



DYEMANSION ON-DEMAND FINISHING SERVICE GUIDELINES



DYEMANSION ON-DEMAND FINISHING SERVICE

GUIDELINES

DYEMANSION ON-DEMAND FINISHING SERVICE OVERVIEW

Fast finishing service for smaller orders

Smaller orders & serial orders
Preparation of the parts
Maximum dimensions

COMPATIBLE PRINTING TECHNOLOGIES AND MATERIALS

DyeMansion Services: On-Demand Finishing Service or TryMansion Benchmark Service

Materials

Compatible technologies

AVAILABLE POST-PROCESSING COMBINATIONS IN THE ON-DEMAND FINISHING SERVICE

Finishing options overview

Assigned processes to Machines
Possible process combinations in the On-Demand Finshing service

PROCESS-RELEVANT GUIDELINES FOR POLYSHOT SURFACING,

DEEPDYE COLORING AND VAPORFUSE SURFACING

Important notes on the design of your parts

PolyShot Surfacing Design Guidelines VaporFuse Design Guidelines DeepDye Coloring Guidelines

REQUEST FOR QUOTATION & ORDERING PROCESS

Overview: The ordering process

Request for Quotation Sending the parts without offer

CONTACT MUNICH & AUSTIN

ON-DEMAND FINISHING SERVICE & TRYMANSION BENCHMARK SERVICE IN MUNICH, GERMANY AND AUSTIN, UNITED STATES



DYEMANSION ON-DEMAND FINISHING SERVICE OVERVIEW

Fast finishing service for smaller jobs

SMALLER ORDERS & SERIAL ORDERS

We offer in-house finishing services for smaller orders.

The goal of our On-Demand Finishing service is to best support our customers with smaller orders and to support customers who do not yet have their own <u>DyeMansion workflow</u> yet.

If you want to finish series and larger orders, we have a <u>wide partner network</u> and can connect you with one of our production partners for series productions at any time. Please contact us for this purpose in.

PREPARATION OF THE PARTS

Our workflow also includes various systems to clean parts in a flawless automated way.

However, we do not offer de-powdering in our On-Demand Finishing Service.

Therefore, we ask you to send your parts to us in the On-Demand Finishing Service completely free of powder.

If the parts show powder residues or arrive undecorated, we reserve the right to charge for the depowdering or, in case of repeated occurrence, to return the parts to you for cleaning.

In addition, the parts should already arrive sorted according to the desired sets (color, finish). Please **separate small parts with a weight < 1.5 g.**

MAXIMUM DIMENSIONS





COMPATIBLE PRINTING TECHNOLOGIES AND MATERIALS

DYEMANSION SERVICES: ON-DEMAND FINISHING SERVICE OR TRYMANSION BENCHMARK SERVICE

MATERIALS

Please let us know which material you would like us to process when you make your inquiry. An exact material specification is essential for the process adaptation of the individual processing steps.

If we have not yet defined exact processes for your desired material, we will be happy to offer you a test as part of a free feasibility study.

If you have any uncertainties regarding the material, please feel free to contact your ODS contact.

COMPATIBLE TECHNOLOGIES

Available for On-Demand Finishing service:



SLS



MJF SAF HSS

The most common hard & flexible polymers of the categories: PA 11, PA 12 & TPU.

Additional materials can be requested as a Trymansion (Free Feasibiltiy study):



FDM FFF



SLA



DLP



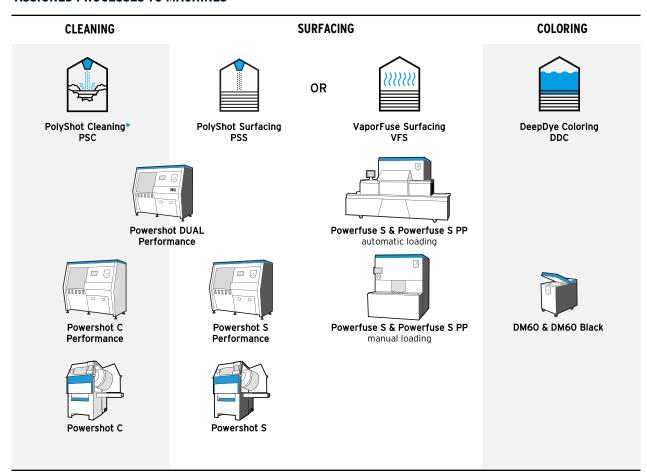
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AVAILABLE POST-PROCESSING COMBINATIONS IN THE ON-DEMAND FINISHING SERVICE

FINISHING OPTIONS OVERVIEW

ASSIGNED PROCESSES TO MACHINES



^{*}PolyShot Cleaning (depowdering) is offered for TryMansion Benchmark Service only, not for On-Demand Finishing Service jobs.

For more information on our systems, please visit our website at https://dyemansion.com/products/ or send us an inquiry via the contact form.



