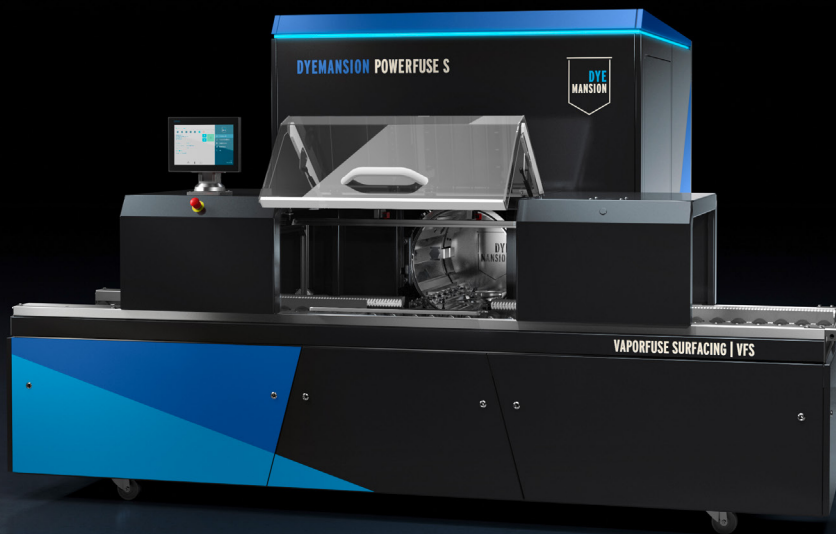


VAPORFUSE SURFACING

For PA, TPU, ULTEM & more

DYE
MANSION



DYEMANSION POWERFUSE S

The green vapor polishing solution for highly industrial manufacturing & surface improvements beyond aesthetics

Unbeatable cost per part for high-volume production

Unbeatable cost per part at full production capacity due to high degree of automation and closed loop circulation with integrated solvent recovery. The Powerfuse S is Industry 4.0 ready. Running fully automated 24/7, offering traceability and connectivity via our IoT offering.

Best in class results delivering high-quality surfaces with improved properties

VaporFuse Surfacing (VFS) delivers injection molding-like parts, reducing surface roughness by up to 70 %. Parts are sealed, water repellent, and achieve washable surfaces that inhibit bacteria growth. Increased mechanical properties benefit delicate structures and soft materials. Achieve an elongation at break increase by up to 200 % depending on your material. The Powerfuse S can smooth inner channels which is unique in the industry and key for pipes or tubes.

The only green vapor polishing technology on the market - non-toxic solvent

The non-toxic VaporFuse VF47 EcoFluid is safe to use (no PFAS, no CMR and no vPvM/PMT). Operating the Powerfuse S does not require protective clothing against chemical hazards. No additional equipment or reconstruction of installation site needed. Vapor polished parts treated with the Powerfuse S can be used for consumer, medical or food & beverage applications.

DYEMANSION PRINT-TO-PRODUCT WORKFLOW: 1 CLEANING | 2 SURFACING | 3 COLORING

TECHNICAL DATA

POWERFUSE S

manual loading



PERFORMANCE

Cycle time	45-180 minutes ¹
Process chamber volume	85 l 22.5 gal
Basket dimensions (L x W x H)	610 mm x 340 mm x 315 mm (385 mm)* 24.0 inch x 13.4 inch x 12.4 inch (15.1 inch)*

COMPATIBLE MATERIALS

PA, TPU, ULTEM & more
Detailed material list available on request

You want to smooth your polypropylene (PP) parts? We also have a Powerfuse S product for that - the Powerfuse S PP. Reach out to us for more information.

DIMENSIONS²

System (L x W x H)	Powerfuse S: 1700 mm x 1700 mm x 2070 mm 66.9 inch x 66.9 inch x 81.5 inch Automatic loading: 960 mm x 3466 mm x 1300 mm 37.8 inch x 136.5 inch x 51.2 inch Manual loading: 705 mm x 1700 mm x 850 mm 27.8 inch x 66.9 inch x 33.5 inch
Recommended space requirement for operation (L x W x H)	Automatic loading: 3760 mm x 4266 mm x 2500 mm 148.0 inch x 168.0 inch x 98.4 inch Manual loading: 3505 mm x 3300 mm x 2500 mm 138.0 inch x 129.9 inch x 98.4 inch

WEIGHT²

System	1600 kg 3527 lb
Automatic loading	800 kg 1764 lb
Manual loading	180 kg 397 lb

POWER

Supply	Ca. 20 kW
Requirements	400 V, 50 Hz, 63 A or 480 V, 60 Hz, 63 A

COMPRESSED AIR

Consumption	Approx. 70 l 78.5 gal at 6 bar 87 psi per run
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NOISE EMISSION

Sound level	< 70 dB (A)
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CLIMATIC CONDITIONS

Room temperatur	max. 40 °C 104 °F
Relative humidity	max. 80 %

¹ Depending on program, excl. heating-up time of the system of approx. 60 minutes. Automatic heating-up programmable via weekly timer.

² Deviations possible depending on system variant.

* Dimensions with basket top unit.

CERTIFICATION²

✓ CE | 2006/42/EG
| 2014/68/EU

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