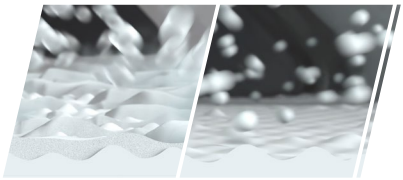
DYE MANSION

INTRODUCING
POWERSHOT PERFORMANCE SERIES

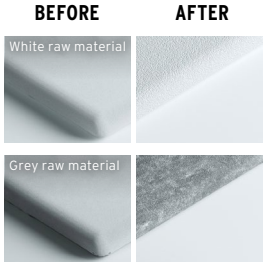
Next level blasting systems purpose-built for the factory of the future & high-volume production with Additive Manufacturing



REDEFINING THE STANDARD OF INDUSTRIAL CLEANING AND SURFACING

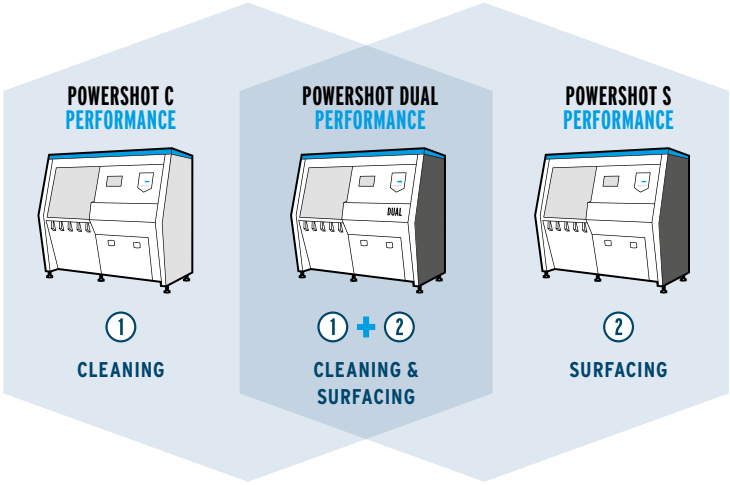
1 POLYSHOT CLEANING (PSC)

- ✓ Proprietary cleaning process with plastic blasting media
- ✓ Gentle and efficient powder removal
- ✓ Allowing for a wider range of process parameters and precision adjustment than conventional cleaning processes
- ✓ Compatible with all common powder-bed technologies and improved depowdering of process challenging materials (e.g. TPU)
- ✓ Developed for the P2P Workflow: The residue-free cleaning process for brilliant colors

