Установки лазерной резки

ACE Laser Compact ST 1313 3.0



APT. : 141106

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

ТЕХНИЧЕСКИЕ ДАННЫЕ

РАБОЧАЯ ЗОНА

Размеры стола	1.300 мм x 1.300 мм
Масса заготовки (макс.)	280 кг

ТЕХНОЛОГИЧЕСКИЙ ХОД

Технологический ход, ось X	1.325 мм
Технологический ход, ось Y	1.350 мм
Технологический ход, ось Z	100 мм

УСКОРЕННЫЙ ХОД

Ускоренный ход по оси X/Y	100 м/мин
Ускоренный ход, ось Z	30 м/мин

ТОЧНОСТЬ

Точность позиционирования	0,05 мм/м
Точность повтора	0,03 мм/м

ЛАЗЕР

Длина луча	1,08 ± 10% мкм
Мощность CW-излучения, макс.	3.000 Вт
Потребляемая мощность	12 кВт
Мощность резания, сталь	18 мм
Мощность резания, нержавеющая сталь	8 мм
Мощность резания, алюминий	6 мм
Частота импульсов	50 Гц - 5.000 Гц

РАЗМЕРЫ И МАССА

Габариты (Д x Ш x В)	3,05 м x 2,06 м x 2,04 м
Масса	1.340 кг

© KNUTH Werkzeugmaschinen GmbH, 2024 Все права защищены
Опубликован в: 21.10.2026.







СВЕДЕНИЯ О ПРОДУКТЕ

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

© KNUTH Werkzeugmaschinen GmbH, 2024 Все права защищены
Опубликован в: 21.10.2026.

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.

СТАНДАРТНАЯ КОМПЛЕКТАЦИЯ

Полная система с ЧПУ (FSCUT2000)
программное обеспечение CypCut CAD/CAM
программное обеспечение для автономной работы CypNest
ручной выдвижной стол для резки
волоконный лазер Ytterbium Raycus
охладитель возвратной жидкости системы охлаждения
режущая головка с автофокусировкой Raytools
пропорциональный клапан Aventics
защитная кабина лазера
руководство по эксплуатации

ДОПОЛНИТЕЛЬНОЕ ОСНАЩЕНИЕ

- Вытяжная и фильтрационная система Kemper, Арт. : 253848
- Кислородный редуктор 200 бар, плавная регулировка 0–20 бар, Арт. : 254030
- Азотный редуктор 200 бар, одна ступень до 50 бар, Арт. : 254031
- Кислородный редуктор 300 бар, 0–20 бар, Арт. : 254032
- Азотный редуктор 300 бар, 0–50 бар, Арт. : 254033
- Вакуумно-фильтрационная система Vanterm, Арт. : 254173
- Сушилка для сжатого воздуха, Арт. : 251090

© KNUTH Werkzeugmaschinen GmbH, 2024 Все права защищены
Опубликован в: 21.10.2026.