

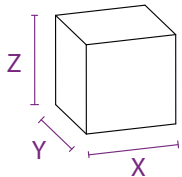
SLS Machines (Selective Laser Sintering)

- 2 x EOSINT P760
- 4 x EOS P396
- 1 x EOSINT P395



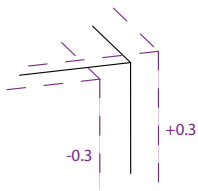
Acceptable File Format

- We accept most popular file types.
- Recommended : STL - STEP - IGES



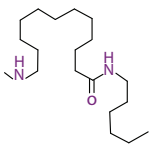
Overall Component Size

- Largest single part: 680mm x 550mm x 350mm
- Smallest part: 10mm x 10mm x 10mm (approx.)
- It is possible to build larger parts by splitting them out and welding back together post-process, contact 3T to discuss your requirements.



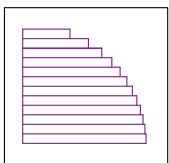
Tolerances

- Standard 3T manufacturing tolerances are:
 - o +/- 0.3mm on dimensions \leq 100mm
 - o +/- 0.3% on dimensions $>$ 100mm
- Tighter tolerances may be achievable depending on geometry, please discuss any requirements with the 3T team.



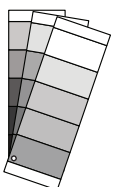
Materials

- Nylon 12 (PA2200)
- Glass Filled Nylon 12 (PA3200)
- 3T offers other materials (Fire Retardant, Nylon 11 Black) subject to conditions. Contact 3T to discuss your requirements.



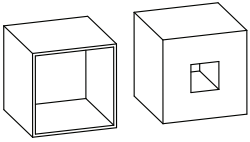
Stepping

- Due to the nature of the process, stepping may be visible, this is highly geometry dependent.



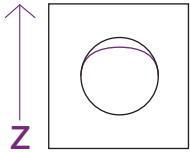
Finishing

- We offer a variety of finishes from smoothing to colour change.



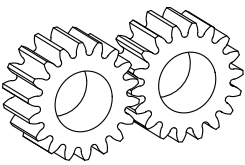
Wall Thickness

- Minimum: 1mm
- Maximum: 10mm. Thicker walls can be produced depending on geometry. 3T can also shell these parts out to reduce this thickness.
- Thinner or thicker features are possible, please discuss with 3T if you have any special requirements.



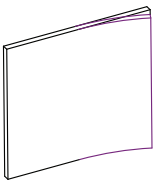
Holes:

- These can build slightly undersize due to the thermal nature of the process.
- Depending on build orientation, they can also be slightly oval.
- They can be drilled or reamed to size post-process.



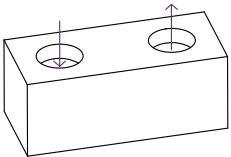
Mechanical Parts

- Offset between surfaces of mating parts should be at least 0.5mm from each surface.
- Thick walls surrounding hinges may cause parts to fuse. Reduce wall thickness or remove material to avoid this.



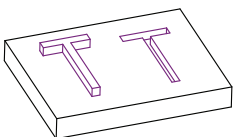
Flat Panels

- These are prone to warping due to the thermal nature of the process and inherent stress within the part.
- It is sometimes possible to reduce this effect either with position in the building process, or post-process by clamping and heating the parts.



Powder Removal

- Powder can become easily trapped within deep recesses, internal chamber and sharp corners.
- When designing these features keep in mind air flow to allow for easier cleaning and more complete powder removal post-process.
- If internal chambers are fully enclosed, powder will remain within the part. If you add holes to allow powder to be removed, please ensure there are at least two of reasonable size (10mm diameter) for better airflow.



Text

- Basic fonts such as Ariel Black work well.
- Approx. 16pt or 5mm letter height is preferred.
- Text can be embossed or debossed, minimum of 0.6mm.