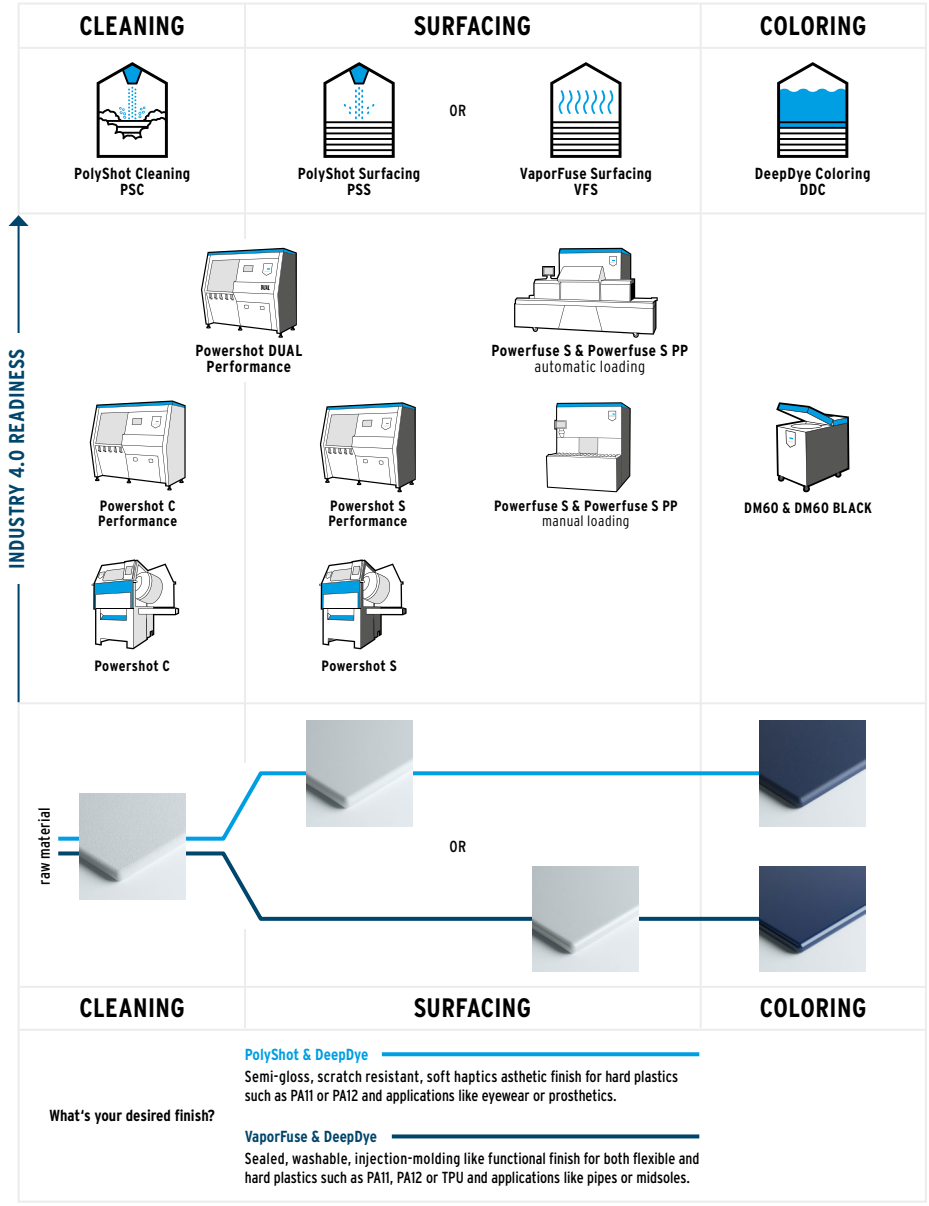


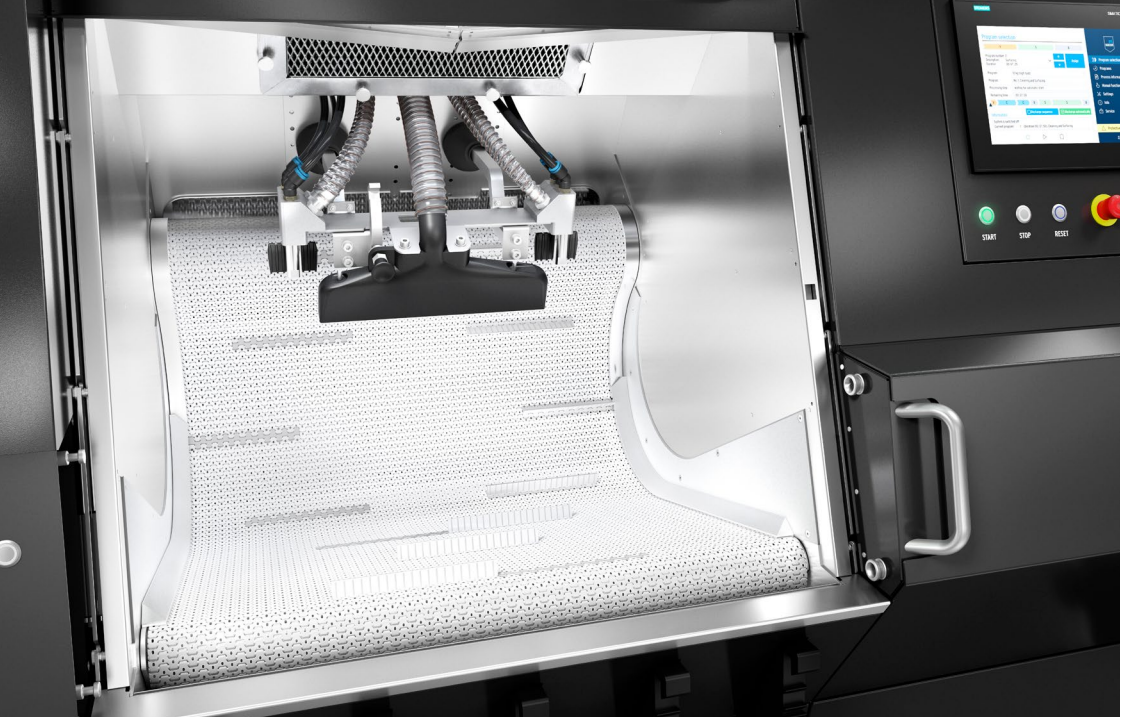
2 POLYSHOT SURFACING (PSS)

