XSPEE3D

HOW IT WORKS

Patented technology enables the SPEE3D to use supersonic deposition in which a rocket nozzle accelerates air up to three to four times the speed of sound. Injected powders are deposited onto a substrate that is attached to a six-axis robotic arm. In this process, the sheer kinetic energy of the particles causes the powders to bind together to form a high-density part.

MATERIALS

- High strength Aluminum
- Aluminum Bronze
- Copper
- Stainless Steel
- Nickel Based Carbides
- Titanium
- More in development

FEATURES

- Includes printer and all auxiliary equipment within one box
- Transports as easily as a standard shipping container
- User friendly expeditionary HMI
- Rapid build rates – up to 3.5oz / minute
- 1,000 times faster than laser based 3D printing
- Customized paint or camouflage
- Tactical model ruggedized for field deployment
- Time to finished part including post-processing in hours, not days*
- Doesn't require expensive inert gases

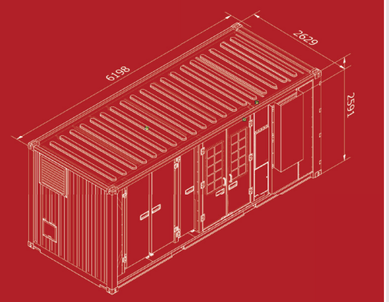
*third party processing times can vary

TECHNICAL SPECIFICATIONS

PART BUILD
Maximum part size ø 40" x 30" (approx)
Maximum part weight 90lbs
Deposition spot size 1/4"

TWINSPEE3D SOFTWARE
CAD input STL format
User Interface HMI Touch Screen

PERFORMANCE SPECIFICATIONS
Deposition rate up to 3.5oz/minute
Electrical Power Supply 415V (3 phase), 80A hard-wired connection
Noise < 80dBA @1m (approx)
Footprint 20ft container, with clearance for doors: 20ft. x 8ft. x 8.5ft.
XSPEE3D weight 10 metric ton



MAKE METAL ANYWHERE

WORLD'S FASTEST CONTAINERIZED METAL 3D PRINTER

WWW.SPEE3D.COM

MILAM 2022
Award for Expeditionary & Tactical 3D Printing Excellence

Land Forces Australia Indo Asia Pacific SME Innovation Award WINNER

InnovationAus 2021 Awards for Excellence Advanced Manufacturing

Defence Australian Defence Industry Awards FINALIST SME of the Year 2021

59th Australian Export & Investment Awards National Finalist 2021 Advanced Technologies

TCT Awards 2018 Hardware Non-Polymer System WINNER

XSPEE3D

SPEE3D

METAL PARTS ON-DEMAND. FAST.

Sourcing parts through global supply chains is expensive and unreliable. XSPEE3D offers a containerized, ruggedized, deployable metal Additive Manufacturing capability that provides all the necessary functions to build metal parts in one place.

With XSPEE3D, military forces can maximize productivity, strengthen inventory, and generate parts where and when they are needed quickly.

HIGH-SPEED RESULTS

- 1,000 times faster than other metal based additive manufacturing.
- From design to finished parts in hours and days, not weeks or months.

PRINT WHERE YOU ARE

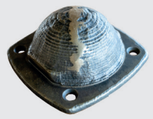
- Transport XSPEE3D as easily as a standard shipping container with printer and all auxiliary equipment within one box.
- Just hook XSPEE3D up to power and begin part fabrication immediately in remote locations or harsh conditions.

FLEXIBLE MANUFACTURING PROCESS

- Works with over 12 different metal materials, including copper, nickel-based carbides, stainless steel, and titanium.
- Print one or multiple parts at once up to 90lbs in weight and 40” x 30” in diameter.

SPEE3D

CAMLOCK
PRINT TIME 24 MINUTES
MATERIAL ALUMINUM 6061
WEIGHT 23OZ



M113 WHEEL BEARING COVER
PRINT TIME 29 MINUTES
MATERIAL ALUMINUM BRONZE
WEIGHT 4.4LBS

GUNNER’S RATCHET
PRINT TIME 60 MINUTES
MATERIAL ALUMINUM BRONZE
WEIGHT 4.4LBS

BILGE PUMP HOUSING
PRINT TIME 83 MINUTES
MATERIAL ALUMINUM BRONZE
HOUSING WEIGHT 18.3LBS

VALVE HANDLE
PRINT TIME 60 MINUTES
MATERIAL 316 STAINLESS STEEL
WEIGHT 2.6LBS

WATER COOLING BLOCK
PRINT TIME 40 MINUTES
MATERIAL ALUMINUM 6061
WEIGHT 20OZ

COPPER ROCKET NOZZLE LINER
PRINT TIME 199 MINUTES
MATERIAL COPPER
WEIGHT 39.4LBS