

# VAPORFUSE SURFACING

**DYE  
MANSION**



## DYEMANSION POWERFUSE S

The green & industrial vapor polishing system for sealed surfaces

### Green technology fulfilling industrial health & safety standards

Our eco-friendly VaporFUSE Eco Fluid solvent is non CMR and 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.

### Improvements beyond aesthetics: sealed, strong & airtight parts

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 factory of the future

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	40-120 minutes <sup>1</sup>
Process chamber volume	129l   34.1gal
Basket dimensions (L x W x H)	610mm x 340mm x 315mm (385mm)* 24.0inch x 13.4inch x 12.4inch (15.1inch)*

### DIMENSIONS<sup>2</sup>

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

### WEIGHT<sup>2</sup>

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

### POWER

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

### COMPRESSED AIR

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

Sound level	< 70dB(A)
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<sup>1</sup> Depending on program, excl. heating-up time of the system of approx. 140 minutes. Automatic heating-up programmable via weekly timer.

<sup>2</sup> Deviations possible depending on system variant.

\* Dimensions with basket top unit.

### CERTIFICATION<sup>2</sup>

✓ CE | 2006/42/EG  
| 2014/68/EU

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