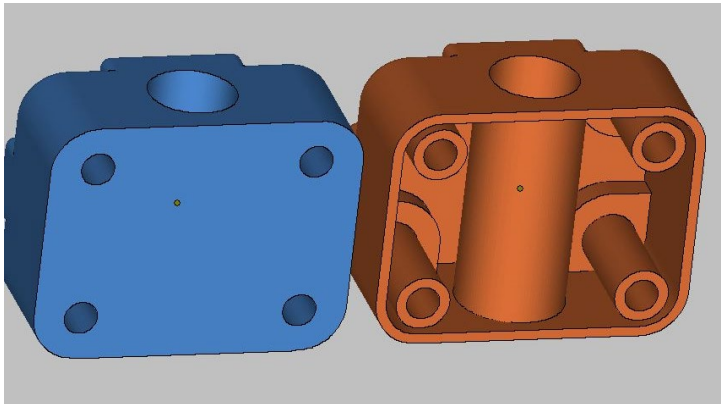


3D Printing General Design Rules for SLS

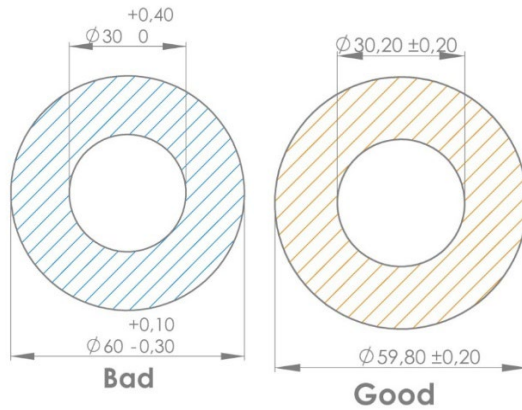
1. Volume/Density

- Mass Volume and Wall thickness should be avoided wherever possible this saves material and building time especially in SLS 3D printing
- Too massive parts can cause surface irritations like bumps and overheating on the part in the printing area
- Keep in mind less volume is equal to less cost, so design smart and minimum material volume.



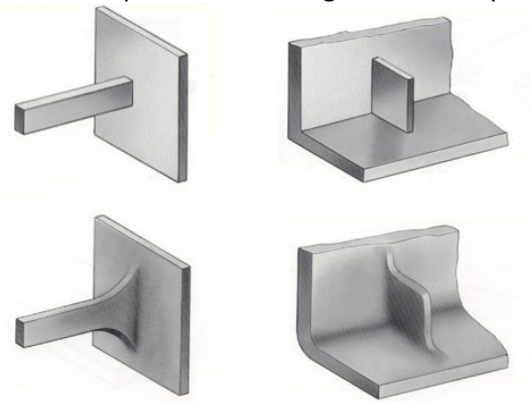
2. Tolerances for SLS 3D Printing

- Change your measurements to a symmetric tolerance zone.
- The bad example has an unsymmetrical tolerance zone the good one a symmetric
- In the sinter process it is only possible to build with symmetric tolerances



3. Edges and corners (these rules apply to both SLS and MJF)

- Sharp Edges and corners which do not fulfill a function should be rounded with a radius.
- This saves material, decreases the risk of a flaw and improves the flow of force.
- Connections with radii prevent stress peaks.
- Avoid sharp corners and edges wherever possible!



4. Powder removable design

- Powder must be removable!
 - Problems in small long pipes
 - Very complex parts with inside structure
 - Smart powder removal design help reduce lost production or effort to clean

