Subject: Hollowing an object - Methods - Printing - File extenstions
Posted by bennp113 on Sun, 25 Sep 2011 14:18:33 GMT
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Hey everyone,

I'm making a 3D model (nothing too fancy) of a "beach-pole" (not sure what it's called in English, Dutch word is "strandpaal"), similar to this one here:

and I just wanted to ask this question:

I am using Solidworks 2010 to make the model, and in order to save money, I want to hollow out my model.

Since I'm going to use the Color-Sandstone 3D printing method, I need to use a base, or else it'll "keel over". I made a hole of 3 mm in the centre of the base that the pole stands on. The rest of the pole just has four walls, and is already attached to the base.

Does this mean that the Shapeways system will now see it as a hollow object, or is there something else I need to do? I read about boolean subtraction and "extruding outer surfaces and creating scaled-down versions on the inside of the object", but that just seems like a lot of work...Isn't what I did already enough?

Another question, does the printer "print" from the bottom up, as in the usual x-y-z axes? This might be a silly question, but it is actually important for the design of my model, as its tip is pointed.

Also, the finished file I have now has the .SLDASM extension. (Solidworks Assembly File) What do I need to do in order to make it acceptable for Shapeways, while retaining color and all? I read something about .zip files and bitmaps, but it's still quite vague.

I'd like your feedback on these questions, please. Sorry for asking so many questions; I might know something about SolidWorks, but absolutely nothing about the world of 3D-printing!

With kind regards,

Ben.

Subject: Re: Hollwing an object - Methods - Printing - File extenstions
Posted by stop4stuff on Sun, 25 Sep 2011 15:28:06 GMT
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Hi Ben,

Welcome to Shapeways!

As it is, your model will be seen as hollow and as long as the wall thicknesses follow the new Fuller Colour Design Rules it should print ok.

The way models are printed are in whichever orientation fits the print tray along with whatever other models are being printed at the same time - the printing process involves a support material, so it doesn't matter which way up models are printed.

The file formats accepted for colour sandstone are VRML97 (aka VRML2.0) and X3D with either an image UV texture map or vertex colours. You can find some information about uploading for colour here. You'll also find more tutorials on the Tutorials Page and some steps for colour models here

Hope this helps, and if you get stuck, be sure to ask

Cheers,
Paul