

SIGNA 4

Multipurpose 4 kW high frequency welder

- Front load pneumatic shuttle work tray
- Heated weld head
- 450x600mm (18x24") work table
- Universal usage for PVC, PU, PET, PLA films, textiles & laminates
- Fully programmable PLC with touch screen HMI
- Ergonomic, simple to setup and easy to operate
- Manual and automatic operation
- Fully shielded work area



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

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Quick overview

- SIGNA 4 single station front load shuttle HF welder with 4kW stable controlled HF power output is made for various industrial HF welding and heat sealing applications requiring precision flat surface for product positioning and complex shape welds.
- SIGNA 4 is a perfect machine for production of blister & clam shell packages, medical elements with switchable welds for tubes and outer edge, laboratory, rehabilitation equipment, automotive parts, cosmetics, etc. Heated electrode plate with temperature presets gives high accuracy for consistent welding of hard PVC/PET foils or PU foams. The HF welder can be converted to a heat sealer for applications where HF welding is not necessary or impossible (eg: PP or PE materials).
- With the use of touch screen HMI and programmable PLC operator can easily save multiple weld/seam recipes. All available options, settings and safety features makes this machine a perfect tool for high-end production where precision, durability and strength is the key. Our in-house tooling department designs and makes high quality tooling for any customers' production needs.

Applications

- Clear plastic blister and clamshell packaging
- Medical bags, lab accessories, rehabilitation equipment
- Automotive parts and assemblies
- Office accessories and promotional items
- Technical textiles and laminates

Features

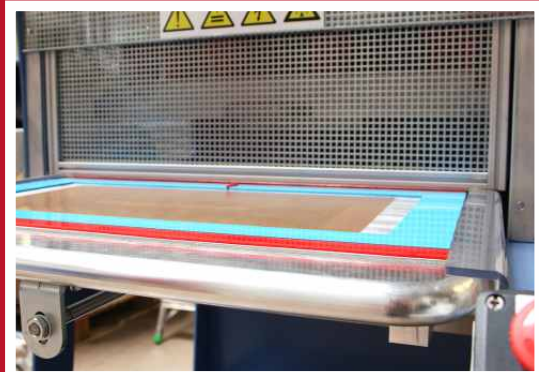
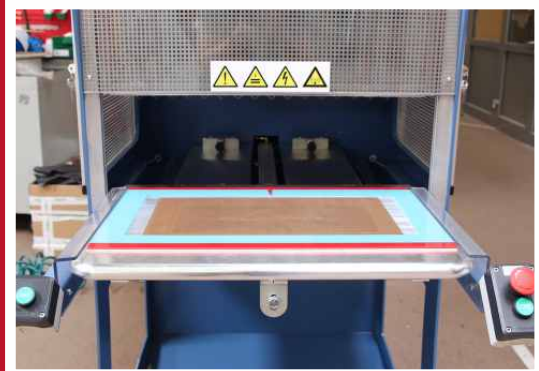
- Memory storage above 1000 recipes
- Heated electrode holding plate up to 120°C
- Built in VPN client and VNC server
- Intelligent weld cycle start and switchable power output settings
- Optional switchable double welds in the same cycle (eg. mandrel and perimeter)
- Heavy duty welded steel frame
- Fully shielded HF weld area with safety gates
- ATS™ Autotuning HF power output system
- Hi-Q4 EcoHF stable and efficient HF generator
- Ultra-fast sensitive ARC sensor & output overload protection
- Available conversion to standard Heat Sealer (up to 160°C)
- Light safety curtains (optional)
- 2 side tables (optional)
- Hydraulic pressure (optional)

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.

Technical specification

Signa 4

HF output power	4 kW
Installed power	6 kW
Power supply	3x400 V; 50Hz (or by request)
Heated weld head	120° (160° optional)
Working frequency	27,12 MHz ± 0,6% Hi-Q Gen4 HF Generator
Electron tube	air cooled metal-ceramic triode
Antiflash system	ultra-fast solid state ZTG AntiFlash™
Autotuning system	standard, ZTG ATS™
Control system	PLC and 7" touch screen HMI
Electrode pneumatic press (at 0,8 MPa)	1000 kg
Electrode pressure control (0,1-0,8 MPa)	200 - 1000 kg
Electrode stroke	up to 200 mm (ability to stop at any height)
Work table dimensions	450 x 600 mm
Work table drive	pneumatic
Electrode platen dimensions	370 x 550 mm
Dimensions	L 1703 x W 881 x H 1672 mm
Weight	700 kg



Zemat Technology Group Ltd.

60 YEARS STRONG
1957-2017

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