Automated, Digitized
Post-Processing Solutions
Enabling Additive
Manufacturing at Scale

# POSTPROCESS

Automated. Intelligent. Comprehensive.

Our automated solutions eliminate time-consuming and expensive piece-by-piece manual cleaning by applying a patent-pending combination of integrated technologies; including software, hardware, and consumables.



#### IT'S INTELLIGENT.

Our revolutionary technology thoroughly processes each part, regardless of geometry. Reliable support removal and dependable surface finishing produce 'customer-ready' parts, every time.



#### IT'S COMPREHENSIVE.

A full range of solutions support your post-processing requirements. From desktop systems to production-scale systems for support removal, powder removal, and surface finishing, we are continuously innovating for the future.



## EVERY MARKET IMAGINABLE.

Across every industry, our technology removes the post-print bottleneck with an automated approach. From aerospace to automotive, consumer goods to dental, or defense to medical, we're ready to put our technology to work for you.



From SLA to DMLS – we've got you covered. From light-cured resins to superalloys – we handle them all. We've designed and tested our solutions to work across a wide variety of materials and print technologies.



# END-TO-END EXPERTISE.

Expertise in the three steps of additive – design, build, and post-print – has allowed us to develop machines and engineer precise solutions to drive faster throughput and more consistent results.

PostProcess's software-driven technology enables users to produce customer-ready 3D printed parts at scale. As the first in the world to bring an automated and intelligent solution to the third step of additive manufacturing, we're helping the market realize its full potential. Our solutions make post-processing parts easier, more consistent, and more efficient.

post-processing bottleneck.



DLP & CLIP

Our comprehensive software, hardware, and chemistry solution reduces SLA and CLIP resin removal steps by 50% or greater. As the **fastest resin removal system on the market**, field-tested on thousands of trays, our solutions are proven to clean multiple full trays in under 10 minutes consistently. Coupled with our surface finishing solutions, PostProcess can streamline your SLA and CLIP



FDM & FFF

Providing the fastest cycle times in the industry, PostProcess FDM post-processing solutions reduce processing times by at least 50% compared to traditional submersible tank systems. Controlled by AUTOMAT3D® software, attended technician time is significantly reduced for **both support removal and surface finishing** to enable high-volume production and decrease overall cycle time for your print operation.

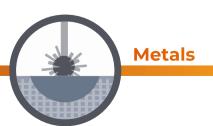
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Our PolyJet solutions perform thorough support removal with less part warpage and breakage. Software-driven submersible technology has been proven to increase throughput by over 30% compared to traditional manual water blasting, along with a dramatic reduction in attended technician time of over 80%. Pair with our surface finishing solutions for a **complete post-print workflow** to achieve consistent results even for the most delicate geometries.



Delivering replicable, high-quality uniformity for every part, our surface finishing and powder removal solutions incorporate advanced, additive-specific technology for MJF and SLS. Our proprietary software platform provides an unprecedented level of process insight and control, ensuring uniform media and detergent exposure as well as motion control for **predictable, consistent surface finishing.** 



PostProcess automates **surface finishing** for additive manufactured metal parts with our unique, patent-pending technologies. Ensuring every printed part meets your desired Roughness Average (Ra) while maintaining dimensional consistency and fine feature detail, our data-driven solutions deliver repeatable automation in batches. This technology is developed to align with your print quantities, enabling significantly reduced operator attendance time.

