

FiberLaser

more than just light

Laser Cutting

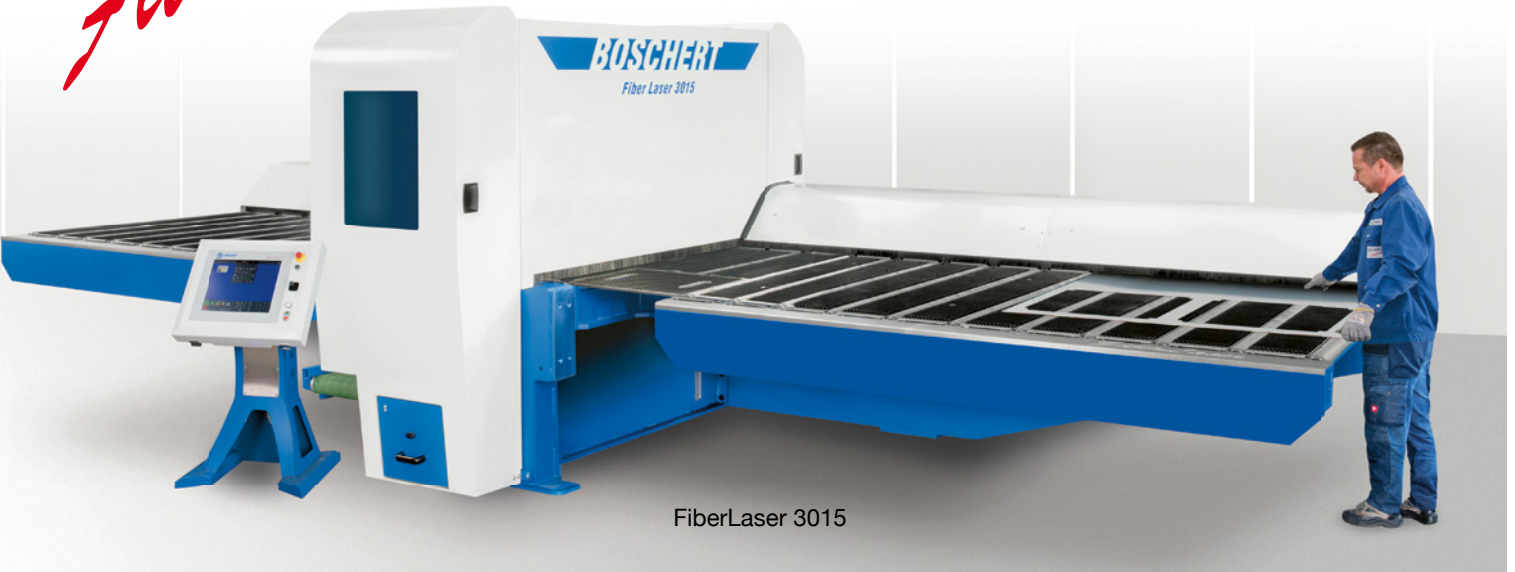
Marking



simply better!

FiberLaser

more than just light



FiberLaser 3015

Fiber laser in a compact design with many practical advantages

The **BOSCHERT** FiberLaser is available in two sizes, 3015 and 4020 with a working range of 1500x3000mm or 2000x4000mm.

Selectively these can be equipped with a 1kW, 2kW, 3kW or a 4kW FiberLaser. Fiber laser in a compact design with many practical advantages.

The unique design results in very good accessibility when loading and unloading the machine table.

Workpieces up to 350x1500mm (350x2000mm) are reliably discharged over the entire table width.

Our design minimizes the problematic tipping of small, cut workpieces!

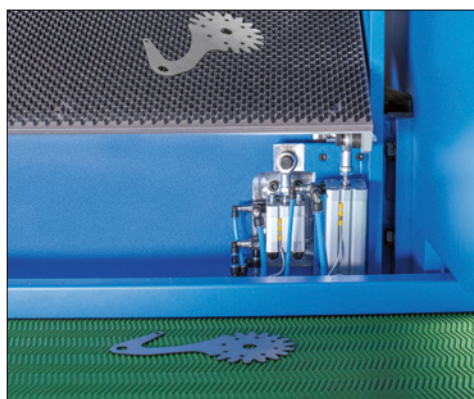
In addition, waste products are transported via a second conveyor belt into a waste container which is located on the operator side.



