# CUSTOMER SPOTLIGHT

EMPIRE GROUP

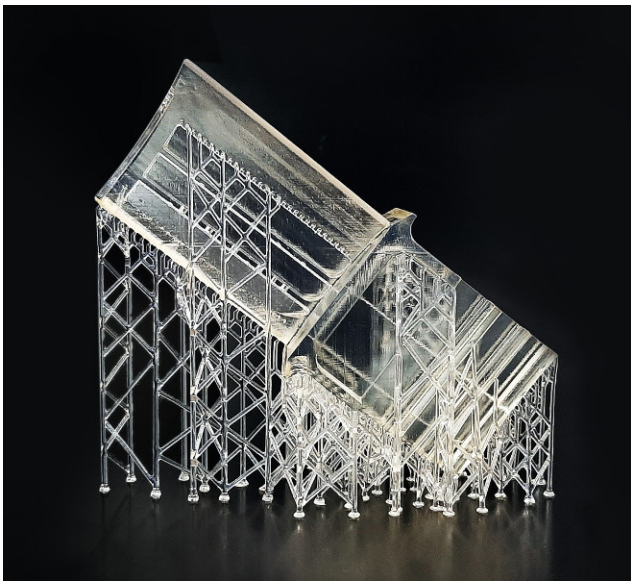
POSTPROCESS
Automated. Intelligent. Comprehensive.

# EMPIRE GROUP: A SUPERIOR APPROACH TO SLA RESIN REMOVAL DRIVES WORKFLOW GAINS

## SLA GROWING PAINS

As an early adopter of rapid prototyping and the first company in its region to embrace 3D printing, service bureau Empire Group has been enabling clients with faster prototype delivery times and increased productivity since 1999. Over the years, the company has expanded its offerings to include industrial design and engineering, rapid prototyping, rapid manufacturing, and graphic design, while continually priding themselves on artistry and craftsmanship. Understanding the nuances of each material used within their shop, as well as the best finishing techniques, is critical to ensuring high product standards.

However, when it came to finishing Stereolithography (SLA) 3D printed parts, Empire Group faced bottlenecks that prohibited them from finishing parts as quickly as they wished. Though SLA 3D printing is acclaimed for its highly accurate part builds and cost-effectiveness, there is still a myriad of post-printing challenges that this technology produces.



**Example SLA part**

In the case of Empire Group, resin removal with solvents and manual labor escalated into a more critical issue as the company grew. While the workload and number of printers increased, it was obvious that without an automated solution, the amount of time dedicated to post-printing would as well.

To keep their additive workflow moving smoothly, they implemented the automated PostProcess™ DEMI 800™ resin removal solution with proprietary SLA-formulated detergent. The DEMI 800 utilizes agitation algorithms for software-controlled technology to swiftly remove excess resin, even in the narrowest of channels. This patent-pending technology, Submersed Vortex Cavitation (SVC), ensures consistency and prevents part damage while software controls the process.

## DELIVERING SWIFT RESULTS

Developed specifically for additive manufacturing, PostProcess's comprehensive solution delivered almost immediate benefits to Empire Group's bottom line. The longevity of the PostProcess chemistry compared to the previously-used solvent (isopropyl alcohol) resulted in a quick positive ROI.

Empire Group has found the PostProcess DEMI 800 to shine, especially when post-printing intricate parts or high-volume production of small parts. Now that they are able to handle resin removal in a fraction

of the time and spend less downtime on chemistry change-outs, the engineers and technicians at Empire Group can direct their energy on more value-added task such as quoting out orders, performing maintenance, build tray optimization, and more.

PostProcess's software-driven solution has unlocked improvements across the board for Empire Group, on average reducing their SLA resin removal times by at least 50%, sometimes more.

Katie Marzocchi, Marketing Manager at Empire Group, said, "We've been in the additive realm for quite a while now, and in just a short time, the DEMI 800 has optimized our workflow in the ways that matter most. From improving our bottom line and enabling scalability within our operation to reducing lead times and passing cost-savings on to our customers, the PostProcess solution is essential in helping us deliver high-quality products and service every time. We look forward to continuing our growth as a cutting-edge product development company, now with the DEMI 800 in our tool belt."


**PostProcess™ DEMI 800™ Resin Removal Solution**

**About Empire Group**
Empire Group is a full-service product development company located in Attleboro, Massachusetts. For over 20 years, we have been a trusted and dependable partner for our customers. Companies on the East Coast, and across the US, that are in the consumer goods, defense, medical device, aerospace/aviation, automotive, juvenile, and toy industries rely on us for our knowledge, experience, and wide range of services. For more information, visit www.empiregroupusa.com.

**About PostProcess**
PostProcess Technologies is the only provider of automated and intelligent post-printing solutions for 3D printed parts. Founded in 2014 and headquartered in Buffalo, NY, USA, with international operations in Sophia-Antipolis, France, PostProcess removes the bottleneck in the third step of 3D printing – post-printing – through patent-pending software, hardware, and chemistry technologies. The company's solutions automate industrial 3D printing's most common post-printing processes with a software-based approach, including support, resin, and powder removal, as well as surface finishing, resulting in "customer-ready" 3D printed parts. Additionally, as an innovator of software-based 3D post-printing, PostProcess solutions will enable the full digitization of AM through the post-print step for the Industry 4.0 factory floor. The PostProcess portfolio has been proven across all major industrial 3D printing technologies and is in use daily in every imaginable manufacturing sector. For more information, visit www.postprocess.com.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