

SIGNA / SIGNA DUO AP

*Single/double side shuttle – pneumatic drive tray
6-20kW output power high frequency welder*

- HF output power range at 6, 10, 15 and 20kW
- Side load pneumatically driven shuttle work trays (1 or 2)
- Heated electrode holding plate up to 160°C
- Sealing efficiency from 1kW: 25cm² for standard PVC materials
- Easy conversion to a standard Heat Sealer
- 10" colour touch screen programmable HMI with PLC
- Memory storage and easy sorting of 1000 recipes for each work tray
- Built in VPN client and VNC server, WAN-LAN and USB I/O
- Universal usage for PVC, PU, PET, A-PET, PLA films
- H-frame rolled steel structure and double wing front access doors
- ATST[™] Autotuning and ultrafast ARC limiter (solid-state antflash)
- Automatic smooth glide work trays
- Easy electrode change system on upper platen
- Fully shielded HF weld area with pneumatic safety gates
- CE, EMI, FCC, OSHA compliant



Made in European Union

www.zemat.com

Zemat Technology Group Ltd.
ul. Brukowa 26, 91-341 Łódź, Poland
phone: +48 42 632 84 84



ZEMAT Technology Group is a leading European design and manufacturing company of high frequency welding machines.

SIGNA AP series - quick overview

■ The **SIGNA AP** series single or double station shuttle HF welders with 6, 10, 15, 20kW stable controlled HF power outputs are designed for various industrial HF welding and heat sealing applications requiring precision flat surface for product positioning and complex shape welds.

■ **SIGNA AP** or **SIGNA DUO AP** with automatic, pneumatically driven work trays are perfect machines for serial production of blister & clam shell packages, medical containers like blood or ostomy bags, laboratory, rehabilitation equipment, automotive parts and assemblies, 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 easily converted to a standard Heat Sealer for applications where HF welding is not necessary or impossible (eg: PP or PE materials). Machine is equipped with quick change 4 point electrode holder. Custom built tooling and electrodes are available upon request. We have our own in-house tooling department which will design and make any electrode and die required for any demanding production needs.

■ With the use of 10" touch screen HMI and programmable PLC operator can easily save hundreds of weld/seam recipes and upload or download them to/from USB drive. Full advanced programming functionality, including **ATS™** Autotuning, **WCS™** Weld Control Systems and VPN client provide excellent flexibility for demanding and advanced industrial environment. All available options, settings and safety features make this machine a perfect tool for high-end production where precision, durability and strength is the key.

Main Applications:

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

Features:

- Precision welding and sealing with **WCS™** Weld Control Systems
- Side load (single or double) pneumatically driven automatic work trays
- Automatic weld cycles with simple setup and operation
- Heated electrode holding plate up to 160°C
- Easy optional conversion to a standard Heat Welder
- **ATS™** Autotuning HF power output system
- Intuitive 10" touch screen HMI with expanded memory
- High production capacity with programmable PLC
- Backflow HF emission protection and EMI grid filter
- Quick 4 point HF electrode change system
- Hi-Q5 EcoHF new generation stable and efficient HF generator
- Ultra-fast sensitive ARC sensor & output overload protection
- Manual and semi-automatic operation
- CE, EMC, EU, FCC and OSHA compliant

Technical specification

Signa/Signa Duo 6AP Signa/Signa Duo 10AP Signa/Signa Duo 15AP Signa/Signa Duo 20AP

	Signa/Signa Duo 6AP	Signa/Signa Duo 10AP	Signa/Signa Duo 15AP	Signa/Signa Duo 20AP
Work trays (side shuttle)	Pneumatic single or double			
HF output power	6 kW	10 kW	15 kW	20 kW
Weld surface (up to 25cm ² from 1kW)	150 cm ²	250 cm ²	375 cm ²	500 cm ²
Installed power	9 kW	15 kW	22 kW	30 kW
Power supply	3 x 400 V ; 50Hz			
Main fuse	32 A		40 A	
Working frequency	27,12 MHz ± 0,6%			
Electron tube	Metal-ceramic triode			
Preheated electrode platen	standard up to 100°C optional up to 160°C			
Antiflash system	ultra-fast nanosecond Solid State			
ATS™ Autotuning System	standard			
Control system	PLC and 10" touch screen HMI			
Electrode pneumatic press (at 0,8 MPa)	1000 kg		1600 kg	
Electrode pressure control (at 0,1-0,8 MPa)	200 - 1000 kg		280 - 1600 kg	
Electrode stroke	200 mm (ability to stop at any height)			
Welding table dimensions	500 x 700 mm	600 x 800 mm	700 x 800 mm	800 x 1000 mm
Electrode platen dimensions	350 x 600 mm	450 x 700 mm	550 x 700 mm	650 x 900 mm
Weight (approx. for DUO models)	900 kg	1500 kg	1700 kg	2000 kg



■ Custom built tooling and electrodes available upon request. Each machine is built according to customers needs. We can modify and adjust any parameters if required at additional cost.

■ Our machines are fully comply with CE regulations for EMC, FCC and OSHA standards.

Contact:

Brokowa 26, Lodz, Poland
phone: +48 42 632 84 84
e-mail: zemat@zemat.com

/ZematTG /ZematTG

www.zemat.com