Specifications for an F370
3D Printing/Prototyping System

Stratasys is the owner of, and holds, more than 550 granted and pending patents globally, and our additive manufacturing systems utilize our patented FDM® and inkjet-based PolyJet™ technologies to enable the production of prototypes, tools used for production and manufactured goods directly from 3D CAD files or other 3D content.

Our FDM® technology uses production grade thermoplastic building materials that feature surface resolution, chemical and heat resistance, color, and mechanical properties necessary for production of functional prototypes and parts.

We believe that our 3D printing systems are unique in the combination of superior printing qualities, accuracy, print speed, the ability to print a range of materials with varying levels of strength, chemical and heat resistance, color and mechanical properties.

Stratasys is the sole manufacturer and/or proprietor of the design and technology of equipment sold under the FDM® and PolyJet™ trademarks and the specific trademarked Fortus, Dimension, uPrint, F-Series, Connex, Eden and Objet brands.

All Stratasys equipment and materials are designed and/or manufactured at the Stratasys corporate facilities in Eden Prairie, Minnesota. These products and materials are sold and serviced only by Authorized Resellers.

This equipment will be used to aid professors in the teaching of drafting, engineering, manufacturing, art, architecture, biomedical engineering, direct digital manufacturing, tooling and graphics. Students and Teachers will produce different parts of an assembly (machine) on a daily basis. The 3D Printer will be used to guide students in learning and creatively applying systems of teamwork, collaboration, engineering design principles, part tolerances and fit, form and function. Students also gain a practical understanding of design revision, concept to production cycles, practical additive fabrication use and advanced industrial technology applications.

Model Specifications:

- Build volume of 14” x 10” x 14”
- Nest multiple parts in build area
- Minimum layer resolution of .005”
- Models can be painting, glued, sanded, drilled
• Models do not change shape after being printed (no infiltrating or curing)
• Models are made of durable ABS, ASA, PC-ABS, ABS ESD7, Diran., TPU plastic and PLA modeling material
• Includes one year warranty in purchase price of equipment
• Includes one year * supply of material at no addition charge (*estimated, depending on machine usage)
• Includes Support Cleaning Apparatus for soluble support material removal

Build Material:
• ABSplus, ASA, PC-ABS, ABS ESD7, Diran, TPU, ABS-CF and PLA materials
• Able to accommodate interlocking part connections
• Withstands temperature range of 30F to 230F
• Withstands rough handling in a classroom environment, i.e. average part being dropped from 4 feet onto a concrete floor without cracking or breaking.
• Material is non toxic
• No residue from parts on hands after normal in-class handling of parts
• Materials can be used to create molds for investment and sand casting

Support Material:
• Soluble Support – Designed to be water soluble
• Allows for building models with overhangs, complex geometries and working assemblies

Computer Interface and Software
• 3D Printer Software accepts models generated using current solid modeling software.
• GRABCad Print software included – software optimizes geometry, hollows (sparse fills) model, orients model
• Software operates on current Windows platform
• Network connectivity with TCP/IP protocol, 100/10 base T

Service:
• On-site installation and training
• One year warranty on parts and labor includes on-site service
• Operating manuals included with system

System Performance:
• Designed for classroom and office use
• System operates unattended once build is started
• Noise level during build less than 46 decibels
• Clean process that leaves no waste
• No ventilation necessary
• Parts are produced with an accuracy of +/- .200 mm (.008 in), or +/- .002 mm/mm (.002 in/in), whichever is greater.

System Physical Features:
• Weight 500 pounds
• Size 64 x 34 x 28 inches
• 110~115 VAC, 15 amps
• Door lock mechanism while system is printing
• Touch Screen