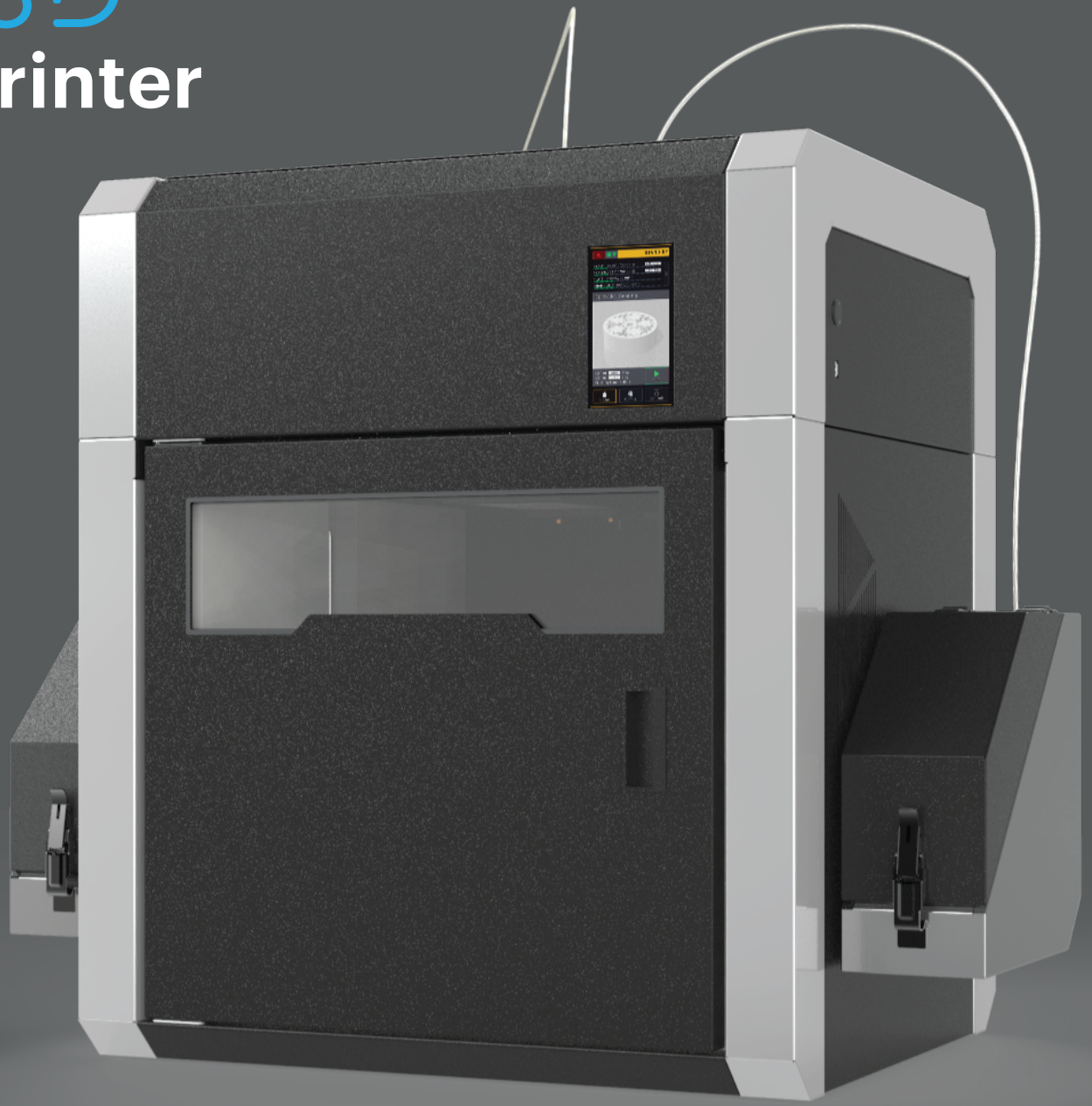
SMART3D

Macro 3D Printer



Develop
for production

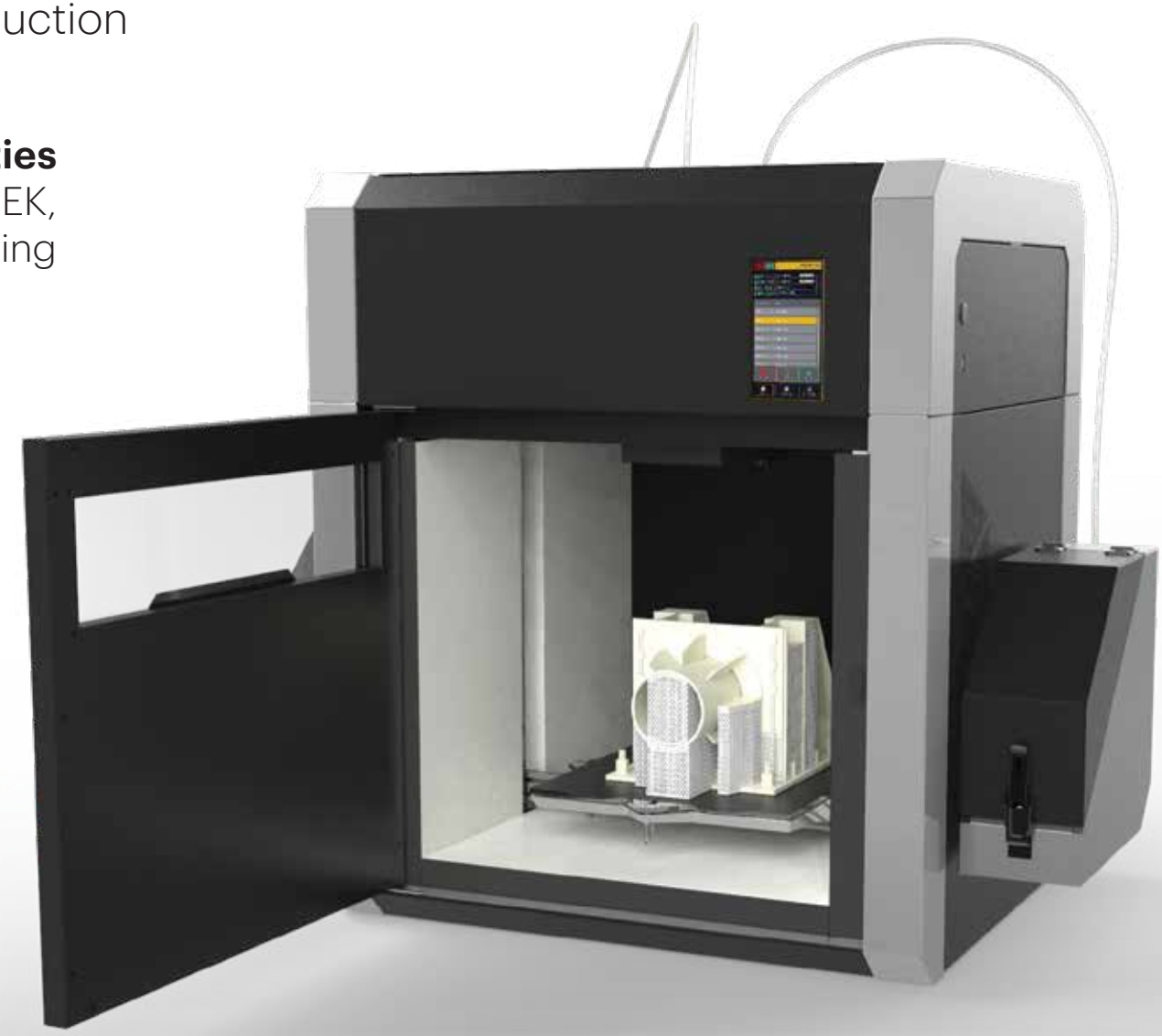
SMART3D Macro 3D Printer

Macro 3D Printer is an additive manufacturing solution conceived to streamline the process from development to production

Boundless material capabilities
