
Subject: Stainless Steel Accuracy - Puzzle Ring
Posted by [mediokay](#) on Wed, 28 Sep 2011 06:20:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi guys,

I've browsed around the forum, and people seem to suggest a .2mm tolerance for stainless steel fitting pieces, but I am concerned because shapeways states that the accuracy for stainless steel is only within 2mm of the design. With that kind of accuracy, I am concerned that the two pieces will not fit together in the end. Does shapeway actually care whether or not my pieces will fit, or is it just "luck of the draw"?

I hope someone with more experience designing with shapeway can shed some light on this situation. I plan on making something similar to this: <http://www.shapeways.com/model/297302/> ,
<http://www.youtube.com/watch?v=pRCIKFr8FM8>
or this
<http://www.youtube.com/watch?v=q43s91UQdEU>
except my product will need to fit snugly and be semi-difficult to take apart.

Please help~ Thanks!

Subject: Re: Stainless Steel Accuracy - Puzzle Ring
Posted by [duann](#) on Wed, 28 Sep 2011 06:58:25 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi there,

The variance will depend on the design of the product, wall thickness and form. Shapeways does of course care about the quality but there is some warping and variation in the stainless steel process, less so in other materials.

I would order in White strong and flexible at the same time so you can test against each other

Subject: Re: Stainless Steel Accuracy - Puzzle Ring
Posted by [mctrivia](#) on Wed, 28 Sep 2011 15:22:59 GMT
[View Forum Message](#) <> [Reply to Message](#)

I can confirm that depending on design steel can be pretty far off.

I ordered http://4ddice.com/M170915/build_your_own_die_kit.html in WSF and steel. The center cube warped enough that I had to cut .3 mm or so off the one side of the wsf piece to make it fit.

A shape like this: http://www.shapeways.com/model/166732/4d_hyper_cube_shadow.html would likely be the farthest off from true since support members are far between.
