



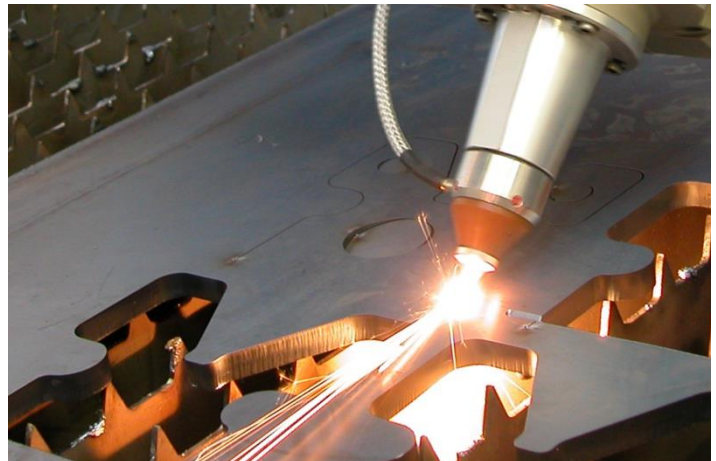
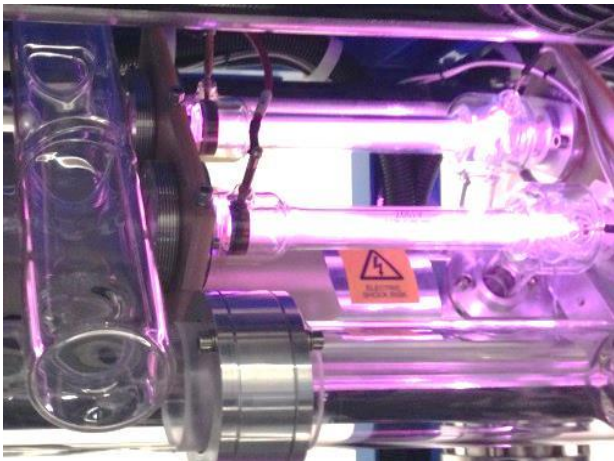
## CM Series CO<sub>2</sub> Lasers - New Laser Generation

Convergent Photonics has been providing laser source since 1960's, offering highest performing, highly efficient and reliable industrial CO<sub>2</sub> Lasers for manufacturing.

Convergent Photonics **CM Series Lasers**, with optimum beam quality for laser processing, excel in cutting and welding a broad range of materials and thicknesses. CM Series Lasers with DC discharge are the most efficiently run industrial CO<sub>2</sub> lasers available. Equipped with magnetic bearing turbine, the laser requires minimal maintenance, reducing cost of ownership.

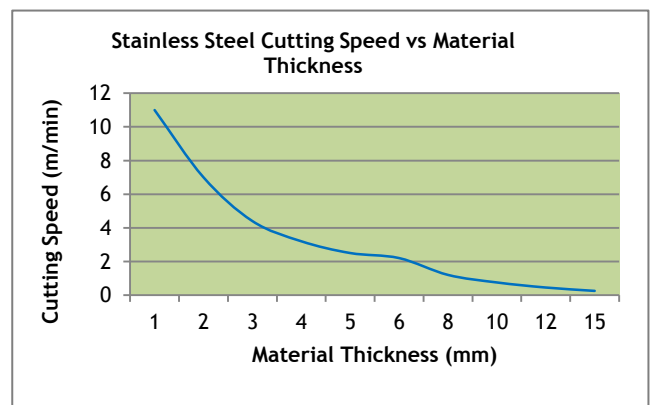
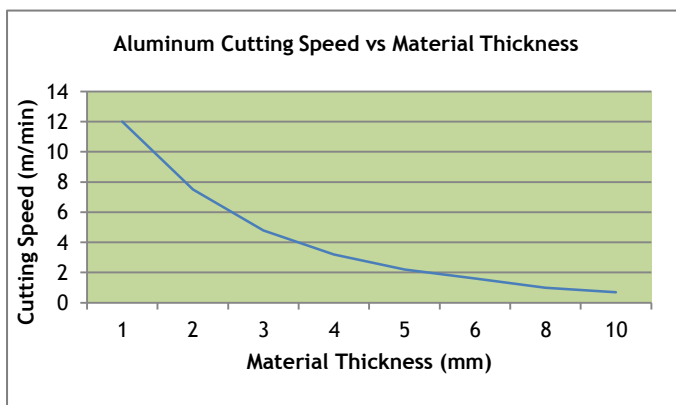
New CM Series features include:

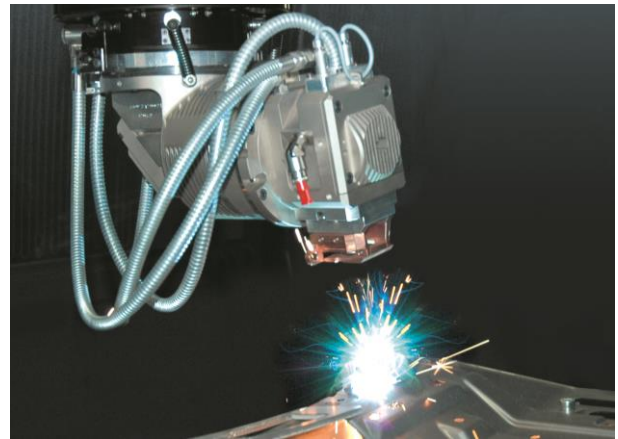
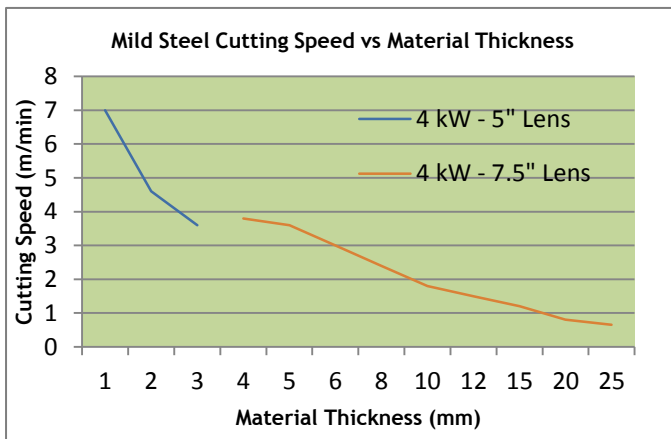
- Smart gas feed system to minimize laser gas consumption
- Energy Conservation Mode
- Solid State High Voltage Power Supply
- Magnetic Bearing Turbine



### CM Series Performance

Typical cutting capabilities of CM Lasers for Aluminum, Stainless Steel, and Mild Steel are shown in graphs below.





CM series beam quality enables significant improvement in welding applications.

### Technical Specifications

	<b>CM4000</b>
Average Power	200 - 4000 W
Wavelength	10.6 μm
Beam Propagation Factor $M^2$ typical	2.5 - 2.7
Beam Divergence	1.5 mrad half angle
Beam Diameter at Output	14.5 mm @ $1/e^2$ , 19 mm full beam
Pulsing	
Pulse Rep. Rate	0-2 kHz
Pulse Width	>100 μseconds
Pointing Stability	+/-150 μrad
Ambient Temperature (min/max)	10° C / 40° C (50° F / 104° F)
Relative Humidity	<95% non-condensing
Diode Pointing Laser	Wavelength 635 nm Power <1 mW
Electrical Power Consumption	34 kW
Voltage	460 ± 10% VAC, 3-phase
Dimensions W / H / L	850 mm / 960 mm / 3115 mm
Weight	1,200 kg