From PLA to composites to PEEK, print virtually any 3D printing material.

Large build volume
Print big parts at high temperatures with Macro's large actively heated chamber.

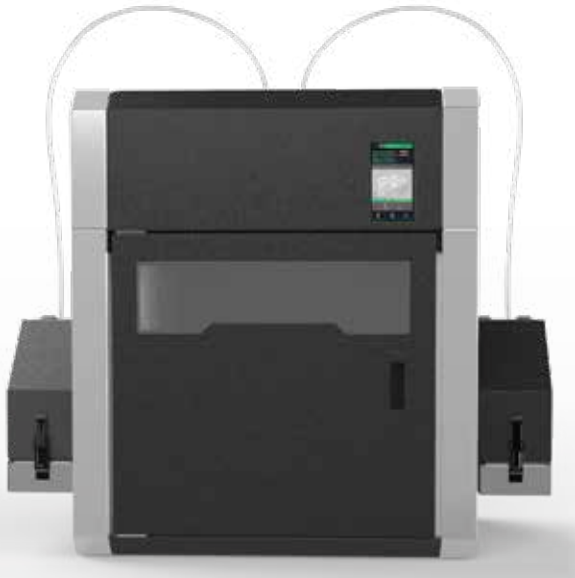
High speed
Achieve segment leading speeds with high accuracy thanks to its motion system.



