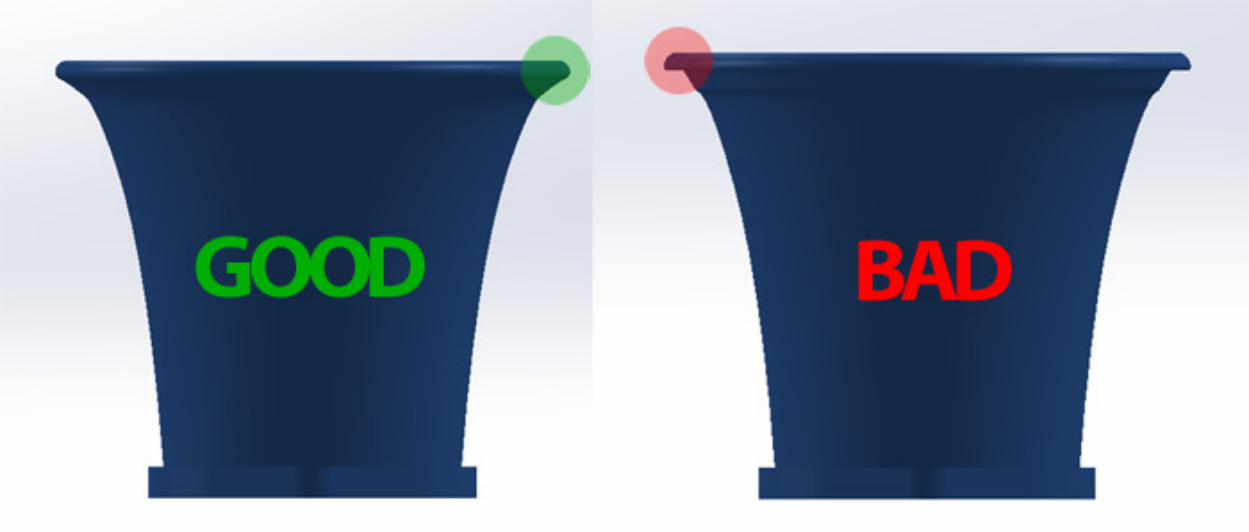
ONPOINT
DYNO + RACE SERVICE

3D PRINTING GUIDELINES

OnPoint would be glad to prototype your design ideas, however there are some design elements you must keep in mind to enable a successful print.

The main design guideline is that the machine prints layer by layer, starting from the bottom. Your object should have a designed start point – i.e. a base, and everything above there should grow at an angle no steeper than 50 degrees. See the image below:



However, in certain instances where this is impossible – i.e. you need two flat planes, the 3D printer can build in support rods that start from the bottom and print to become a base for your flat plane. Where supports are required however, you will be required to remove the supports after the print, which leaves a rough surface finish. If there are no flat starting planes, the machine can build its own base out of supports, but you will need to specify which surface you want to be used as the base, as this will have the majority of the supports.

Other design guidelines:

- **Wall thickness of the part should be no less than 2mm.**
- **The object must be closed, or "water-tight".**
- **Hole dimensions should be slightly larger than desired, as shrinkage does occur as the print cools. If your holes are printed too tight, you can drill them to size.**
- **Overall dimensions will shrink across a large part, however we normally accommodate for this by enlarging the entire part by a scaling factor.**
- **As a result of the above points, we cannot guarantee dimensional tolerances and across a large part the additive shrinkage can result in a fairly large dimensional change from the design.**
- **The build volume is 9.5" wide x 6" tall x 6" deep**
- **Our default print resolution is 250 microns, or 0.25mm. Finer print resolutions can be offered for an additional fee.**

Please contact sanis@onpointdyno.com with your STL file for a quote.