

3D Printing

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Prototyping Techniques

- Hi Fidelity Prototyping



3D printer



Prototyping Techniques

■ Hi Fidelity Prototyping



Laser cutter



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Prototyping Techniques

■ Hi Fidelity Prototyping

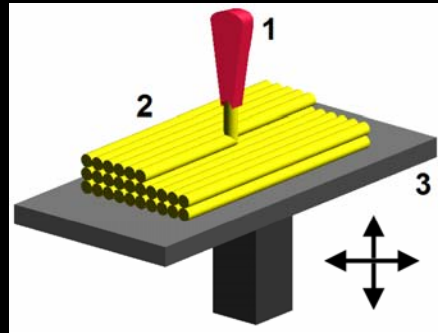


Vacuum Forming



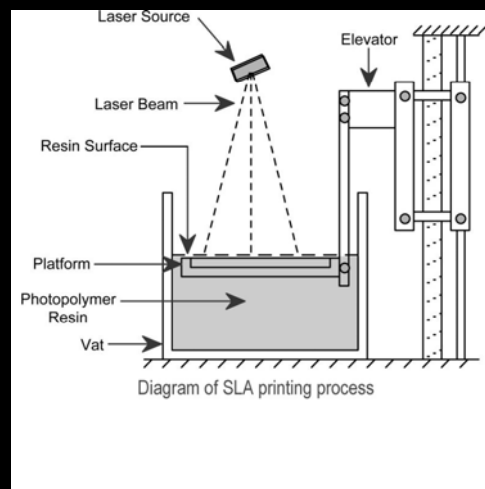
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FDM – Fused Deposition Modeling



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SLA - Stereolithography



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FDM vs SLA

- FDM – Lower cost, easier maintenance, faster builds, larger builds
- SLA – Higher quality finish, strength, new DLP versions

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3D Printers



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3D Printers



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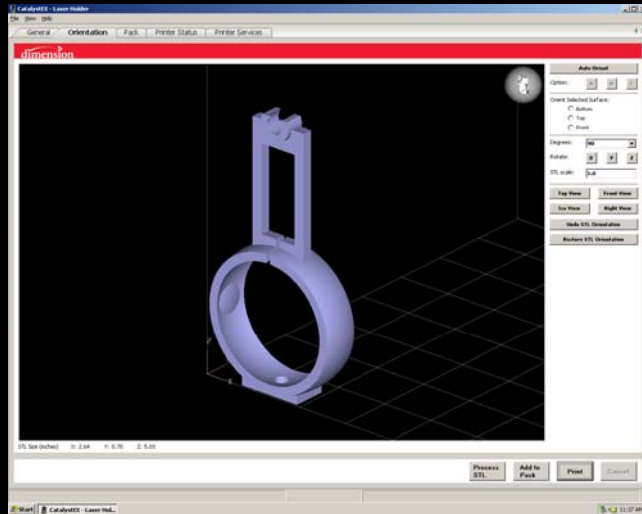
Using the 3D Printer

1. Build a 3D model (RhinoCad, SolidWorks,)
2. Import model into the 3D printer software
3. Prepare 3D printer
4. Print



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3D model



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3D part



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Laser Scanners



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examples



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If you don't lock the tray



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CAD Tools

Software options:

- Solid works (student license)
- Rhino (free trial)
- Blender
- Google sketch up (free trial)
- Autocad (free trial)

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