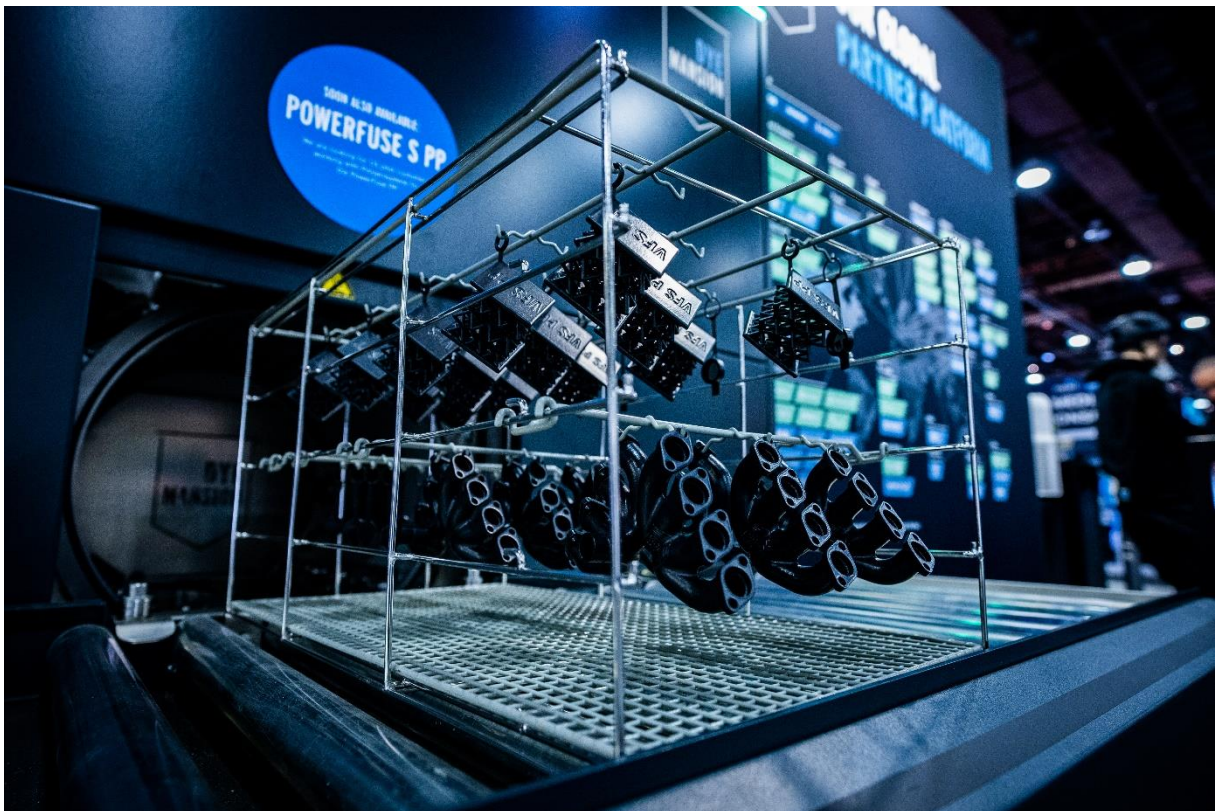


DYEMANSION PAVES THE WAY FOR NEW MATERIALS IN POWDER BED 3D-PRINTING AND DRIVES THE INDUSTRIALIZATION OF AM IN NORTH AMERICA



Polypropylene parts finished with DyeMansion's VaporFuse Surfacing technology in the soon to be released Powerfuse S PP - the first ever industrial solution to smooth 3D-printed PP at Rapid 2022 in Detroit

17.05.2022 (Munich) *Flexible plastics such as Thermoplastic Polyurethane (TPU) and Polypropylene (PP) are gaining relevance and offer a variety of new applications. DyeMansion has therefore tuned their VaporFuse Surfacing technology of the Powerfuse S, making it compatible with Lubrizol's ESTANE ® 3D TPU. Beyond that, DyeMansion, the post-processing leader, is announcing the forthcoming release of the new Powerfuse S PP. At Rapid in Detroit, visitors can learn more and see TPU*



parts which have been finished with the Powerfuse S and Polypropylene parts from the soon to be released Powerfuse S PP.

ANNOUNCING THE LAUNCH OF THE NEW POWERFUSE S PP

A SPECIAL VERSION OF THE POWERFUSE S AND THE FIRST-EVER SYSTEM TO SMOOTH 3D-PRINTED PP

The preparations for the launch of this new solution are already in full swing. Currently, DyeMansion is qualifying customers for the pilot phase. The system is to be officially revealed at Formnext 2022 later this year. According to market experts who have seen the first parts, the technology behind the Powerfuse S PP is already achieving a PP surface quality standard suitable for industrial use today. Vapor polishing improves the mechanical properties of polypropylene parts - the outcome is sealed, washable surfaces that are visually and functionally on a par with injection molded parts. This makes completely new applications possible.

