

# Fortus 450mc



stratasys



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SOLUTIONS FOR A 3D WORLD™

**The Fortus 450mc is a factory floor ready additive manufacturing tooling solution. Industrial FDM technology with an open material ecosystem for advanced prototyping, tool production and end-use parts.**

Bring the speed, agility and design freedom of advanced additive manufacturing to your business while gaining the latest advances in FDM® technology. The Fortus 450mc™ 3D printer builds high-requirement functional prototypes, rugged manufacturing tooling and custom production parts in its large 406 x 355 x 406 mm (16 x 14 x 16 in.) build envelope. Fourteen Stratasys Preferred Materials, multiple Stratasys Validated Materials and soluble support address a wide variety of applications.

Additionally, the Fortus 450mc can be paired with the optional Fortus FDC™ material delivery and drying cabinet to extend printing times. This add-on feature can deliver up to 500 ci of model material and dries the spools of filament so that moisture is never a concern.

OpenAM™ software lets users alter print parameters to optimize material capabilities and print results. GrabCAD Print™, GrabCAD Print Pro™, Streamline Pro, and Insight™ software provide an easy CAD-to-print workflow and in-depth print processing control. MTConnect and Stratasys Software Development Kits let you integrate the Fortus 450mc into your connected factory floor.

## System Specifications

Build Envelope (XYZ)	406 x 355 x 406 mm (16 x 14 x 16 in.)
Material Delivery	Two bays each for model and support canisters. Auto changeover between canisters

## Product Specifications

System Size and Weight	129.5 cm x 90.2 cm x 198.4 cm (51 x 35.5 x 78.1 in.) 601 kg (1325 lbs.)
Achievable Accuracy	Parts are produced within an accuracy of $\pm .127$ mm ( $\pm .005$ in.) or $\pm .0015$ mm/mm ( $\pm .0015$ in/in), whichever is greater). Z part accuracy includes an additional tolerance of $-0.000/+$ slice height. Note: Accuracy is geometry dependent. Achievable accuracy specification derived from statistical data at 95% dimensional yield.
Network Communication	10/100 base T connection. Ethernet protocol. Wired: TCP/IPV6 protocols
Operator Attendance	Limited attendance for job start and stop required
Power Requirements	208VAC 3 phase, 50/60 Hz, consumes 18 Amps
Regulatory Compliance	CE, cTUVus, RCM, EAC, FCC Part B
Software	All Fortus systems include Insight™ and Control Center™ job processing and management software. Compatible with GrabCAD Print™, GrabCAD Print Pro™ and Streamline Pro for use with part processing, job reports, scheduling and remote monitoring. OpenAM software is available through the purchase of an OpenAM License.
Operating System	Insight: Microsoft Windows 11, Microsoft Windows 10, or Microsoft Windows Server 2012 R2 GrabCAD Print, GrabCAD Print Pro, Streamline Pro, and OpenAM: Windows 10 and newer, Windows Server 2016 and newer. Only 64-bit versions of Windows are supported.

## Material Options

### Stratasys Preferred Materials

Material	Layer Thickness				Support Structure	Available Colors
	0.127 mm (0.005 in.)	0.178 mm (0.007 in.)	0.254 mm (0.010 in.)	0.330 mm (0.013 in.)		
ABS-ESD7™	○	●	●	○	Soluble	■ Black
ABS-M30™	●	●	●	●	Soluble	■ Ivory ■ Black ■ Blue □ White ■ Red ■ Dark Gray
ABS-M30i™	●	●	●	●	Soluble	■ Ivory
Antero™ 800NA	○	○	●	○	Breakaway	■ Natural
Antero 840CN03	○	○	●	○	Breakaway	■ Natural
ASA	●	●	●	●	Soluble	■ Black ■ Dark Gray ■ Light Gray □ White ■ Ivory ■ Dark Blue ■ Green ■ Yellow ■ Orange ■ Red
FDM Nylon 12™	○	●	●	●	Soluble	■ Black
FDM Nylon 12CF™	○	○	●	○	Soluble	■ Black
PC	●	●	●	●	Breakaway, Soluble	□ White
PC-ABS	●	●	●	●	Soluble	■ Black
PC-ISO™	○	●	●	●	Breakaway	■ Translucent Natural □ White
ULTEM™ 9085 resin	○	○	●	●	Breakaway	■ Tan ■ Black
ULTEM™ 1010 resin	○	○	●	●	Breakaway	■ Natural
ST-130	○	○	○	●	Breakaway	■ Tan

### Stratasys Validated Materials

Material	Layer Thickness				Support Structure	Available Colors
	0.127 mm (0.005 in.)	0.178 mm (0.007 in.)	0.254 mm (0.010 in.)	0.330 mm (0.013 in.)		
FDM HIPS	○	○	●	○	Breakaway	■ Light Gray
Kimya PC-FR	○	○	●	○	Soluble	■ Light Gray
ULTEM® 9085 Resin (colors)	○	○	●	●	Breakaway	■ Red
	○	○	●	○	Breakaway	■ Jana White
	○	○	●	○	Breakaway	■ Dream Gray
	○	○	●	○	Breakaway	□ White 7362
	○	○	●	○	Breakaway	■ Gunship Gray
	○	○	●	●	Breakaway	■ Aircraft Gray
PC	○	○	●	○	Soluble	■ Red ■ Black
PC-ABS	○	○	●	○	Soluble	■ Red
VICTREX AM™ 200	○	○	●	○	Breakaway, Soluble	■ Natural
PC-ESD	○	○	●	○	Soluble	■ Black

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PRODUCT SPEC SHEET  
FDM



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