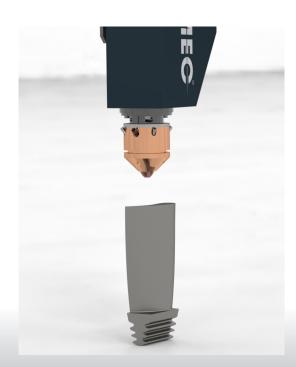
# **OPTOMEC**®

### **CS250**

# Metal AM Printer with Controlled Atmosphere Options





High performance Directed Energy Deposition (DED) system for research and high volume production. Processes all common alloys, including steels, titanium and aluminum.

## Compact, all-in-one machine enclosure for easy transport and integration

- 250 x 250 x 250 mm standard build volume
- 3, 4 or 5 axes of motion, including simultaneous coordination
- Available with inert atmospheric control for processing reactive metals such as titanium and aluminum
- Up to 4 front-mounted powder feeders for easy access
- Operator-friendly Omron/Delta Tau motion controller

#### **LENS Print Engine**

- Adjustable laser spot size with optional automation for change-on-the-fly operation
- 500 W standard diode laser with options up to 2 kW
- Optional Premium laser for reflective material like copper and aluminum alloys
- Optional AutoCLAD<sup>TM</sup> integrated vision and control for adaptive laser cladding and repair of components
- Optional melt-pool sensor for closed loop process control

#### **Applications**

- Materials research, alloy blending, graded material deposition
- Laser cladding
- Production repair of components
- 3D part printing

## **LENS CS250 DED Metal Additive System**



CS250 Shown with Controlled Atmosphere Option

	CS250 System Specifications	
Automation	XYZ travel distance	250 x 250 x 250 mm
	Number of axes	3-5
	Resolution	0.001 mm
	Max part mass	23 Kg
	Controller	Omron/Delta Tau, PMAC
Deposition System	Laser	500-2000 W IR optical fiber laser, optional premium laser for processing Al and Cu
	Enclosure	CDRH Class 2 laser enclosure
	Standard powder feeders	One front-mounted powder feeder; up to 4 in total
	Optional atmospheric control	Continuous purge system, <20 ppm oxygen, or automated gas recirculation system, <10 ppm oxygen
	AutoCLAD Adaptive Toolpath Generation Software with Integrated Vision	Optional
	Automated part loading	Optional
Mechanical	Dimensions	1.9 x 2.5 x 2.5 m
	Weight	Арргох. 2010 Кg

