

OPTIMA

Rotary turntable high frequency welder

- Turntable with 2, 4, 6 or 8 workstations
- Pneumatic or hydraulic welding press
- 1, 2, 3 or 4 HF welding heads operation
- Production speed 5-10 cycles/min
- Touch screen control panel with PLC
- High frequency generator integrated with press
- Fully automated HF weld cycles with adjustable rotating speed
- Precision (to 0.1 mm) indexing rotary work table
- High pressure sealing with enhanced ram guidance
- Memory storage above 1000 recipes
- Safety light curtains on all work stations
- Optionally: Pick-and-Place feeders or robotic arms
- EMC gates and shielding on all HF welding heads



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HF Welders - Impulse Welders - Heat Sealers - Boxmakers - Die Cutters
Thermoformers - Hydraulic and Pneumatic Presses - Custom machines

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Quick overview

- Optima is a turntable high frequency welder. Machine can be built with 2, 4, 6 or 8 workstations. Machine can be used for production in many various industries: automotive, medical, packaging, recreation, textile etc. It provides high power HF output and a custom mandrel style press for a versatile and reliable sealing/welding process.
- Optima is equipped with special high precision rotary indexing gear controlled by frequency inverter. The machine operation is based on step by step technology with possibility of multiple welds in one cycle.
- With the use of touch screen HMI and programmable PLC operator can easily input multiple weld/seam recipes. Machine provides automatic and manual weld cycles, optional preheated or cooled weld platen, pneumatic or hydraulic weld head drive and optional solid state generator. It is a perfect tool for demanding production processes when precision and durability are the most important factors.

Applications

- Medical equipment: blood, urine, colostomy and drainage bags
- Rehabilitation: DVT, lumbar support, knee & elbow braces
- Automotive: pneumatic lumbar support systems, sun visors, fuel and air assembly parts
- Packaging: clam-shell and blister PVC, PET-G, A-PET
- Stationery: covers, albums, business card holders, notebooks
- Elements of garments and protective clothing
- Advertising, embossed logos, traffic signs

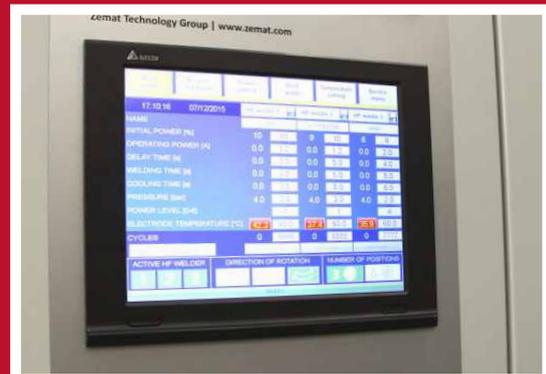
Features

- Ideal for all HF weldable thermoplastics and textiles (automotive and medical industry)
- Machine calibration and process validation according to medical or automotive standards
- Freestanding control panel with touch screen HMI and onboard PLC
- C-frame welded steel structure with integrated HF generator
- Pneumatic or hydraulic electrode drive
- ATST™ Autotuning HF power output system
- Fully programmable min/max smooth HF power output
- Ultra-fast sensitive ARC sensor & output overload protection
- ZTG iCom internet connection module
- Built in VPN client and VNC server
- Customized size work tables
- Safety gate at tooling column
- Safety light curtains on all work stations
- Hi-Q cavity stable and efficient HF generator (solid state generator available on request)
- EMC gates and shielding on all HF welding heads
- Electrode heating/cooling and loaders/unloaders (option)
- Pick-and-Place feeders or robotic arms (option)

Technical specification

- Number of workstations: 2, 4, 6, 8
- Number of HF welding heads: 1, 2, 3 or 4
- Power supply: 3x400V; 50Hz (or by request)
- Output power: 3-25 kW
- Working frequency: 27,12 MHz stabilized ($\pm 0.6\%$)
- High-Q Gen5 STANDARD stabilized HF generator integrated with press (option 1)
- RFT-Gen7 Solid State HF generator with DMS Dynamic Matching System (option 2)
- Antiflash system: ultra-fast solid state ZTG AntiFlash™
- Autotuning system: standard, ZTG ATST™
- Work tables sizes: depending on number of workstations (per request)
- Downstroke pressure: pneumatic max: 4T or hydraulic max: 8T
- Stroke opening: 200-400mm
- Work table turn indexing precision: to 0.1mm
- Production speed 5-10 cycles/min

Custom built tooling and electrodes available upon request. Each machine is built according to customers needs. Parameters can be modified or adjusted - if required - at additional cost.



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