

## SIGNA DUO

**Double shuttle**  
high frequency welder

- Welded H-frame steel structure
- Custom size work tables and welding platen
- Switchable power for double welds in the same operation
- Two sides pneumatically driven shuttle work trays
- Optional heated electrode platen
- Easy conversion to Standard Heat Welder
- Programming up top 100 weld presets
- Universal usage for PVC, PU, PET, PLA films
- Fully shielded HF weld cage with side safety gate
- ZTG AT™ Autotuning and ultrafast ARC limiter
- ZTG iCom™ internet communication module
- Z-REG™ Weld cycle register unit
- Intelligent weld cycle start and switchable power output settings
- Touch screen programmable HMI / PLC



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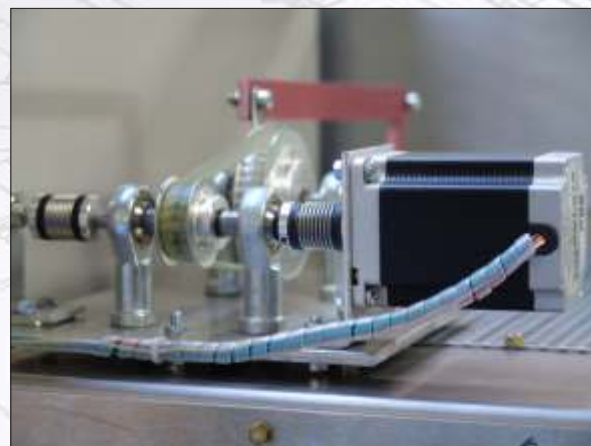


ZEMAT TG is a leading manufacturer of industrial application high frequency welding machines. The SIGNA DUO double station shuttle HF welders is made for various industrial HF welding and sealing applications requiring precision large flat surface for product positioning and complex shape welds.

SIGNA DUO is a perfect machine for production of medical, laboratory, rehabilitation equipment, automotive parts and car interior elements, safety vests, reflective signs, inflatable toys, cosmetics, blister packages, etc. Optional heated electrode platen with temperature presets gives high accuracy for consistent welding of hard PVC/PET foils or PU foams.

Machine is equipped with special quick change 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 touch screen HMI and programmable PLC operator can easily input multiple weld/seam recipes. SIGNA DUO series have HF power outputs from 4kW to 20kW for heavy production loads and special projects using reinforced heavy duty materials. All these options make this machine a perfect tool for high end production where precision, durability and strength is the key. ZEMAT TG always puts quality, efficiency and safety first!



### Main applications:

- Medical, laboratory, rehabilitation equipment
- Clear plastic blister and clam shell packaging
- Office accessories and promotional items
- Inflatable toys and gadgets
- Safety equipment and protective clothing
- Automotive interiors and parts

### Technical and Safety Features:

- Precision welding and sealing with one or two step welding
- Automated weld cycles with multiple recipes
- Optional heated electrode holder with temperature presets Easy conversion to Standard Heat Welder
- Programming up to 100 weld presets
- Pneumatic shuttle work trays up to 2000x2000mm
- ZTG AT™ Autotuning and ultrafast ARC limiter
- ZTG iCom™ internet communication module
- Z-REG™ Weld cycle register unit
- Intelligent weld cycle start and switchable power output settings
- Safe fully gated HF work area
- Hi-Q cavity stable HF generator
- Ultra-fast sensitive ARC sensor
- CE, EMC, EU, FCC and OSHA compliant

Technical specifications	ZD3PD	ZD4PD	ZD6PD	ZD10PD	ZD15PD	ZD20PD
Emitted maximum HF output power	3 kW	4 kW	6 kW	10 kW	15 kW	20 kW
Installed power maximum	4,5 kW	6 kW	9 kW	15 kW	22 kW	30 kW
Power supply	230 V ; 50 Hz	400 V ; 50 Hz	400 V ; 50 Hz	400 V ; 50 Hz	400 V ; 50 Hz	400 V ; 50 Hz
Main Fuse	20 A	25 A	32 A	40 A	40 A	50 A
Working frequency	27.12MHz (+/-0.6%)					
Power tube (metal-ceramic triode)	Air cooled metal-ceramic triodes 7T/3CX/ITL series					
Antiflash system (electrode protection system)	Standard - Thyristor					
HF Auto-tuning System (ATS)	Optional					
PLC control system	MITSUBISHI with touch panel HMI					
Electrode pneumatic press (press force for 0,4-0,7MPa)	250-500 kG	250-500 kG	350-750 kG	600-1200 kG	600-1200 kG	900-1900 kG
Compressed air consumption max.	12 nl/cycle	12 nl/cycle	18 nl/cycle	44 nl/cycle	44 nl/cycle	68 nl/cycle
Electrode platen working stroke	100 mm	100 mm	100 mm	150 mm	150 mm	150 mm
Distance (table - electrode platen)	120 mm	120 mm	120 mm	170 mm	170 mm	170 mm
Welding table dimensions (effective work space for each station)	400 x 600 mm	400 x 600 mm	400 x 700 mm	500 x 800 mm	600 x 800 mm	800 x 1000 mm
Electrode platen dimensions	350 x 500 mm	350 x 500 mm	350 x 600 mm	450 x 700 mm	550 x 700 mm	750 x 900 mm
Weld surface (per work cycle) max.	75 cm <sup>2</sup>	100 cm <sup>2</sup>	150 cm <sup>2</sup>	250 cm <sup>2</sup>	375 cm <sup>2</sup>	500 cm <sup>2</sup>
Preheated electrode platen	Standard (adjustable 30°C-100°C)					
Protective HF radiation shield	Standard					
Weight	350 kg	400 kg	500 kg	700 kg	750 kg	900 kg