



## 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.



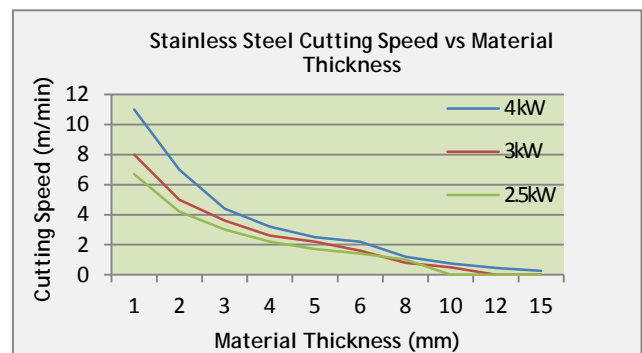
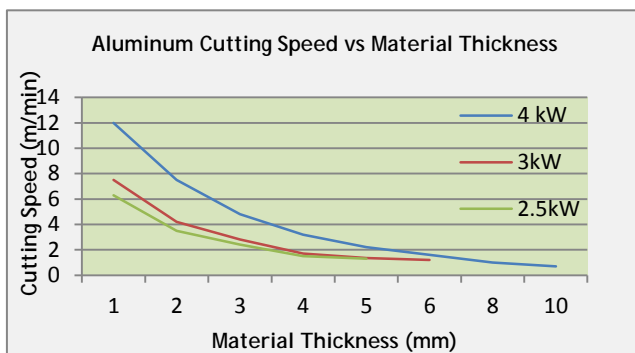
The upgrades correspond to a highly reliable Solid State HVPS and significantly lower gas consumption.

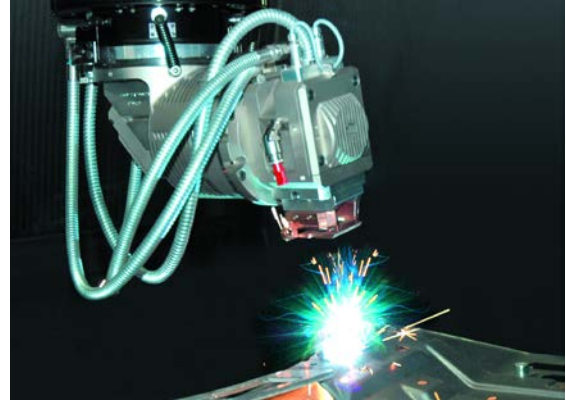
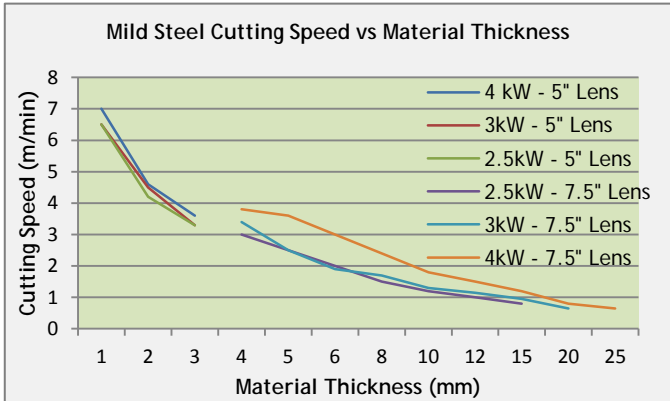
	CX2500	CX3000
Number of lanes	8	
Control system	Prima Electro PRIMAl <sup>o</sup> gic PLC	
HVPS	Oil	
HV transformer	In oil	
Turbine	3 stage	
Speed	440 Hz	
Bearing	Mechanical	

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

	EX2500	EX3000
Power Range	200 - 2500 W	200 - 3000 W
Wavelength	10.6 μm	
Beam Propagation Factor M <sup>2</sup> typical (Prometec)	2.1 - 2.5	
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 μseconds	
Pulse Width	+/-150 μrad	
Pointing Stability	Wavelength 635 nm Power <1 mW	
Diode Pointing Laser	29kW	
Electrical Power Consumption	32 kW	
Voltage	400/600 Vac 3P	
Operating Environment (min/max)	10°C / 40°C (50°F / 104°F)	
Relative Humidity	<95% non-condensing	
Cooling	Req. Capacity	27 kW
	Temperature	18°C / 20°C (64,4°F / 68°F)
	Pressure	4 bar - 5 bar
	Flow	133 l/min
	Fluid	Distill water /35% Glycol
Filter requirement	500 μm	
Dimensions W / H / L	850 mm / 887 mm / 2551 mm	
Weight	1,137 kg	

