

# BySprint Fiber 12020

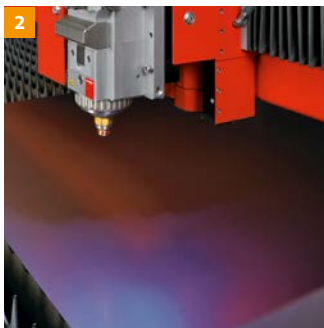
**Highest productivity for competitive fiber laser cutting**

## **Customer benefits**

- High degree of material utilization thanks to extra-long sheet formats up to 12 meters in length
- Wide spectrum of applications for steel, aluminium and other non-ferrous metals. With up to 6 kilowatts of laser power, stainless steel is cut with high precision up to a material thickness of 30 millimeters
- Fiber laser technology reduces operating costs by eliminating the need for laser gas and reducing power consumption
- Automated process solutions (optional) for fast loading and unloading as well as for sheet metal handling shorten the job processing time even further



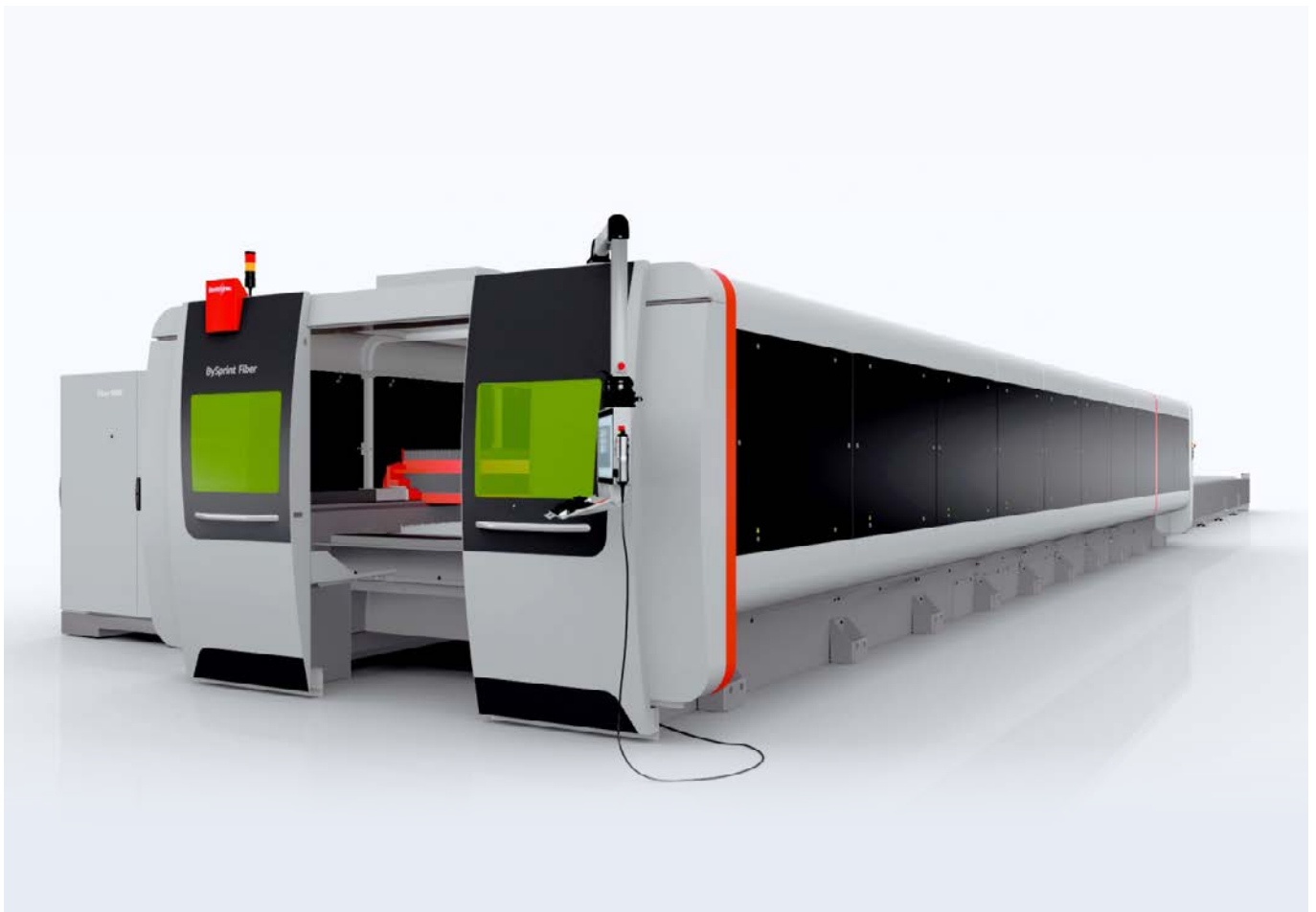
- 1 Access at the front
- 2 Detection Eye
- 3 Detection Eye
- 4 Nozzle changer
- 5 Cutting head with automatic focus position adjustment



