

# MS sonxTOP

Innovative ultrasonic servo presses: OPUS, NEXUS, FUSION, GENESIS



# WE TRUST IN OUR TECHNOLOGY

Our latest generation of ultrasonic servo presses offer unrivaled precision for maximum machine productivity.

Our specialists are always asking themselves how to improve our ultrasonic servo presses even further, so that we can offer the ideal solution for you, our customers in the automotive, packaging technology, medical technology, textile and consumer goods industries.

WE GO TO EXTREMES ENSURING OUR EQUIPMENT IS OF THE HIGHEST QUALITY WHEN IT ARRIVES AT OUR CUSTOMERS SITES.

Our latest generation of ultrasonic servo presses, MS sonxTOP, was developed out of innovative spirit. With our specially developed, patented and groundbreaking preciSer® servo drive, our MS sonxTOP ultrasonic servo presses offer unrivaled precision for maximum machine productivity. Thanks to a 100% electric drive concept that operates without compressed air, our servo presses are the ideal choice for clean room production as well as manufacturing sites which do not wish to use costly compressors.

A DEVELOPMENT „MADE IN GERMANY“

The MS ultrasonic servo presses are available in three versions: table top, column and inline machine. All versions in the series have the same servo drive concept allowing developed processes to easily transfer from one MS sonxTOP machine to another. The models are complemented by appropriate accessories such as sound-insulating cabinets and work tables to suit your needs.



## FREE OF DEFLECTION

The patented MS paralliCer® technology eliminates any deflection during processes.

## INNOVATION

Our specially developed MS preciSer® servo drive offers unrivaled precision.

## PROCESS MONITORING

Comprehensive process monitoring with simple reading and saving of welding parameters.

## CONNECTIVITY

Multiple ultrasonic servo presses can be networked and centrally operated with a single controller.

## INTEGRATED TENSILE TEST

Welding and testing with just one machine.

# THE CENTER OF EXCELLENCE FOR ULTRASONIC PROCESSES

In our application technology labs, a team of highly trained ultrasonic experts perform detailed feasibility studies and test runs to find the optimal solutions for your applications.

## THE ULTRASONIC LAB

- Joint design consultation by ultrasonic experts and application technicians
- Tests on pre-production parts
- Feasibility studies
- Verification of process parameters for an ideal welding process
- Leak test
- Burst pressure tests
- Thermography
- Tensile tests
- Microtome sections of welding seams
- Validation processes

## SHOWROOM

Here you get a detailed insight into the possibilities of the latest ultrasonic technologies:

- Training course delivery
- Application demonstrations
- Product range presentations



Individually adapted for you: our workflow

## 1 | PROJECT PLANNING

Our project team is ready to assist you right from the product development stage, ensuring that the geometries of your product can be adapted to the welding process, or adapting our welding process to your product.

## 2 | APPLICATION TECHNOLOGY

With a wealth of expertise, inventiveness and a fully equipped testing laboratory, our application engineers are able to simulate almost any requirement and offer you the best solution.

## 3 | MACHINE CONCEPT

We will develop an advanced machine concept that is tailored to your requirements. Thanks to the intelligent interplay of several departments, we will provide a feasibility study and a complete 3D model along with our offer for your machine.

## 4 | PROJECT EXECUTION

True to the motto "one face to the customer", you will have a personal sales consultant and a dedicated project manager for each project. They will accompany you from the initial enquiry to the final handover of the machine and are on hand with their knowledge as your first port of call.

## 5 | COMMISSIONING

We tailor our training content to the specific machine and how it fits into your production process.

## 6 | AFTER-SALES-SERVICE

Our highly qualified service staff are on hand to offer you immediate assistance, including on-site service and emergency interventions, to prevent costly machine downtimes. We are there for you!

SKILLS AND KNOWLEDGE OF OUR QUALIFIED EMPLOYEES, AS WELL AS THE LATEST TECHNOLOGY, ARE OUR SUCCESS FACTORS FOR FIRST-CLASS MACHINES.

THOMAS BAUMEISTER, COO

# THREE MODEL VERSIONS FOR ALL OPERATING PROCESSES

Whether you are looking for an inline, stand mounted or table top machine, your specific production process can be handled perfectly by our model versions.

## A | INLINE MACHINE

- incredibly simple integration of the welding unit into automated machine environment
- slim inline welding unit for space-saving integration with minimal footprint
- rapid machine positioning using universal assembly plate
- flexible installation of the weld process controller with operating display
- comprehensive networking of several machines
- highly recommended for large quantities and little product variety

## B | STAND MOUNTED MACHINE

- incredibly simple integration of the stand mounted machine into automated machine environment
- rapid machine positioning using universal assembly foot plate
- automatic activation of the weld process
- flexible installation of the weld process controller with operating display
- comprehensive networking of several machines
- highly recommended for large quantities and little product variety.

## C | TABLE TOP MACHINE

- highly flexible use as a standalone machine
- manual operation of the weld process
- 2-handed operation with choice of different operation elements
- ergonomic and easy to operate
- tool-free quick changes of the resonant unit and workpiece nest
- highly recommended for producing a large number of variants and for frequent application changes



A —



| C



## MS sonxTOP GENESIS (NEWTON)

Our top model offers all the options and advantages of our servo presses, including MS paralliCer® technology.

