Macchine a taglio laser

ACE Laser Compact ST 1313 1.5



COD. ART. : 141104

Building on the strengths of the ACE laser machine family, this series impresses with its outstanding price-performance ratio. With high-quality components and versatile software options, it provides all the tools needed for efficient cutting processes. Thanks to its compact design, the machine is ideal for smaller workshops.

- Modern, space-saving design
- Manually extendable table
- Powerful software with nesting function
- High-performance laser source with up to 3 kW beam power
- High-performance cutting head with auto-focus

SPECIFICHE TECNICHE

AREA UTILE DI LAVORO

Dimensioni tavola	1.300 mm x 1.300 mm
Peso max. del pezzo	280 kg

CORSA

Corsa asse X	1.325 mm
Corsa asse Y	1.350 mm
Corsa asse Z	100 mm

AVANZAMENTO RAPIDO

Avanzamento rapido asse X-/ Y	100 m/min
Avanzamento rapido asse Z	30 m/min

PRECISIONI

Precisione di posizionamento	0,05 mm/m
Ripetibilità	0,03 mm/m

LASER

Lunghezza d'onda	1,08 ± 10% µm
Potenza raggio	1.500 W
Potenza assorbita	5,5 kW
Capacità di taglio acciaio da costr.	12 mm
Capacità di taglio acciaio inox	4 mm
Capacità di taglio alluminio	3 mm
Frequenza impulsi	50 Hz - 5.000 Hz

DIMENSIONI E PESO

Dimensioni (lungo x larghezza x altezza)	3,05 m x 2,06 m x 2,04 m
Peso	1.340 kg

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DETTAGLI PRODOTTO

Design and Construction

- The basis of this compact cutting system is a heavy, carefully welded steel frame.
- To ensure maximum dimensional stability, the entire structure is thermally relaxed during the manufacturing process.
- The large portal is moved by a powerful servo drive on both sides.
- This design enables impressive travel speeds while maintaining maximum rigidity.
- The use of high-quality ball screws and low-maintenance linear guides guarantees precise positioning.
- Even at high accelerations and travel speeds, this ensures precise and clean cutting results.
- The work table is designed so that it can be manually moved out of the fully enclosed housing for loading and unloading.
- This design enables quick material changes and optimal accessibility for the operator, despite the compact dimensions.
- An automatic central lubrication system permanently supplies all moving components and reduces maintenance requirements.
- The fully enclosed housing reliably protects the operator from all sources of danger.
- The machine frame is already designed for optimal connection to a powerful extraction system.
- Thanks to the integrated viewing window made of certified special glass, you can keep a safe and clear view of the cutting process at all times.

Cutting Head

- Outstanding design: The optimised optical configuration of the RayTools autofocus laser cutting head, together with the smooth, efficient airflow design, guarantees outstanding cutting quality and efficiency.
- Precision focusing: Automatic focus adjustment reduces the need for manual intervention. Focus adjustment range: -12 mm to +10 mm; positioning accuracy: 0.05 mm.
- Low wear: An additional protective lens in the collimation unit effectively protects the collimation lens and extends its service life.
- Easy to maintain: The drawer-style design allows for quick and easy replacement of the protective lenses and simplifies maintenance.

Laser Sources

- Proven power: ACE Compact ST models are equipped with high-end laser sources from the renowned manufacturer Raycus.
- Efficiency meets performance: Benefit from high electro-optical efficiency and enormous energy density.
- Robust system: The beam is guided via flexible fibre-optic cables, eliminating the need for moving parts or mirrors. This reduces maintenance requirements and significantly increases the service life compared to other systems.
- Advantages over CO_2 lasers: Fibre lasers are generally more energy-efficient and require less maintenance, which results in significant long-term cost savings.
- Advantages over plasma: Switching from a plasma laser to a fibre laser can significantly reduce annual operating costs.

Controller

- Easy to use: The powerful FSCUT 2000 control system features a clear interface that is optimised for specific applications. This enables short training times and ensures safe operation in the long term.
- Knowledge at the touch of a button: A comprehensive technology database instantly provides you with the appropriate cutting parameters and preset cycles for a wide variety of metals – saving set-up time and trial runs.
- Automatic control: For optimum cutting results, solenoid and proportional valves control the gas pressure setting fully automatically directly from the control system.

Software

- Everything at a glance: Cypcut is a proven software solution that offers all the functions required for editing cutting contours. It also informs the operator in real time about the current operating status.
- Minimal waste: Automatic nesting arranges your components on the sheet metal in the most efficient way possible. This significantly reduces

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preparation time and saves a lot of material costs.
- Flexibility: As well as allowing customised adjustments, the software offers a variety of predefined nesting patterns for standard tasks.

DOTAZIONE STANDARD

Sistema completo con controllo CNC (FSCUT2000)
Software CAD/CAM CypCut
software CypNest offline
tavola di taglio estraibile manualmente
Laser a fibra di itterbio Raycus
Serbatoio di rigenerazione refrigerante
testa di taglio Raytools con autofocus
valvola proporzionale Aventics
cabina di protezione laser
Manuale d'uso

DOTAZIONE OPZIONALE

- Sistema d'aspirazione e filtraggio Kemper, Cod. Art. : 253848
- Riduttore della pressione ossigeno 200 bar/0-20bar a variazione continua, Cod. Art. : 254030
- Riduttore della pressione idrogeno 200 bar a 50 bar, monostadio, Cod. Art. : 254031
- Riduttore della pressione ossigeno 300 bar/0-20bar, Cod. Art. : 254032
- Riduttore della pressione idrogeno 300 bar/0-50bar, Cod. Art. : 254033
- Sistema di aspirazione e filtrazione Vanterm, Cod. Art. : 254173
- Essiccatore a freddo per aria compressa, Cod. Art. : 251090

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