



MAKE METAL ANYWHERE

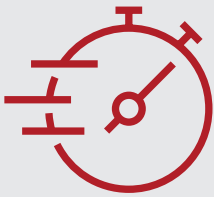
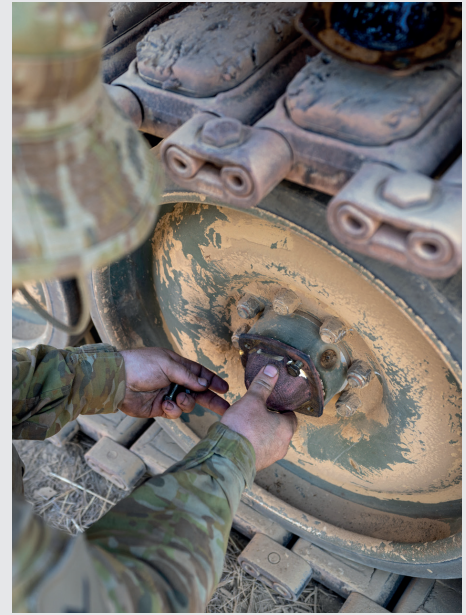
Containerised Metal 3D Printer

XSPEED3D

METAL PARTS ON-DEMAND. FAST.

Sourcing parts through global supply chains is expensive and unreliable. XSPEE3D offers a containerised, ruggedised, 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

- ▶ Significantly faster than traditional 3D printing
- ▶ 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



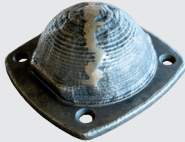
FLEXIBLE MANUFACTURING PROCESS

- ▶ Materials in full release are Aluminium, Aluminium Bronze, Stainless Steel, and Copper, with others in development
- ▶ Print one or multiple parts at once up to 40kg (90lbs) in weight and 1 x 0.7m (40"x30") in diameter



CAMLOCK

PRINT TIME 24 MINUTES
MATERIAL ALUMINIUM 6061
WEIGHT 660g (23oz)



M113 WHEEL BEARING COVER

PRINT TIME 29 MINUTES
MATERIAL ALUMINIUM BRONZE
WEIGHT 2kg (4.4LBS)



GUNNER'S RATCHET

PRINT TIME 60 MINUTES
MATERIAL ALUMINIUM BRONZE
WEIGHT 2kg (4.4lbs)



BILGE PUMP HOUSING

PRINT TIME 83 MINUTES
MATERIAL ALUMINIUM BRONZE
HOUSING WEIGHT 8.3kg (18.3lbs)



VALVE HANDLE

PRINT TIME 60 MINUTES
MATERIAL 316 STAINLESS STEEL
WEIGHT 1.2kg (2.6lbs)



WATER COOLING BLOCK

PRINT TIME 40 MINUTES
MATERIAL ALUMINIUM 6061
WEIGHT 580g (20oz)



COPPER ROCKET NOZZLE LINER

PRINT TIME 199 MINUTES
MATERIAL COPPER
WEIGHT 17.9kg (39.4lbs)

HOW IT WORKS

Patented technology enables the XSPEE3D 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 Aluminium
- ▶ Aluminium 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 100g (3.5 oz)/minute
- ▶ 1,000 times faster than laser based 3D printing
- ▶ Customised paint or camouflage
- ▶ Tactical model ruggedised 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

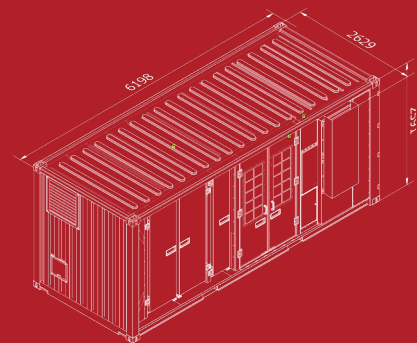
Maximum part size 1m x 0.7m
(0" x 30")(approx.) in diameter
Maximum part weight 40kg (90lbs)
Deposition spot size 6mm (1/4")

TWINSPEE3D SOFTWARE

CAD input STL format
User Interface HMI Touch Screen

PERFORMANCE SPECIFICATIONS

Deposition rate up to 100g (3.5 oz)/minute
Electrical Power Supply 415V (3 phase),
80A hard-wired connection
Noise < 80dBA @1m (approx.)
Footprint 20ft container, with clearance
for doors: 6056mm x 2428mm x 2591mm
(20ft. x 8ft. x 8.5ft)
XSPEE3D weight 10 tonnes (10 metric ton)



WWW.SPEE3D.COM