



Stratasys Smoothing Station Makes FDM Parts as Smooth as Injection Molding

New Process is for Parts made via FDM Rapid Prototyping or Direct Digital Manufacturing.

MINNEAPOLIS--(BUSINESS WIRE)-- (NASDAQ: SSYS) Additive fabrication system maker, Stratasys, today introduced the Smoothing Station,(TM) which improves the surface finish of ABS-based thermoplastic parts made via FDM. The improved smoothness is equal to an injection molded part.

The system's semi-automated process provides a surface finish of 32 to 63 microns. Without the process, design and manufacturing engineers requiring an FDM part with this level of smoothness must manually fill, sand, and paint the part. By using a Stratasys FDM additive fabrication system with the new Smoothing Station, injection molded-quality parts can be created in just a few minutes, saving hours of labor.

The smoothed part creates an ideal surface for painting, electroplating, vacuum metallization, liquid sealing, and making mold masters such as silicone molding, sand casting, or investment casting.

"The smoothing process brings efficiency benefits for FDM equipment users who need an automated smoothing process post manufacturing," says product marketing manager Fred Fischer. "FDM users can now produce parts with the same smoothness as matte finish injection moldings in just a few minutes, while drastically reducing the manual labor required."

The [Smoothing Station](#) consists of two interior chambers that together are approximately the size of a small chest freezer. The first chamber treats the thermoplastic part for 15 to 30 seconds to smooth the outer surface of the part. The part is then moved to the second chamber, which holds the part while it cures from the initial process. After just 30 - 45 minutes, parts can be touched, with parts fully cured in 12 - 18 hours or less.

There is virtually no preparation required with the smoothing process. Users simply remove support material and place the cleaned and dried part into the chamber. Parts typically are finished in one to three exposures, depending on the smoothness desired.

The system is engineered to work with Stratasys ABS-based thermoplastics only, including ABS, ABSi, ABSplus ABS-M30 and ABS-M30i.

For customers that want to further improve the part's surface finish, Stratasys offers a soda-blast station, called the Burnishing Station,(TM) which can be used in conjunction with the Smoothing Station. The station gives parts a satin or matte finish, blends any small blemishes, and greatly improves overall part aesthetics.

Both the Smoothing Station and Burnishing Station are available today. To get a sample part that has been surfaced smoothed follow this link: [[Request a Smoothed Part](#)].

Stratasys Inc., Minneapolis, manufactures additive fabrication machines for direct digital manufacturing (a.k.a rapid manufacturing), 3D printing, and rapid prototyping. It also offers part manufacturing services through its RedEye RPM business unit. According to Wohlers Report 2008, Stratasys supplied 44 percent of all additive fabrication systems installed worldwide in 2007, making it the unit market leader for the sixth consecutive year. Stratasys patented and owns the process known as fused deposition modeling (FDM^(R)). The process creates functional prototypes and end-use parts directly from any 3D CAD program, using ABS plastic, polycarbonate, PPSF, and blends. The company holds more than 180 granted or pending additive fabrication patents globally. Stratasys products are used in the aerospace, defense, automotive, medical, education, electronic, and consumer product industries. On the Web: www.Stratasys.com

Smoothing Station and Burnishing Station are trademarks, and FDM is a registered trademark, of Stratasys, Inc.

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