Subject: 3d Software doesnt make sense. Someone please give me some advice
Posted by Raizer04 on Sat, 27 Oct 2012 16:15:37 GMT
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Hello there, I have a BFB 3d touch printer and I am having a problem. Everytime I try printing it keeps closing the holes. I have tried a repair in netfabb studio but it keeps closing holes that I need open.

Please read post: http://www.bitsfrombytes.com/eur/forum/post/axon-2-keeps-filling-when-i-dont-want-it

I am new to 3d software, and i am looking for someone to explain and possibly show me how to fix this.

File Attachments

1) Thumb Rebuilt.stl, downloaded 19 times

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by stonysmith on Sat, 27 Oct 2012 18:43:50 GMT
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The simple answer here is that computers are stupid, and that the computer can't read your mind.

Most "Hole Correction" algorithms tend to go with a simpler geometry rather than try to create a more complex one.

Rather than use your complex example, let me try to explain using a simpler item:

Here on the left, you can see that there are two holes (top/bottom), but there is no internal structure.
If you use most any "Hole Correction" tool, it is going to just plug the two holes as surface defects, and not create a passage THRU the object.
What is necessary is to have the vertexes that I've outlined on the right in white, and you must have the faces shown in yellow.
Your model is missing these "internal" faces.

To repair this, you must do one of two things:
1) repeat the original subtraction, ensuring that interior faces are created properly.
2) if your tool allows, you could add the vertexes and faces manually

File Attachments
1) Edges.jpg, downloaded 216 times

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by stonysmith on Sat, 27 Oct 2012 18:44:33 GMT
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Here's my attempt at fixing it.

File Attachments
1) Thumb Rebuilt.stl, downloaded 23 times

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by mygadgetlife on Sat, 27 Oct 2012 18:45:04 GMT
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Hi,

I looked at the postings you referred to and your correspondent is correct - the model is non-manifold, meaning it's outer 'skin' is not continuous and has holes. This is why your model will not print correctly.

You need to go back to your software to correct the issue. Believe me, if you're a beginner like me, this is easier said than done.

Best of luck, and you can always post back here if you have difficulties.

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by Raizer04 on Sat, 27 Oct 2012 18:52:36 GMT
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stonysmith wrote on Sat, 27 October 2012 18:44Here's my attempt at fixing it.

I....I...I think i love you. That is exactly what I needed. What software did you use to add the vertexes and faces manually?

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by Fredd on Sat, 27 Oct 2012 19:04:11 GMT
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Bah, I was too busy making an image. Your problems were pretty well answered. Proper facing normals are on the image on the right side.

File Attachments

1) WATERTIGHT.jpg, downloaded 203 times

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by stonysmith on Sat, 27 Oct 2012 20:10:57 GMT
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I use an old school (now free) program called TrueSpace. If you want to try it, you need version 7.6.0. The 'update' version 7.6.1 removed the native STL export from the package.

People (my kids) ask me why I hang onto such an old program (this version from 2008).. It's mostly because I've got "a bit of experience" with the program... I started working with Version 1 way back in 1994.

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by Raizer04 on Sat, 27 Oct 2012 22:28:36 GMT
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stonysmith wrote on Sat, 27 October 2012 20:10I use an old school (now free) program called TrueSpace. If you want to try it, you need version 7.6.0. The 'update' version 7.6.1 removed the native STL export from the package.

People (my kids) ask me why I hang onto such an old program (this version from 2008).. It's mostly because I've got "a bit of experience" with the program... I started working with Version 1 way back in 1994.

Well thank you everyone for attempting to help me with this. I tried to recreate the file myself (so that I can learn to do this rather than asking people), and I smoothed out the structures within the thumb and eliminated all the unnessesary vertices and faces using Blender (that TrueSpace 7.6 wouldnt even let me import an stl). I think I am getting close, but I cant find out what I am doing wrong compared to the one that he supplied that worked.....Whats different compared to the one he did?

File Attachments

1) ThumbBlender Test1.stl, downloaded 9 times

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by stonysmith on Sat, 27 Oct 2012 23:37:11 GMT
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Make sure that you downloaded TS 7.6.0 .. the version 7.6.1 had the STL option removed from it.

As to what you're doing wrong in blender... there are several people here on the forum much more capable with Blender than I currently am.

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by Raizer04 on Sun, 28 Oct 2012 01:59:17 GMT
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stonysmith wrote on Sat, 27 October 2012 23:37Make sure that you downloaded TS 7.6.0 .. the version 7.6.1 had the STL option removed from it.

As to what you're doing wrong in blender... there are several people here on the forum much more capable with Blender than I currently am.

I was looking under "File" in that software for import and couldnt find it, finally found how to properly import the file. So what did you do to clear the stuff in that software?

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by jrey on Mon, 29 Oct 2012 20:38:50 GMT
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stonysmith wrote on Sat, 27 October 2012 20:10I use an old school (now free) program called TrueSpace. If you want to try it, you need version 7.6.0. The 'update' version 7.6.1 removed the native STL export from the package.

People (my kids) ask me why I hang onto such an old program (this version from 2008).. It's mostly because I've got "a bit of experience" with the program... I started working with Version 1 way back in 1994.

Hey! I started on truespace version 1 back in 95! (I was 12 then) I switched to 3dsmax in 2004, but truespace holds a special place in my heart. I met Roman Ormandy at Siggraph 2000 and he bought a group of us users dinner. I hate that it was sold off to Microsoft, and then abandoned.

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by Bathsheba on Tue, 30 Oct 2012 04:14:06 GMT
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I'm such a nub.

Hey, if you were a big software company, why else would you buy small ones other than to kill them? Just keeps on happening.

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by megmaltese on Fri, 02 Nov 2012 19:32:35 GMT
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Bathsheba wrote on Tue, 30 October 2012 04:14I'm such a nub.

Hey, if you were a big software company, why else would you buy small ones other than to kill them? Just keeps on happening.

It's simple: small companies CAN be a risk for larger companies.
They eat share of market and if their product is better or can become better, they can take action to wipe them out so to not have any menace around.
This sucks really, but that's how it is.
I think there should be made some law to not allow this.
This is killing options for the users and it's not moral from my point of view.

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by jrey on Fri, 02 Nov 2012 19:48:24 GMT
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In the case of Microsoft buying Caligari that doesn't really apply. They initially bought it to offer something like sketchup for their map system to compete with google. I guess it wasn't what they thought it was.

Subject: Re: 3d Software doesnt make sense. Someone please give me some advice
Posted by megmaltese on Fri, 02 Nov 2012 19:58:01 GMT
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jrey wrote on Fri, 02 November 2012 19:48In the case of Microsoft buying Caligari that doesn't really apply. They initially bought it to offer something like sketchup for their map system to compete with google. I guess it wasn't what they thought it was.

Yeah that was another reason of course, but usually it's like that.
Autodesk bought Maya (unluckily) to have income from selling Maya instead than losses.
I was scared that they would cut off the project but at least they hold it alive.