POSSIBLE PROCESS COMBINATIONS IN THE ON-DEMAND FINISHING SERVICE

LIGHT BASE MATERIAL

Surface finishing		PolyShot Surfacing (PSS)		VaporFuse Surfacing (VFS)	
Optional: DeepDye Coloring (DDC)		Black	All colors except black	Black	All colors except black
Material hardness	hard	DDC+PSS Final Touch	PSS Pre-Blasting + DDC + PSS Final Touch	VFS+DDC	
	elastic	No PSS, DDC only (PSS has no effect)		VFS+DDC on request tbd *1)	VFS+DDC selected color *2)

DARK BASE MATERIAL

Surface finishing		PolyShot Surfacing (PSS)		VaporFuse Surfacing (VFS)	
Optional: DeepDye Coloring (DDC)		Black	All colors except black	Black	All colors except black
Material hardness	hard	DDC+PSS Final Touch		VFS+DDC	
	elastic	No PSS, DDC only (PSS has no effect)		VFS+DDC on request, tbd *1)	VFS+DDC only on recommendation *3)

^{*1)} Black coloration on VFS finish for elastic materials on request

^{*3)} Parts become almost black after vapor smoothening, so the choice of light colors is limited here



NOTE



PSS = PolyShot Surfacing

✓ VFS = VaporFuse Surfacing

✓ DDC = DeepDye Coloring

- When coloring parts with light base material in black, the PolyShot finish is applied exclusively after coloring to allow as much dye as possible to penetrate the part
- When coloring parts with light base material in multicolored, the PolyShot finish must take place before coloring so that the surface is leveled, and the color can penetrate homogeneously into the part. Post-blasting after coloring is used for further scratch resistance, better haptics, and a glossy, elegant look.
- When coloring parts with dark base material in black & in color, the PolyShot finish is applied exclusively after coloring to allow as much dye as possible to penetrate the part
- ✓ Elastic materials are not treated with the PolyShot Finish, as this step provides no effect on these special base materials
- ✓ PolyShot Surfacing and VaporFuse Surfacing can also be done without combining with DeepDye Coloring
- ▼ The VaporFuse Surfacing takes place before the coloring process

^{*2)} Selected colors are recommended. Please request



PROCESS-RELEVANT GUIDELINES FOR POLYSHOT SURFACING. DEEPDYE COLORING AND VAPORFUSE SURFACING

IMPORTANT NOTES ON DESIGNING YOUR PARTS FOR THE BEST **POSSIBLE QUALITY**

We have prepared Guidelines for you for all technologies for which we offer processing in the On-Demand Finishing Service.

In these guidelines you can find relevant information regarding design, printing & pre-treatment to achieve the best possible quality result in combination of your print and our post-processing solutions.

PolyShot Surfacing Guidelines | VaporFuse Surfacing Guidelines | DeepDye Coloring Guidelines

REQUEST FOR QUOTATION & ORDERING PROCESS

OVERVIEW: THE ORDERING PROCESS

You are welcome to request a quote from your On-Demand Finishing Service contact at any time or send the parts directly to On-Demand Finishing Service for processing.

REQUEST FOR PROPOSAL

Please send your request to your ODS contact person.

WHAT DO WE NEED FOR A QUOTATION? Exact material specification Desired finish Exact color specification STL file or optionally STEP file Number of parts

If you do not have an STL file available or do not want to share this information, a weight specification is also sufficient.

For better advice regarding possible sources of error or especially for VaporFuse Surfacing, we recommend that you send us the STL file as well, since better advice can be given here in advance.

Feel free to send your parts to us afterwards using the On-Demand Service Order Form.

The parts should arrive already completely de-powdered.

In addition, the parts should already arrive sorted according to the desired sets (color, finish).

Please separate small parts with a weight < 1.5 g.



Upon receipt of the goods, you will receive an order confirmation with the date of shipment.

SENDING THE PARTS WITHOUT OFFER

Please feel free to send the parts to your ODS contact. For this purpose, you are welcome to fill out the On-Demand Service Order Form and enclose it with the parts.

The parts should arrive already completely de-powdered.

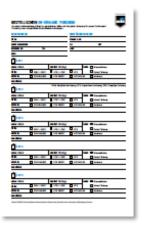
In addition, the parts should already arrive sorted according to the desired sets (color, finish). Please **separate small parts with a weight < 1.5 g.**

Upon receipt of the goods, you will receive an order confirmation with the date of shipment .

PROCESS OVERVIEW

As soon as you receive the offer, please fill in the On-Demand-Finishing order form and enclose it with your parts.

Please add parts with the same finish and color as one set in the order form. For each additional combination of finish and color, please add another set to the order form.







Please pack all parts of a set together and label the set with the corresponding number. In this way, your components can be clearly assigned to the sets on the order form.



Please enclose the filled out delivery bill with your parts and send the package to the appropriate address in Munich or Austin, TX (see next page).



CONTACT MUNICH & AUSTIN

ON-DEMAND FINISHING SERVICE IN MUNICH, GERMANY AND AUSTIN, UNITED STATES

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