Economical production of tubes
Single station welder
for the highest flexibility
weil technology

weil technology is a weil engineering gmbh brand and incorporates different enterprises, which are market and technology leaders in the field of sheet metal processing. Machines and systems for innovative forming, cutting and joining techniques have been designed and manufactured for the global market within the group since 1987.

Our turn-key and fully automated production lines are primarily found in the automotive sector and in the HVAC, housing and container construction and electrical industries. Each company within weil technology focuses on its core competency and together we are able to offer our clients a large pallet of customized system solutions. Our focus is on flexible, rational and efficient production while making use of innovative roll-forming, stamping, laser welding and laser cutting technologies.

weil technology clients value the fact that our system concepts are efficient, reliable and consistently reproduce high quality parts: Shape. Join. Look ahead.
The art of joining

Automatic joining of tube edges is our specialty

The Flexmaster series has been the most reliable longitudinal seam welder for tubes and profiles, with the most diverse dimensions, on the market for many years.

The fully automatic clamping process guarantees the shortest cycle times and consistently optimal welding results.

Automatic aligning and joining of the welding edges and rapid changeover times with automatic diameter changes are trademarks of the Flexmaster series.
Your first step in tube production

Flexmaster:
Offers the highest quality in short tube welding

The Flexmaster series, one of the most successful machines within the group of longitudinal tube welders offered by weil technology, introduces a new machine to its ranks. We offer weil technology quality, short cycle times and optimal welding results, all at a very attractive price. Like all weil technology machines, the Flexmaster also includes automatic changeovers for diameter changes.

After selecting one of the programmes in the memory, the clamping tool automatically adapts to the new clamping position and the corresponding welding parameters are activated.
The „Champion“

Unbeatable when it comes to flexibility in geometry, diameter or tube lengths

Simple operability paired with reliability, automatic loading and unloading up to unmanned production – the Flexmaster will stand up to all of your requirements.

Round or oval geometries are no problem with the patented Flexmaster clamping concept.

This easy-to-operate and compact tube production unit can manufacture different diameters alternately without sacrificing productivity, all within a minimal footprint.
The „Big One“

Solutions for large tube diameters with all the advantages of the Flexmaster Series

To cover diameter ranges up to 1000 mm (39”), the Flexmaster 1000 is equipped with a loading trolley which can position tube bodies up to a length of 2000 mm (78”) for welding.

Technical data Flexmaster 1000/2000

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating range</td>
<td>200 - 1000 mm (8” – 40”)</td>
</tr>
<tr>
<td>Tube length</td>
<td>500 - 2000 mm (20” – 78”)</td>
</tr>
<tr>
<td>Material thickness</td>
<td>0.6 – 1.5 mm (0.024” – 0.059”)</td>
</tr>
<tr>
<td>Material*</td>
<td>mild steel, stainless steel*</td>
</tr>
<tr>
<td>Welding sources</td>
<td>Laser, TIG, Plasma</td>
</tr>
<tr>
<td>Cycle time</td>
<td>~ 60 s (laser welding)</td>
</tr>
</tbody>
</table>

*feasibility with special materials after verification of process
From Blank to Tube

Single units interlinked for flexible production

At the push of a button: high quality, short cycle times, flexible production.

Single production, multiple production with twin welding stations or continuous welding: the Flexmaster can be integrated into an interlinked manufacturing line for the highest productivity possible. Time is money. To make maximum use of its operation range, the welder can clamp and weld several tubes at once in one production cycle.

1. Pallet
2. Destacker
3. Infeed table
4. Roll-forming unit
5. Transfer system
6. Flexmaster
7. Deposit table
Blanks stacked on an stationary pallet or a rotary pallet-changer are moved to the infeed table of the rollforming machine by a destacker. A servo-driven transport system unloads the roll-forming machine and pushes the non-welded tube into the Flexmaster. After welding, an unloading unit on the back of the machine removes the tube and drops it on a conveyor belt.

