



## CX Series CO<sub>2</sub> Lasers

Convergent Photonics offers highest performing, highly efficient and reliable industrial CO<sub>2</sub> Lasers for manufacturing.

Convergent Photonics lasers are available in different power levels, from 200 W up to 4000 W, to better suit the customer needs in material processing. All models are very compact, for easy integration in different machine configurations.

Convergent Photonics CX Series Lasers, designed with operational efficiency in mind for laser processing, are considered as the best economical fit for cutting and welding a broad range of materials and thicknesses, in 2D and 3D. The CX4000 is an economical upgrade to the popular and widely deployed CP4000 laser.



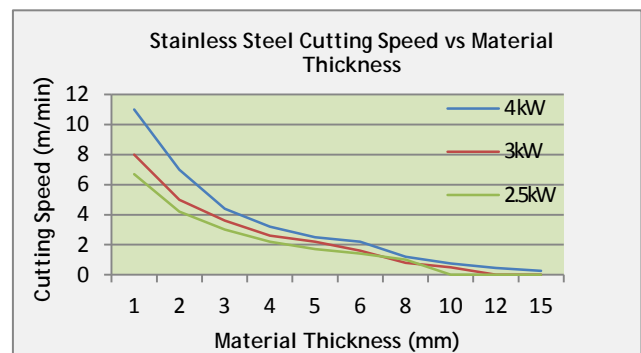
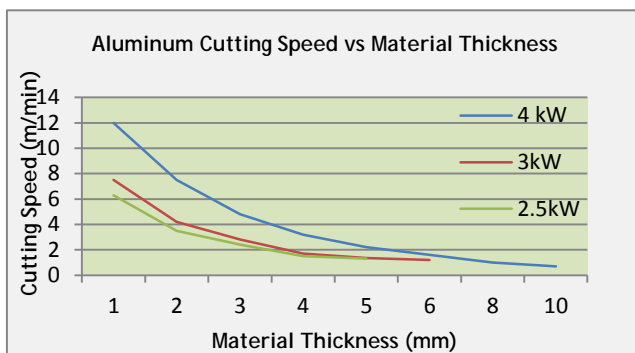
The upgrades correspond to a highly reliable Solid State HVPS and significantly lower gas consumption.

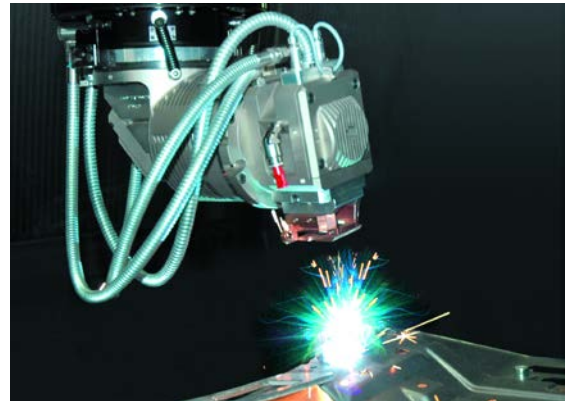
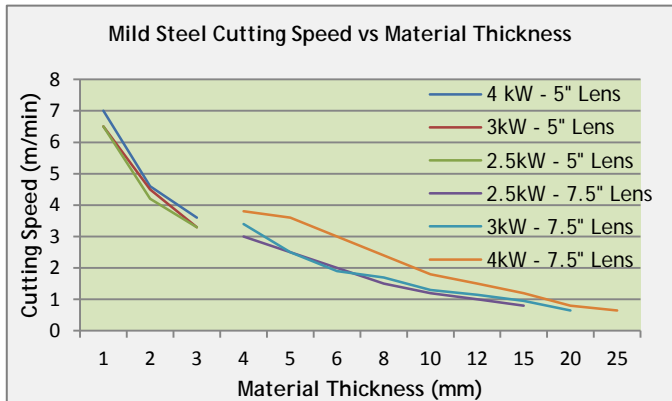
	CX2500	CX3000	CX4000
Number of lanes	8		12
Control system	Prima Electro PRIMAlagic PLC		
HVPS	Oil		Solid State
HV transformer	In oil		
Turbine	3 stage		
Speed	440 Hz		
Bearing	Mechanical		

All models are based on proprietary resonator technology, which allows high stability of the beam, thanks to carbon fiber structure and stress free design.

### CX Series performance

Typical cutting and welding capabilities of CX Lasers for different materials are outlined in the graphs below.





### Technical Specifications

	<b>EX2500</b>	<b>EX3000</b>	<b>EX4000</b>
Average Power	200 - 2500 W	200 - 3000 W	200 - 4000 W
Wavelength	10.6 $\mu$ m		
Beam Propagation Factor M <sup>2</sup> typical	2.5 - 2.8		2.4 - 2.7
Beam Divergence	1.5 mrad half angle		
Beam Diameter at Output	14.5 mm @ 1/e <sup>2</sup> , 19 mm full beam		
Pulsing	0-2 kHz		
Pulse Rep. Rate	>100 $\mu$ seconds		
Pulse Width	+/-150 $\mu$ rad		
Pointing Stability	10°C / 40°C (50°F / 104°F)		
Ambient Temperature (min/max)	<95% non-condensing		
Relative Humidity	Wavelength 635 nm Power <1 mW		
Diode Pointing Laser	29kW	32 kW	37 kW
Electrical Power Consumption	460 $\pm$ 10% VAC, 3-phase		
Voltage	850 mm / 887 mm / 2551 mm		855mm / 883 mm/ 3105 mm
Dimensions W / H / L	1,137 kg		1,200 kg
Weight			

