
Subject: Cutting Items along a plane (blender script) - Thin walls
Posted by [woody64](#) on Sun, 14 Aug 2011 14:33:29 GMT
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I've found an interesting blender script (crosssections) from Yorik:
<http://yorik.uncreated.net/guestblog.php?tag=blender&complete=3>

I've adapted it to help me to search for thin walls:

- 1) Shows my item
- 2) now the script is called generating 5 cross sections parallel to XZ
- 3) I've moved the cross sections to allow better viewing

(not so bad. the original code seems to have troubles with intersections showing them as holes)

Woody64

File Attachments

- 1) [Cutplane-0.png](#), downloaded 378 times
-

Subject: Re: Cutting Items along a plane (blender script) - Thin walls
Posted by [woody64](#) on Sun, 14 Aug 2011 18:08:02 GMT
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And here's a picture of using the cross selection together with Blender Caliper for measurement.
Woody64

File Attachments

- 1) [Bildschirmfoto-25.png](#), downloaded 322 times
-

Subject: Re: Cutting Items along a plane (blender script) - Thin walls
Posted by [bartv](#) on Thu, 25 Aug 2011 12:00:46 GMT
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Wow, that's a clever and unexpected application of that script, thanks for sharing! Does it work in the newer Blender versions as well?

Bart

Subject: Re: Cutting Items along a plane (blender script) - Thin walls

Posted by [woody64](#) on Tue, 26 Jun 2012 19:14:30 GMT

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I will take a look on my newer installation (Ubuntu 11 with the blender installed there) to see the reaction there.

Since I have been asked for the script I will upload my modified version later on and publish the link here.

Woody64

Subject: Re: Cutting Items along a plane (blender script) - Thin walls

Posted by [woody64](#) on Wed, 27 Jun 2012 18:44:47 GMT

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The script also works with blender 2.49b.

But I have adapted some internals and only reused the main feature of the original ...

http://minifigcustomsin3d.mac-au.eu/object_CrossSection.py

(There are some sections inside which have to be adapted to each designers need: numbers of cut planes and distance)

Currently I'm looking inside a problem with several different 3d meshes which intersect. There the blender mesh fill modus currently used does not work correctly (caused by more then one linked vertex group)

(You see that also in the first picture where there are some holes in the cut area)

Woody64

Subject: Re: Cutting Items along a plane (blender script) - Thin walls

Posted by [woody64](#) on Sun, 01 Jul 2012 12:32:07 GMT

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... some small enhancements to the user interface

- number of cuts selectable

- distance editable
 - cut planes selectable
 - filled cuts: but unfortunately that's experimental since
 - the blender/python fill does not cope correctly with that
- => if somebody has a code snippet to generate a list of linked vertices that may help (since the problem arises when there are more than 1 closed loop of vertices in the cut, in that case the fill has to fill each loop of linked vertices in an extra step which may work)

File Attachments

1) [Bildschirmfoto-Namenloses Fenster.png](#), downloaded 139 times

Subject: Re: Cutting Items along a plane (blender script) - Thin walls

Posted by [woody64](#) on Tue, 03 Jul 2012 22:10:22 GMT

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Solved a lot of issues (including my raw/k3d importer, which caused the previous problems)

You see one of my objects cut by 3 planes in each direction.

The YZ plane is shifted out of the resulting figure to take a deeper look on it.

On the bottom left you can see the new menu.

File Attachments

1) [Bildschirmfoto-Namenloses Fenster-2.png](#), downloaded 127 times