Form Factors

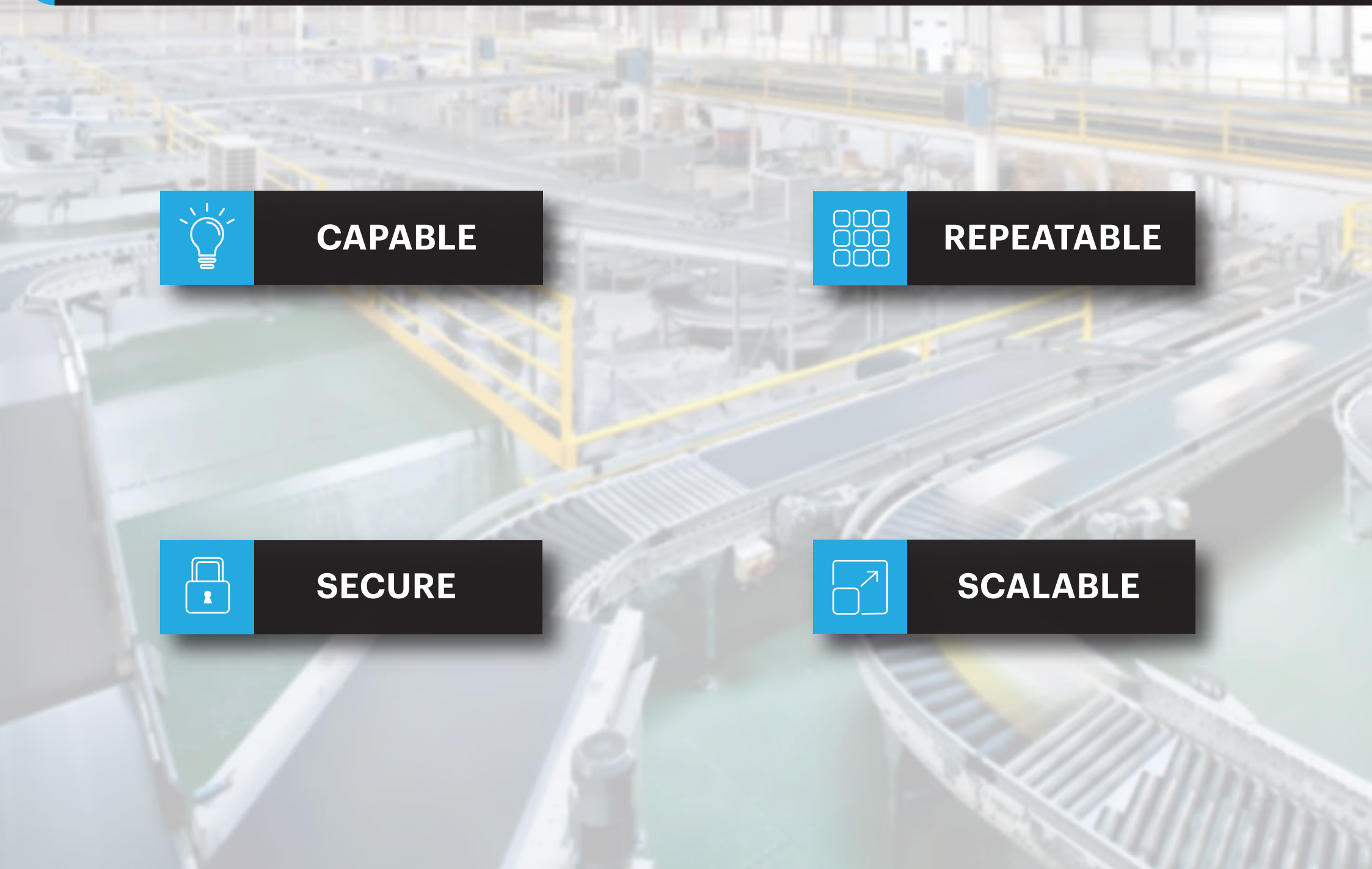
Macro 3D Printer is the best solution for the office or lab, as well as the manufacturing floor

Prototyping Unit		Production Module
Office	**Space**	Manufacturing Plant
Designer / Engineer	**Personna**	Machine Operator
Product Development	**Application**	Low Volume Manufacturing



Macro 3D Printer is a modular solution to seamlessly transition from product development to low volume manufacturing within one process. With a common material set and the same output, it serves the needs of both the engineer and the machine operator.

