VAPORFUSE SURFACING



DYEMANSION POWERFUSE S

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DYE MANSION

VAPORFUSE SURFACING | VFS

The Clean Vapor Technology for parts challenging injection molding

Clean technology fulfilling all industrial health & safety standards

Our VaporFuse Eco Fluid solvent is approved for the processing of plastics with food contact according to regulation (EU) 10/2011. The solvent is circulated continuously in a closed loop and automatically recovered by the system. This enables a sustainable contact-free process without chemical waste. Operating the Powerfuse S does not require protective clothing against chemical hazards.

Sealed injection molding like surfaces across all geometries

VaporFuse Surfacing (VFS) delivers sealed and washable parts with injection molding like surfaces. The surface roughness is reduced to a minimum. The entire process chamber is flooded with vapor while undergoing vacuum. This ensures a reproducible processing of complex geometries and internal surfaces. VFS works for all common plastics and particularly for flexible polymers such as TPU, for which mechanical techniques are not suitable.

Ready for the future of manufacturing

The Powerfuse S is Industry 4.0 ready. The system offers fully automatic loading, connectivity and batch tracking features. Validated and specially developed programs for all common materials are available and ready to use. In addition, all process parameters can be adapted individually for other materials. This ensures flexibility and a seamless integration with existing production processes such as the DyeMansion Print-to-Product workflow.

TECHNICAL DATA

POWERFUSE S manual loading



PERFORMANCE

Cycle time Process chamber volume Basket dimensions (L x W x H)

DIMENSIONS²

System (L x W x H)

40-80 minutes¹

1291 | 34.1gal 610mm x 340mm x 315mm (385mm)* 24.0inch x 13.4inch x 12.4inch (15.1inch)*

Powerfuse S: 1700mm x 1700mm x 2090mm 66.9inch x 66.9inch x 82.3inch 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

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

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

WEIGHT²

System Automatic loading Manual loading

POWER

Supply Requirements

COMPRESSED AIR

Consumption

NOISE EMISSION

Sound level

1600kg | 3527lb 800kg | 1764lb 180kg | 397lb

14.1kW 400V, 50Hz, 63A or 480V, 60Hz, 63A

Approx. 70I | 78.5gal at 6bar | 87psi per run

<70dB(A)

¹ Depending on program, excl. heating-up time of the system of approx. 140 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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Status 11/2019. Technical data subject to change without notice. Please request latest technical data from team DyeMansion.