

TARPA PRO series HFWA

Automated Traveling Head High Frequency Welder for Tarpaulins, Tents, Billboards, Signs, Truck covers

- Precision laser guided rail driven HF welding head
- High efficiency automated HF weld cycles
- Universal usage for PVC, PU, Tarpaulin film
- Easy material positioning table with laser guides
- Work table length up to 25 m with optional vacuum system
- C-frame strong structure for excellent work ergonomics
- Precision linear motion with frequency inverter
- SafeDOWN™ operator safety system
- TZG AT™ Autotuning and ultrafast ARC limiter
- Smooth switchable power output settings
- Touch screen programmable HMI / PLC



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ZEMAT TG is a leading design company and manufacturer of traveling head high frequency welding machines. Traveling Head TARPA PRO HF Welder is designed specifically for production of large format tarpaulins, tents, shading systems, truck covers, swimming pool covers, airline hangars, billboards, signs, side curtains and many other general technical fabric joining. Machine can be fitted with special curved electrodes for welding round window profiles made of clear PVC and any other shapes requiring precision sealing.

TARPA PRO model is equipped with special high precision linear motion gear, controlled by frequency inverter and glide-on railing to achieve a perfect continuous straight line seam. Work table has two gutters for easy material handling. Optional vacuum work table with the length up to 25 meters and laser guides allow handling of large format materials and precision weld positioning for fast production setup.

With the use of touch screen HMI and programmable PLC operator can easily input multiple weld/seam recipes. TARPA PRO series have HF power outputs from 6kW to 30kW for heavy production load and reinforced heavy duty fabrics. Automatic weld cycles, pneumatically driven welding bar, electronic motion counter controlling the length, traveled distance and weld cycle number make this machine a perfect tool for high end product where precision, durability and strength is the key.

ZEMAT TG always puts quality, precision, efficiency and safety first!

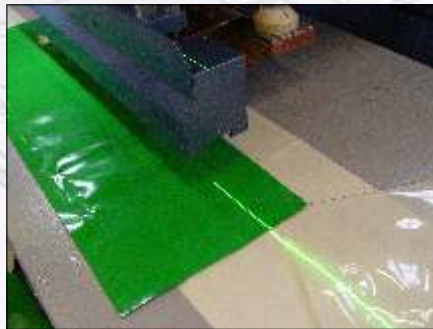
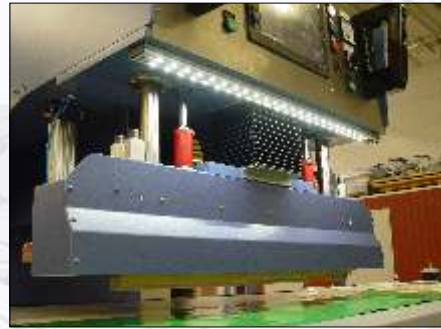
TARPA PRO can be easily upgraded and converted into a Keder production machine with the use of special attachment and weld electrode.

Main applications:

- Large format technical textiles with welds up to 50mm wide
- Tents, shading systems, truck covers, swimming pool covers
- Tarpaulins, airport hangars, side curtains
- Advertising signs and billboards
- Flood dams and water tanks
- Swimming pools, ground liners, ecomembranes

Technical and Safety Features:

- Precision linear motion/weld accuracy to 0.1mm
- Work table length per customer request (up to 30m)
- 2 work table gutters and deep space behind electrode for material handling
- Built in electrode illumination
- Fully automated weld cycles with multiple recipes
- ZTG AT™ Autotuning HF power output system
- Simple to setup and easy to operate
- Optional vacuum table system for easy positioning
- High production capacity with programmable PLC
- Backflow HF emission protection
- Output overload protection with warning indicator/reset
- Electrodes up to 1200mm in length
- ZTG SafeDOWN™ anti-crush safety system
- Hi-Q cavity stable HF generator
- Ultra-fast sensitive ARC sensor
- Manual, semi-automatic and automatic operation
- CE, EMC, EU, FCC and OSHA compliant



Technical specifications	HF6WA	HF10WA	HF15WA	HF20WA	HF30WA
HF output force on electrode max.	6 kW	10 kW	15 kW	20 kW	30 kW
Installed force	9 kW	15 kW	22 kW	30 kW	45 kW
Power supply	400 V ; 50 Hz				
Head protection	32 A	40 A	40 A	50 A	63 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				
PLC control system	MITSUBISHI with touch panel HMI				
Electrode pneumatic press (press force for 0,4-0,7MPa)	350 – 750 kG	350 – 750 kG	500 – 1 000 kG	500 – 1 500 kG	700 – 1 500 kG
Compressed air consumption max.	30 nl/cycle	30 nl/cycle	38 nl/cycle	38 nl/cycle	60 nl/cycle
Electrode working stroke (with electrode)	20 – 160 mm possibility to stop on any height				
Electrode length max.	800 mm	1000 mm	1000 mm	1200 mm	1200 mm
Welding surface each working cycle max.	180 cm ²	300 cm ²	450 cm ²	600 cm ²	900 cm ²
Table width	900 mm	1000 mm	1200 mm	1200 mm	1200 mm
Space behind electrode	500 mm	600 mm	600 mm	700 mm	800mm
Table length	For customer request (6 – 20 meters)				
Welder drive	Electric motor drive, speed 0,2 – 0,5 m/s				
Capacitor reducing HF radiation	Stationary moveable, pneumatic lowering				
Quick release chuck for quick electrode change	Standard				
Weight (without table)	500 kg	800 kg	1000 kg	1000 kg	2000 kg

** Custom built tooling and electrodes available upon request. We have our own in-house tooling shop which will make any electrodes and dies your production requires.

** Each machine is built according to customers needs and production specifications. We can modify and adjust any of the above parameters if required at additional cost.

** Our welders fully comply with CE regulations for EU Radio Frequency Machine Standards, EMC, FCC and OSHA and have EQM European Quality Mark.