
Subject: 3D design first time - Doing it right?
Posted by [moogthedog](#) on Fri, 27 Jul 2012 10:22:38 GMT
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Hi. I'm a complete first timer, I've got a series of objects that I'd like to have made. It's 6 pieces that fit together to form a cube. I've used SketchUp to generate the outlines of the pieces, and I've done a bit of extra work on the first one (attached). (Any old-school Doctor Who fans may recognise it)

Originally the piece was solid, but that was going to be prohibitively expensive, so I've hollowed it out, and left the internal faces exposed, just to do something different..

So - Before I worsen my RSI finishing off the rest of the pieces, I thought I'd pop in here and check that this is the sort of thing I was supposed to be producing.

On the Shapeways side of things, what do you think the best material would be to form this? I want a polished finish, with nice clean points and edges, so I was considering the fine detail plastic. Does it come in different colours?

Also, if I were to put the six pieces together in one model, a) is that possible, and b) are there any considerations to be made over the fact that they're detached?

Thanks for *any* assistance.

File Attachments

1) [1hollowsmall.skp](#), downloaded 100 times

Subject: Re: 3D design first time - Doing it right?
Posted by [denali3ddesign](#) on Fri, 27 Jul 2012 12:53:33 GMT
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Welcome to Shapeways!

That's exactly how you should design the model, but depending on the material and the end use you could go even thinner.

If you need a nice finish Fine Detail plastic is a good material. The minimum wall thickness is 0.7 mm. I wouldn't necessarily go that thin, but 1-1.5mm thick would be sufficient for a part that small. You might also look at Polished strong and flexible - that may be cheaper but it will round off the corners somewhat.

Re six parts in one model, here's what the guidelines say for Fine Detail plastic:

Quote:Multiple Part per STL:

Yes: (please sprue together your model if you have more than 5 parts)

Subject: Re: 3D design first time - Doing it right?
Posted by [thuisman](#) on Thu, 02 Aug 2012 18:33:00 GMT
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Hello all,

I'm also new to 3d modeling and 3d printing.

I made the part I want to 3d-print in Google Sketchup(and attached it).

My question is:

- Is the way it is drawn ok?
- If I want to print this object, what do I have to change/do extra to make the printing of this object a success?
- What are the cost(aprox) for this? If it is just plastic or something. I know the prices are on the website, but I don't know how many cm³ this object is. How can I see that?

Thanks for your help,

Thijs

File Attachments

1) [component 1.skp](#), downloaded 81 times

Subject: Re: 3D design first time - Doing it right?
Posted by [stonysmith](#) on Fri, 03 Aug 2012 00:31:11 GMT
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If you save it as a STL file, and pick a unit of "Millimeters", then it comes up as 40mm in diameter, and 23mm tall.

Load it up in Netfabb, and it tells you that it's 7.44cm³ - about \$12 in WSF

Subject: Re: 3D design first time - Doing it right?

Posted by [denali3ddesign](#) on Fri, 03 Aug 2012 02:55:26 GMT

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Hello Thijs,

By coincidence, I was hosting a meetup tonight about 3D Printing from Sketchup. I live streamed the Meetup via Google+ and saved it on YouTube. I used your model as an example. This was the first time trying this, so there was some trouble with the recording, but you should be able to learn something! You can see the video here.

Hope its helpful!