<b>BySprint Fiber 12020</b>	
Nominal sheet size	12,000 × 2,000 mm
Max. simultaneous positioning speed	140 m/min
ByVision Touchscreen operation and manual control unit	



# BySprint Fiber 12020 Technical Data





		BySprint Fiber 12020
Length		31,400 mm
Width		6,670 mm
Height		2,565 mm
Nominal sheet size (X)		12,000 mm
Nominal sheet size (Y)		2,000 mm
Cutting area (X)		12,300 mm
Cutting area (Y)		2,024 mm
Cutting area (Z)		70 mm
Max. positioning speed parallel axis X/Y		100 m/min
Max. simultaneous positioning speed		140 m/min
Positioning accuracy Pa (±) *		0.1 mm
Repeatability Ps (±) *		0.05 mm
Max. workpiece weight		4,800 kg
Machine weight (without exhaust, chiller and conveyor)		38,000 kg
Operation	ByVision Touchscreen and manual control unit	

Laser source	Fiber 3000	Fiber 4000	Fiber 6000
Power	3,000 W	4,000 W	6,000 W
Range of adjustment	300–3,000 W	400–4,000 W	600–6,000 W
Wavelength	Fiber	Fiber	Fiber
Steel (max. cutting sheet thickness) **	20 mm	20 mm	25 mm
Stainless steel (max. cutting sheet thickness) **	12 mm	15 mm	30 mm
Aluminum (max. cutting sheet thickness) **	12 mm	15 mm	30 mm
Brass (max. sheet thickness) **	6 mm	8 mm	15 mm
Copper (max. sheet thickness) **	6 mm	8 mm	12 mm
Total electric consumption of system (with exhaust, chiller)	22.7 kW	26.7 kW	31.4 kW

\* According to VDI/DGQ 3441 measuring length 1m. The precision of the sheet metal part depends on the material in question and its pretreatment as well as the sheet size and its temperature

\*\* In order to cut the maximum thicknesses, the following conditions must be met:  
- optimally maintained and adjusted laser cutting systems  
- the materials must be of the quality specified by Bystronic (laser materials)

The right to make changes to dimensions, construction, and equipment is reserved. ISO-9001-certified.

The technical data can vary in the different countries, according to local security rules and configuration of the machine.



Modern sheet metal processing without high-performance software is unimaginable these days. BySoft 7 offers a comprehensive range of functions and is still easy to operate. With BySoft 7, the user can quickly and easily design tailored parts and create cutting plans and bending programs with the push of a button. On top of that, scheduling and manufacturing monitoring is easy. Planning of changes in production schedule are effortless.

# BySoft 7

**Modular CAD/CAM software with 2D and 3D CAD as well as extensive functions for scheduling and monitoring manufacturing processes**

## Customer benefits

- Existing drawings and models can be input, edited, and processed easily
- Perfect nesting of parts results in reduced costs and full utilization of raw material. Also for tubes and profiles.
- One-click creation of cutting plans and bending programs, that is the most loved feature of BySoft 7. The correct cutting technology is automatically set and the bending process is automatically simulated and monitored
- Scheduling and monitoring manufacturing processes
- All machine and job data are always available
- Connection to ERP/PPS systems



## ByVision Cutting

With ByVision Cutting, laser cutting is as easy as using your smartphone. The user interface is based on a touchscreen. Control the entire cutting process with a few swipes of your finger: Sort the job list, assign cutting parameters, and define automation mode. Then start the process, let your laser do the work. In addition, ByVision Cutting also supports users with its extensive database, which includes parameters for all common sheet types and cutting technologies.

Available for: ByStar Fiber, BySmart Fiber