



# postpro<sup>®</sup> 3D

## SPECIFICATION GUIDE

JANUARY 2021



## THE ONLY AUTOMATED TURNKEY ADDITIVE MANUFACTURING POST- PROCESSING TECHNOLOGY DELIVERING END-USE PARTS AT SCALE

AMT's PostPro3D patent pending technology is a smart and automated post processing solution for thermoplastic polymer 3D Printed parts based on AMT's proprietary BLAST process (Boundary Layer Automated Smoothing Technology).

PostPro3D achieves for the first time a surface finish that matches injection moulding techniques. This enabling technology reduces lead-time, cost of manufacture, operational and maintenance costs providing the 'missing piece' in the digital manufacturing chain.

Our PostPro3D machine makes part surface finishing cost and speed competitive for high volume production.

### PROPRIETARY PATENT PENDING TECHNOLOGY

5 YEARS OF FUNDAMENTAL DEVELOPMENT AT THE UNIVERSITY OF SHEFFIELD. 3 YEARS OF INDUSTRIAL DEVELOPMENT. OVER 92,000 PARTS PROCESSED TO DATE FOR 250 END USERS.

### ENHANCING PART PROPERTIES

THE ONLY TECHNOLOGY THAT SMOOTHS AND SEALS THE SURFACE OF ADDITIVE MANUFACTURED PARTS WHILE ALSO IMPROVING MECHANICAL PROPERTIES.

### COMPATIBILITY

WORKS WITH POWDER- AND EXTRUSION-BASED ADDITIVE MANUFACTURING TECHNOLOGIES. TESTED WITH OVER 80 THERMOPLASTIC POLYMERS INCLUDING NYLONS AND TPU/TPE FLEXIBLE MATERIALS. IDEAL FOR LS, MJF, HSS AND FFF APPLICATIONS.

### AUTOMATED

INDUSTRY 4.0 ROBOTIC AUTOMATION WITH ADVANCED MACHINE LEARNING ALGORITHMS.

### COMPLIES WITH ALL INDUSTRIAL HEALTH AND SAFETY STANDARDS

PROPRIETARY INDUSTRY ACCEPTED SOLVENT CONSUMABLES VALIDATED IN HIGHLY REGULATED APPLICATIONS FROM MEDICAL AND DENTAL TO CONSUMER AND FOOD APPLICATIONS. POSTPRO3D WORKS WITH A WIDE RANGE OF SOLVENTS TAILORED TO YOUR SPECIFIC REQUIREMENTS.

### SAFE AND SUSTAINABLE

FULLY CLOSED-LOOP SYSTEM TO ENSURE OPERATOR AND END USER SAFETY. WORLD'S ONLY UL CERTIFIED POST PROCESSING TECHNOLOGY. ZERO SYSTEM WASTE AND FULL CONSUMABLE RECYCLING.

### PART EXAMPLES:



CAPACITY	UNITED STATES	EU
Chamber Dimensions, W x D x H	16.0" x 24.0" x 15.7"	410mm x 610mm x 400mm
Consumable Cannister Volume	940in <sup>3</sup>	15,400cm <sup>3</sup>
Nominal Chamber Temperature	Maximum 158°F	Maximum 70°C
DIMENSIONS	US (W x D x H) (IN)	EU (W x D x H) (MM)
PostPro3D Machine	71.9 x 54.7 x 54.4	1826 x 1388 x 1380
Chiller Unit	28.2 x 37.2 x 58.8	715 x 945 x 1492
Extraction Unit	24.6 x 31.5 x 47.2	626 x 801 x 1197
Recommended Operating Space	236 x 177	6000 x 4500
WEIGHT	US (LBS.)	EU (KG)
PostPro3D Machine	2204	1000
Chiller Unit	386	175
Extraction Unit	320	145
POWER	US	EU
Power Supply	480V 60Hz 3-Phase + PE	400V 50Hz 3-Phase+ PE
Permissible Voltage Fluctuation		±10%
Typical Power Consumption	12.4kW	9.7kW
Maximum Power Consumption	28.5kW	23kW
Mains Fuse Protection		3 x 32 A (characteristic C)
Rated Short-Circuit Current		10kA

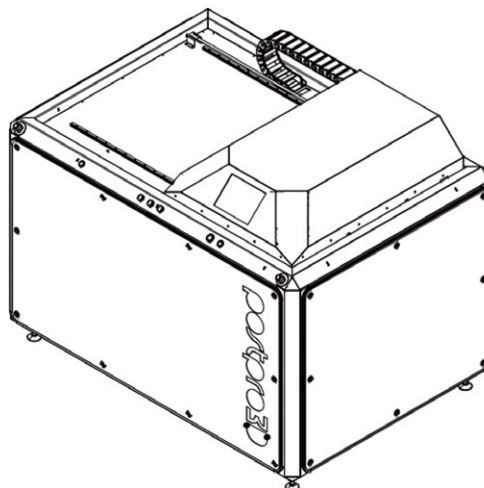
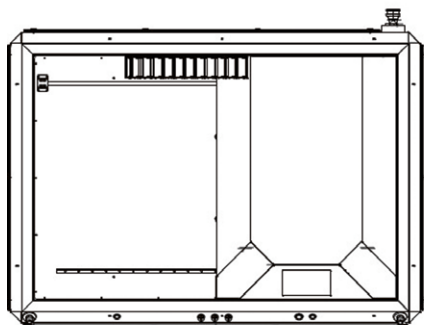
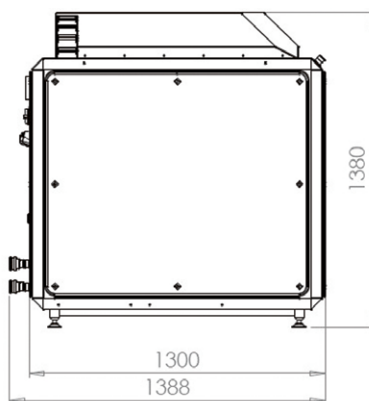
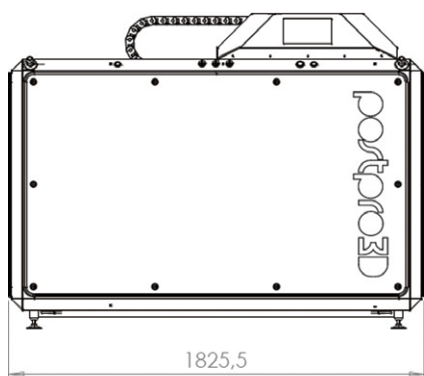
### SAFETY AND CERTIFICATION

The PostPro3D has been thoroughly tested with a number of industrial end users in the USA and Europe. PostPro3D is a CE and UL listed machine with file number - E500100.

## SAFETY FEATURES

- Closed loop system with activated carbon filters.
- 2 × front-panel-mounted e-stop buttons connected to dedicated safety relay
- Two-handed safety start function, requiring both front-panel start buttons to be pressed to operate
- Front-panel mounted anti-vandal key switch with LEDs for maintenance and diagnostics
- Uninterruptible power supply with 12Ah sealed lead-acid battery
- Detection of power cut or improper shutdown, battery charge and usage detection
- C-curve breakers for short-circuit or overload protection
- Clear indication of machine state via front-panel LEDs and luminescent PostPro3D logo
- Automatic handling of fault and emergency states with failsafe procedures and remote alarm transmission via internet connection
- 24/7 Automatic remote monitoring of machine through the 3G cellular network

## DIMENSIONS





## CONTACT INFORMATION

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