

bigrep **ALTRA**⁶⁷⁰



The BigRep ALTRA 670 is a large-format industrial 3D printer for demanding production environments. Its large build volume, high-temperature capabilities, speed, and reliability enable complex, production-quality parts for industries such as automotive, aerospace, and defense.



High-temperature 3D printing for large parts that perform.



Large-Scale Accuracy

With a build volume of 670 liters, the ALTRA 670 produces intricate prototypes, production parts, and end-use components. Its welded frame, ball screws, and servo motors deliver the accuracy and repeatability expected from industrial manufacturing equipment.



Reliable DSX Extruders

The two DSX extruders are built for high-temperature 3D printing of technical materials up to 450°C. Dual extrusion supports complex prints with soluble support, as well as backup to maintain reliable production and reduce interruptions during extended print jobs.



Even Temperature Distribution

Consistent temperature in the build volume is key for excellent prints and a requirement for high-performance parts. The airflow control technology maintains a stable high-temperature environment up to 140°C. This ensures part accuracy and is essential for printing performance materials.



SWITCHPLATE Print Bed

Heated up to 140°C with embedded electrical wiring, the print bed's achieves extremely homogeneous temperature distribution. This ensures accurate prints and superior layer adhesion even while producing large intricate parts. After printing, parts are easy to remove.



Dry Material Storage

A sealed dry-storage chamber protects materials from moisture. Room for two filament spools keeps materials like ABS, ASA, PC, and PEKK in optimal condition. As part of the Open Material System, it gives full freedom in material choice with peak conditions for uninterrupted workflows



Automated Quick Start

Automatic bed calibration, topology measurement, and compensation simplify setup and improve reliability. Integrated sensors support continuous operation, while the built-in camera enables real-time remote monitoring throughout long and demanding production runs.

Key features at a glance:

670 LITERS BUILD VOLUME

700 x 1200 x 800 mm for large parts printed in full scale

450°C DUAL EXTRUSION

Two reliable DSX extruders for continuous production

140°C BED & CHAMBER

Homogeneous temperatures with consistent monitoring and control



Technical Specifications

MATERIALS

Supported Materials	Recommended materials with BLADE slicing profiles: ABS, ASA, PC
Compatible Materials	Including but not limited to: ABS, ABS-ESD, ABS-FR, ASA, HT-PETG, PA6, PA6-CF, PA12, PA12-CF, PA12-GF, PC, PC-ABS, PC-FR, PC-CF, PCTG, PEKK, PEKK-CF, PETG, PLA, PP, PP-GF, PPS, PPSU, TPU, TPC

KEY FEATURES

Build Volume	X 700, Y 1200, Z 800 mm (X 27.6, Y 47.2, Z 31.5 in)
Chamber Temperature	Up to 140°C (284°F)
Print Bed Temperature	Up to 140°C (284°F)
Print Bed Surface	SWITCHPLATE
Outer Dimensions	X 1900, Y 2450, Z 1950 mm (X 74.8, Y 96.5, Z 76.8 in)
Weight	Approx. 1870 kg (4123 lbs)
Automation	Out-Of-Filament Detection, Pause and Resume Print, Relay Mode, Adaptive Mesh Bed Leveling, Automated Calibration

EXTRUSION

Extruders	Two water-cooled Direct Synchronized Extruders (DSX)
Nozzles	Diamond nozzle with 0.6 or 1.0 mm diameter
Nozzle Temperature	Up to 450°C (842°F)
Minimum Layer Height	0.15 mm
Maximum Throughput	250 g/h
Filament Diameter	1.75 mm

CHARACTERISTICS

Material Storage	Keep-Dry Chamber
Drive Technology	Servo motors
Max. Movement Speed	XY 400 mm/s
Position Accuracy	<0.05 mm
Air Cleaning Unit	HEPA and activated carbon filters
Power	3P+PE, 400 V/480 V, 32A, 50/60 Hz
Certifications	CE, UL Ready



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An Industrial Powerhouse When Production Demands.

Get in touch.

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