

HIGH POWER LASER CL 2000



CL 2000 high-power laser system in mobile cabinet

Basic system

- 1700 W laser power (CW)
- diode pumped solid-state laser
- real-time controlling
- optional air or water cooling
- suitable for robust industrial applications
- laser class 4
- laser optics OSH 80

LASER SYSTEMS FOR INDUSTRIAL USE

The CL 2000 is a versatile industrial laser system of the cleanLASER High Power series. The diode-pumped laser module allows a reliable, almost maintenance-free use of the system. The laser light is guided via glass fibre to the processing optics. The system can easily be operated with the optics controller buttons or by the intuitive cleanTOUCH touch display.

Common applications are large-area paint removal, pre-treatment, cleaning or weld seam de-coating prior to non-destructive testing at high feed rates. Also nuclear de-contamination in large area scale are preferred applications of cleanLASER's most powerful product.

Thanks to a compact and robust design and full mobility – despite the ultimate laser power- the system can be used for any mobile application in field and outside. Only a three-phase current connection and, separate cooling water is required.



APPLICATION EXAMPLES

- Weld seam pre-treatment for aluminium alloys
- Large scale surface de-coating and de-contamination
- fast cleaning of oily surfaces
- complete or selective paint removal
- Preparation for NDT

TECHNICAL DATA



Laser system CL2000 in industrial switch cabinet

OPTIONS

- Round or square optical fibre
- Optional Pilot laser mirrored into the beam path of the laser
- Tele diagnosis system CLQ control
- HMI control unit cleanTOUCH integrated
- Fieldbus interface, e.g. profinet, profibus, interbus
- External chiller system for water or air cooling
- Extraction and filter technology adapted to the application

Laser type	Diode-pumped solid state laser
Control system	cleanTOUCH HMI, μ -controlled with safety circuits
Wavelength	1064 nm \pm 4nm
Laser safety class	4
Specified power of the beam source	1,700 W \pm 5 %
Pulse rate	25-40 kHz
Maximum pulse energy	65 mJ
Minimum pulse duration	80 ns
Maximum power consumption	13kVA
Standard fibre length	10m, optional up to 50m
Expected lifetime of the beam source in continuous operation	>10.000hrs (MTBF)
Dimensions (L x W x H without handles, display elements and fiber tracking)	Depending on cabinet style
Weight	460 kg (w/o cable package)
Power supply (laser only)	3x32 A, 400V (50/60Hz), N,PE
Minimum / maximum operating temperature	38°C
Humidity	90%, non condensing, dew point below 22°C req.
Cooling system / medium	Internal water – to water (external chiller required)
Required external cooling water quality for water-cooled systems	< 17 °C, diff.-pressure 1,5 – 4 bar, max. particle-size 100 μ m, non corrosive, pH-neutral
Technical availability according to DIN	> 96 %

01.2025 All specifications are subject to technical changes

PLEASE GET IN CONTACT! WE WILL BE HAPPY TO ADVISE!