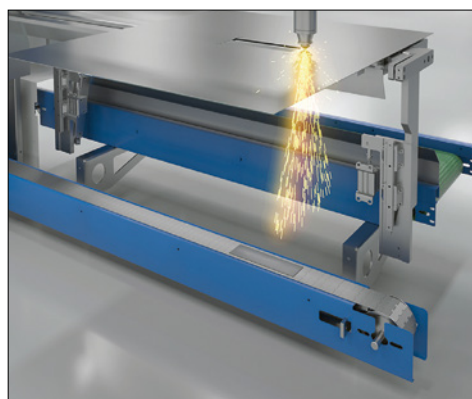
Open working area



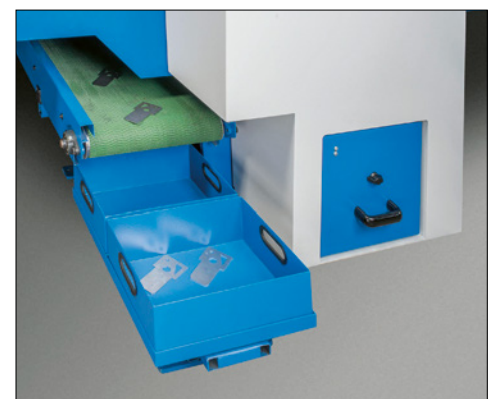
Nuzzle change at Laserhead



Part chute



Standard conveyor for disposal of slag and waste of sheets



Part sorting

Operational convenience for greater productivity and efficiency

The precise cutting system and the practical clamping concept also allow working on sheets as small as 50x300mm, giving a very high degree of material utilization.

The sheet metal is clamped by a freely selectable number (max. up to 4) of pneumatic clamps guided on a ball screw. The whole cutting unit travels and positions via a rack-and-pinion drive in the X-axis.

The entire cutting unit is positioned in the X-axis by a precision rack and pinion drive. The maintenance access panel (for example, changing nozzles) is on the front of the machine, reducing downtime and increasing productivity.

On the Y-axis, the laser head is positioned quickly and precisely using a high accuracy ball screw and linear guides.

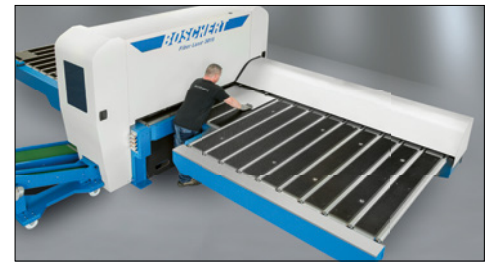
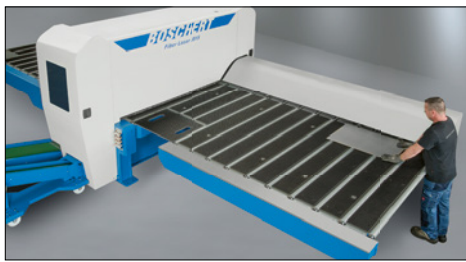


