Accessible Large-Format FDM Printing

Industrial scale printing. Simplified.

Print big without the high capital investment of exclusive, large-format printers. The Stratasys F770™ 3D printer makes printing large, complex parts affordable, reliable and easy.

Print large or print many.

The F770 is designed with size in mind. Print one or several large parts or take advantage of the printer's generous capacity to make multiple parts for maximum productivity.

With the longest fully heated build chamber on the market, you can print a part that is 116.8 cm (46 in.) long on the diagonal. The spacious 0.37 m³ (13 ft³) build envelope opens up new opportunities for manufacturing, prototyping and production-part part applications that aren't available with smaller printers.

With the T25 head, the F770's print speed can be increased by up to 2.3x. The T25 head is an easy, plug-in upgrade designed for faster part production. With enhanced motor torque, four drive gears, and a redesigned hot end, the T25 accelerates material flow while maintaining similar layer thickness and surface quality as the standard T14 head.

There's no need to sacrifice on part complexity either. The F770 uses soluble support material, which lets you design and print your parts free from design-for-manufacturability constraints or the limitations of printers with inferior support capability. The hands-free support removal process also minimizes post-processing, increasing your productivity.
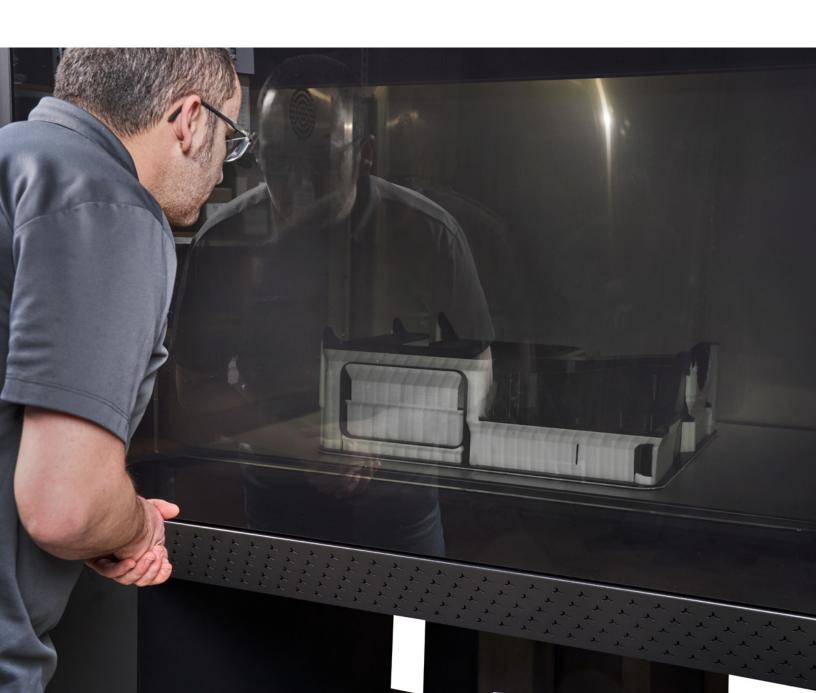
Print-and-forget dependability.

Get accurate print results along with the repeatability and reliability that FDM Technology™ is known for. Stratasys FDM build chamber design is time-tested, ensuring precise thermal management across the build platen. This gives you consistent, successful print results, whether parts are big or small.

You can easily control the material density options. Print with full density when you need the strength or use a sparser fill to save material and print time, a valuable option for very large parts. Variable slice height capability also lets you optimize your part's appearance while minimizing print time.

The F770 embodies the same industrial-grade components and design philosophy that make FDM Technology a class leader for reliability and consistent performance. It is proven technology that simply works.

A printer anyone can operate.

3D printing with the F770 is straightforward and requires no specialized training. It's designed with plug-and-print simplicity so virtually anyone can print large, complex parts quickly and easily.

The user-friendly GrabCAD Print™ software offers advanced 3D slicer software. This enables you to prioritize parts, enhance details, and apply high-level geometrical changes. Before sending parts to the printer, you can easily access in-depth views of your model, tray, and slice preview. This ensures successful results when printing large parts and tools.

