# Xerox<sup>®</sup> ElemX<sup>™</sup> 3D Liquid Metal Printer On-Demand Manufacturing

Simpler. Safer. Stronger.



Complex global supply chains leave manufacturers and their customers vulnerable to external risks. Introducing Xerox<sup>®</sup> ElemX<sup>™</sup> 3D Printer, which uses liquid metal, adding greater flexibility and resilience to your supply chain.

#### EMPOWER YOUR MANUFACTURING SUPPLY CHAINS WITH LOCALIZED 3D PRINTING

- More resilient operations
- Reduced operational risk
- Increased production control

#### **ELEMX<sup>™</sup> 3D PRINTING SOLUTIONS**

**Enhanced Efficiency:** Faster time to part with agile manufacturing that adapts to your business needs.

**Lower Costs:** Removes the hidden costs of inventory maintenance and warehousing and reduces logistics spend.

**Increased Agility:** Rapidly respond to market changes while reducing supply and shipping risks.

**Customer-centric:** Quickly deliver parts to customers, thanks to localized production.

**Safety First:** No need for facility modifications or PPE. Only basic safety measures around heat and argon gas.

**Easy to Deploy:**  $Elem X^{m}$  is easy to implement and install. It's ready to use the day it arrives.

**Reduced Carbon Footprint:** Increased materials efficiency and lower transportation costs.

By significantly lowering production costs and lead times for a variety of metal parts, 3D printing has the potential to transform the value chain...

- McKinsey & Company



xerox

Xerox<sup>®</sup> ElemX<sup>™</sup> 3D Printer

#### THE XEROX ADVANTAGE

More than a century of experience in bringing business-critical technologies to market.

A highly respected global brand that customers hold to the highest standards with a network of readily available service manufacturers around the world.

We are now applying our **expertise in liquid physics, product development, and production-grade system design** to Additive Manufacturing.

For more information, contact us: 3DPrinting@xerox.com.



# Xerox<sup>®</sup> ElemX™ 3D Printer

Additive manufacturing for a more flexible and resilient supply chain.

## System Specifications\*

#### SYSTEM CONFIGURATION Xerox Provides

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

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

#### Maximum Build Rate

0.5 pounds per hour/84 ccc per 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%

## WEIGHT AND DIMENSIONS

Printer Weight

4730 lbs/2146 kg **Printer Dimensions (L x W x H)** 9.3 x 4 x 7.3 ft/ 284 x 125 x 221 cm **Chiller Weight** 340 lbs/154 kg **Chiller Dimensions (L x W x H)** 2.5 x 1.6 x 2.2 ft/

78 x 44 x 66 cm

**Total Space Required (L x W x H)** 20.5 x 12.4 x 10.3 ft/

624 x 326 x 320 cm

#### POWER

- Printer
- 50 amp480V 3 phase
- 4 wire
- Chiller
- 30 amp
  230V single phase
  Build Plate Removal
  No power required (mechanical)

#### MATERIALS

**356 (4008) Aluminum Alloy Input Material Weight** 20 lbs/9.1 kg spool **Wire Diameter** .062 in/1.6 mm

#### 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



#### XEROX 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.

\*These specifications are subject to change without notice.

#### For more information, contact us: **3DPrinting@xerox.com**.

