COLORING





DYEMANSION DM60

The world's leading industrial coloring system for 3D-printed plastics.

Plug & Play system

The DM60 is user-friendly and enables consistant coloring results to meet the requirements for high-value, end-use products. Simply insert parts, choose a color cartridge and press start.

Best color quality in AM

Our coloring solution is optimized for powder-bed 3D technologies, like PA 11/12/6 and TPU and ensures the best color quality on the market today. The colored plastic parts are UV stable, long-lasting and not washable.

Clean process

Our color cartridges provide a contact free and clean dyeing process with no manual pigment handling. Color cartridges are available in five different sizes and have a scalable dyeing volume from 10 to more than 50 liters. An integrated cleaning program ensures fast color Changes.

No added material

Submerged in a water bath, our dyes penetrate the plastic through a chemical reaction using heat and pressure DyeMansion is able to deliver consistent penetration depth at approximately 0.2mm. No material is added and surface is colored homogeneously in our sophisticated dyeing process.

TECHNICAL DATA





PERFORMANCE

Cycle time Approx. 2.5 hours

Capacity per run Up to full EOS P396 or HP Jet Fusion 4200 build job

Working temperature Up to 115 °C | 239 °F Penetration depth of dye Approx. 0.2 mm Integrated cleaning program Fully automated

Heating power 6 kW

DIMENSIONS

950 x 600 x 900 mm | 37.4 x 23.7 x 35.5 inch Coloring system PED (L x W x H) Coloring system ASME 1000 x 600 x 950 mm | 39.4 x 23.7 x 37.4 inch Coloring system in operation PED (L x W x H) 2030 x 1250 x 1700 mm | 80.0 x 49.3 x 67.0 inch

Coloring system in operation ASME 2030 x 1250 x 1700 mm | 80.0 x 49.3 x 67.0 inch

Maximum part size (Ø x H) 390 x 360 mm | 15.3 x 14.2 inch

Color cartridge sizes S, M, L, XL, R-L

WEIGHT

Coloring system PED 250 kg | 552 lb 300 kg | 662 lb Coloring system ASME

COLOR OPTIONS 17 standard colors, RAL/Pantone, customized colors

POWER

Connection 400V 50Hz CEE 16A incl. feed line 3 m | 9.8 ft

or 208V 60Hz, NEMA L21-20A, incl. feed line 3 m | 9.8 ft

Consumption Max. 11kWh per 2.5 h dyeing cycle

RESOURCES

Fresh water Water inlet 1/2" ET, demineralized water <20µS, min. 3.5 bar | 50.8 psi,

fresh water per dying cycle max. 135 I | 35.7 gal

Waste water Coloring: 1/2" ET, 2 bar | 29 psi pressure-proof, chemical waste water

per colour cycle max. 60 I | 15.9 gal, water temperature < 95°C | 203°F Cleaning: 1/2" ET, 2 bar | 29 psi pressure-proof, drain waste water per colour cycle max. 75 I | 19.8 gal, water temperature < 45°C | 113°F

Compressed air Plug nipple (NW 7,2), dry and oil-free compressed air,

air flow per colour cycle max. 400 I | 105.7 gal at 4 bar | 58 psi

OPTIONAL EXTRA: DM60 RESERVOIR

Coloring system incl. Reservoir (L x W x H) 950 x 940 x 1560mm | 39.4 x 37.0 x 61.4 inch Coloring system incl. Reservoir in operation (L x W x H) 2030 x 1600 x 1700mm | 80.0 x 63.0 67.0 inch

DyeMansion GmbH

Air flow per colour cycle max. 600 I | 158.5 gal at 4 bar | 58 psi Compressed air

CERTIFICATIONS

- CE 2006/42/EG
- PED 2014/68/EU
- UL 61010-1 & UL 61010-2-010
- ASME Sec. VIII Div.1

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