
Subject: Menifold problem

Posted by [jeroen870](#) on Sun, 23 Aug 2009 09:12:38 GMT

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Hi!

I'am still a newbie, and so I've a little problem when uploading these two files. I'm getting the error: "Only manifold objects can be printed."

I know what kind of problem this is, but I can't find any problems in my editor.

It would be great if someone could help me out with this.

Grz,

Jeroen

File Attachments

1) [katenjerschaal.stl](#), downloaded 192 times

2) [katenJ2.stl](#), downloaded 118 times

Subject: Re: Menifold problem

Posted by [WiKKiDWidgets](#) on Sun, 23 Aug 2009 12:52:50 GMT

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Here is a tutorial on repairing manifold issues. (Also works for menifold issues hehe)

Give this a go and see if you can work it out.

<http://www.wikkid-widgets.com/RepairingNon-manifoldmesheswithBlender.pdf>

Subject: Re: Menifold problem

Posted by [jeroen870](#) on Sun, 23 Aug 2009 14:45:09 GMT

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Well,... there was just a small error with my manifolds, but now shapeways says: "Based upon the

size, volume and wallthickness of your model there is no printer available which is able to print your model. Please adjust the volume and/or size of your model."

But the model is not that small. (23x28x2,2(=wall) in mm)

What can I do?

Subject: Re: Menifold problem
Posted by [WiKKiDWidgets](#) on Mon, 24 Aug 2009 00:51:53 GMT
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katenjerschaal.stl:
The side walls are 1.00619mm thick. Needs to be at least 2mm for WSF.

katenjerschaal.stl:

I think it's the arches of the "K" when they first come out. They are only 1.2mm there. Not entirely sure though.

I'd try scaling just a little bigger and then test upload to see when it is able to print.

Subject: Re: Menifold problem
Posted by [jeroen870](#) on Mon, 24 Aug 2009 09:32:22 GMT
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Yea, but I tried that already. But when I go to the gallery on shapeways, there are some shapes that are much more curly (and thinner) then mine.

The biggest file is OK now. (was only a manifold problem)

And the strange thing is that the small file is just a little bit different then the file I posted a topic before. And that file is ok now.

Subject: Re: Menifold problem
Posted by [WiKKiDWidgets](#) on Mon, 24 Aug 2009 12:35:53 GMT
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Looking at other peoples models is going to be a very misleading venture as the display is scaled

to make it fit a percentage of the scene. I scaled your model to 40mm (1.57") across and it uploads fine.

The attached version is printable.

File Attachments

1) [katenJ2_Test.stl](#), downloaded 104 times

Subject: Re: Menifold problem

Posted by [jeroen870](#) on Mon, 24 Aug 2009 15:50:24 GMT

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Mmm, well yea. 4cm is a little to big for me.
I'll play with it a little more.

But there is one thing I don't understand; if you have a tip (a spear f.e.), then the tip is getting smaller to the end. At one point it will be smaler then 2mm.

Why does shapeways does not complain at that point?

Tnx for your help btw.

Subject: Re: Menifold problem

Posted by [WiKKiDWidgets](#) on Mon, 24 Aug 2009 17:27:06 GMT

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There are two basic measurements to deal with in 3D printing.

The first is a valid printable object.

Shapeways has identified the minimums for:

Size

Thickness

Wall thickness (For hollowitems)

They have validated through testing that anything less than a certain value (different for each Material)will not produce a valid print. I.e., it would be so thin it would be sure to break.

That being said, the actual print resolution is much much finer than these thresholds. In WSF it is down to .2mm (200 microns)

I am not privy to the actual algorithm they use to calculate a valid print, but rest assured, these are there to keep you, the customer, from ordering something they know you won't be happy with.

You can read about Materials here:

<http://www.shapeways.com/about/material-options>
