C2 – Chemical smoothing and dyeing of polymers in one single machine

Liquid Color Smoothing
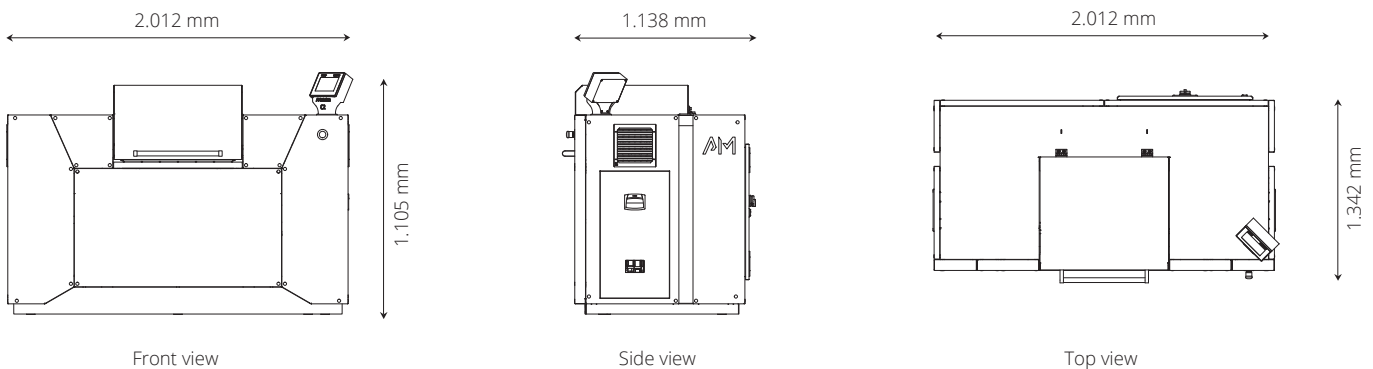
Polymers

Features & Benefits

- 2-in-1-process: chemical smoothing and dyeing in one single operation
- Significantly lower capital investment and small footprint
- Up to 50% shorter processing time thanks to our innovative immersion smoothing technology
- Compared to alternative solutions, the costs per piece can be up to 60 % lower
- Up to 80 % lower surface roughness
- Closed system with continuous cleaning and recycling of the process liquid
- More eco-friendly than other chemical smoothing processes
- Flexible quick-connect clamping system allows intuitive part handling
- Special lifting device ensures ergonomic loading and unloading of the parts

Technical highlights

Our C2 system enables chemical smoothing and dyeing of 3D printed polyamide parts in a single step. Thanks to specially developed process media, the C2 operates more eco-friendly than comparable systems, while at the same time being highly efficient and economical. For example, with the immersion smoothing technology the processing time can be reduced by up to 50%. Overall, the costs per piece can be lowered by up to 60% compared to other solutions. The entire process is fully automated and continuous without manual intervention, resulting in a significantly leaner process chain, with a result that is convincing: the C2 achieves excellent surface qualities.

Equipment layout

2.012 mm — 1.105 mm

Front view

1.138 mm

Side view

2.012 mm — 1.342 mm

Top view

Equipment specifications

Technical data
Dimensions of the processing chamber (w x d x h): 400 x 400 x 250 mm
Fill volume: 70 Liter
Compound: RAM-D2-PS

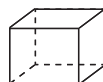| Installation conditions |
| --- |
| Supply voltage: 400 V / 3~/N/PE, CEE-Stecker 32A 5p 6h 400 V |
| Control voltage: 24 V DC |
| Cooling water: Hose DI14 mm |
| Compressed air: Hose DA12 mm |
| Compressed air quality: purity class: 2.4.2 DIN ISO 8573-1 |
| Operating pressure: 6 bar |
| Transport: Stacker |
| System weight: 800 kg |

Possible work piece dimensions (mm; w x d x h)

Minimum size: 11 x 11 x 15
Maximum size: 200 x 200 x 250