- ✓ Proprietary surfacing process with plastic beads
- ✓ Most efficient surfacing technology to achieve end-use parts
- ✓ Non-abrasive surface homogenization
- ✓ Semi-glossy surfaces with ideal properties: The foundation for superior coloring results
- ✓ Achieves high scratch resistance and soft haptics



TAKING THE PRINT-TO-PRODUCT WORKFLOW TO THE NEXT LEVEL





Boost your production performance: Maximum efficiency with the smallest workspace

The Powershot Performance Series is designed for the most demanding applications within AM. The first system with a wide multi-belt has an effective process volume of 55 liters and can handle 10kg of parts. While being able to process a full-sized build job, the Powershot Performance series has the smallest workspace requirements on the market. The blasting media sieving and separation unit leads to a lower consumable consumption and results in a reduction of costs. With a short cycle time and a capacity of a full-sized build job per run, the Powershot Performance series is more efficient than any other system available. Complemented by both our proprietary Cleaning & Surfacing processes these systems are designed for high volume production.

CAPACITY & **PROCESS TIME** › **EFFICIENCY**

Up to	Reduce up to	Increase up to
1.5x	**20%**	**2x**
PART VOLUME	**TIME**	**EFFICIENCY**

Ready to form the factory of the future – now

Our Powershot Performance series blends right into the factory of the future with state-of-the-art automation technology from Siemens. Through DyeMansion Data Connect, the machine integrates with your digital store floor with ERP/MES connectivity and standardized communication protocols such as OPC-UA (optional 360° Digital Services feature). Monitor and analyze all data surrounding the state and condition of the systems for performance & process optimization using the DyeMansion Workflow Center (optional 360° Digital Services feature). Via a secure & certified VPN connection the systems can be accessed remotely for maintenance and troubleshooting to increase system uptime. This ultimately results in an unmatched performance of your production lines.

Setting the stage for automation in Additive Manufacturing

All three versions of the Powershot Performance Series provide an intuitive user-friendly interface with optional user-levels. Pre-installed programs with specifically developed process parameters can be controlled. Your individual process parameters can be configured and saved easily, enabling a fast adaption to each specific application. Automatic part handling such as automatic unloading of your processed parts supports the integration into the DyeMansion Print-to-Product workflow and the compete Additive Manufacturing chain. The design of the system allows for upcoming extension features for automatic loading.

Exemplary concept with AGV. Open design of the Powershot Performance system also allows for alternative automation options such as robots, conveyor belts or similar.

TECHNICAL DATA

POWERSHOT PERFORMANCE SERIES

AUTOMATION	Individual programming, control and monitoring of process parameters via touch screen. Fully automatic unloading of processed parts.
PERFORMANCE	
Cycle time	Individually configurable, typically 10 to 15 minutes each process[1]
Capacity per run	Up to 1x EOS P396, 1.5x HP Jet Fusion 4200/5200 or 3x Stratasys H350 build jobs
Effective volume of multi-belt	55l | 14.5 gal
Effective dimensions of multi-belt (L x W x H)	409mm x 800mm x 325mm | 16.1inch x 31.5inch x 12.8inch
DIMENSIONS	
System (L x W x H)	1535mm x 2205mm x 2038mm | 60.4inch x 86.8inch x 80.2inch
Recommended space requirement in operation (L x W x H)	2835mm x 3205mm x 2700mm | 111.6inch x 126.2inch x 106.3inch
POWER	
Supply	From 1,2kW up to 3,6kW
Requirements	400V, 50Hz, 16A / 208V, 60Hz, 20A
COMPRESSED AIR	
Supply pressure	Minimal 7 bar | 101 psi (consistent) Maximal ≤10 bar[2] | 145psi[2]
Consumption	2,5m³/min bei 7 bar | 88CFM at 101 psi
CERTIFICATION[3]	CE | 2006/42/EG EMV | 2014/30/EU RoHs | 2011/65/EU

[1]Can vary according to material, printing process, part volume or complexity of the parts.
[2]For pressures greater than 10bar (145 psi), a pressure reducer with the following specification must be provided by the customer: Flow rate at 6.3 Bar (91.5 psi) and ΔP 0.5bar (7psi) à 5m³/min (5000 Nl/min = 176.5 cfm).
[3]Deviations possible depending on system variant.

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