Utilize small remnants



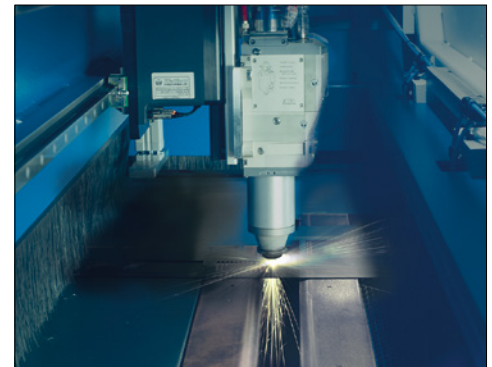
User friendly clamping concept

Different loading possibilities



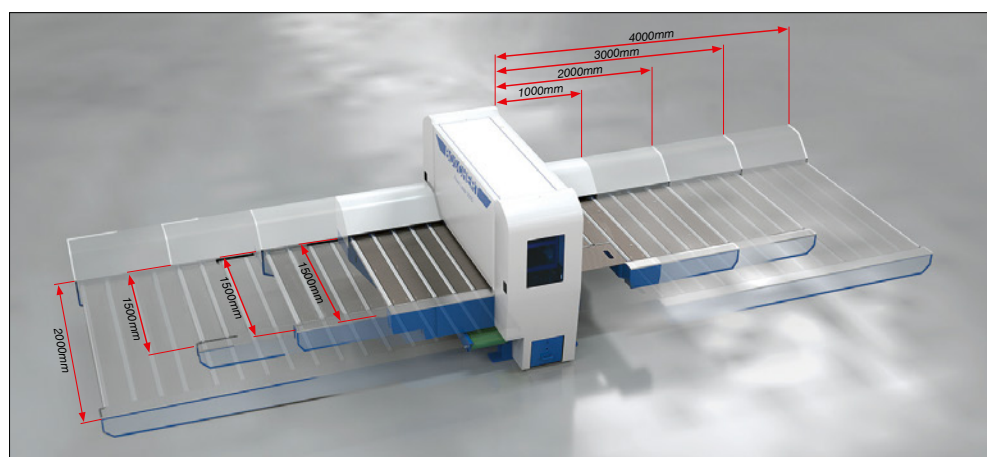
Laser safety

Complete cover of Laser with safety glass sight window to view the cutting result.



Variable machine sizes

In addition to the standard machine sizes of 3015/4020, **BOSCHERT** offers many smaller travels that conserve floor space.

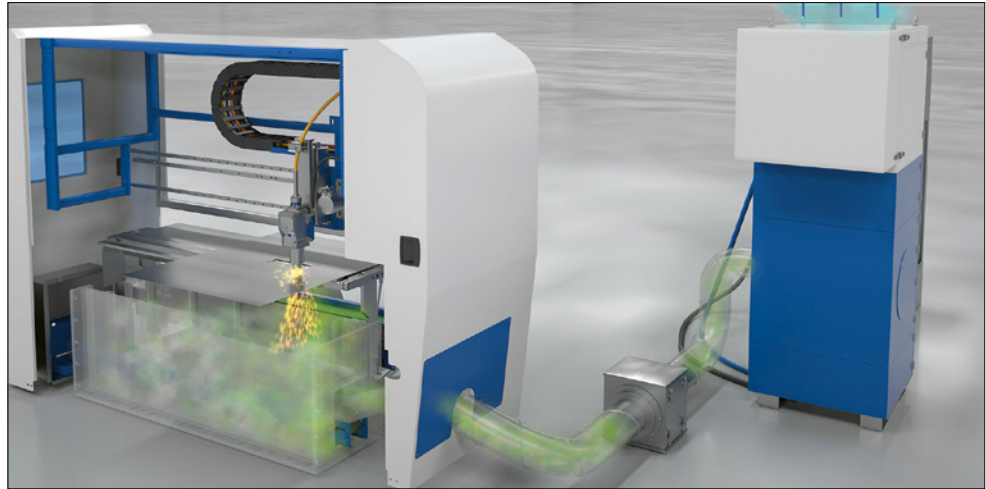


Dust collection for FiberLaser:

To ensure a safe work environment, it is necessary to have direct extraction of the pollutants in their development area.

Full coverage of the dust is possible only at a small distance between the cutting point and extraction point.

To that end, **BOSCHERT** has ensured optimal and effective integration of the extraction system on our FiberLaser.



