Post-Processing Workflow

DEPOWDERING

Depowdering is the first step in post-processing parts printed with powder-based technologies such as selective laser sintering (SLS) or multi-jet fusion (MJF). It is a process in which residual powder is cleared from 3D printed parts using compressed air and blasting media, without damaging the intricate details of the print.

Correct depowdering is essential for the part's functionality and prepares it for any further post-processing steps, such as surface blasting or vapor smoothing.

1

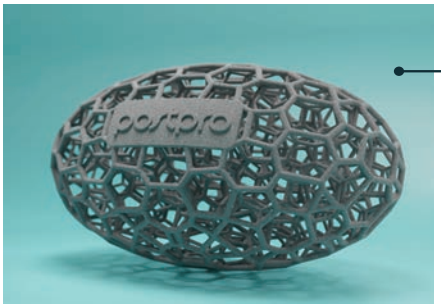
DEPOWDERING

PostPro DPX
PostPro DP STUDIO
PostPro DP
PostPro DP PRO
PostPro DP MAX
PostPro Duo MAX

SURFACE BLASTING

Surface blasting is a technique used to smooth and polish the surface of 3D printed parts. This process involves blasting the surfaces of parts with a steady stream of blasting media to reduce surface roughness.

The blasting media gently abrade the surface, removing imperfections and creating a more uniform and aesthetically pleasing finish. The process can be combined with vapor smoothing for a sealed and even smoother finish.



2

SURFACE BLASTING

PostPro SB STUDIO
PostPro SB
PostPro SB PRO
PostPro SB MAX
PostPro Duo MAX

VAPOR SMOOTHING

Vapor smoothing is a finishing process in which the rough surface of a printed object is exposed to vapors under controlled conditions. The vapor condenses on the part's surface, eliminating peaks and troughs, and enhancing the parts strength, aesthetics and water tightness.

It is a vital step in post-processing in that it turns parts into smoother, more functional, and aesthetically appealing finished product.

3

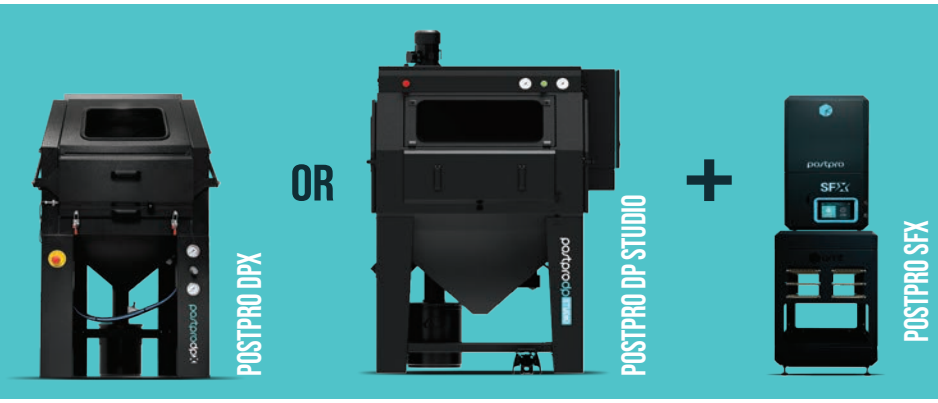
VAPOR SMOOTHING

PostPro SFX
PostPro SF50
PostPro SF100

Post-Processing Workflows Overview

ENTRY LEVEL/PROTOTYPING

EXAMPLE
Formlabs Fuse 1+ or
Sinterit Lisa X or
Nexa QLS 230.



The entry-level post-processing workflow is ideal for smaller volumes and those looking for a cleaner and more automated workflow.

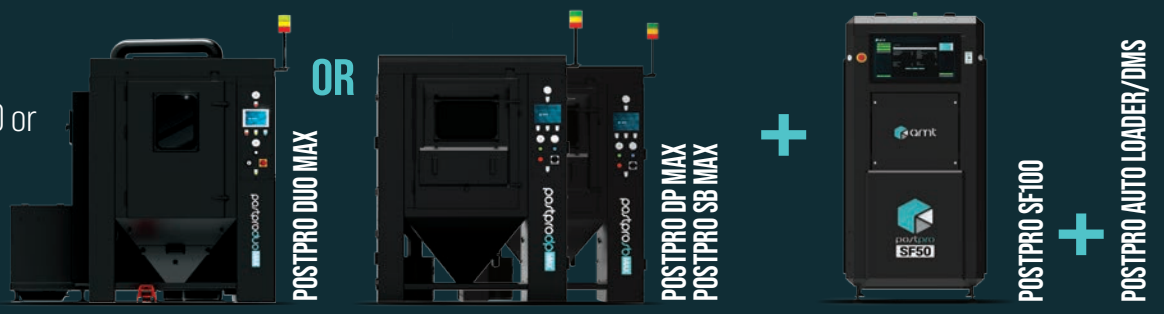
PRODUCTION

EXAMPLE
EOS P396 or
HP MJF 5200 or
3D Systems ProX 6100 or
Stratasys H350.

For customers operating large format powder-based printers in a production environment. The workflow includes surface blasting as an additional aesthetic finish to vapor smoothing.

HIGH LEVEL PRODUCTION

EXAMPLE
2+ EOS P396 or
2+ HPMJF 5200 or
2+ 3D Systems ProX 6100 or
2+ Stratasys H350.



This workflow is designed for customers producing high volumes of 3D parts with multiple 3D printers in a production environment. The offering includes all AMT surface finishing capabilities with further automation and integration between the stand alone modules.

Consumables

AMT IS COMMITTED TO SUSTAINABILITY.

Our vapor smoothing systems use proprietary, environmentally friendly solvents that meet all major health, safety, and compatibility standards. Coupled with the closed-loop technology, this not only ensures the vapor smoothing process is safe for operators but also guarantees that the parts are safe for end users to handle.

- FOOD GRADE, FDA-APPROVED CHEMISTRY
- BIOCOMPATIBLE AND BIODEGRADABLE
- NON-HALOGENATED
- NO REGULATORY RESTRICTIONS
- CONTINUED COMMITMENT TO ISO 14001, ISO 45001, ISO 9001

MATERIAL COMPATIBILITY

PRINTER & MATERIAL COMPATIBILITY

POWER BED FUSION	SLS / MJF / HSS / SAF
RIGID PLASTICS	PA11 / PA12 / PP*
ELASTOMERS	TPU / TPE
COMPOSITES	GLASS / CARBON / MINERAL - FILLED

* Compatible with the FA9202 consumable.

Validated by

BASF We create chemistry | FORWARD AM Innovating Additive Manufacturing

RICOH imagine. change.

AM Polymers

ARKEMA INNOVATIVE CHEMISTRY

EVONIK POWER TO CREATE

FABULOUS

Lubrizol

FA9202

GREEN CONSUMABLE FOR TREATING POLYPROPYLENE

Finishing Agent (FA) 9202 is AMT's dedicated consumable for vapor smoothing polypropylene. The consumable offers unparalleled surface refinement and enhanced aesthetics of the material.

FA9202 is compatible with the SF50 & SF100 machines.

PURE

SUSTAINABLE CONSUMABLE FOR VAPOR SMOOTHING THERMOPLASTICS

PostPro Pure is a fully green, FDA-approved chemistry that is sustainably manufactured. It is non-toxic, non-halogenated, readily biodegradable, non-marine pollutant and has no regulatory restrictions.

The consumable is compatible with rigid thermoplastics, elastomers and composites.

PostPro Pure is compatible with the PostPro SFX, SF50 & SF100 machines.