

MicroStep[®]



MSL Flex

Powerful & cost-effective fiber laser cutting machine

MSL Flex

MSL Flex is the perfect stepping stone into the world of laser cutting. The precise laser cutting machine delivers an excellent value for money without compromising on quality. With reliable processing of 2D cutting tasks it lets its performance to speak for itself.

Tough & nimble

MSL Flex is designed to work in harsh conditions and to require minimal maintenance, maximizing its uptime. In combination with dynamic speed aided by a light-weight gantry the nimble machine stands ready to boost productivity of any manufacturing facility.

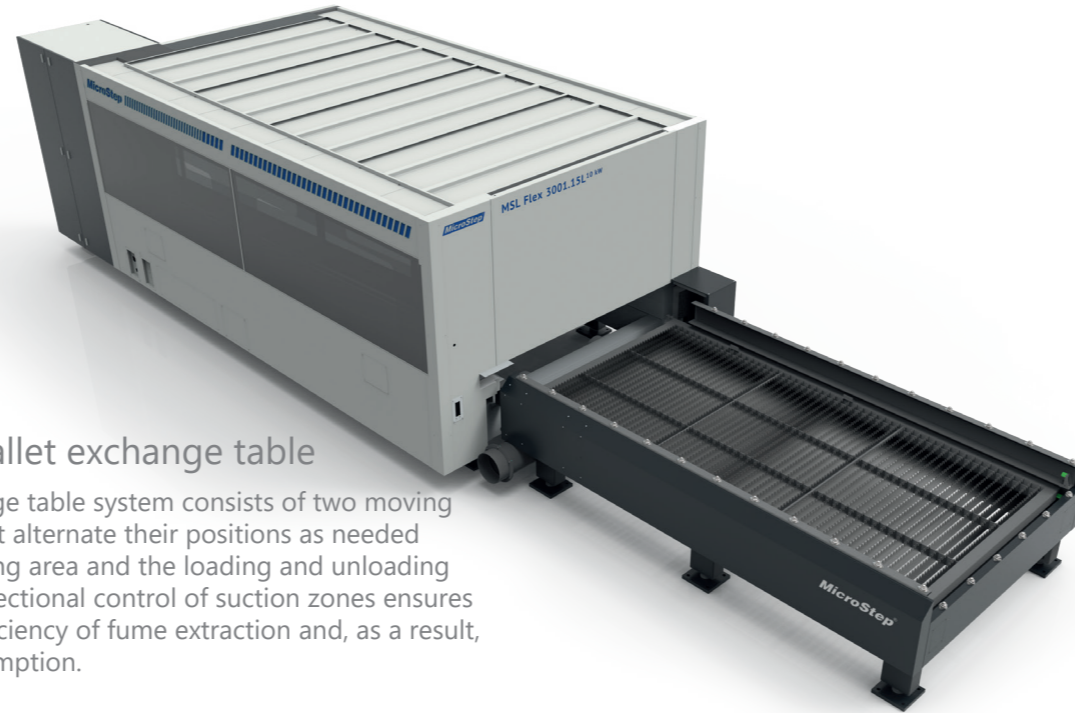


Laser sources from IPG

Fiber laser sources from the renowned manufacturer IPG Photonics ensure optimal solutions for a diverse array of cutting applications, material types, and thicknesses.

Automatic pallet exchange table

The pallet exchange table system consists of two moving cutting pallets that alternate their positions as needed between the cutting area and the loading and unloading area. The table's sectional control of suction zones ensures a high level of efficiency of fume extraction and, as a result, low energy consumption.



Cutting head EX-TRABEAM®

The EX-TRABEAM® cutting head series by THERMACUT offers advanced features such as automated focus position adjustment, low-drift height control and auto-monitoring of protection glass that significantly contribute to efficiency and stability of the cutting process. Its innovative service concept enables servicing of the heads by MicroStep engineers onsite at the customer.



