

Bystronic BySprint Fiber 3015 (4 kW) incl. ByTrans Extended Loading/unloading system (2016)

Main Features

Cuts faster, saves energy and uses fiber laser technology.

Unique Advantages

Economical and environmentally friendly thanks to outstanding energy efficiency, excellent part quality in thin and medium thickness ranges, and maintenance-free operation.

High-end fiber laser combined with advanced machine technology.

Machine Concept

Simple, compact and clearly arranged design.

Optimal accessibility to the working area.

Fast and easy loading of remnant sheets – ideal for express jobs in between.

Reduced operator effort resulting in higher productivity.

setting of micro-joints without programming.

Automatic nesting of individual parts into existing nesting plans.

Micro weld points for holding small and long thin parts.

Technical Data

Working Area: 3000 × 1500 mm

4 kW Fiber Laser

Automatic Shuttle Table

ByTrans Extended with 2 Cassettes

Automatic Nozzle Changer

Second Operator Console

Machine Length: 11018 mm

Machine Width: 6051 mm

Machine Height: 2565 mm

Sheet Size (X): 3000 mm

Sheet Size (Y): 1500 mm

Cutting Area (X): 3048 mm

Cutting Area (Y): 1524 mm

Cutting Area (Z): 70 mm

Maximum Positioning Speed X/Y: 100 m/min

Maximum Simultaneous Positioning Speed: 140 m/min

Position Accuracy (VDI/DGQ 3441): ± 0.1 mm

Repeatability (VDI/DGQ 3441): ± 0.05 mm

Edge Detection Accuracy: ± 0.5 mm

Maximum Workpiece Weight: 890 kg

Machine Weight (without extraction unit and chiller): 12000 kg

Shuttle Table Change Time: 35 s

Laser Source: Fiber 4000

Pulse Frequency: 1–2500 Hz

Laser Power: 4000 W

Power Control Range: 400–4000 W

Laser Type: Fiber

Maximum Mild Steel Thickness: 20 mm

Maximum Stainless Steel Thickness: 15 mm

Maximum Aluminium Thickness: 15 mm

Maximum Brass Thickness: 8 mm

Maximum Copper Thickness: 8 mm

Total Power Consumption (including extraction unit and chiller): 25.3 kW

Standard Machine

BySprint Fiber 3015; Fiber 4000

Shuttle Table System with 2 Shuttle Tables

Fully Enclosed Cabin/Roof

Chip Cart with Rollers

CNC Control Unit and Cabinet

Touchscreen with ByVision User Interface

Operation and Comfort Package

Maintenance Messenger

Restart Manager

System Manager

Handheld Control Unit

ByHand

Cutting Parameter Assistant

Uninterruptible Power Supply (UPS)

Cutting Bridge

Cutting Head

Piercing Jet

ByPos Fiber

Detection Eye

Nozzle Cleaning

Scanning

Fiber Laser Source

Tank Heating

Tropicalization Package

Standard Extraction Unit 3000

Automation/Handling Interface

Chiller for Fiber 4000

Operator Protection in the Cutting Area

Operator Protection in the Loading/Unloading Area

Power Supply: 400 V / 50 Hz

Electrical Connection (Machine incl. Laser Source)

Compressed Air Connection (Machine incl. Laser Source and Chiller)

Material Specification

Part Tolerances and Cut Surface Quality

Cutting Gas Supply and Cutting Quality

Environmental Conditions

Building Requirements

Machine Documentation

STL Cabinet