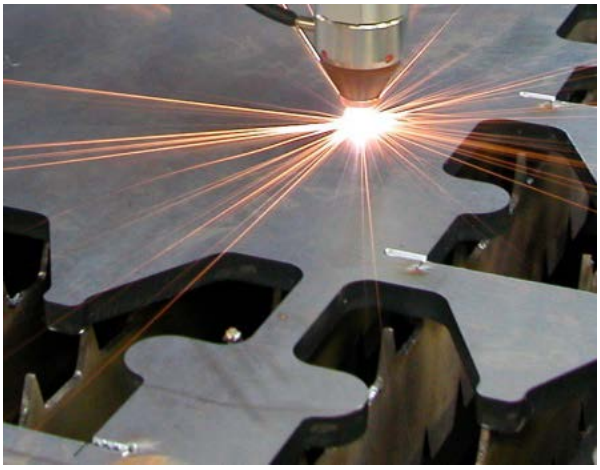
CV Series CO_2 Lasers

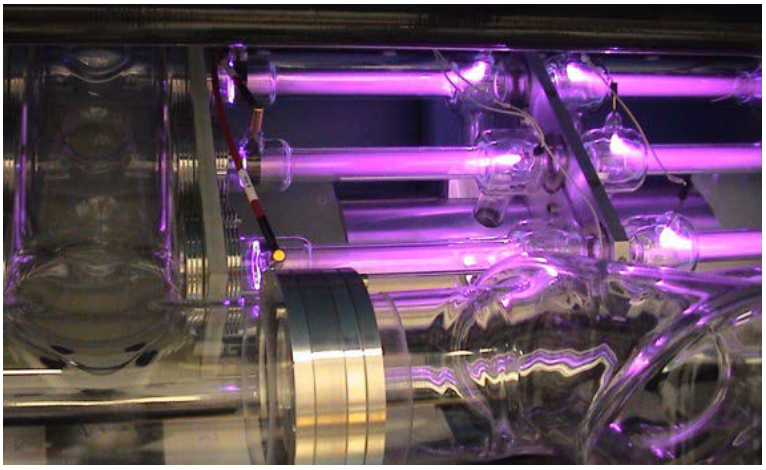
Convergent Photonics has been in business providing laser source since 1960's. Convergent Photonicsprovides highest performing, highly efficient and very reliable CO_2 lasers for manufacturing.

Convergent Photonics CV Series Lasers, with optimum beam quality for laser processing, excel in cutting and welding broad range of materials and thickness. CV Series Lasers with DC discharge are the most efficiently run industrial CO_2 laser available. With magnetic bearing turbine, the laser requires minimal maintenance, reducing cost of ownership.

CV Series Lasers features include:

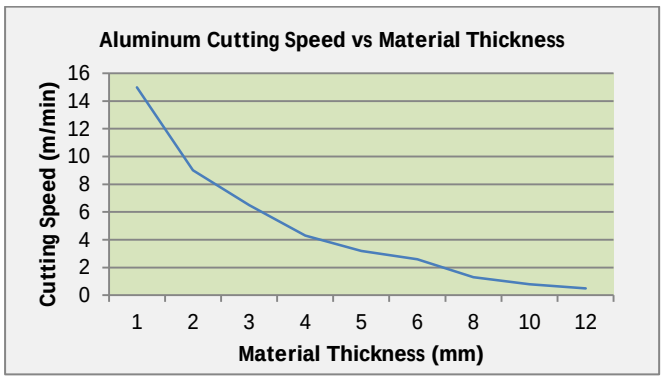
- **High Quality Beam Output at High Power**
- **Maintenance-free Magnetic Turbine**
- **Energy Conservation Mode**
- **Solid State High Voltage Power Supply**

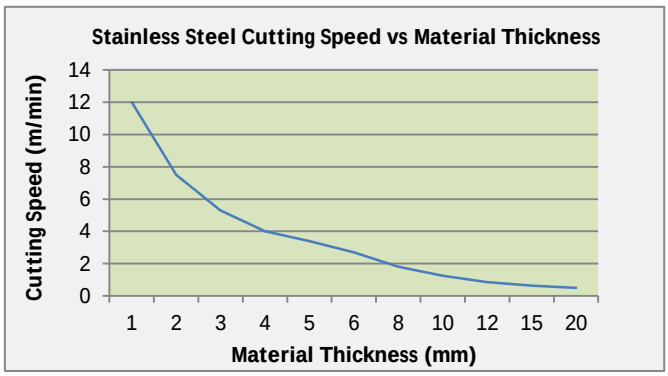


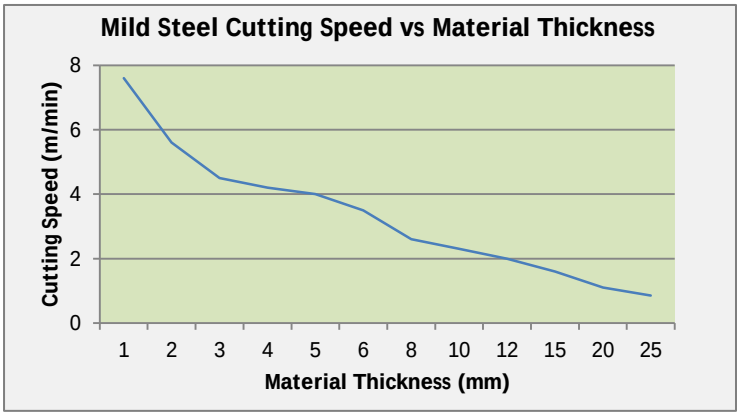


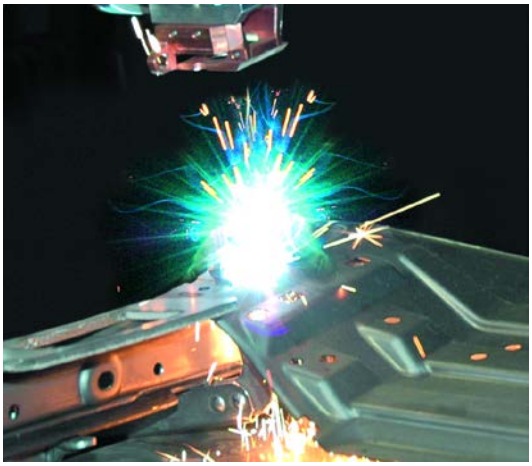
CV Series performance

Typical cutting capabilities of CV Lasers for Aluminum and Stainless Steel are compared with legacy lasers demonstrating significant increase in speed.



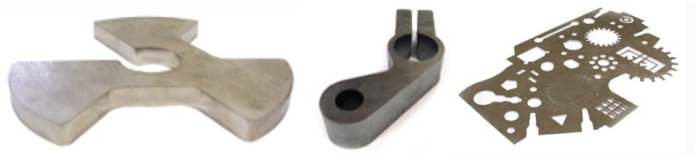






Specifications

	CV5000	CV6000
Average Power	200 - 5000 W	200 – 6000 W
Wavelength	10.6 µm	
Beam Propagation Factor M^2 typical	2.2 – 2.6	
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	40kW	44 kW
Voltage	400 – 460 VAC, 3-phase	
Dimensions W / H / L	849.6 mm / 957 mm /3119 mm	
Gas Consumption - He (68%), N_2 (36%), CO_2(4%)	20-70LPH	
Weight	1,200 kg	



MADE IN U. S. A.