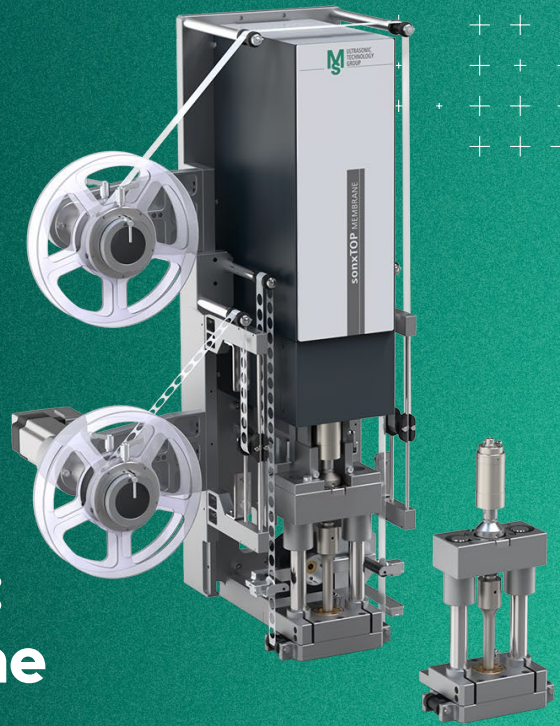


INNOVATIVE COMPLETE SOLUTION

MS sonxTOP MEMBRANE: Punching and sealing in one process step

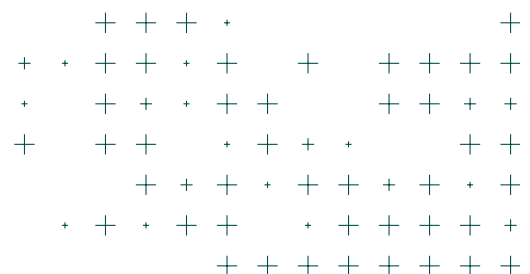


To save material and production costs of plastic parts with integrated membranes: MS sonxTOP MEMBRANE. Whether as a manual workstation or integrated in an automation system, the modular solutions integrates punching and sealing of the membrane in one process step (among others DAE [pressure equalization elements]) in a cycle time of less than 2 seconds. In short, the ultrasonic machine combines four process steps. Strip transport with splice control, mechanical punching out of the strip material, transport of the membrane die-cuts to the sealing position and lastly, sealing of the die-cuts by means of ultrasonic on the plastic components.

To reduce machine downtime to a minimum, when changing the punching and sealing tools, the MS sonxTOP MEMBRANE has an innovative quick tool change system which enables tools to be changed in under five minutes (without the cutting gap between the sonotrode and the punching die needing to be adjusted).

BENEFITS

- + Available as a manual workstation (table machine) and for integration into automation systems as a stand and inline module
- + Punching and welding in one work step
- + Material savings due to individually adjustable cycle widths
- + Integrated leak test (optional)
- + Integrated belt monitoring (optional)
- + Splice point control (optional)
- + Job change possible, in just a few minutes, due to preset punch-seal tools
- + Unbeatable energy efficiency and high positioning accuracy thanks to integrated servo drive technology
- + You are investing in intelligent and seamless connectivity for your Industry 4.0 production

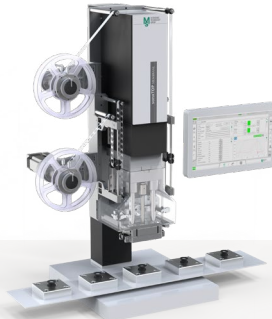


APPLICATION EXAMPLES

- Electronics housing
- Lamps and lighting systems
- Lambda probe connectors
- Photovoltaic junction boxes
- Solar module junction boxes
- Battery packs for e-bikes
- Sensor housing
- Car keys
- Automatic brake systems
- Gear box control
- Tire inflation pressure sensors
- Headlight control in passenger car
- Tank ventilation
- Pedestrian protection sensors
- Sound generators for electric cars
- Insulin pumps
- Medical filters
- Avalanche beacons



MS sonxTOP MEMBRANE table machine



MS sonxTOP MEMBRANE stand system



MS sonxTOP MEMBRANE inline system

TECHNICAL DATA

Machine model	MS sonxTOP in 20 kHz and 35 kHz
Machine weight of inline system	approx. 80 kg
Dimensions (WxDxH) of inline system	600 x 270 x 920 mm
Workspace height (workpiece holder & workpiece)	min. 60 mm to max. 160 mm (optionally up to 260 mm in 25 mm increments)
Welding phases	force controlled / speed controlled
Control	Time, energy, power, relative path, absolute path, absolute power
Feed rate	max. of 240 mm/s
Cycle times	1.5 seconds
Color HMI display	15.6 or 18.5 inch
Language selection	14 languages
Interfaces	USB; optional: Network, fieldbus, 30 digital inputs and outputs
Punch diameter	8–22 mm in 0.5 mm increments, available as standard
Min. width of material	Punching diameter + 3 mm
Roll diameter of punch–seal module	240 mm
Roll core of punch–seal module	76 mm

OPTIONS

MS sonxWARE Remote	Parameterization via MS sonxTOP HMI
MS sonxWARE Gateway	Profinet, EtherCAT, EthernetIP, OPC UA, Profibus (V1.0), others on request
MS sonxWARE Network	Network access to the machine
MS sonxWARE Scan	defined scanner of the MS sonxTOP (handheld scanner or integrated scanner)
MS sonxWARE RFID	Sonotrode detection and user identification
MS sonxWARE USB Administration	Machine access via USB / operator levels which can be parametrized and page authorization

