VAPORFUSE SURFACING

For polypropylene (PP) only



DYEMANSION POWERFUSE S PP

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

The first ever green vapor polishing solution to smooth 3D-printed PP

This technology enables endless application possibilities for the use of polypropylene in Additive Manufacturing industries such as automotive, medical & chemical tech, consumer goods & prototyping. The sustainable VaporFuse VF44 EcoFluid PP is 100% bio-based and readily biodegradable as well as non-toxic: no PFAS, no CMR, no vPvM/PMT.

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

VaporFuse Surfacing delivers injection molding-like parts with reduced roughness. The surface is sealed, fluid repellant and washable, allowing you to increase mechanical properties and achieve technical cleanliness for your applications - essential for automotive & healthcare applications, or other applications where contamination is not an option. The system can also smooth inner channels which is unique in the industry and key for any applications featuring pipes or tubes.

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.

TECHNICAL DATA

POWERFUSE S PP manual loading

PERFORMANCE

Cycle time

Process chamber volume

Basket dimensions (L x W x H)

90-180 minutes1

851 | 22.5gal

610mm x 340mm x 315mm (385mm)* 24.0inch x 13.4inch x 12.4inch (15.1inch)*

COMPATIBLE MATERIALS

Polypropylene (PP)

Works with all common PP's on the market. Detailed compatible material list available on request

You want to smooth your PA, TPU or ULTEM parts? Let's have a look at our Powerfuse S and reach out for more information.

DIMENSIONS²

System (L x W x H)

Powerfuse S: 1700mm x 1700mm x 2070mm

66.9inch x 66.9inch x 81.5inch

Automatic loading: 960mm x 3466mm x 1300mm

37.8inch x 136.5inch x 51.2inch

Manual loading: 705mm x 1700mm x 850mm

27.8inch x 66.9inch x 33.5inch

Recommended space requirement for operation (L x W x H)

Automatic loading: 3760mm x 4266mm x 2500mm

148.0inch x 168.0inch x 98.4inch

Manual loading: 3505mm x 3300mm x 2500mm

138.0inch x 129.9inch x 98.4inch

WEIGHT²

System Automatic loading

Manual loading

1600kg | 3527lb

800kg | 1764lb

180kg | 397lb

POWER

Supply

Ca. 20kW

Requirements 400V, 50Hz, 63A or 480V, 60Hz, 63A

COMPRESSED AIR

Consumption

Approx. 701 | 78.5gal at 6bar | 87psi per run

NOISE EMISSION

Sound level

<70dB(A)

CERTIFICATION²

CE | 2006/42/EG | 2014/68/EU

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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.