



OVERVIEW

**DYEMANSION ON-DEMAND
FINISHING SERVICE &
TRYMANSION
BENCHMARK SERVICE**



OVERVIEW

DYEMANSION ON-DEMAND FINISHING SERVICE & TRYMANSION BENCHMARK SERVICE

WE OFFER AN ON-DEMAND FINISHING SERVICE AS WELL AS A TRYMANSION BENCHMARK SERVICE.

DEFINITION ON-DEMAND FINISHING SERVICE

- ✓ Paid in-house service for post-processing of 3D-printed parts
 - ✓ Post-processing solutions offered: PolyShot Surfacing, VaporFuse Surfacing, DeepDye Coloring (No PolyShot Cleaning)
 - ✓ Sophisticated processes for the most common hard & flexible polymers in the PA11, PA12, TPU category
 - ✓ No limit on how many sets you want to finish, as long as they are small orders. For series orders we offer a wide partner network
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DEFINITION TRYMANSION BENCHMARK SERVICE

- ✓ Free in-house service to give you an idea of our post-processing capabilities
- ✓ Post-processing solutions offered: PolyShot Cleaning, PolyShot Surfacing, VaporFuse Surfacing, DeepDye Coloring
- ✓ Sophisticated processes for the most common hard & flexible polymers in the PA11, PA12, TPU category
- ✓ Testing of materials, for which there are no sophisticated processes yet (Feasibility)*.
- ✓ Limit how many sets you can edit

*We offer feasibility studies as part of the TryMansion Benchmark Service. We offer these feasibility studies for both existing and new customers for materials for which there are no mature processes yet.

OVERVIEW

DYEMANSION POST-PROCESSING TECHNOLOGIES

The automated PolyShot Cleaning process is a highly efficient & gentle blasting process to completely depowder a large number of parts evenly and in a short time. In addition to significantly increasing productivity, the parts are depowdered without affecting the parts surface. Regardless of the part geometry, this process forms the basis for all further post-processing steps.

POLYSHOT CLEANING

Automated depowdering:
Gentle & efficient as a perfect base



ADVANTAGES AND IMPROVED PART PROPERTIES



- ✓ **Increased** productivity through automated, efficient processes
- ✓ **Highly efficient** & reproducible blasting process
- ✓ **No** negative impact of the surface, gentle to the surface

- ✓ **Uniform** blasting distribution
- ✓ **Improved blasting processes** perfectly designed for different materials & finishes
- ✓ **No** powder residues & flaws as a perfect basis for further post-processing

POLYSHOT SURFACING

The leading blasting process for a high-quality surface finish



The effective PolyShot Surfacing process is a mechanical blasting process in which the surface of the parts is leveled using blasting medium. This process impresses with improved properties, including minimized roughness and a more pleasant feel. Since no material is removed, the original geometry of the part is retained.

ADVANTAGES AND IMPROVED PART PROPERTIES



- ✓ **Proprietary** surface technology developed for powder bedding processes
- ✓ **Highly efficient** & reproducible blasting process
- ✓ **Homogenization** of unevenness without material removal

- ✓ **High** color brilliance and homogeneity in combination with the DyeMansion dyeing technology DeepDye Coloring
- ✓ **Smoothed** surface & at the same time geometry and detail fidelity
- ✓ **Matte glossy** surface

- ✓ **Pleasant** haptics
- ✓ **Strongly** increased scratch resistance

The industrial VaporFuse Surfacing process is a post-processing method which enables additively manufactured components to have a surface at injection molding level. The sealed and washable surface after vapor smoothing - even on porous, flexible materials - opens up new fields of application for a wide variety of applications.

VAPORFUSE SURFACING

The Green & Industrial Vapor Polishing System



ADVANTAGES AND IMPROVED PART PROPERTIES



- ✓ **Injection molded** surfaces
- ✓ **Sealed** and washable surfaces
- ✓ **Different** smoothing levels possible

- ✓ **Improved** stability & air tightness
- ✓ **Reduced** friction
- ✓ **Inhibition** of bacteria formation

- ✓ **No** material removal/ material increase

DEEPDYE COLORING

The Leading Coloring Solution for Industrial Additive Manufacturing



The innovative DeepDye Coloring process enables coloring without varnishing by means of dye penetration into the material. Consequently, the color has a high scratch resistance and is very resistant to wear. Thanks to the world's largest color database, as well as individual color painting offers, there are almost no limits to your color wishes.

ADVANTAGES AND IMPROVED PART PROPERTIES



- ✓ **Reproducible** staining results
- ✓ **Exact** color and process formulas developed according to material, surface finish & color.
- ✓ Penetration of the dye into the component **close to the surface**

- ✓ **No** application of an additional layer
- ✓ **Increased** scratch resistance

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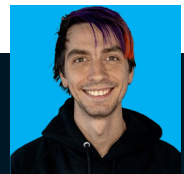
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HOME OF A
COLORFUL
FUTURE.