**Roll-forming and tube welding machines in a fully automated process**
Quality

Your advantages are high quality components and increased profitability

When evaluating the finished tube we do not only evaluate the quality of the weld seam but the total process chain from material to cutting, roll-forming, clamping and welding.

Visual analysis of the weld seam gives a very good picture of seam irregularities, penetration, holes, undercut, seam width, discoloration and spots.

Testing by expanding the tubes to the final dimensions and cone tests show the high strength of the weld seams. This is the basis for high quality parts.
# Flexmaster Series

<table>
<thead>
<tr>
<th></th>
<th>Flexmaster 400/1250</th>
<th>Flexmaster 400/2000</th>
<th>Flexmaster 600/1500 D</th>
<th>Flexmaster 1000/2000</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tube diameter</strong></td>
<td>76 - 400 (600) mm</td>
<td>76 - 400 (600) mm</td>
<td>100 - 600 mm</td>
<td>200 - 1000 mm</td>
</tr>
<tr>
<td></td>
<td>(2.9” - 15.7” (23.62”))</td>
<td>(2.9” - 15.7” (23.62”))</td>
<td>(3.93” - 23.62”)</td>
<td>(8” – 40”)</td>
</tr>
<tr>
<td><strong>Tube length</strong></td>
<td>100 - 1270 (1525) mm</td>
<td>100 - 2000 mm</td>
<td>200 - 1525 mm</td>
<td>500 - 2000 mm</td>
</tr>
<tr>
<td></td>
<td>(3.93” - 50” (60’))</td>
<td>(3.93” - 78.74”)</td>
<td>(7.87” - 60”)</td>
<td>(20” – 78”)</td>
</tr>
<tr>
<td><strong>Material thickness</strong></td>
<td>0.4 - 2.0 mm</td>
<td>0.8 - 3.0 mm</td>
<td>0.4 - 2.0 mm</td>
<td>0.6 - 1.5 mm</td>
</tr>
<tr>
<td></td>
<td>(0.015” – 0.078&quot;)</td>
<td>(0.031” – 0.012&quot;)</td>
<td>(0.015” – 0.078&quot;)</td>
<td>(0.024” – 0.059&quot;)</td>
</tr>
<tr>
<td><strong>Materials</strong></td>
<td>Mild steel, stainless steel</td>
<td>Mild steel, stainless steel</td>
<td>Mild steel, stainless steel</td>
<td>Mild steel, stainless steel</td>
</tr>
<tr>
<td><strong>Output</strong></td>
<td>Up to 150 Tubes/h</td>
<td>Up to 180 Tubes/h</td>
<td>Up to 60 Tubes/h</td>
<td>Up to 60 Tubes/h</td>
</tr>
</tbody>
</table>

*Other materials on request.
Service

Machines do not take notice of deadlines or production schedules and we realize that production downtimes are frustrating and unprofitable. Our service technicians understand the consequences of production downtimes and are on-call to assist you when and where necessary.

Not only are our machines custom made; our service support is also tailored to our clients needs. Clients choose from various service modules, which are then packaged together into individual service support packages.

Hotline
Our clients have the opportunity to make use of our extended telephone hotline, which is available outside our office hours (Monday to Friday from 7:00 to 16:30). The hotline is available weekdays until 22:00 CET, excluding public holidays.

Teleservice
Our remote access capability allows our technicians to react quickly to our client’s needs by logging into their system to diagnose problems and implement solutions. Based on our many years of experience, this not only significantly reduces the need for on-site service visits, but also ensures that production downtimes are kept to a minimum. This enables our clients to save time, resources and money.

Training
We offer a comprehensive training programme, which can be customised for your individual needs and to suit any budget.

Preventative Maintenance
Preventative maintenance has proven itself an important component of our service offering over the years, because it reduces the cost of repairs on site drastically, while increasing the productivity of machines.

Product Development Support
Our competent specialists are available to assist you with any product development or quality problems or questions.

Spare Parts
Your spare parts will be delivered as quickly and cost effectively as possible.