SMART3D Macro 3D Printer



CAPABLE

REPEATABLE

SECURE

SCALABLE

CAPABLE

Large build volume

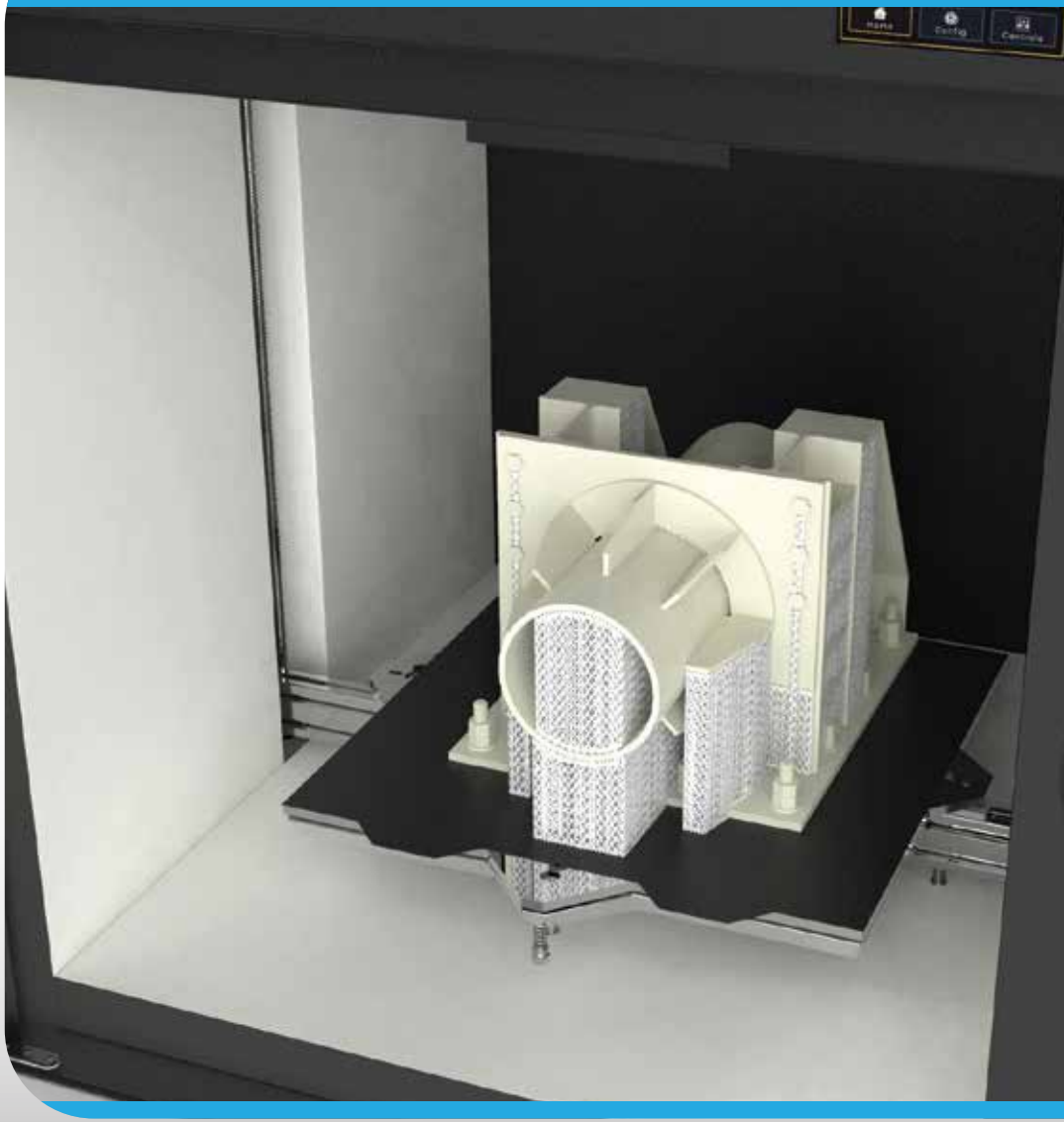
With a 350 x 350 x 400 mm or 13.8 x 13.8 x 15.7" capacity on dual extrusion, Macro has the largest print volume in its category and is capable of fitting several parts in one print for production purposes.

