

Laser Next 2141

LASER METAL DEPOSITION



THE LARGE SCALE DEPOSITION SOLUTION WITH LARGE WORKING ENVELOPE FOR 3D FABRICATION, REPAIRING AND CUSTOMIZATION

The Laser Next 2141 combines the efficiency and productivity of the other Laser Next products with unique flexibility. Thanks to multiple machine configurations (fixed tables, split cabin, shuttles and turn table) it can meet any production need. Laser Next 2141 is a multipurpose solution developed and designed for large-part processing and jobshop production with advanced technology for different applications (Additive manufacturing, 3D cutting, 2D cutting and welding).



FLEXIBLE

Different applications with a single machine. Laser Metal Deposition, 3D cutting, 2D cutting and welding in a single multipurpose solution with multiple machine configurations.



HIGH-CAPACITY

Very large working envelope for large parts processing combined with reduced footprint.



RELIABLE

Fully tested and reliable thanks to the experience of the successful Laser Next platform.



ACCURATE

High precision, with no backlash or wear, thanks to the linear motor-driven focusing head and optical scales on main axes and on the focusing head.



EFFICIENT

Higher Overall Equipment Efficiency due to reduced downtime and maintenance. Less resources dedicated and no special skills needed for simplified maintenance.

Technical Specifications

Laser Next 2141

LASER POWER	1 - 6 kW
TYPE OF LASER	Fiber
BEAM WAVELENGTH	1,070 - 1,080 nm
WORKING VOLUME	4,140 x 2,100 x 1,020 mm
AXES CONFIGURATION	5 axes
AXES STROKES	X = 4,140 mm Y = 2,100 mm Z = 1,020 mm
HEAD AXIS	A = 360° continuous B = +/- 135° C = +/- 12 mm
AXES VELOCITY	X, Y, Z = 120 m/min A, B = 540°/s (1.5 rev/s) C = 50 m/min TRAJECTORY = 208 m/min
ACCURACY	X, Y, Z = 0.03 mm A, B = 0.005°
ACCELERATION	X, Y, Z = 1 g A, B = 9.5 rev/s ² C = 4 g TRAJECTORY = 1.73 g
ROTARY OPTION	2 axes Rotation (load capacity option)
MAXIMUM OVERALL DIMENSIONS	4,650 mm x 7,400 mm x 4,450 mm
WEIGHT	22,000 kg
DEPOSITION RATE	max 50 - 70 cm ³ /h - typical 25 - 30 cm ³ /h
ROUGHNESS RA	min 20 micron - typical 40 micron
DEPOSITION ACCURACY	+/- 0.2 mm
POWDER FEEDER	1 to 4 hopper (1.5 l)
CAM SOFTWARE	MasterCam DeD
CNC SOFTWARE	P94S Prima Power

- Laser
- Machine and additive process details
- Peripheral & auxiliaries - Software