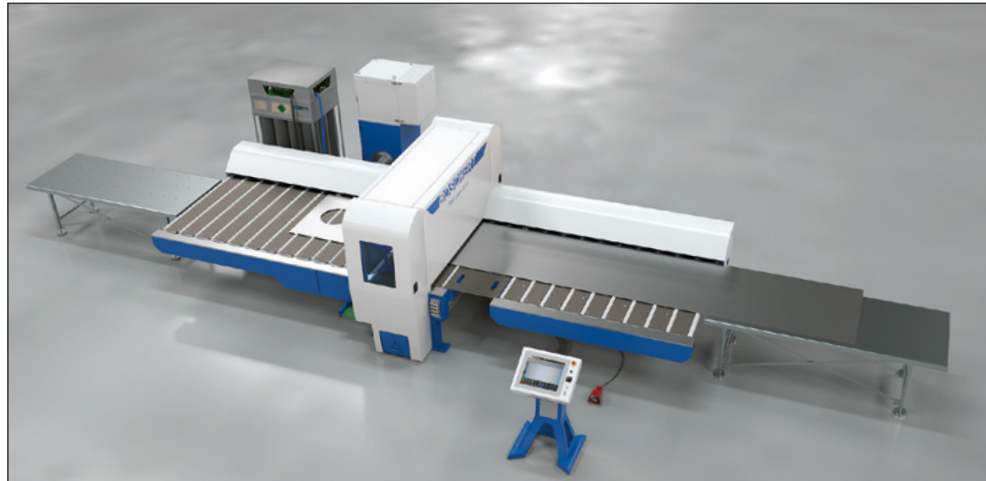
Dust collection for FiberLaser

Repositioning

Automatic repositioning of sheets is possible to 10m length*.

Optional side tables shown.

* max. sheet weight 360Kg



Repositioning cylinders open



Repositioning Cylinders closed



Table extension left and right as option

Precision cutting and high-speed separation cutting with FiberLaser power of 1kW, 2kW, 3kW and 4kW possible.

After years of successful experience with combination punch-laser machines, **BOSCHERT** introduced the flat bed machines in 2018.

BLS BOSCHERT LaserSystem

The **BOSCHERT** CNC has a built-in database covering all ranges of materials.



Cutting head from Precitec

Integrated technology database:

- Selection of the optimum cutting parameters depending on material and thickness
- Integrated pierce and corner system
- Automatic adjustment of the motorized focus system of the laser head and the gas pressures from the database

Our system Components:

FiberLaser

Solid-state laser 1000 / 2000 / 3000 / 4000

Automatic adjustment of parameters according to selection at the **BOSCHERT** control.

Provision of gases according to parameter selection type and pressure

- Laser cutting head with automatic focus position
- Display of protection glasses dirtiness at menu
- Cutting and marking with the same consumables
- Axis with height control unit
- Integrated cooling system