The upgraded version, GrabCAD Print Pro™, includes all of the benefits of the standard version as well as enhanced features that support high-performance end-use parts or prototypes utilized in process-controlled conditions. This includes labeling for traceability, automation, templates, part cost estimation, a sustainability calculator, and automatic model correct. With these tools, manufacturing at scale is easily achievable.

3D printing with the F770 is also a lights-out, 24/7 operation. There's no need to constantly monitor the printer while it's operating. Quick-change material boxes are equipped with 3,277 cm^3 (200 in.^{3}) of filament, enabling up to 140 hours of unattended printing. When you do want to check progress, the F770's built-in camera provides continually updated static images of print status, and GrabCAD Print's monitoring feature lets you check this remotely from your mobile device.

Print big for a not-so-big price.

Large-format printing doesn't have to break your budget. The F770 is designed to make reliable, large-scale printing more accessible, with an affordable price. That's possible because not all 3D printing applications require high-performance materials or all the capabilities engineered into large, more expensive printers.

Instead, the F770 gives you access to widely used engineering-grade thermoplastic materials and Stratasys FDM reliability. It does all this in a large-format, easy-to-use platform, for the best value available for 3D printing large, complex parts.

Unmatched support, when you need it.

Stratasys invented FDM Technology and we've been perfecting it for over 30 years. Our technicians and application engineers have the knowledge to make the most of your printer investment and address problems when they occur.

When you need help, our global support staff is here to assist, from professional installations to application guidance to on-site troubleshooting. Whether it's optimizing your print results, solving a problem or providing training, Stratasys service and support has the experience and reach to keep you operational.

To learn more about the Stratasys F770, see the specifications below. Or contact a Stratasys representative by visiting Stratasys.com/contact-us.

Product Specifications

Stratasys Preferred Materials

Material	Layer Thickness			Support Structure	Available Colors	
	0.178 mm (0.007 in.)	0.254 mm (0.010 in.)	0.330 mm (0.013 in.)			
ASA	●	●	●[1]	Soluble	▪ Ivory ▪ Red ▫ White ▪ Light Gray	▪ Black ▪ Blue ▪ Yellow
ABS-M30™	●	●	●	Soluble	▪ Black	

System Specifications

Build Envelope (XYZ)	1,000 x 610 x 610 mm / 372,000 cm³ (39.4 x 24 x 24 in. / 22,677 in.³) Maximum length on the diagonal – 1,171 mm (46.1 in.)
Material Delivery	3,277 cm³ coil box (200 in.³)

Other Specifications

System Size and Weight	175 x 124 x 196 cm (69 x 49 x 77 in.) 658 kg (1,450 lbs.)
Achievable Accuracy	**XY part accuracy =** +/- 0.254 mm (+/- 0.010 in.) or +/- 0.002 mm/mm (+/- 0.002 in./in.), whichever is greater **Z part accuracy =** +/- 0.200 mm (+/- 0.008 in.) or +/- 0.002 mm/mm (+/- 0.002 in./in.), plus 1 layer height
Software	GrabCAD Print, GrabCAD Print Pro[2], Insight, Control Center™, MTConnect enabled
Workstation Compatibility	Wired and wireless (with USB dongle) network interfaces using standard TCP/IP protocols at 100 MBPS minimum
Wireless Network Connectivity	IEEE 802.11n-2009 IEEE 802.11g-2003 IEEE 802.11b-1999
Operating Conditions	**Operating temperature:** 15 °C to 30 °C (59 °F to 86 °F) **Operating humidity:** 30-70% 99 cm (39 in.) clearance on each side of printer
Audible Noise/Acoustics	54 dBA
Power Requirements	3 phase, 208V, 30A, 5 wire, 47-63Hz frequency
Regulatory Compliance	CE, cTUVus, RCM, EAC, FCC Part B
Facility Requirements	Double-door width for installation, vacuum pump within system – no shop air required, forklift uncrating and installation
Installation Requirements	**Crate =** 186.7 cm W x 146 cm D x 225.4 cm H (73.5 in. W x 57.5 in. D x 88.75 in. H) **Crated weight =** 907 kg (2,000 lbs.)

[1] The T25 head is only compatible with 0.330 mm (0.013 in.) layer height.
[2] GrabCAD Print Pro is available on a subscription basis.