



TARPA PRO

**Automated Traveling Head High Frequency Welder
for Tensile structures, Membranes, Tents, Billboards, Oil Booms**

- Frequency inverter rail driven HF welding head
- Linear ball bearing drive for high precision continuous welds
- High efficiency HF weld cycles with 6/10/15/20 or 25kW output power
- Sealing efficiency from 1kW: 40cm² for standard PVC materials
- Work table length up to 50m with optional vacuum system
- Universal usage for PVC, PU, TPU, reinforced technical textiles
- Easy material positioning with back trough and laser guides
- C-frame rolled steel structure for excellent strength & work ergonomics
- 1500mm electrode length (1700mm for Tarpa PRO 25)
- PE, PP weldability with optional impulse electrode
- 10" touch screen color HMI panel with expanded functionality
- Memory storage above 1000 recipes and USB, WAN/LAN IO
- SafeDOWN™ electrode motion safety system
- WCS™ Weld Check System
- ATST™ Autotuning and ultrafast ARC limiter (solid-state antflash)
- Built in VPN client and VNC server



Zemat Technology Group is a leading European design and manufacturing company of high frequency welding machines and auxiliary processing equipment.

TARPA PRO - quick overview

- ▀ **TARPA PRO** HF welder heat sealer is designed specifically for production of large format tensile structures, membranes, tarpaulin, tents, oil booms, truck covers, swimming pool liners & covers, airline hangars, large billboards, fast doors, side curtains, etc. Machine can be equipped with special impulse electrode for welding non-HF weldable fabrics made of PE and PP, as well as FlexEL 'soft' multilayer welding electrode and curved HF electrodes for sealing round window profiles made of clear PVC and any other shapes requiring precision welding.
- ▀ **TARPA PRO** model is equipped with special high precision ball bearing linear motion gear, controlled by frequency inverter and glide-on railing to achieve a perfect continuous straight line seam. Optional vacuum work table with the length up to 50 meters and laser guides allow handling of large format materials and precision weld positioning for fast production setup.
- ▀ Full advanced programming functionality, including ATS™ auto-tuning, WCS™ weld control systems and expanded linear weld control (spot sealing, cycle left-right-left welds, parking and starting at any end, overlap welds) is achieved thanks to onboard PLC integrated with 10" touch screen HMI.
- ▀ **TARPA PRO** machines have HF power output 6/10/15/20kW and optionally 25kW for large production loads and reinforced heavy duty fabrics, effectively providing between 240-1000cm² of welded surface with one weld cycle.

Features:

- ▀ Back table trough and deep space behind electrode for easy material handling
- ▀ Optional front trough (attached or sliding)
- ▀ Built in electrode illumination and optional linear laser guides (2 sides/2 lines)
- ▀ Fully automated weld cycles with more than 1000 weld cycle recipes memory
- ▀ ATS™ Autotuning HF power output system
- ▀ WCS™ Weld Check System - verifying quality of welds with preset parameters
- ▀ Simple to setup and easy to operate, intuitive 10" color touch screen HMI
- ▀ High production capacity with fully programmable PLC
- ▀ Optional Swing Arm HMI assembly for easy 270° access to welding area
- ▀ Backflow HF emission protection and EMI grid filter
- ▀ QuickGRIP HF electrodes 1500mm and up to 70mm wide
- ▀ SafeDOWN™ anti-crush electrode motion safety system
- ▀ Hi-Q5 EcoHF new generation stable and efficient HF generator
- ▀ Ultra-fast sensitive ARC sensor & output overload protection
- ▀ Manual, semi-automatic and automatic operation
- ▀ CE, EMC, EU, FCC and OSHA compliant

Optional features:

- ▀ Oil temperature stabilization (30-60°C)
- ▀ Work table vacuum system panels for easy material handling
- ▀ Double side, double line laser line projectors – red or green
- ▀ Front trough – attached or sliding under the work table
- ▀ QuickGRIP HF electrodes 1700mm (with Tarpa PRO 25 machine)

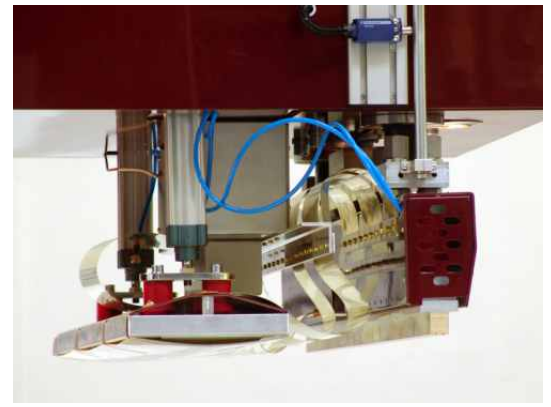
Main applications:

- ▀ Large format technical textiles with welds up to 50m long and 70mm wide
- ▀ Single weld cycles up to 1000cm² welded area
- ▀ Tensile structures, tents, shade systems, truck covers and side curtains
- ▀ Swimming pool liners and covers, oil booms, flood dams and water tanks
- ▀ Airport hangars, portable storage structures, containment pools, ground liners
- ▀ Advertising signs and large format billboards

Technical specification

Tarpa Pro 6 Tarpa Pro 10 Tarpa Pro 15 Tarpa Pro 20 Tarpa Pro 25

HF output power	6 kW	10 kW	15 kW	20 kW	25 kW
Weld surface (up to 40cm ² from 1kW)	240 cm ²	400 cm ²	600 cm ²	800 cm ²	1000 cm ²
Installed power	9 kW	15 kW	22 kW	30 kW	38 kW
Power supply	3x400 V ; 50Hz				
Main fuse	32 A		40 A		50 A
Working frequency	27,12 MHz ± 0,6% Hi-Q Gen5 HF Generator				
Electron tube	air cooled 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	10" touch screen HMI with PLC				
Electrode length	1500 mm				1700 mm
Electrode pneumatic press (at 0,8MPa)	1600 kg			2400 kg	
Electrode pressure control (at 0,1-0,8MPa)	280 - 1600 kg		350 - 2400 kg		
Electrode stroke	up to 160 mm (ability to stop at any height)				
Work table width (without trough)	1100 mm				
Space behind electrode (with trough)	1000 mm				
Trough size	360 x 260 mm				
Electrode mount	QuickGRIP, pneumatic				
Grounding foot	standard, pneumatic drive				
Working table length	up to 50 m; sections: 800 mm				
HF welding head drive	automatic, inverter-controlled electric motor; linear speed up to 0,5 m/s.				



- ▀ 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 fully comply with CE regulations for EMC, FCC and OSHA standards.

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