

ElemX™3D Printer

Additive Manufacturing for a more flexible and resilient supply chain.

System Specifications*

SYSTEM CONFIGURATION

ADDiTEC Provides

- Printer
- Chiller
- · Slicer software
- Build plate removal tool
- · Initial supplies kit

Customer Provides

- · PC for software
- · Quench tank for part removal
- Hoist/Crane for part removal
- Ultra high Purity (99.999%)
- · Compressed air
- · Distilled water for chiller

PERFORMANCE

Build Volume

12 in x 12 in x 4.7 in / 300 mm x 300 mm x 120 mm

Maximum Build Rate

0.5 pounds/hour / 84 ccc/hour (2 pound part maximum)

Dimensional Accuracy

- XY: +/-0.6 mm
- Z: +/-0.5 mm

Minimum Layer Thickness

0.24 mm

Heat Treatment

As required

Secondary Processing

As required

Inert Gas

Argon in printhead region

Surface Finish

Sand cast comparable

Density

>98.5%

· Distilled water for chiller

WEIGHT AND DIMENSIONS

Printer Weight

4730 lbs / 2146 kg

Printer Dimensions (LxWxH)

9.3 ft x 4 ft x 7.3 ft /

284 cm x 125 cm x 221 cm

Chiller Weight

340 lbs / 154 kg

Chiller Dimensions (L x W x H)

2.5 ft x 1.6 ft x 2.2 ft /

78 cm x 44 cm x 66 cm

Total Space Required (L x W x H)

20.5 ft x 12.4 ft x 10.3 ft / 624 cm x 326 cm x 320 cm

POWER

Printer

- 50 amp
- 480V 3 phase
- 4 wire

Chiller

- 30 amp
- 230V single phase

Build Plate Removal

No power required (mechanical)

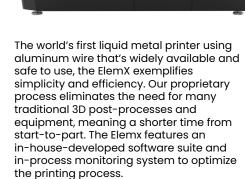
SLICER

Features

- Import format: STL
- Move/rotate/scale
- Center on build plate
- Set process parameters
- Slice
- Export g-code

PC Requirements

- Windows 10 operating systems
- Memory: 16 GB RAM min



LIQUID METAL AT A GLANCE

- Uses off-the-shelf materials —currently wire aluminum 4008
- No powder removal, debinding or sintering means shorter cycle times
- Known material properties are as good or better than input material
- Requires only basic safety measures around heat and argon gas

MATERIALS

356 (4008) Aluminum Alloy Input Material Weight 20 lbs / 9.1 kg spool

Wire Diameter

.062 in / 1.6 mm



For more information visit ADDITEC3D.COM

*These specifications are subject to change without notice.
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