Desktop Family

3D Printing System

Operator Training Guide

Basic Course

Stratasys®

Course Description

Description		**Desktop 3D Printers for Operators** – Designed specifically for printer operators and provides hands-on experience in operation and maintenance procedures.
Hands-on		The training combines the presentation of conceptual information with hands-on sessions for operating and maintaining your 3D printer. A comprehensive training guide is provided to ensure an effective learning experience.
Objectives		Upon completion of **Desktop 3D Printers for Operators** course, the trainee will be able to operate and maintain the Printing System.
Duration		1-2 Days

Course Outline

The operator training should be implemented during the installation.

The following is the outline for the operator training course.

System Installation & Initial Print Job		
Topics		**Activity**
1. Unpack the Printer Shock sensors, printer positioning		Observation
2. Prepare for Printing Head- cover removal, inserting cartridges		
3. Safety Procedures Review safety guidelines		
4. Initial Print Test Send a print job: print service ATP Use the quick start.		
5. Install the WaterJet		Observation
6. Operating the WaterJet Learn to operate the WaterJet		Hands-on
7. Operator Print Job Review Objet Studio & Job Manager with operator. The operator sends a print job.		Hands-on
Using Objet Software & Operator Maintenance		
1. Printer Software Control Become familiar with the application		Hands-on
2. Operator Maintenance • Top cover & build tray cleaning • Wiper • Pattern test • Waste container • Odor system	• UV Calibration • Head Optimization • Roller waste collector • Manual head replacement • Head alignment • Load cell calibration • System shutdown	Hands-on
3. Start Up Kit Familiarize operator with Start-Up kit contents		Observation

Safety Procedures

Hot Surface	Risk of burns from: • Block – 70°C • Heads - 75°C • UV socket **Do NOT touch these surfaces while they are hot.**
High Voltage	• Main Power Supply • UV Power Supply • UV Lamp Connectors • X-Axis Power Supply • Printer Computer Power Supply **Risk of Electric Shock**
Ultra Violet Radiation	Radiation from UV Lamps **Always** use protective eyewear when the printer cover is open. Manufacturer : UN process supply INC. No : I005-017orange
Moving Parts	• 4 Moving Axes - X axes, Y axes, Z axes ,T axes (wiper) • UV Fans • Pumps
Handling Printing Materials	• Printing materials (resins) are flammable – Do **not** expose them to flames, heat or sparks. • Keep resins away from food and drink. • Uncured resin is toxic - minimize direct contact with the skin to prevent irritation and other health hazards. Prolonged contact may cause burns. • Always wear protective gloves.
First Aid for Working with Resins	• If respiratory irritation occurs, expose the victim to fresh air immediately. • If uncured resin comes in contact with the eyes, flush immediately with large amounts of water for 15 minutes and seek medical attention. • When handling resins or material containers, wear protective goggles to prevent uncured resin from splashing into the eyes. • If uncured resin comes in contact with the skin, wash the area immediately with soap and cool water.
General Safety Rules	• Be familiar with the locations and use of safety equipment. • Do **not** use broken equipment. Machinery with moving parts must have a working safety interlock, and a protective cover over the moving parts. • Do **not** open the cover while printer is operating. If open, do not stare at the UV light and use protective eyewear to prevent exposure to UV light.