

# SculptPrint™ RND

## Large-Scale Metal Additive Manufacturing System



### Think BIG with Lincoln Electric Additive Solutions

Many additive technologies are limited to printing small parts with poor quality, and too often traditional manufacturing methods dictate your large metal part designs. Partner with the world leader in large-scale metal additive manufacturing (AM) and start realizing the full range of benefits: faster turn-around times, part design flexibility & freedom, and rapid prototyping of functional parts.

### Limited to Your Imagination

The SculptPrint™ RND additive system from Lincoln Electric is designed for R&D use by corporate, academic and government institutions to help you test and qualify parts, prototypes and materials faster and more efficiently. The SculptPrint RND comes ready to print parts from mild steel, high strength low alloy (HSLA) steel, austenitic stainless steel and martensitic stainless steel—with more alloys over time—optimized with Lincoln Electric's best-in-class wires to ensure a consistent, quality print.

### SculptPrint OS Path Planning Software

Most additive slicing software only allow for path planning of planar layers, and often require significant user intervention & correction. Lincoln Electric's proprietary SculptPrint OS software reliably and quickly takes you from CAD to print -- including printing non-planar layers.

### R&D To Production. Seamlessly

Create and validate new designs, generate internal standards, and fully characterize metals for your future AM efforts. Take designs from the page to print and measure how well they stack up as a part, tool or prototype. Move from research & development to finished production parts and sub-assemblies easily and quickly using Additive Solutions' manufacturing services. From idea to reality - all with a trusted partner.

## » Specifications

- Build Envelope (approximate): 2.5 ft x 2.5 ft x 2.5 ft (76 cm x 76 cm x 76 cm)
- Footprint: 7.3 ft x 13.5 ft [2.2 m x 4.1 m] - fully palletized
- System height: 7.5 ft [2.3 m] as delivered, 9.1 ft [2.8 m] with supplied fume hood; 12 ft [3.7 m] ceiling height for ductwork
- SculptPrint OS and the SculptPrint RND system are only licensed for use with Lincoln Electric wire feedstock.
- Pre-loaded with approved wire feedstock settings
- Patented closed-loop deposit height control - reduces opportunity for costly error
- Configurable for international locations, including power requirements and CE and CSA markings.

## » Equipment

- 6-Axis ABB® IRB 1660ID Robot Arm
- 2-Axis ABB IRBP A750 Skyhook Positioner
- Power Wave® R450 with STT® module
- AutoDrive® 4R100 Wire Feeder
- Magnum® PRO Water-Cooled Welding Torch
- Torch Maintenance Station
- Fume Hood (fume extraction equipment sold separately)

## » Sensors

- Through-Arc™ Tracking
- Torch Calibration
- Non-Contact Distance Measurement
- IR Temperature Measurement

## » Remote System and Process Support

- System & Software Training Package at Additive Solutions
- Additive Solutions Engineering Support



## Easy Financing options available!

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