<b>FEATURES</b>	<ul style="list-style-type: none"> <li>• MS Tensile Test: simplified tensile test function</li> <li>• MS Log: log function for monitoring specified pages</li> <li>• MS USB User Administration: user log in via USB stick</li> <li>• MS Extended I/O Package: 30 inputs/outputs</li> <li>• MS Network: simple data exchange between machine and PC</li> <li>• MS Sequence Setup: simple step-by-step programming to define your preferred program sequences</li> <li>• Further software and hardware options can be found in the technical data sheets</li> </ul>
<b>COMPONENT MEMORIES</b>	<ul style="list-style-type: none"> <li>• Recipe management of up to 1,000 welding recipes</li> </ul>
<b>GENERATOR OUTPUT</b>	<ul style="list-style-type: none"> <li>• 20 kHz / 2,500W, 4,000W, 5,000W or 6,000W</li> <li>• 30 kHz / 2,000W</li> <li>• 35 kHz / 1,000W</li> </ul>
<b>FORCES</b>	<ul style="list-style-type: none"> <li>• Force range 20 kHz / 30 kHz: 10 – 3,000 N (NEWTON: 20 kHz, 1,000 – 9,000 N)</li> <li>• Force range 35 kHz: 10 – 1,000 N</li> </ul>
<b>CONTROLLER</b>	<ul style="list-style-type: none"> <li>• Combination of turn-off options STANDARD / VARIO / KOMBI</li> <li>• Time</li> <li>• Energy</li> <li>• Absolute / relative path</li> <li>• Absolute performance</li> <li>• External turn-off</li> </ul>
<b>PROFILING</b>	<ul style="list-style-type: none"> <li>• 10 levels + 2 holding forces (force, speed, amplitude)</li> </ul>
<b>DISPLAYS</b>	<ul style="list-style-type: none"> <li>• 17.3 inch</li> </ul>
<b>INTERFACES</b>	<ul style="list-style-type: none"> <li>• USB 2.0</li> <li>• Ethernet</li> </ul>

## MS sonxTOP FUSION

The MS sonxTOP FUSION, our basic model and little sister to the Genesis, is also a powerful and reliable machine.

<b>FEATURES</b>	<ul style="list-style-type: none"> <li>• MS Tensile Test: simplified tensile test function</li> <li>• MS Log: log function for monitoring specified pages</li> <li>• MS Extended I/O Package: 15 inputs/outputs (3 potential-free outputs)</li> <li>• MS Network: simple data exchange between machine and PC</li> <li>• MS Sequence Setup: simple step-by-step programming to define your preferred program sequences</li> <li>• Further software and hardware options can be found in the technical data sheets</li> </ul>
<b>COMPONENT MEMORIES</b>	<ul style="list-style-type: none"> <li>• Recipe management of up to 300 welding recipes</li> </ul>
<b>GENERATOR OUTPUT</b>	<ul style="list-style-type: none"> <li>• 20 kHz / 2,500W, 4,000W, 5,000W or 6,000W</li> <li>• 30 kHz / 2,000W</li> <li>• 35 kHz / 1,000W</li> </ul>
<b>FORCES</b>	<ul style="list-style-type: none"> <li>• Force range 20 kHz / 30 kHz: 10 – 3,000 N</li> <li>• Force range 35 kHz: 10 – 1,000 N</li> </ul>
<b>CONTROLLER</b>	<ul style="list-style-type: none"> <li>• Combination of turn-off options STANDARD / VARIO / KOMBI</li> <li>• Time</li> <li>• Energy</li> <li>• Absolute / relative path</li> <li>• Absolute performance</li> </ul>
<b>PROFILING</b>	<ul style="list-style-type: none"> <li>• 5 levels + 2 holding forces (force, speed, amplitude)</li> </ul>
<b>DISPLAYS</b>	<ul style="list-style-type: none"> <li>• 17.3 inch</li> </ul>
<b>INTERFACES</b>	<ul style="list-style-type: none"> <li>• USB 2.0</li> <li>• Ethernet</li> </ul>



## MS sonxTOP NEXUS

Our standard model in the MS sonxTop servo press series, the MS sonxTOP NEXUS offers good value for money with an adequate set of options.

FEATURES	<ul style="list-style-type: none"> <li>MS Sequence Setup: simple step-by-step programming to define your preferred program sequences</li> <li>Further software and hardware options can be found in the technical data sheets</li> </ul>
COMPONENT MEMORIES	<ul style="list-style-type: none"> <li>Recipe management of up to 100 welding recipes</li> </ul>
GENERATOR OUTPUT	<ul style="list-style-type: none"> <li>20 kHz / 2,500W or 4,000W</li> <li>30 kHz / 2,000W</li> <li>35 kHz / 1,000W</li> </ul>
FORCES	<ul style="list-style-type: none"> <li>Force range 20 kHz / 30 kHz: 50 – 3,000 N</li> <li>Force range 35 kHz: 50 – 1,000 N</li> </ul>
CONTROLLER	<ul style="list-style-type: none"> <li>Time</li> <li>Energy</li> <li>Absolute / relative path</li> <li>Absolute performance</li> </ul>
PROFILING	<ul style="list-style-type: none"> <li>3 levels + 1 holding force (force, speed, amplitude)</li> </ul>
DISPLAYS	<ul style="list-style-type: none"> <li>15.6 inch</li> </ul>
INTERFACES	<ul style="list-style-type: none"> <li>USB 2.0</li> <li>Ethernet</li> </ul>

## MS sonxTOP OPUS

The MS sonxTOP OPUS offers an innovative and cost-effective entry into the world of MS Ultrasonic servo presses.