High speed

With segment-leading speeds at high accuracy enabled by its motion system and high extrusion flow, Macro is a real manufacturing engine.

Actively heated chamber

Its up-to-120°C actively heated print chamber allows it to print the widest material range on the market, including composite or high temperature materials such as Smart3D PEEK.



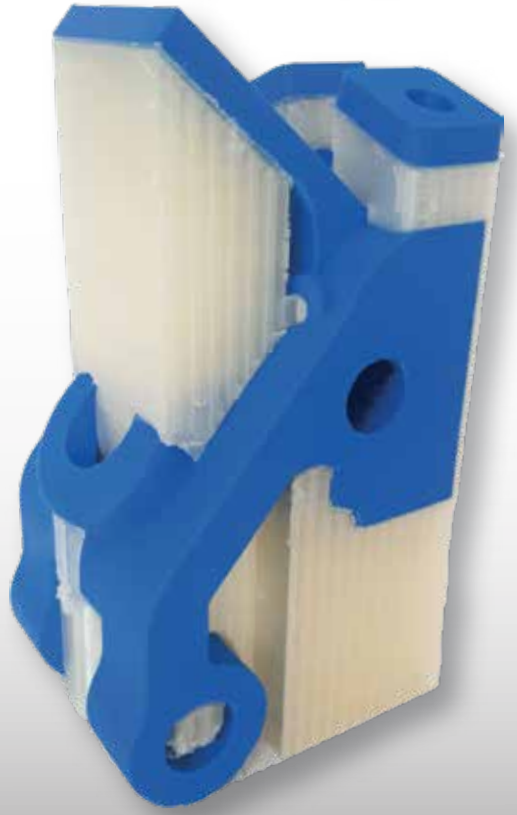
CAPABLE

Liquid-cooled dual extrusion system

Its high flow swappable print cores with rapid cooling and soluble supports for a wide material range make Macro the most material capable 3D printer.

More material sets

The wide range of Smart3D materials is enriched by a Material Partnership Program to provide manufacturer-approved preset printing profiles with the leading suppliers of industrial-grade 3D printing materials.



Flexible configuration

The open system with enabled advanced settings provides operators with the needed flexibility in the preparation of production batches.

REPEATABLE

Solid construction

Experience optimal accuracy at high speeds, as well as durability and low maintenance, thanks to a sturdy frame and top quality components.

Protected materials

Airtight feeders for Smart3D and third-party materials protect the filament from ambient moisture while printing.

Sensors

Store information on material consumption for filament runout, management and statistical purposes.

SECURE

Secure communication

Macro printers are interconnected via Blockchain, which brings network security to an unknown level in 3D printing. This gives IT departments no need to struggle with Wi-Fi networks, internet access via LAN or VPN's that may be compromised.

Industry 4.0

All Smart3D products have been conceived for Industry 4.0 compliance. Among other things, this means that Smart3D devices are highly interconnected and sharing information with each other via IoT. In addition, they have been designed for automation and are accessible by third-party software.

Business continuity

Easy serviceability accounts for little to no downtime. Macro has been designed with easily replaceable modules for mechanics and electronics.

Disaster recovery

In addition to recovery after power failure, decentralized connectivity provides a new level or redundancy which ensures information security.

SCALABLE

A modular solution

The scalable approach enables low initial investments, which may be increased gradually according to manufacturing demand.

High productivity

Modular investment, high speed and repeatability, and optimized factory space provide a high productivity per square meter.

Advanced management and reporting

Advanced management features for production control are powered by a live camera, status visualization and on-screen slicing on the Production Module's dedicated computer and on the Prototyping Unit's 7" screen.

SMART3D Macro 3D Printer

TECHNICAL SPECIFICATIONS

Build Volume: 350 x 350 x 400 mm (13.8 x 13.8 x 15.7”)
Hotends: dual extrusion with liquid cooling
Maximum speed: 300 mm/s
Maximum nozzle temperature: 500°C
Maximum build plate temperature: 150°C
Maximum chamber temperature: 120°C
Z axis resolution: 0.025 mm
Accuracy: 0.2 mm
Bed leveling: automatic, active Z compensation

Display: 7” full color touch screen
Camera for live monitoring
Interchangeable **print heads** for different materials
Controlled environment for filaments in use
Emergency **stop button**
Connectivity: Ethernet, Wi-Fi, RFID, USB
Filament diameter: 1.75 mm
Open filament compatibility
Preset print profiles for Material Partnership Program
Industry 4.0 compliant