

CL 1000iF

HIGH POWER LASER POWERFUL AND EFFICIENT

- 1000 Watt average laser power
- Laser sources made by IPG Photonics in Germany
- High feed enables rates of up to 30 m/s or 100 cm²/s

- Available as stationary and mobile version with a robust control cabinet
- Easy to automate



Laser system CL 1000iF for industrial applications

FEATURES

- Homogeneous top-hat beam quality ensures consistent material removal
- Highly dynamic scanner
- Suitable for both wide and narrow lines (>10 mm)
- Wide focus range of up to +/-8 mm
- Modern cleanTOUCH control system with remote diagnostics for easy and intuitive operation
- Software features such as on-the-fly machining
- Fieldbus interface for industrial integration
- Interface for emergency stop and interlock
- Interface with service function for connecting and monitoring industrial suction units
- Water-cooled
- Low-maintenance, easy access for maintenance tasks (replacement of protective glass, filter change)
- Ready to operate and pre-configured

APPLICATION EXAMPLES

Pre-treatment for many joining processes, such as welding, soldering, bonding and coating

Post-treatment of welds, soldering fluxes for processes such as coating

Cleaning of surfaces at highly efficient processing speeds

Paint removal, efficient and economic even with high layer thicknesses (>80 µm)

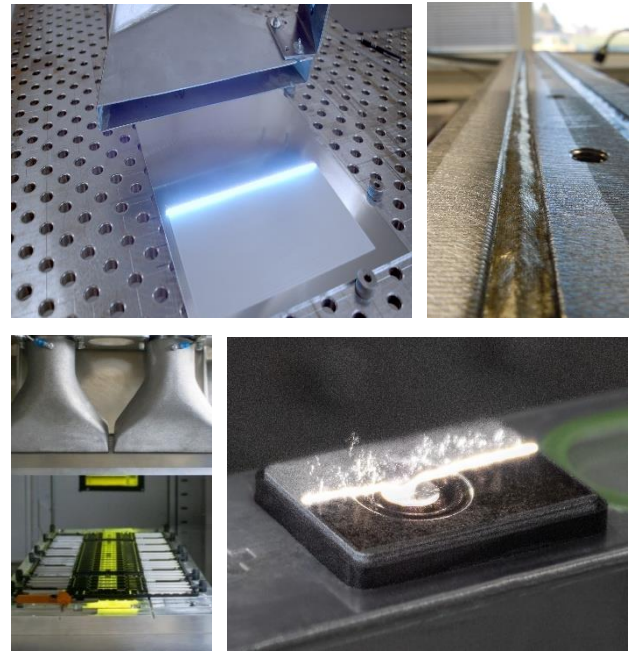
Damage-free processing of zinc-coated steels

Mold cleaning

TECHNICAL DATA CL 1000iF



Laser system of the High Power Series



Application examples

Laser type	Fiber laser
Control	µ-controller with safety control circuits
Wave length	1064 nm (infrared)
Specified power of the beam source	1000 W ± 5 % (average power in optics)
Laser class	4
Pulse frequency	10 - 150 kHz
Max. pulse energy	100 mJ
Min. pulse duration	70 ns
Max. power input of the laser system during standard operation	4,5 kW
Standard fibre length	15 m, pulg-in on both sides
Expected beam source lifetime in continuous operation	> 100.000 Stunden (MTBF)
Dimensions (l x h x H without handles, display elements and fibre refilling)	~ 990 x 1.205 x 1.750 mm ³
Weight	~ 390 kg
Power supply (laser only)	400V (+/-10%) 50-60 Hz
Minimal/maximal operating temperature	10 / 38 °C
Air humidity	< 95 %, non-condensing
Cooling system	Air – Water
Compatible optics systems	Stamp30 (incl. PC) , OS70, OSA70V
Technical availability according to DIN	> 99 % (DE)

GLOBAL SERVICE FOR OUR CUSTOMERS – AVAILABLE LOCALLY:

With nearly 30 IPG offices and 10 cleanLASER service partners worldwide, we are able to provide premium support.