

Hollowing Your Model with ZBrush Dynamesh

Posted by Marco CM - 2012/01/24 11:42

Dynamesh is a great re-meshing tool added to ZBrush 4R2. You can use Dynamesh to hollow a model for 3d printing in a few steps. Without making a separate low-detail mesh to fit on the inside.

1. Set your mesh to the highest Sub-D level. Delete all lower Sub-D levels.
2. Adjust your Dynamesh options to smoothing: "0" and "1024" resolution. Click the Dynamesh button to re-mesh your model.
3. Hold the (Alt) key while inserting a cylinder into the mesh with the insert cylinder brush. Put the cylinder where you would like a hole in the model.
4. Select a thickness with the slider under the Dynamesh button. Make sure the Dynamesh options are set to smoothing "0" and "1024" resolution.
5. Clear all masking.
6. Click the "Create shell" button and wait. Dynamesh takes a few minutes depending on the complexity of the model.

http://kraftwurx.com/images/fbfiles/images/Dynamesh_Vase_20120124-20131204.jpg

This removes the (Alt) inserted cylinder leaving a hole in its place while hollowing the mesh at the same time. Click Undo if the walls appear too thin or too thick and try again. Be patient it takes a few tries at different thicknesses to get it just right for each model. If your model has thin parts such as legs, arms and neck. I would recommend a thickness setting that keeps those parts solid for rigidity.

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by digital3dart - 2012/03/14 08:11

Using the insert brushes combined with dynamesh it is easy to create holes in designs as well I will post a tutorial in a few days or well there is one out there I will hunt it down and post the link!

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by Marco CM - 2012/03/14 10:32

Awesome, thanks for contributing. I can't wait to see the tutorial.

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by foleypro - 2012/03/29 17:10

Very nice TUT...

But wouldnt it be better to Boolean the object...?

I mean where we could make a duplicate of the model scale it down and then Boolean the smaller mesh from the original keeping all in perspective...?

This I am proposeing for like Human or creature designs and keeping with the 4mm...?

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by Marco CM - 2012/03/29 17:28

Depending on the model shape, a Boolean operation with an evenly scaled-down model can work just fine.

The advantage to ZBrush's dynamesh shell tool is it's ability to adaptively create the hollow inside mesh. This means the mesh become solid in thin areas such as fingers when set to a specific thickness. As oppose to an equally hollow model like a Boolean might produce.

I hope I explain this well enough, let me know if you have any more comments.

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by m_filiault - 2012/03/29 17:37

I think this is the tutorial that digital3Dart was talking about:

http://www.youtube.com/watch?v=TF_I0t5aH5c

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by Marco CM - 2012/03/29 17:41

Thank you m filiault for finding that tutorial, it is very useful for 3d print.

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by foleypro - 2012/03/29 17:45

Marco CM wrote:

Depending on the model shape, a Boolean operation with an evenly scaled-down model can work just fine.

The advantage to ZBrush's dynamesh shell tool is it's ability to adaptively create the hollow inside mesh. This means the mesh become solid in thin areas such as fingers when set to a specific thickness. As oppose to an equally hollow model like a Boolean might produce.

I hope I explain this well enough, let me know if you have any more comments.

This tool I will need to explore more in ZBrush...Soo many tools in ZBrush that I am still learning after using for the last sevral years and upgrades...Thanks too all

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by nateowens - 2012/08/13 16:21

Super - will give this a run
Thanks!

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by olivierduhamel - 2012/10/13 21:56

Hello Marco,

I saw a tutorial with step by step instructions on how to hollow out a mesh with Dynamesh.... This was brilliant and workd beautifully. But I cant find this document anymore.

Do you know where I could find it?

Many thanks,

Olivier
Olivier.duhamel@bodyscape.net.nz

PS.

It had the attahed image in it. http://kraftwurx.com/images/fbfiles/images/Dynamesh_Vase_20120124.jpg

=====

Re:Hollowing Your Model with ZBrush Dynamesh

Posted by Marco CM - 2012/10/16 11:10

I am not sure why. But the entry was still there the entire time. I just wasn't visible. It is now back up.

Dynamesh is a great re-meshing tool added to ZBrush 4R2. You can use Dynamesh to hollow a model for 3d printing in a few steps. Without making a separate low-detail mesh to fit on the inside.

- 1.Set your mesh to the highest Sub-D level. Delete all lower Sub-D levels.
- 2.Adjust your Dynamesh options to smoothing: "0" and "1024" resolution.Click the Dynamesh button to re-mesh your model.
- 3.Hold the (Alt)key while inserting a cylinder into the mesh with the insert cylinder brush. Put the cylinder where you would like a hole in the model.
- 4.Select a thickness with the slider under the Dynamesh button. Make sure the Dynamesh options are set to smoothing "0" and "1024" resolution.
- 5.Clear all masking.
- 6.Click the "Create shell" button and wait. Dynamesh takes a few minutes depending on the complexity of the model.

This removes the (Alt) inserted cylinder leaving a hole in its place while hollowing the mesh at the same time. Click Undo if it the walls appear too thin or too thick and try again. Be patient it takes a few tries at different thicknesses to get it just right for each model. If your model has thin parts such as legs, arms and neck. I would recommend a thickness setting that keeps those parts solid for rigidity.

http://kraftwurx.com/images/fbfiles/images/Dynamesh_Vase_20120124-20121016-2.jpg

=====