UNC CHARLOTTE
Department of Engineering Technology

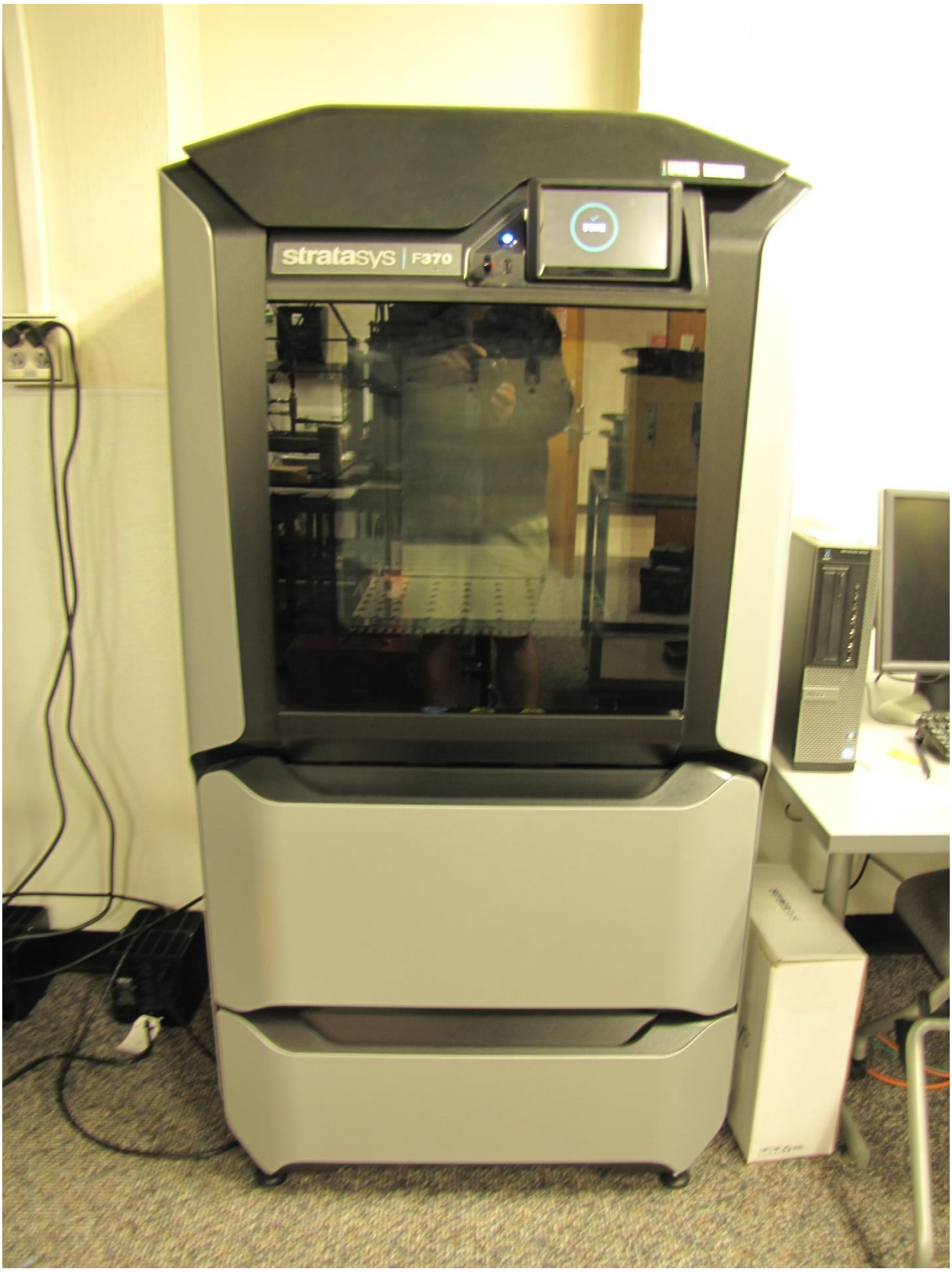
Laboratory Safety Analysis

Operating Stratasys F370 Three-Dimensional Printer

Location: Smith 129
Required Training: The Stratasys F370 Three-Dimensional Printer is designed and intended for use by properly trained and experienced operators. If you are not familiar with the proper and safe operation of this unit, do not use until proper training and knowledge have been obtained.
Required Personal Protective Equipment (PPE): Safety glasses
Reference Materials: Manufacturer's safety rules and operating instructions.

Task	Hazards	Controls
Wear safety glasses with side shields	Flying debris.	• Students are required to provide their own safety glasses • See laboratory instructor or laboratory manager if you do not have safety glasses before using the equipment.
Inspect safety glasses for cracks, scratches or other damage. Ensure ANSI standard Z87.1 is stamped into the side of glasses.	Flying debris.	• If defects are found report to your laboratory instructor before beginning the experiment.
Put on PPE, including gloves and face shield if necessary.	Flying debris and sharp materials, burns	• Always wear safety glasses. • Always wear leather gloves when working inside of the printer. Interior surfaces are **HOT!**
Empty purged material hopper	Burns	• Always wear leather gloves when working inside of the printer. Interior surfaces are **HOT!**

Insert or remove blank build tray.	Burns	• Wear gloves when inserting or removing build tray due to hot interior surfaces. • Insure that tray locking clamps are engaged.
Removing completed build tray.	Burns	• Disengage tray locking clamp. • Wear gloves when inserting or removing build base due to hot interior surfaces. • Handle base by molded in handle as printed models may also be hot.
Removing models from build tray.	Cuts, flying debris, burns.	• Allow models to cool before removing from tray. • Always wear approved safety glasses when removing models from base, as support material can shatter and fly outward.
Maintenance	Injury, burns, electrical hazards.	• In all cases, maintenance (including material cartridge changes) must be referred to the Laboratory Manager, or qualified Laboratory Instructor.
Clean Work Area and return all PPE to a clan storage area.	Injury	• Ensure adequate housekeeping measures to prevent accidents. • Clean any residual shards of support material from the table and floor.
For more information about this LSA, contact the *Department of Engineering Technology* at UNC Charlotte (704) 687-2305 or please visit our website at: http://www.et.uncc.edu\		
The development of Laboratory Safety Analyses is a very effective means of helping reduce incidents, accidents and injuries in the workplace. It is an excellent tool to use for training purposes and can also be used to investigate "near misses" and accidents.		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