

CL 500iM

500 WATT LASER POWER COMPACT AND COST-EFFECTIVE

- Smaller – lighter – more efficient
- Beam sources by IPG Photonics made in Germany
- Exceptionally high socket efficiency of up to 30%
- Ideal for hand-guided applications
- Fully air-cooled, making it lightweight and almost maintenance-free
- Soft beam with homogeneous profile for gentle yet powerful processing
- Requires no optical isolator, making the processing optics particularly easy to handle with full reflection

FEATURES

- All-round shock-protected chassis with a lift option for forklifts and cranes as well as lashing options for secure transport
- Easy to manoeuvre thanks to large castors with easy-to-lock parking brakes
- Ergonomic, stable grip for pushing
- Secure compartment for optics storage and non-slip parking space
- The latest cleanTOUCH portal with remote diagnostics for easy operation
- Optimal visibility of laser status display from all sides, clear signal design (standby, laser ON/emission)
- Single-phase power supply, operation via household socket possible
- Interface for emergency stop and interlock
- Interface with server function for connection and monitoring of industrial suction devices
- Suction nozzle integrated into hand-held optics for optimal extraction of smoke, vapour and dust
- Integrated cooling of the handheld optics for continuous 24/7 use
- Low-maintenance, with easy access for maintenance tasks (protective glass replacement, filter replacement)



Mobile laser system of Mid Power series CL 500iM



Suitable optics for homogeneous distribution of the laser beam

APPLICATION EXAMPLES

Laser cleaning

Pre-treatment for welding and
decoating

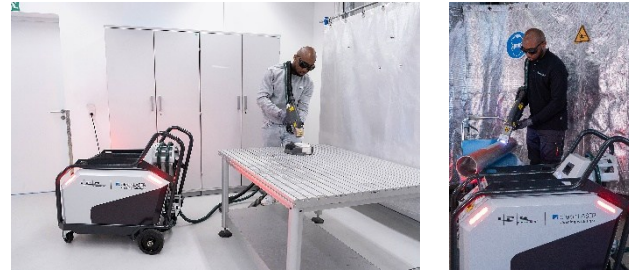
Post-treatment of welding seams

Rust removal

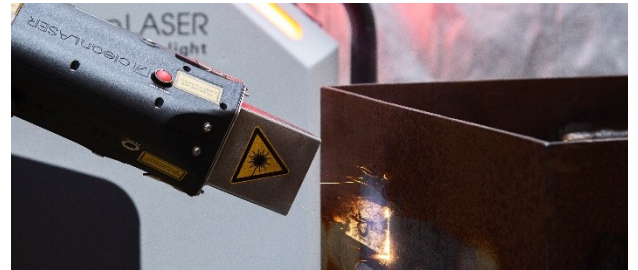
TECHNICAL DATA CL 500iM



Rugged construction for industrial indoor and outdoor use



Application examples



Versatile application range with user-defined parameters: flexible use from gentle cleaning to powerful ablation

Lasertype	Faser laser
Control	µ-controller with safety control circuits
Wavelength	1064 nm (infrared)
Laser class	4
Specified power of the beam source	500 W +/- 5 % average laser power
Puls frequency	50 – 500 kHz
Puls duration	120 ns
Maximal power input	1,85 kWh
Standard fibre length	7 m
Expected lifetime of the beam source in continuous operation	> 100.000 hours (MTBF)
Dimensions (l x w x h with handles)	1090 x 685 x 980 mm
Weight	~ 99 kg, incl. optical fibre and optics 110 kg
Power supply (laser only)	110–230 V +/- 10%, 16 A (single-phase), Schuko; altern. on request (NEMA 5/20 oder 6/15) 120 V, 20 A
Minimal/maximal operating temperature	8 – 36 °C (max. 38 °C at 50 % utilisation)
Humidity	< 95 %, non-condensing
Cooling system	Air, optics with internal liquid cooling
Technical availability according to DIN	> 98 %

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GLOBAL SERVICE FOR OUR CUSTOMERS – AVAILABLE LOCALLY:

With nearly 30 IPG offices and over 10 cleanLASER service partners worldwide, we are able to provide you with the best possible support.