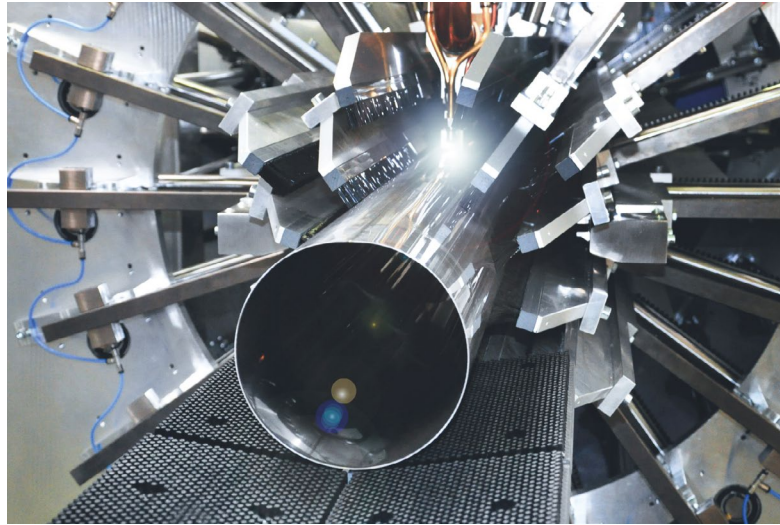


Flexible production of efficient ventilation systems



Flexistar DataCenter

Material: Steel, stainless steel, galva

Input: Coil or blanks

Material thicknesses: 0,4 – 1,5 mm

Diameters: 350 – 1000 mm

Tube lengths: 300 – 2000 mm

Welding technology: Laser

Welding speed: up to 10 m/min

Changeover: <1 min.

No tool changing

10 2026

As computing power increases, so does the challenge of efficiently dissipating the ever-growing amounts of heat generated by data centres. Laser-welded air ducts enable airtight, aerodynamically optimized systems, helping to reduce energy consumption and lower data centre operating costs sustainably.

Specific requirements for data centres

Compared with conventional seamed metal ventilation ducts, laser-welded ducts offer two key advantages: superior airtightness and exceptionally smooth internal surfaces. These features help minimize air resistance and reduce the accumulation of dust and other contaminants, extending fan service life and reducing electricity consumption.

Efficient, flexible production of high-quality laser-welded tubes

Our Flexistar production line is a proven solution for cost-effective manufacturing of high-quality, thin-walled tubes with consistently excellent results. Its flexible clamping system accommodates changes in tube length and diameter without requiring product-specific change parts. New product dimensions can be configured using pre-programmed machine parameters, enabling the automated production of different tube variants. The laser-welded butt seams are smooth and dimensionally consistent, ensuring leak-tight, corrosion-resistant tubes. High strength and structural stability are maintained even under demanding airflow conditions, elevated pressures, and high temperatures. The Flexistar is available as a turnkey solution, including coil-fed production and tube-end forming.

Your benefits

- + Tool-free adjustment of tube length and tube diameter within the working range
- + Automated feeding of blanks from stack or coil
- + Optional in-line quality control
- + Optional tube end processing, for example expanding, beading, flanging or shrinking
- + High output of up to 240 tubes per hour, depending on the variant, component and process

Weil Technology

Weil Technology's core competence lies in machines for sheet metal processing using laser welding and cutting. We have over 35 years' experience in this field. At our headquarters in Müllheim, Germany, around 250 employees develop and manufacture our designs and systems. Our tried-and-tested solutions and pioneering applications in the field of laser-welded tubes are in use worldwide. We also offer an outstanding global service and support network.

Weil Technology GmbH

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For further information see:
www.weil-technology.com