

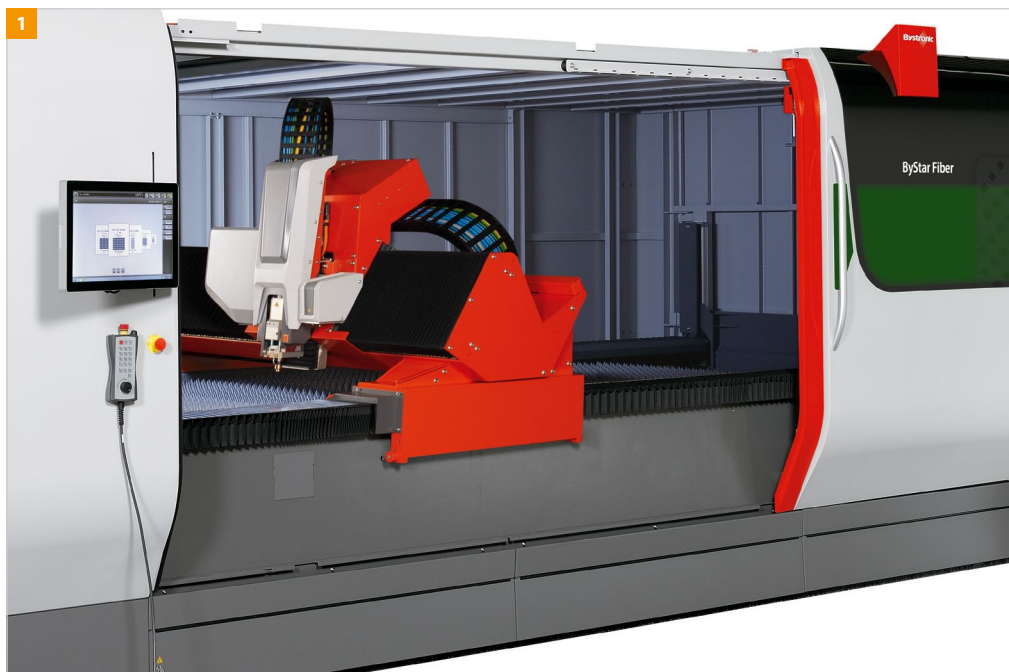


ByStar Fiber

Fiber laser cutting for the highest performance

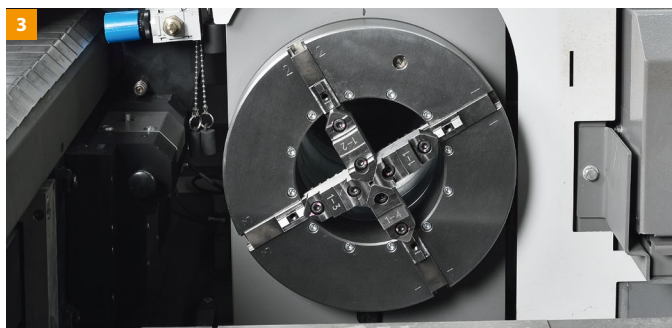
Customer benefits

- High-speed cutting in a class of its own, with up to 15 kilowatts of laser power. For unbeatable productivity in 3 to 15 millimeter thick mild steel with an average 50 percent speed advantage over 10 kilowatts
- Maximum flexibility for large series and spontaneous customer orders. Regardless of whether aluminum, non-ferrous metals, or steel, the high-performance Bystronic cutting head excels with maximum precision in both thin and thick sheets and profiles
- Clean cutting edges and high operational reliability in a wide variety of steel sheet qualities thanks to the unique BeamShaper option (up to 30 millimeter)
- 15 kilowatt also offers new advanced applications in steel and aluminium up to 50 millimeter
- Using a 21.5-inch touch screen, Bystronic's ByVision Cutting software is operated just as simply as a smartphone
- A wide range of automation solutions guarantees maximum machine utilization and process reliability even during unmanned operation



- 1 Unlimited accessibility
- 2 Cutting head
- 3 Rotary axis*
- 4 Nozzle changer
- 5 Detection Eye

* For 3015 and 4020 format only



	ByStar Fiber 3015	ByStar Fiber 4020	ByStar Fiber 6225	ByStar Fiber 8025
Nominal sheet size	3,000 × 1,500 mm	4,000 × 2,000 mm	6,200 × 2,500 mm	8,000 × 2,500 mm
Max. simultaneous positioning speed	170 m/min	170 m/min	170 m/min	170 m/min
ByVision Cutting operation and manual control unit	■	■	■	■
Circumscribed circle diameter of the rotary axis	30–315 mm	30–315 mm		



