



FORMALLOY

X-Series & L-Series System Specifications



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FORMALLOY AX



FORMALLOY PF



FORMALLOY ADF

X & L-Series

FORMALLOY's award winning laser metal deposition systems features include closed-loop control, variable-wavelength lasers, and Formalloys PF and ADF powder feeders for gradient/bi-metallic structures.

FORMALLOY's systems boast improved quality, better powder efficiency, and the ability to print with the most comprehensive list of metal alloys on the market. Each machine comes standard with the Formalloys AX metal deposition head and a customizable build volume with up to 5-axes of motion.

FORMALLOY's systems can be configured with Dynamic Layer Selection technology to monitor build quality and accuracy in real-time, auto-set layer thickness and auto-correct errors to achieve a part that is free of dimensional defects. The Formalloys AX head has proven high powder efficiency and built in quick-release features for ease of maintenance and component swaps. Formalloys designs all components and systems to utilize open standards for powder supply, allowing the user to provide their own powders if desired. This provides a cost-effective solution for 3D metal part production, repair and cladding to a diverse set of industries.

Specifications	X & L-Series
Build Volume	200x200x200mm 500x500x500mm 1x1x1m Customizable also available
Deposition Rates	Up to 7 kg/hr
Resolution	0.5-8 mm
# of Axes	Up to 5
# of Formalloys AX Heads	Up to 2
Formalloys AX Nozzle Type	Coaxial, 4-Stream
# of Formalloys Feeders	Up to 4
# of Lasers	Up to 2
Laser Type	IR (970-1070nm), Blue (450 nm)
Laser Power	Up to 8 kW
Powder Efficiency	Up to 95%
Machine Controller	FormNC
Dust Removal/Extraction	< 5 micron filtration
Inert Gas Build Chamber (L-Series)	< 10 ppm oxygen content
Build Plate Heating	Optional
Dynamic Layer Selection	Optional