Technical data

| Machine | |
|-------------------------|------------------------------------------|
| Model | MSL Flex |
| Machine sizes | 3 x 1.5 m, 4 x 2 m, 6 x 2m, 6 x 2.5 m |
| Gantry | Aluminum extrusion |
| Number of tool stations | 1 (straight cutting only) |
| Exchange table | Two-level with automatic pallet exchange |

| Laser | |
|----------------------|---------------------------------------|
| Laser source | Up to 12 kW: IPG Photonics * |
| (entry-level option) | Up to 6 kW: SIL Laser |
| Cutting head | Up to 8 kW: THERMACUT EX-TRABEAM® Eco |
| | Above 8 kW: THERMACUT EX-TRABEAM® XP |
| (entry-level option) | Up to 6 kW: Raytools BM |

* Higher laser powers are available on request

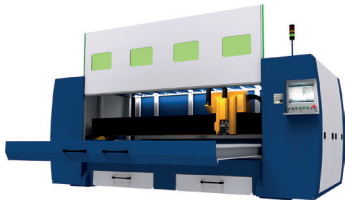
| Speed & Accuracy | |
|----------------------|-----------|
| Positioning speed | 130 m/min |
| Max. acceleration | 1.5 G |
| Positioning accuracy | ± 0.03 mm |

| Control | |
|-------------|------|
| CNC control | ECAT |

Cutting thicknesses

| Power | Mild steel | Stainless steel | Aluminum | Brass | Copper |
|-------|------------|-----------------|----------|-------|--------|
| 1 kW | 8 mm | 4 mm | 4 mm | 2 mm | 1 mm |
| 2 kW | 12 mm | 6 mm | 6 mm | 4 mm | 3 mm |
| 3 kW | 18 mm | 10 mm | 10 mm | 6 mm | 5 mm |
| 4 kW | 20 mm | 12 mm | 12 mm | 8 mm | 6 mm |
| 6 kW | 20 mm | 20 mm | 15 mm | 12 mm | 10 mm |
| 8 kW | 25 mm | 25 mm | 20 mm | 15 mm | 12 mm |
| 10 kW | 30 mm | 30 mm | 25 mm | 15 mm | 12 mm |
| 12 kW | 35 mm | 30 mm | 30 mm | 15 mm | 12 mm |

Unlock unmatched productivity, versatility and multi-functionality with our **MSF series**:



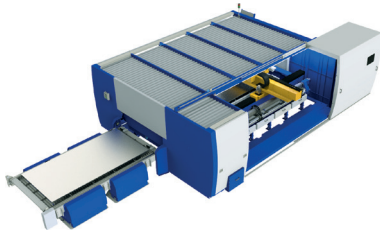
MSF Compact

MSF Compact is a powerful yet space-saving fiber laser machine – without compromising any of the dynamic properties of the MSF line. With laser powers up to 8 kW, the compact design makes it ideal for small and middle-sized workshops.



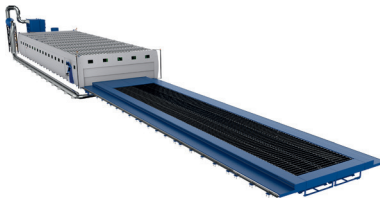
MSF Cut

MSF Cut is a state-of-the-art shuttle-table machine for straight fiber laser cutting with laser powers up to 15 kW. The series is available in three sizes with work areas of 3 x 1.5 m, 4 x 2 m and 6 x 2 m. It can be integrated with MicroStep's automatic material handling systems.



MSF Pro

The precise laser all-rounder MSF Pro allows for 2D and 3D cutting of sheets up to 45°, drilling, tapping and countersinking up to Ø 15 mm / M16 and marking. The machine can be equipped with pipe and profile cutting up to Ø 500 mm and a length of 12 m as well as automated material handling.



MSF Max

With overall table dimensions as large as 50 x 6 m, MSF Max is suitable when some particularly wide work areas are needed. It can have bevel cutting up to 45°, drilling and tapping up to Ø 30 mm / M20 and marking. It features a mobile cabin for the whole work area, or a lightweight cabin encapsulating the gantry.



MSF Pipe

MSF Pipe machines provide fiber laser cutting of pipes and profiles of round, rectangular and custom cross-sections. The machines come in two basic versions – manual or fully automated – and allow to process pipes of up to Ø 500 mm and length 12 m.



Your Partner for Cutting and Automation

MicroStep offers CNC cutting systems with a variety of processes and accessories in a single machine. Our machines enable complex bevel cutting jobs with all technologies – plasma, fiber laser, oxyfuel and waterjet along with marking, drilling, tapping, milling and countersinking operations.

With welding and bending added to our portfolio, we bring matching fabrication processes under one roof. After cutting, MicroStep supplied welding machines and press brakes are ready to take over.

We do not stop there – we integrate our machinery with material handling systems and provide added value through automation and digitalization.

For more information visit:
www.microstep.eu/machines



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