

ACE Laser Compact R

All the advantages of advanced fiber laser technology in a small package



- Rapid feed speed up to 40 m/min
- Laser power up to 2000 W
- Large work area
- Nesting software included

- The machine frame is made of a rigid steel weldment, ensuring production-related stress on the material is eliminated
- The gantry is an aluminum die-cast construction with low weight, high rigidity, and servo-drives on both sides for excellent dynamics
- The linear guides on all axes require minimal maintenance and are designed for long-lasting precision and high cutting speeds

- High-quality preloaded ball drives on all axes ensure above-average positioning accuracy
- A central lubrication system supplies lubricant to all guide components, simplifying maintenance and extending machine life
- The cutting system is fully enclosed to protect operators and the environment
- A safety glass window in the door allows direct monitoring of the cutting process

Control

- The powerful PC-based control is easy to operate via an application-specific user interface
- A technology database includes cutting parameters and pre-set cycles for various metals
- The efficient processing of all cutting jobs is further supported by user-friendly software for the selection of process parameters
- Solenoid and proportional valves regulate the gas pressures (set in the control) during the cutting process

Nesting Software

- The Cypcut software provides all functions needed for the machining of cutting contours, and displays the current operating status
- Automatic nesting saves much time, allows custom adjustments and ensures minimal material waste
- The software includes predefined nesting patterns that cover a wide variety of practical applications

Cutting head

- The proven RayTools cutting head features an integrated collision guard, automatic focus positioning, and height control
- Focus lenses can automatically change the position in the range of 25 mm (+10 ~ -10 mm) with an adjustment accuracy of 0.05 mm
- The laser beam focus continuously adjusts itself based on material conditions during program execution
- The drawer-type lens holder allows for quick and easy replacement of protective lenses

Laser Sources

- ACE Laser Compact R models are equipped with powerful Raycus laser sources
- Raycus laser sources are known for their high reliability, electro-optical conversion efficiency at high energy density and wide modulation frequency
- Low-maintenance beam guide is provided by a flexible fiberoptic cable and ensures long tool life

Standard Equipment

Complete system with CNC-control (CypCut), Ytterbium fiber laser by Raycus, fibre optics, high-pressure cutting head by Raytools, automatic focus position adjustment, laser protection booth, automatic gas console, central lubrication, coolant return cooler, CAD/CAM software (CypCut), operating manual and programming instructions

Options

Part No.

- | Options | Part No. |
|--------------------------------------|----------|
| • Vacuum and filter system by Kemper | 253848 |

Specifications ACE Laser Compact		1313 1.0 R	1313 1.5 R	1313 2.0 R
Working area				
Table size	mm	1.300x1.300	1.300x1.300	1.300x1.300
Maximum workpiece weight	kg	250	250	250
Axis acceleration X- / Y-axis	m/s ²	5	5	5
Travels				
Travel X-axis	mm	1.320	1.320	1.320
Travel Y-axis	mm	1.320	1.320	1.320
Travel Z-axis	mm	80	80	80
Rapid feed				
X-axis rapid feed	m/min	40	40	40
Y-axis rapid feed	m/min	40	40	40
Accuracies				
Positioning accuracy X- / Y-axis	mm	± 0,03	± 0,03	± 0,03
Repeatability X- / Y-axis	mm	± 0,02	± 0,02	± 0,02
Laser				
Fiber laser	W	1.000	1.500	2.000
Laser source		Raycus	Raycus	Raycus
Shaft length	µm	1,08 ± 10%	1,08 ± 10%	1,08 ± 10%
Power consumption	kW	3,6	6	7
Cutting capacity in structural steel	mm	8	10	12
Cutting capacity in stainless steel	mm	4	5	6
Cutting capacity in aluminum	mm	2	4	5
Measures and weights				
Overall dimensions (length x width x height)	m	2,52x2,17x1,88	2,52x2,17x1,88	2,52x2,17x1,88
Weight	kg	2.040	2.040	2.040
Part No.		141100	141101	141102