#### **RESIN & SUPPORT REMOVAL**



**DEMI 400** Series

35.5 cm x 35.5 cm x 35.5 cm 14" L x 14" W x 14" H

Footprint: 74 cm x 91 cm x 109 cm 29" L x 36" W x 43" H



Envelope: 46 cm x 46 cm x 46 cm 18" L x 18" W x 18" H

Footprint: 88 cm x 110 cm x 152 cm 34.75" L x 43.5" W x 59.75" H



Series 46 cm x 46 cm x 46 cm

**DEMI 900** 

Carbon compatible

Footprint: 88 cm x 110 cm x 152 cm 34.75" L x 43.5" W x 59.75" H

18" L x 18" W x 18" H

Carbon Compatible with L1 & M2 Printers



#### **DEMI 4000** Series

89 cm x 89 cm x 63.5 cm 35" L x 35" W x 25" H

Footprint: 221 cm x 127 cm x 224 cm 87" L x 50" W x 88" H

Only Available for SLA, DLP, and CLIP Resin Removal

### SUPPORT REMOVAL



**VORSA 500** 

41 cm x 41 cm x 37 cm 16" L x 16" W x 14 5" H

Footprint: 170 cm x 88 cm x 170 cm 67" L x 35" W x 67" H

Only Available In North America



48 cm x 70 cm x 66 cm 19" L x 27.5" W x 26" H

Footprint: 114 cm x 103 cm x 238 cm 44 7" L x 40 4" W x 93 8" H

> Only Available In Europe



**BASE** 

Envelope: 102 cm x 70 cm x 66 cm 40" L x 27.5" W x 26" H

Footprint: 174 cm x 103 cm x 238 cm 68 7" L x 40 7" W x 93 2" H

#### **SURFACE FINISHING**



**RADOR** 

Rectangular Envelope: 54 cm x 22 cm x 33 cm 21.4" L x 8.4" W x 13" H

Footprint: 137 cm x 72 cm x 100 cm 54.3" L x 28.3" W x 39.4" H



**DECI Duo** 

Envelope: 38 cm x 38 cm x 38 cm H 15" L x 15" W x 15" H

Footprint: 177 cm x 94 cm x 239 cm 69.5" L x 37" W x 94" H

Only Available For Metals

■ FDM / FFF ■ Metals

■ PolyJet / Material Jetting

■ CLIP

■ FDM / FFF

The patented Submersed Vortex Cavitation (SVC) technology works in combination with proprietary detergents and exclusive AUTOMAT3D® software to automate resin removal and support removal processes, and efficiently scale throughput. Agitation flow from the solution's vortex pumping scheme ensures that 3D printed parts are uniformly, consistently, and reliably exposed to detergent and cavitation as they undergo automated post-processing. This results in a reduced need for manual labor, higher throughputs, improved detergent longevity, and a notable reduction in material waste.

■ FDM / FFF

Our proven Volumetric Velocity Dispersion (VVD) technology effectively removes support materials from 3D printed polymer parts by implementing a high-volume, low-pressure 360° spray method. Leveraging PostProcess's exclusive detergents and AUTOMAT3D® software, this technology minimizes manual labor and has been patented to keep part geometries consistent while enabling the fastest post-processing times in the additive industry.

■ DLP ■ CLIP

■ PolyJet / Material Jetting

Suitable for basic and complex part geometries alike as well as plastics and metals, automated Suspended Rotational Force (SRF) technology is developed to achieve specific Roughness Average (Ra) values on 3D printed parts of all materials. Equipped with AUTOMAT3D® software intelligence, this technology optimizes mechanical energy as well as abrasive media to suspend parts in the media, ensuring a uniform finish.

Thermal Atomized Fusillade (TAF) technology employs two perpendicular single-axis jet streams of compressed air, detergent, and suspended solids to efficiently surface finish additive parts. Providing AU-TOMAT3D® software-driven targeted blast sequences and optimizing **Chemical Rate of Removal (cRoR)** with heat when needed, seamlessly caters to varying throughput and finishina requirements.

Dimensions subject to change; please download latest Spec Sheet at postprocess.com/resources



# AUTOMAT3D"

PostProcess pioneered intelligent post-processing with our patent-pending AUTOMAT3D® software platform. We've taken the guesswork out of post-processing after spending years collecting data from hundreds of thousands of benchmark parts of all 3D print technologies and most materials.

The data collected is at the core of our software design, which incorporates optimized recipes to deliver a precise finish every time. This enables a consistently finished part in four simple steps with the push of a button. You can also customize programs to your unique needs and use the recipe setting recall feature for streamlined operation.

AUTOMAT3D continuously monitors and reacts to key process factors to optimize part finishing. This logic- based, real-time decision-making reduces operator "attended" time to increase the efficiency of your additive manufacturing (AM) operation and enable volume production.

# CONNECT3D®

Complementing our AUTOMAT3D platform in driving our intelligent machine solutions, PostProcess's CONNECT3D® software application features functionality that accommodates the digital thread for smart manufacturing. In the past, the concept of the digital thread within additive manufacturing ended once a part was printed. With conventional finishing processes relying on tribal knowledge and hand tools, there was no ability to collect or transfer data.

Now, with CONNECT3D, PostProcess has delivered the first solution to the industry that completes the picture through the post-processing step. The CONNECT3D platform is the only software that addresses additive manufacturing end-to-end within the digital thread. It combines all features necessary to generate the direct digital thread while being fully adaptable to the customer's needs.

Starting with the native CAD file or 3D printer sliced file, CONNECT3D defines the requirements and strategies to automatically post-process the additive manufactured part on PostProcess's hardware platform. CONNECT3D is designed for both metal and polymer additive manufacturing and imports most native CAD formats.



As the pioneer of the automated post-processing industry, PostProcess Techologies' patent-pending chemistry solutions are unmatched. Our family of detergents and media have been developed for high-performance and safe handling, delivering faster throughput and more consistent results.



## OUR CHEMISTRY FOR RESIN & SUPPORT REMOVAL

Our chemistry for Resin & Support Removal", and the change the blurb to, "PostProcess's pre-mixed detergents optimize the removal of excess resin, FDM & PolyJet supports while leaving the build material in perfect condition. Our chemistry line, along with our thoughtfully designed systems, is formulated to achieve the customer's desired cycle time and product characteristics.



## OUR CHEMISTRY & MEDIA FOR SURFACE FINISHING

Our surface finishing media, available in different density and grit, ensures the desired finish and end product surface roughness (R<sub>a</sub>) for all print materials. With abrasive and polishing options, our comprehensive solutions are designed to work with the media to accurately deliver the correct amount of energy to produce the desired end result.





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