ByStar Fiber Technical Data





	ByStar Fiber 3015	ByStar Fiber 4020	ByStar Fiber 6225	ByStar Fiber 8025
Length	11,900 mm	14,200 mm	20,200 mm	23,800 mm
Width	5,700 mm	6,300 mm	6,900 mm	6,900 mm
Height	3,200 mm	3,200 mm	3,200 mm	3,200 mm
Nominal sheet size (X)	3,000 mm	4,000 mm	6,200 mm	8,000 mm
Nominal sheet size (Y)	1,500 mm	2,000 mm	2,500 mm	2,500 mm
Cutting area (X)	3,100 mm	4,105 mm	6,250 mm	8,150 mm
Cutting area (Y)	1,580 mm	2,100 mm	2,600 mm	2,600 mm
Cutting area (Z)	100 mm	100 mm	150 mm	150 mm
Max. positioning speed parallel axis X/Y	120 m/min	120 m/min	120 m/min	120 m/min
Max. simultaneous positioning speed	170 m/min	170 m/min	170 m/min	170 m/min
Bilateral repeatability of positioning of one axis R (following ISO 230-2:2014(E))	0.025 mm	0.025 mm	0.025 mm	0.025 mm
Averaged, bilateral position deviation of one axis M (following ISO 230-2:2014(E))	0.05 mm	0.05 mm	0.1 mm	0.1 mm
Edge detection accuracy (\pm)	0.5 mm	0.5 mm	0.5 mm	0.5 mm
Max. workpiece weight	1,100 kg	1,900 kg	3,650 kg	4,710 kg
Maximum allowed workpiece weight on both shuttle tables	1,850 kg	3,200 kg	7,300 kg	9,420 kg
Machine weight (without exhaust, chiller and conveyor)	11,000 kg	14,500 kg	22,000 kg	27,000 kg
Table changeover time	25 s	28 s	56 s	64 s
Operation	ByVision Cutting Touchscreen and manual control unit			



Laser source	Fiber 3000	Fiber 4000	Fiber 6000	Fiber 8000	Fiber 10000	Fiber 12000	Fiber 15000***
Power	3,000 W	4,000 W	6,000 W	8,000 W	10,000 W	12,000 W	15,000 W
Range of adjustment	300–3,000 W	400–4,000 W	600–6,000 W	800–8,000 W	1,000–10,000 W	1,200–12,000 W	400–15,000 W
Wavelength	Fiber	Fiber	Fiber	Fiber	Fiber	Fiber	Fiber
Steel (max. cutting sheet thickness) *	20 mm	20 mm	25 mm	25 mm	25 mm	25 mm	25 mm
Steel (with option BeamShaper) *	20 mm	25 mm	30 mm	30 mm	30 mm	30 mm	30 mm
Steel (advanced applications) *							50 mm
Stainless steel (max. cutting sheet thickness) *	12 mm	15 mm	30 mm	30 mm	30 mm	30 mm	40 mm
Stainless steel (advanced applications) *							50 mm
Aluminum (max. cutting sheet thickness) *	12 mm	20 mm	30 mm	30 mm	30 mm	30 mm	40 mm
Aluminum (advanced applications) *							50 mm
Brass (max. sheet thickness) *	6 mm	8 mm	15 mm	15 mm	15 mm	15 mm	20 mm
Copper (max. sheet thickness) *	6 mm	8 mm	12 mm	12 mm	12 mm	12 mm	20 mm
Total electric consumption of system ByStar Fiber 3015 **	20 kW	21 kW	22 kW	24 kW	25 kW	27 kW	27 kW
Total electric consumption of system ByStar Fiber 4020 **	20 kW	21 kW	22 kW	27 kW	28 kW	27 kW	27 kW
Total electric consumption of system ByStar Fiber 6225 **	21 kW	22 kW	23 kW	26 kW	27 kW	27 kW	
Total electric consumption of system ByStar Fiber 8025 **	21 kW	23 kW	23 kW	26 kW	27 kW	27 kW	

* 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)

** Entire system with exhaust and chiller: Electrical consumption data shows an average value based on 4 reference cutting plans of mild steel between 1–10 mm thickness

*** For 3015 and 4020 format only

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