“One of the biggest limitations in Additive Manufacturing is material availability. Enabling the industrial use of PP will be a big driver for further growth in our industry. We are very happy that we found a way to provide injection molding like surfaces and enhanced properties through our Powerfuse S PP and we are very much looking forward to seeing the first high-volume use cases soon”, says Felix Ewald CEO and CO-Founder of DyeMansion.

The technical specifications of the special Powerfuse S PP are nearly identical to the current Powerfuse S version. DyeMansion specially developed the solvent for PP materials. It is green as well as biobased and fulfills DyeMansion’s principle of economic sustainability. This new solvent has already been successfully tested with all common PP materials on the market so far from HP, BASF, EOS, ALM, Prodways,



AM Polymers or Covestro. Visitors can see parts for themselves at the DyeMansion booth 1920 at Rapid in Detroit from May 17-19.

A NEW PROCESS FOR SMOOTHING AVAILABLE FOR THE POWERFUSE S: LUBRIZOL'S ESTANE® 3D TPU



Quatro Prosthetic Sock Inlay - produced out of Lubrizol ESTANE® 3D TPU with HP Multi Jet Fusion and finished with DyeMansion's VaporFuse Surfacing technology in the Powerfuse S at Rapid 2022 in Detroit

Another big step for VaporFuse Surfacing is the compatibility with Lubrizol's ESTANE® 3D TPU. This material is characterized by abrasion resistance and high mechanical properties which tend to complicate traditional vapor polishing. DyeMansion has been able to create a new program for their Powerfuse S system -



designed specifically for this TPU. This new program adds another TPU to Powerfuse's material portfolio alongside existing TPUs such as from BASF.

The brand-new process is available immediately, reducing surface roughness to a minimum; sealing the surface of TPU parts making them ready to use in fields like Orthotics, automotive applications, and many more. At Rapid, visitors can see firsthand one of the first applications using this material - finished with the DyeMansion Print-to-Product workflow: the Quatro Prosthetic Sock from the Colorado-based medical tech company Quorum.

ESTANE ® is a registered trademark property of The Lubrizol Corporation.

A STRONG PRESENCE OF DYEMANSION'S POST-PROCESSING TECH AT RAPID 2022

Under the motto "We deliver the finishes your parts deserve", DyeMansion is proving once again this year at Rapid that finishing is not just about single surface finishing products, but about providing users of industrial 3D-printing with a complete, fully integrated workflow. In addition to the various surface finishing solutions such as the Powershot S and the Powerfuse S, trade show visitors will also be able to experience DyeMansion's solutions for depowdering and dyeing "live and in color."

On May 18, DyeMansion will have a joint presentation with their production partner Stratasys Direct Manufacturing - the largest service provider in North America. "From the Racetrack to the Manufacturing Line: How to get beautiful high-performance parts in serial production (NASCAR case study)" is the title of the session where Head of Application Consulting Mike Schorr together with Kevin Sheehy from Stratasys will give insights into an exciting automotive application. CATi and GoEngineer, two of the six North American Stratasys resellers of DyeMansion solutions will exhibit at Rapid as well.

"I am delighted to welcome six new partners in the United States to the DyeMansion Sales Partner platform. The consequent execution of our reseller



centric go-to-market strategy is highly valued by our customers around the world. Together with our partners, we make end-use part-specific consulting and the respective leading DyeMansion Print-to-Product workflow solutions available to all Additive Manufacturing users", tells Kai Witter, Chief Customer Officer at DyeMansion.

ABOUT DYEMANSION

DyeMansion is the global leader in post-processing solutions for industrial polymer 3D-printing that turn 3D-printed raw parts into high-value products. From perfect fit eyewear to personalized car interiors, their technology makes 3D-printed products become a part of our everyday life. Starting in 2015 with the first industrial coloring solution for powder bed fusion parts, the Munich-based company extended its portfolio with advanced part cleaning and surfacing solutions for a wider range of 3D-printing technologies in the field of plastics. Today, DyeMansion's Print-to-Product workflow combines industry-leading hardware with the widest range of color and surfacing options on the market. Their systems are applicable for Industry 4.0 and can be integrated seamlessly into various production processes. The ability to provide a flexible solution for both small batches and high volumes makes DyeMansion a trusted partner for future factories. Through close collaboration with customers across all industries, the 3D-finishing technology and expertise continuously grow with the market. Reduced cost per part, unmatched quality, and high sustainability are core values that drive each innovation of the fast-growing company. In addition to these principles, finding the right finish for every application is what drives them.

Learn more about DyeMansion and visit www.dyemansion.com, [LinkedIn](#), [Instagram](#), [Twitter](#) or [YouTube](#).



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