

ValCUN's Molten Metal Deposition

Reducing Lead Times & Ensuring Parts Availability

- Direct, on-demand manufacturing
- Automated, straightforward pre & post-processing

Sustainable and Environmentally Friendly

- Energy efficient and low LCA
- No toxic chemicals, requires only basic safety measures

Deployable and Easy-to-Use

- Off the shelf wire feedstock, eliminating powder hassle
- User-friendly system with fast ramp-up

ValCUN's Minerva Machine (Taking pre-orders for Q1-2024 delivery)

Printer dimensions Footprint 75cm x 150cm $(2.5ft \times 5 ft)$

Height 2.3m (7.5ft) pre-install through regular door

Build volume Ø 125 x 200mm³ (Ø 4.9in x 7.9in)

 \emptyset 200 x 200 mm³ extension kit (\emptyset 7.9in x 7.9in)

Energy consumption Rated 2.5kW

Nominal 1.2kW

Electrical connection 230V / 50Hz

110V / 60Hz

Shielding gas supply 2.5bar, max 10L/min

Molten Metal Deposition (MMD) process

Materials Open materials, 1.2mm wire

ValCUN qualifying & supplying aluminum 4008, 4043,

6061, 6082

Nozzle temperature 700°C - 900°C

Bed temperature 400°C - 600°C

Shielding gas Argon 99.999%

Resolutions Nozzle [mm] 1 2

Smaller and larger Track width [mm] upon request

Layer height [mm] 0.5-0.8 0.7-1.3

0.8 - 1.5

1.5-2.5

