
Subject: An object inside another
Posted by [steeveesas](#) on Thu, 11 Nov 2010 21:15:56 GMT
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Hello,

I was wondering if Shapeways supports printing an object inside another object when the 2 object's volumes do not overlap at all. For example see the attachment.

In this crude picture I have a sphere which is placed inside a box made up of only edges. So basically the sphere is trapped inside the edges of the box, but the box has no faces so part of the sphere could go outside the box until it hits the edges.

So if I were to model this with a sphere and a box I constructed in one 3D model, would Shapeways accept it and print the sphere inside the box's edges so that when the 3D print arrived I would have a trapped sphere?

Finally, can this be done with separate colors ... one for the box one for the sphere?

Thanks,

Steve

File Attachments

1) [ballinsquare.PNG](#), downloaded 80 times

Subject: Re: An object inside another
Posted by [Youknowwho4eva](#) on Thu, 11 Nov 2010 21:22:51 GMT
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Depending on the material choice this can be done. Multiple colors, no. As far as I know the only material you'd be able to get multiple colors out of is sandstone, and as far as I know you can not printed separated geometries in sandstone. Now if you printed the box large enough and the bars thin enough and made the ball fit tight enough and used the right materials, you could print them in different materials and combine them later.

Subject: Re: An object inside another
Posted by [steeveesas](#) on Thu, 11 Nov 2010 21:39:11 GMT

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hmmm...okay. well it sounds like I can do this with just one color. so maybe afterwards I can paint one of the objects if I want multiple colors.

At least I can print it though even if it is one color...

Thanks for the answer.

Subject: Re: An object inside another
Posted by [Magic](#) on Thu, 11 Nov 2010 22:35:58 GMT
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Hmmm... A sphere inside a box... This reminds me my very first print...

Subject: Re: An object inside another
Posted by [steeveesas](#) on Fri, 12 Nov 2010 18:43:25 GMT
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Haha yeah that is exactly what I was describing...my actual model won't be that exactly, but it was my example for the basic question. Thanks for posting...that's sure fire proof it works out. Also the separation of .5mm between the two objects is great to know! I was wondering how much room I might have to leave. That is a very small amount...these printers are great huh?

Subject: Re: An object inside another
Posted by [Magic](#) on Fri, 12 Nov 2010 18:55:35 GMT
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Yeah, this technology is great!

But be careful: 0.5mm (for the radius so the actual range of movement is 1mm) worked well for the Detail material, but the very same model in White Strong and Flexible got fused! So for Strong and Flexible, I would recommend 0.75mm.

Good luck for your model, and please, keep us updated!
