

**SUPRA PRO series HFSPZ**

**Traveling Head High Frequency Welder  
for Stretch Ceilings PVC Films and Harpoons**

- High HF weld efficiency and speed of production
- Universal usage for PVC film and Harpoon welding
- 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
- Programmable automatic weld cycles
- Precision linear motion with frequency inverter
- SafeDOWN™ anti-crush safety system
- TZG AT™ Autotuning and ultrafast ARC limiter
- Smooth power output settings
- Touch screen HMI and programmable PLC



[www.zemat.com](http://www.zemat.com)

Phone: +48 042 632 84 84 | Zemat Technology Group, Ltd.  
+48 042 630 25 79 | Brukowa 26  
Fax: +48 042 633 15 67 | 91-341 Lodz, Poland



ZEMAT TG is a leading designer and manufacturer of traveling head high frequency welding machines. Traveling Head SUPRA PRO HF Welder was developed specifically for production of large format Stretch Ceiling (French Ceiling) interior design elements. The machine is equipped with special high precision linear motion gear controlled by frequency inverter to achieve a perfect continuous weld "invisible seam" weld.

SUPRA PRO HF Welder has universal application for both: PVC film welding and Harpoon welding with the use of special patented IAW™ "Inverted Airplane Wing" shape tooling. Optional vacuum work table and laser guides allow handling of thin films and precision positioning for fast production setup and weld.

With the use of touch screen HMI and programmable PLC operator can easily input multiple weld/seam recipes. The standard HF power output is 4kW. 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 and aesthetics are the key.

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

The machine can be easily upgraded and converted (if needed) into standard straight bar HF welder, advertising banner/billboard HF welder or Keder production machine with the use of special attachment and electrode.

### Main applications:

- Large format PVC Stretch Ceiling interior design elements
- Indoor and outdoor lightning fixtures
- 3D and molecular decoration structures
- Advertising signs and billboards
- Protective clothing
- Reflective materials and signage

### Technical and Safety Features:

- Precision linear motion/weld up to 0.1mm
- Custom designed for specialty PVC or PU films
- Fully automated weld cycles
- ZTG AT™ Autotuning HF power output system
- Simple setup and easy to operate
- Optional vacuum table system
- High production capacity with programmable PLC
- Backflow HF emission protection
- Output overload protection with warning indicator/reset
- Weld/cut electrodes for "invisible seam" welding
- 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

\*\* 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.



| TECHNICAL SPECIFICATIONS            | HFS4PZ                      |
|-------------------------------------|-----------------------------|
| Electrical supply                   | 3x400V; 50Hz                |
| Installed power (max)               | 6kW                         |
| Output power (max)                  | 4kW                         |
| Welding surface                     | 100cm <sup>2</sup>          |
| Work table length                   | up to 25 meters             |
| Work table size (weld surface)      | 240 x 1000 mm               |
| Electrode drive                     | pneumatic                   |
| Electrode stroke                    | 100mm                       |
| Space behind electrode              | 350mm                       |
| Downstroke pressure w/0.6MPa        | 300kg                       |
| Working pressure                    | 0.6MPa                      |
| Welding electrode length (standard) | 670mm                       |
| Programmable linear motion          | 0.2-0.5m/sec                |
| Compressed air usage                | ~ 12nl/cycle                |
| Weld time                           | regulated to 0.1sec         |
| Press/cooling time                  | regulated to 0.1 sec        |
| Working frequency                   | 27.12 (+/-0.6%)             |
| Air Cooled metal-ceramic            | Air Cooled metal-ceramic    |
| Weight (without work table)         | ~ 400kg                     |
| Work table width (with gutter)      | 980mm                       |
| Work table length                   | up to 25m                   |
| Dimensions (work unit)              | w: 1000 x d:1200 x h:1500mm |