FEATURES	<ul style="list-style-type: none"> <li>MS Sequence Setup: simple step-by-step programming to define your preferred program sequences</li> <li>Further software and hardware options can be found in the technical data sheets</li> </ul>
COMPONENT MEMORIES	<ul style="list-style-type: none"> <li>Recipe management of up to 30 welding recipes</li> </ul>
GENERATOR OUTPUT	<ul style="list-style-type: none"> <li>20 kHz / 2,500W</li> <li>30 kHz / 2,000W</li> <li>35 kHz / 1,000W</li> </ul>
FORCES	<ul style="list-style-type: none"> <li>Force range 20 kHz / 30 kHz: 50 – 3,000 N</li> <li>Force range 35 kHz: 50 – 1,000 N</li> </ul>
CONTROLLER	<ul style="list-style-type: none"> <li>Time</li> <li>Energy</li> <li>Absolute / relative path</li> </ul>
PROFILING	<ul style="list-style-type: none"> <li>1 level + 1 holding force (force, speed)</li> </ul>
DISPLAYS	<ul style="list-style-type: none"> <li>15.6 inch</li> </ul>
INTERFACES	<ul style="list-style-type: none"> <li>USB 2.0</li> <li>Ethernet</li> </ul>





## ADD-ONS AND ACCESSORIES

With our add-ons and accessories you can optimize your sonxTOP ultrasonic servo press even more.

### A | ERGONOMIC WORK TABLE

The ergonomic worktable is available as an expansion for each of the MS sonxTOP Ultrasonic servo presses.

### B | SOUND-INSULATING CABINET

The sound-insulating cabinet for MS sonxTOP ultrasonic servo presses stands for maximum sound insulation, safety and ergonomics. It includes a service door with a safety contact strip. All operating devices can be flexibly positioned.

### C | INDEXED ADJUSTMENT MODULE

The indexed adjustment module with workpiece nest further enhances the effectiveness and quality of ultrasonic welding, sealing and cut-and-seal with the MS sonxTOP models.

### D | FULLY AUTOMATIC FOIL CYCLING DEVICE

Available in various sizes, the foil cycling device MS sonxTOP feeds the protective film to the servo presses fully automatically.

### E | QUICKLY SWITCH APPLICATIONS (OPTIONAL)

Quick and straightforward changing of workpiece carriers and resonant units with no additional tools reduces downtimes.

### F | MS SERVICE APP

With its interactive app, the MS Ultrasonic Technology Group perfectly supplements its portfolio of all your MS ultrasonic machines with a detailed display of process and welding data right to your smartphone. You can send any errors immediately to MS to help aid in support – right from the machine.

# WE ARE THERE FOR YOU

No matter if spare part procurement, service and maintenance or a repair – our MS After-Sales-Service covers everything to your complete satisfaction.

Just because we have delivered your machines, our cooperation need not be over. On the contrary, we offer you the best possible service over the entire machine life cycle. That is why qualified, reliable and effective after sales support is so important to us, because we know that professional service forms the basis for a lasting partnership.

Our original spare parts undergo extensive quality tests. This is how we guarantee the optimal operation, reliability and running time of our machines and thus make your production processes safer and more flexible.

Moreover, our highly qualified service staff are on hand to offer you immediate assistance, including on-site service and emergency interventions, to prevent costly machine downtimes. We are there for you!

### SERVICE AND MAINTENANCE

- + Service operations worldwide
- + personal, solution-oriented support and individual advice
- + Online fault diagnosis and assistance
- + Training for your employees
- + Hotline

### SPARE PARTS PROCUREMENT

- + Quick and competent processing of spare parts delivery with short delivery times thanks to optimized warehousing
- + Machine modifications / extensions
- + Original spare parts in manufacturer quality

### REPAIRS

- + Temporary replacement and rental equipment during repair work



- PRODUCTION SITES
  - MS Ultraschall Technologie GmbH / Spaichingen, GER
  - MS Ultrasonic Technology, LLC / Howell, USA
  - WTP MS Ultrasonics / Belo Horizonte, BRA
  - Shanghai MS soniTEC Co., Ltd. / Jiangyin, CHN
- SALES AND SERVICE PARTNERS

# THINK GLOBALLY – ACT LOCALLY

Our strategic positioning in the market, the development of new or growing sales markets and the proximity to our customers require a global presence. That's why we have global locations – in Germany, the US, Brazil and China, as well as a broad global distribution network of sales and service organizations.



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