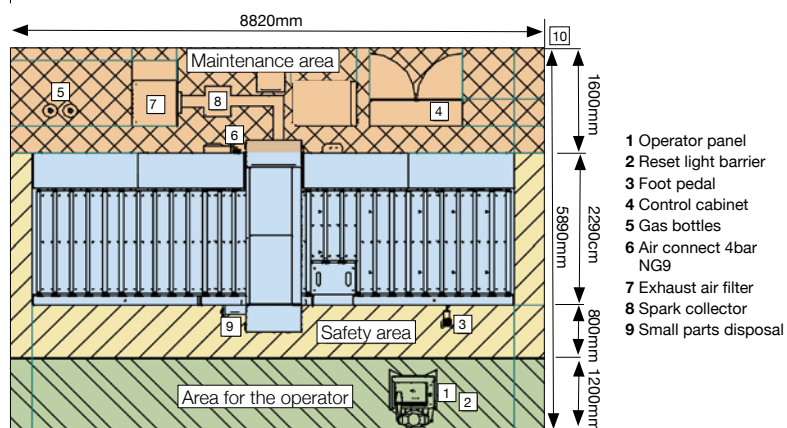
Technical data

Working area	
FiberLaser 3015	3000x1500mm
FiberLaser 4020	4000x2000mm
Laser data	
FaserLaser	FaserLaser solid state Laser
	1000 2000 3000 4000
Max. power	1kW 2kW 3kW 4kW
Cutting performance	
Mild steel	max. 6mm 10mm 10mm 10mm*
Stainless steel	max. 4mm 8mm 10mm 10mm
Aluminium	max. 3mm 6mm 8mm 10mm
Copper	max. 2mm 4mm 6mm 8mm
Space requirements ¹	
FiberLaser 3015 (LxWxH)	8820x5890x2200mm
FiberLaser 4020 (LxWxH)	10820x6390x2200mm
Weight	
FiberLaser 3015	8000 Kg
FiberLaser 4020	9500 Kg
Speed	
Simultan (X und Y)	100m/min
Accuracy	
Positioning difference	+/-0,05mm
Repeatability	+/-0,03mm
Control	
Typ	Schneider Touch
Display	19" TFT Touchscreen
Data transfer	LAN RJ45 und USB
Part chute	
	350x1500mm 350x2000mm
Max. sheet weight with 4 clamps	
	360 kg
Colour	
Blue	RAL 5017
Light grey	RAL 7035
Electrical power supply	
Faser Laser / Machine + dust collection, cooling	22kVA

¹ The exact values can be found in each specific layout plan

* The maximum clamp opening is 15mm. Therefore is for 4 kW Laser the clamp opening the maximum not the cutting range.

Layout FiberLaser 3015 1kW



Optional Components

CNC/CAD Software BG-Cut

Our CNC / CAD solution offers a versatile and powerful support for **BOSCHERT** punching and laser machines. We also offer Auto- Nesting program for optimal sheet utilization.



BOSCHERT FiberLaser advantages are:

- Processing sheets as small as 50 x 300cm is possible, allowing the use of residual drop sheets.
- Automatic small parts removal during processing is possible with parts as large as 350 x 1500/2000mm.
- Small parts are automatically moved to the operator position by conveyor belt.
- Superior operator accessibility to the sheets during loading and unloading
- Low floor space requirement because no pallet changer is needed.
- Gases and vapors from cutting are removed along with slag, which is moved by a steel conveyor belt.
- Maintenance opening for the fiber laser unit is easily accessible near the operator station
- Automatic sheet repositioning up to 10m.
- Variable machine capacities to meet your needs.
- Ability to automatically remove various sized parts during cutting.
- Micro joints possible, but not needed due to auto-removal of parts
- Small part tipping problems virtually eliminated

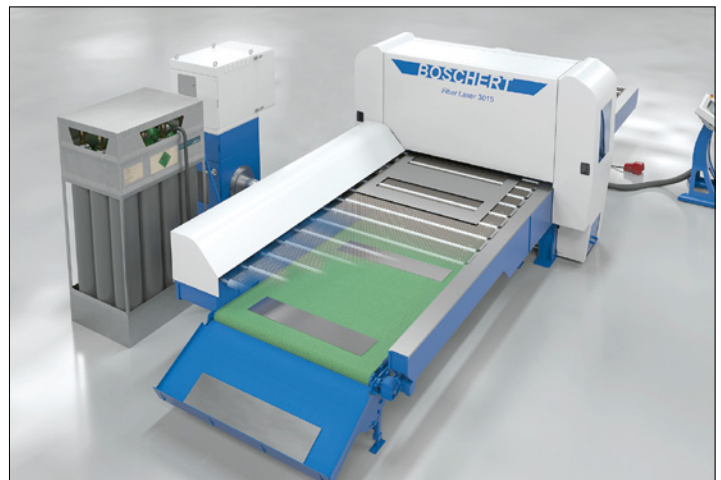
Part removal options



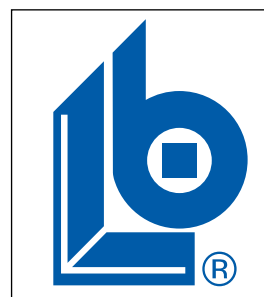
Additional conveyor to unloading point



Double conveyor to unloading point



Part removal to the left



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