350x1300mm (or by request)
- Two EMC grounding feet (on both sides of welding press)
- Parking area for HF welding head for easy access to work table
- Downstroke pressure: 4000kg
- Stroke opening: 400mm
- Vacuum table on periphery of the HF welding table



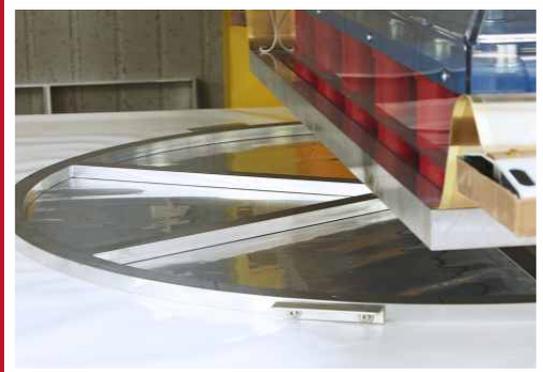
ZTG Hi-Q Gen5 HF GENERATOR

- Power supply: 3x400V; 50Hz (or by request)
- Power installed: 40 kVA
- Output power: max. 25 kW
- Working frequency: 27,12 MHz stabilized ($\pm 0.6\%$)
- High-Q Gen5 stabilized HF integrated with press
- Powered by metal-ceramic air cooled triode
- Fully programmable min/max smooth power output



Electronic systems and safety features

- Light curtains (horizontal and vertical) protecting access to work area during welding cycle
- 10" HMI - Human Machine Interface with color touch screen (located on HF welding head) controlled by latest generation PLC
- ZTG WELDSAVE™ - Registering the real-time weld parameters & saving them in Excel file/USB
- Unlimited number of saved recipes (above 1000) with easy sorting capability.
- Multilevel viewing/editing of weld settings secured with passwords
- ZTG iCOM™ internet interface unit allowing remote control (via VPN) of all aspects of machine setup and weld cycles – this Plug&Play unit does not interfere with internal client LAN settings.
- VNC server - control the machine's HMI via internet browser
- ZTG HF Autotuning System™ - automatic control of output HF power based on Zemat TG custom HF power matching algorithms.
- ZTG SafeDOWN™ - tooling bar press protection system for operator safety and ease of operating and positioning of welded material.
- Pressure Logic System PLS™ - intelligent down-stroke pressure setting for thick and heavy fabrics' welding cycles.
- Manual weld cycle - operator sets up all parameters of welding cycle
- Automatic weld cycle - operator chooses the HF weld cycle with preprogrammed options (power output, time of weld, pressure and distance)
- Fully programmable work power and maximum output power
- ZTG Antiflash™ ultra-fast solid state anti-flash



Custom built tooling and electrodes available upon request. Each machine is built according to customers needs. Parameters can be modified or adjusted - if required - at additional cost.

Zemat Technology Group Ltd. **60 YEARS STRONG**
1957-2017

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