

Laser Cladder

HP-115CL MULTI-AXIS LASER POWDER FUSION WELDING SYSTEM

Are You Looking for
Exceptional, Technical, and
Commercial Results from
Laser Welding?



The Huffman **HP-115CL Multi-Axis Laser Powder Fusion Welding System** produces dramatic cost savings with improved productivity, superior material deposition, reduced consumption of filler material and minimal finishing at a fraction of the process time of conventional methods. This fully automated system provides the precision and reliability necessary for **hardfacing turbine components and resurfacing worn aerospace engine components.**



[HP-115CL AT-A-GLANCE]

- ▼ **Omni-Directional Laser Cladding**
- ▼ **Low Heat Input**
- ▼ **Reduced Distortion / Residual Stress**
- ▼ **Minimized Base Alloy Dilution**
- ▼ **Near Net Shape Welding Reduces Finishing Time**

- ▼ Features AutoCLAD Laser Vision Software that:
 - Controls laser power
 - Controls weld path position
 - Controls powder flow parameters and machine motion and feed rate



Call our Sales Team Today!
1-888-HUFFMAN

WWW.HUFFMANCORP.COM



Compelling Productivity. Legendary Reliability.

HP-115CL

MULTI-AXIS
LASER POWDER FUSION
WELDING
SYSTEM

[TECHNICAL DATA]

	<i>Axis Type</i>	<i>Total Travel (axes under CNC control)</i>		<i>Feed Rate</i>
X-Axis	Linear	24" (610 mm)		0-200 ipm (0-5 mpm)
Y-Axis	Linear	24" (610 mm)		0-200 ipm (0-5 mpm)
Z-Axis	Linear	24" (610 mm)		0-200 ipm (0-5 mpm)
B-Axis	Rotary	±90°		0-5 rpm
C-Axis	Rotary	Continuous		3-33 rpm

	<i>Programming Resolution</i>	<i>Positioning Accuracy</i>	<i>Positioning Repeatability</i>
Linear Axes	0.0001" (0,001 mm)	±0.0008 in/ft (±0,02 mm/m)	0.0008 in/ft (0,02 mm/m)
Rotary C-Axis [with motor feedback]	0.001°	±20 arc sec	20 arc sec
Rotary B-Axis [with motor feedback]	0.001°	±36 arc sec	36 arc sec

Electrical	460V (±10%), 3-phase, 60Hz	Total Weight	20000 lbs (9072 kg)
	380V (±10%), 3-phase, 50Hz	Overall Dimensions	184 x 201 x 150" (4675 x 5105 x 3810 mm)

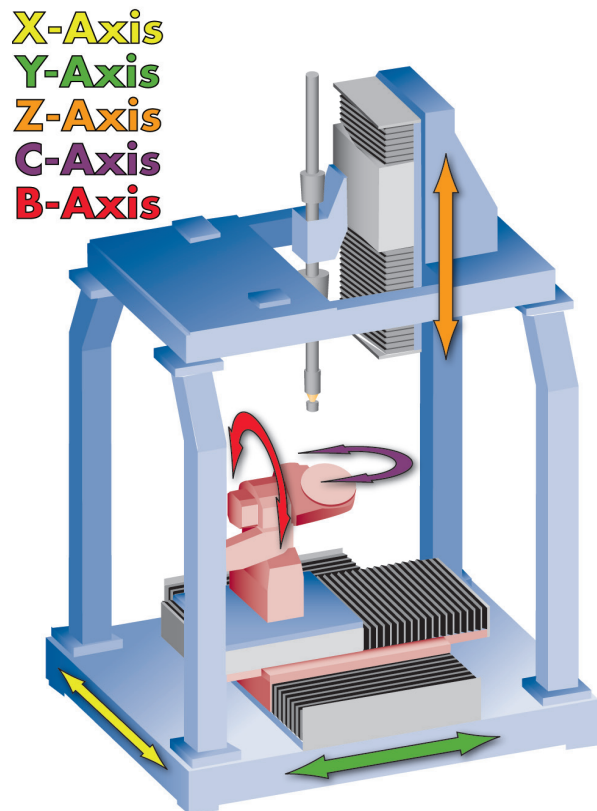
▼ [STANDARD EQUIPMENT]

- Huffman vision system
- Metric design and hardware
- Stress-relieved weldment machine base
- Totally enclosed
- Digital AC brushless servo drive systems
- Motor encoders on all axes
- Huffman Powder Feeder System
- Huffman Open Architecture Control (OAC)
- Pendant-mounted control panel
- IEC 61131 interface software
- Automatic lubrication
- Machine enclosure locks
- CDRH Class II
- ISO 9001 Certified Quality System

▼ [OPTIONAL EQUIPMENT]

- Exhaust system
- Air dryer
- CE Compliance
- Optional second powder feeder
- Custom vision software for specific applications
- Part/material handling systems
- Laser chillers
- Gear drive rotary
- High-resolution camera for larger parts
- Scale feedback on linear axes

[HP-115CL AXIS CONFIGURATION]



Compelling Productivity. Legendary Reliability.

CORPORATE HEADQUARTERS

1050 Huffman Way • Clover, SC 29710 • USA
Tel: 803-222-4561 • Fax: 803-222-7599
Toll-Free: 888-HUFFMAN
Web: www.huffmancorp.com