



TECHNICAL SPECS

WORKING AREA

Table dimensions	4000 mm x 2000 mm
Workpiece weight (max.)	2500 kg
Axis acceleration X- / Y-axis	15 m/s ²
Axis acceleration Z axis	15 m/s ²

TRAVELS

Travel X-axis	2050 mm
Travel Y-axis	4100 mm
Travel Z-axis	370 mm

RAPID FEED

Rapid feed X-/ Y-axis	180 m/min
Z-axis rapid feed	35 m/min
Change time at cutting table	20 sec - 23 sec

ACCURACIES

Positioning accuracy	0.03 mm/m
Repeatability	0.03 mm/m

LASER

Fiber laser	20000 W
Shaft length	1,08 ± 0,5% µm
Beam power max.	20000 W
Supply voltage	AC 380V ± 10%
Cutting capacity in structural steel	40 mm
Cutting capacity in stainless steel	30 mm
Cutting capacity in aluminum	25 mm

DRIVE CAPACITY

Machine drive capacity X-axis	2.9 kW
Machine drive capacity Y-axis	1.3 kW
Machine drive capacity Z-axis	0.75 kW

MEASURES AND WEIGHTS

Overall dimensions (length x width x height)	11.54 m x 4.1 m x 2.52 m
Weight	9288 kg

PRODUCT DETAILS

- ACE Laser Pro laser cutter systems have been designed for the use of high-power laser sources and for working with high workpiece weights
- Work area dimensions can be selected from 3000 mm x 1500 mm to 6000 mm x 2000 mm
- The machine frame is made of an thermally treated weldment for a tension-free construction - this ensures long-term repeatability for all cut parts
- The precision linear guides require minimal maintenance and are designed for long-lasting precision and high cutting speeds
- High-precision rack-and-pinion gears on the X and Y axis ensure superior and reliable positioning accuracy
- Powerful servo motors on all axes ensure high dynamics, i. e. fast response to control signals
- This allows precise adaptation of the feed for the respective cutting conditions
- To ensure operator and environment safety the cutting system is totally enclosed, and a custom safety glass window provides a clear view to observe the cutting process inside the machine
- An automatic changer table system minimizes down-times by allowing simultaneous loading and unloading of the table during the cutting process
- Perpendicularity and squareness tolerance for laser cutting acc. to DIN EN ISO 9013-1

Control

- The FSCUT8000 CNC control is based on a modern EtherCAT bus system that was developed for high-power lasers above 8 kW
- It is very user-friendly and provides extensive functions
- FSCUT is one of the leading EtherCAT controls for laser cutting systems in the market
- HypCut is a customized software for high-power laser cutters and allows smart production
- It supports planning and scheduling to simplify the system's production management

Cutting head

- Smart cutter heads of the BLT 6 series also were custom designed for high-power laser cutting systems with max. 40 kW power
- A completely new beam path design with optimized lenses and dual dust collector ensures reliable cutting performance as well as easy setup and maintenance
- The Smart-Piercing and Auto-Recut functions fulfill the strict requirements for air-assisted and N₂-assisted high-power cutting and significantly improve efficiency and yield
- Auto-Recut: A real-time cut sensor ensures constant cutting performance by detecting uncut path sections and automatically recutting them
- Smart piercing: Real-time monitoring of the piercing process allows immediate start of the cutting process when pierced - eliminates waiting periods for significantly increased efficiency
- Slag-free laser cutting: Laser beam monitoring allows prompt shut off when reaching the contour end, resulting in a virtually slag-free cut.
- Easy maintenance: The modern drawer-type design allows quick replacement of lens guards and lenses
- Lens guard monitoring: An optimized algorithm in the sensor prevents tearing of the lens guard due to contamination

Height control

- The FSCUT laser cutting system also includes a capacitive height control. Functions like height sensing, segmented and stepped plunge-cutting, detecting and finding workpiece edges, vibration suppression, etc. can be implemented via Ethernet communication
- The latest anti-collision function can effectively prevent tilt collisions in production

Laser source

- HP series CW multi-module fiber lasers from Raycus come with 4000 W to 40 kW power and feature high electro-optical conversion efficiency, high beam quality, high energy density, wide modulation frequency bandwidth, and superior reliability
- The maintenance-free laser source reduces maintenance and operating cost

STANDARD EQUIPMENT

Complete system with CNC control (FSCUT8000)

Hypecut CAD/CAM Software
CypNest offline software
Ytterbium Faserlaser Raycus
BOCI BLT 6 generation autofocus cutting head
Filter suction system
Laser safety cabin
Automatic shuttle table system
Centralised lubrication
Cooling water cooler
Aventics proportional valve
Operator instructions

OPTIONAL EQUIPMENT

- Oxygen pressure reducer 200 bar/0-20bar infinitely variable, SKU : 254030
- Oxygen pressure reducer 300 bar/0-20bar, SKU : 254032
- Refrigerated compressed air dryers, SKU : 251090



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**Are you interested in a machine for which you cannot find a current video?
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