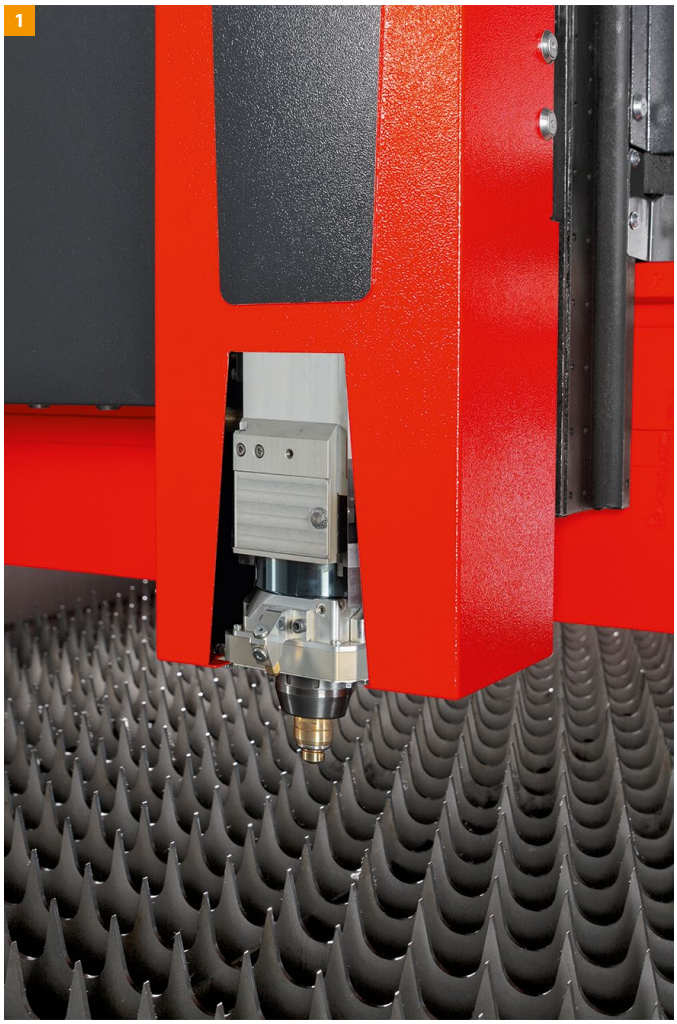
BySmart Fiber

The smart access to fiber laser technology – now with up to 12 kW laser power.

Customer benefits

- Lots of power: New laser power of up to 12 kW ensures excellent cutting performance and high part output for thin to medium-thickness sheets in your production.
- Wide range of applications: In addition to steel, stainless steel and aluminum, you can also process non-ferrous metals for first-class cut quality
- Easy to use: A simple user interface and intuitive process control allow you to quickly get started with fiber laser technology
- More profit per part: A fast cutting process and low maintenance requirements ensure low operating costs
- Flexible process solutions: Bystronic software and automation solutions optimally integrate the BySmart Fiber in your sheet metal production



1 Cutting head
2 Nozzle changer
3 Operator panel with BySoft Cell Control Cut

	BySmart Fiber 3015	BySmart Fiber 4020
Nominal sheet size	120 × 60 in	160 × 80 in
Max. simultaneous positioning speed	5,511 in/min	5,511 in/min
BySoft Cell Control Cut operation and manual control unit	■	■

BySmart Fiber
Technical Data

	BySmart Fiber 3015	BySmart Fiber 4020
Length	413 in	503 in
Width	272 in	297 in
Height	113 in	113 in
Nominal sheet size (X)	120 in	160 in
Nominal sheet size (Y)	60 in	80 in
Cutting area (X)	122 in	162 in
Cutting area (Y)	62 in	83 in
Cutting area (Z)	4 in	4 in
Max. positioning speed parallel axis X/Y	3,937 in/min	3,937 in/min
Max. simultaneous positioning speed	5,511 in/min	5,511 in/min
Bilateral repeatability of positioning of one axis R (following ISO 230-2:2014(E))	0.002 in	0.002 in
Averaged, bilateralposition deviation of one axis M (following ISO 230-2:2014(E))	0.004 in	0.004 in
Edge detection accurancy (±)	0.02 in	0.02 in
Max. workpiece weight	2,425 lbs	4,189 lbs
Maximum allowed workpiece weight on both shuttle tables	4,050 lbs	7,080 lbs
Machine weight (without exhaust, chiller and conveyor)	26,015 lbs	32,628 lbs
Table changeover time	27 s	36 s
Operation	BySoft Cell Control Cut Touchscreen and manual control unit	

Laser source	Fiber 2000	Fiber 3000	Fiber 4000	Fiber 6000	Fiber 10000	Fiber 12000
Power	2,000 W	3,000 W	4,000 W	6,000 W	10,000 W	12,000 W
Range of adjustment	200–2,000 W	300–3,000 W	400–4,000 W	600–6,000 W	1,000–10,000 W	1,200–12,000 W
Wavelength	Fiber	Fiber	Fiber	Fiber	Fiber	Fiber
Steel (max. cutting material thickness)	0.47 in	0.75 in	0.75 in	1 in	1 in	1 in
Steel (with option BeamShaper) *	0.47 in	0.75 in	1 in	1.18 in	1.18 in	1.18 in
Steel (Option «Advanced Applications»)					1.18 in	1.18 in
Stainless steel (max. cutting material thickness)	0.25 in	0.47 in	0.625 in	1.18 in	1.18 in	1.18 in
Aluminum (max. cutting material thickness)	0.312 in	0.47 in	0.75 in	1.18 in	1.18 in	1.18 in
Brass (max. cutting material thickness)	0.16 in	0.25 in	0.312 in	0.59 in	0.59 in	0.59 in
Copper (max. cutting material thickness)	0.12 in	0.25 in	0.312 in	0.47 in	0.59 in	0.59 in
Total electric consumption of system (with exhaust, chiller) **	14 kW	14 kW	15 kW	17 kW	18 kW	21 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

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.

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Please contact your Bystronic consultant in this regard.