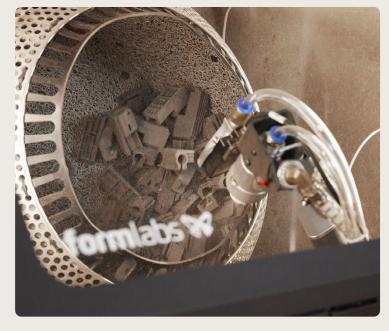
# FUSE BLAST

Complete Your SLS Ecosystem With an Automated Cleaning and Polishing Solution Reduce Post-Processing Time By 80% Deliver Consumer-Ready Parts





## Consumer-Ready Parts Faster and Easier

Complete your SLS 3D printing workflow with a media blasting and polishing solution designed for ease of use — so that you can deliver perfectly smooth, consumer-ready parts with professional finishes in record time.

Reduce your reliance on outsourcing or extra machinery, and go from packed build chamber to fully polished parts in less than an hour total, with less than 15 minutes of hands-on time.

Fuse Blast works seamlessly with powder bed fusion 3D printers from other manufacturers, including EOS, HP, Farsoon, voxeljet, Stratasys, and Sinterit. It has been tested with various thermoplastic polymers, including nylons and flexible TPU, enabling an affordable, end-to-end post-processing solution for SLS or MJF technologies.

"The Blast speeds up our process tremendously because the operator doesn't need to clean the parts manually now. They just put them inside the box and start the machine. Previously, they were doing it manually and it was really time-consuming. So in that time now the operators could be doing other things and we speed up the process."

#### Bruno Alves,

Additive Manufacturing Expert and Tooling Specialist *Ford* 



### 15 Minute Hands-Free Part Cleaning

Pre-programmed cleaning routines automatically process an entire build chamber in as little as 15 minutes, while media filtering reduces post-processing time on Fuse Sift by 80%.

#### Increase Throughput

Ramp up to batch production volumes easily. Fuse Blast enables higher volume printing without the need to hire additional workforce to manage post-processing and part cleaning. Fuse Blast Polishing System replaces extra machinery or outsourced smoothing, so you can get enduse parts, all in-house.

#### Reduce Cost Per Part

Achieve your lowest cost per part ever by automating what is typically the most labor-intensive part of the SLS workflow. Fuse Blast and Fuse Blast Polishing System enable set-it-and-forget-it postprocessing.

#### Consumer-Ready Parts

The Fuse Blast ionization system prevents dust and media from re-settling on your prints, for clean-to-the-touch parts, and the Polishing System add-on allows you to go the extra mile and deliver parts with a smooth, semi-gloss, scuff-resistant, dye-ready surface finish.



Fuse Blast Polishing System can create consumer-ready surface finishes even on organic shapes and in hard-to-reach areas, like on this connector part.



Left to Right: Pre-Fuse Blasted part with some unsintered powder in its negative features and less defined edges. Fuse Blast-cleaned part with no unsintered powder. Cleaned and polished part after using Fuse Blast Polishing System.

#### **TECH SPECS**

| Printer Compatibility          | Fuse Series SLS 3D printers  Third-party powder bed fusion 3D printers                             | Media Separation    | Passive media separation filters media and powder continuously, doubling media usage time and cleaning parts faster                                     |
|--------------------------------|--|---------------------|---|
| Dimensions                     | 100 × 75 × 175 cm  | Power Supply        | AC circuit providing at least 3 A at 230 VAC (EU) or 6 A at 120 VAC (US). The circuit does not have to be   |
|                                | 39 × 29.6 × 68.7 in  |                     | dedicated to the unit.  |
|                                | Height when open: 195 cm (76.8 in)   | Recommended Media   | Glass media (200–300 μm (50/70 mesh)  |
| Minimum Dimensions             | 145 × 150 × 210 cm (W × D × H)   |                     |   |
| for Convenient Access          | 57.4 × 59.6 × 82.6 in (W × D × H)  | Vacuum Requirements | Antistatic, grounded, and bonded vacuum (e.g. NFPA 652 compliant)   |
| Product Control                | Interactive touchscreen, foot pedals for manual control.   | Air Supply          | Compressed air supply with minimum 10 SCFM (285 SLPM) airflow at 90 PSI (6 bar)   |
| Tumbling Basket<br>Dimensions  | 450 mm internal diameter   | Blasting Modes      | Choose automated blasting with an in-place nozzle and rotating tumbler basket or remove the basket and manually manipulate the nozzle for deep crevices |
| Blasting Process               | One blast nozzle cleans parts with media and forced  |                     | or extra-strength abrasion.   |
|                                | ionized air. Removable tumbling basket rotates<br>to agitate parts and ensure even coverage during | Ionization Process  | In-line ionizer removes static charge from parts and  |
|                                | automated media blasting.  | ionization i rocess | causes powder and media to drop to the bottom of the chamber for easy clean up.   |
| Fuse Blast<br>Polishing System | Exchange glass media for Blast Polishing<br>Media, connect water line to Fuse Blast nozzle, water  | Recommended         | Adjustable pressure, recommended 30 PSI for Fuse  |
|                                | is aerosolized during the polishing process, enabling media to flow through the system smoothly.   | Pressure            | Series parts, but 45 PSI for stiffer powder cakes from third-party printers. For polishing, recommended pressure of 60 PSI.                             |

