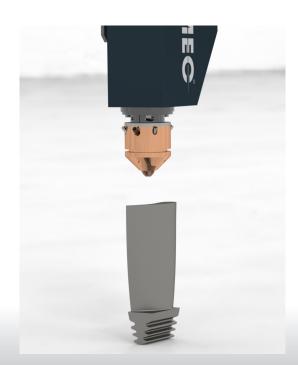
OPTOMEC

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 AutoCLADTM 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

