
Subject: Problems with Detail

Posted by [reecejames](#) on Thu, 06 Jan 2011 13:50:29 GMT

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Hello,

I'm trying to get this model to be printable and having some issues with the detail. The gear teeth appear to be the problem, though they are only 0.4mm in height, they are being counted as walls. The numbers pictured are the thickness of the teeth at their thinnest point.

As per the thin walls tutorial, it appears these are allowable as long as they do not extend out more than 0.7 from the wall's surface.

Anyone able to help? Cheers.

File Attachments

1) [32100_91201_196631_v0_s1.stl.jpg](#), downloaded 1380 times

Subject: Re: Problems with Detail

Posted by [Mark_Kendrick](#) on Thu, 06 Jan 2011 22:52:51 GMT

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I'm sorry I can't help you, but would like to order your model in 1:43 scale

A traction or portable engine has been on my list of to-do's for a while now. Great modelling!

Subject: Re: Problems with Detail

Posted by [reecejames](#) on Fri, 07 Jan 2011 01:58:05 GMT

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Thanks Mark!

I'm going to start doing requests for models though keeping it to smaller sizes 1:87-1:150. Trying my hand at 1:148 currently and it's fiddly.

I'm still trying to work out what classifies as detail and what doesn't. In this case I've got the equivalent of a detailed ridge running along the length of a wall. As per the thin walls tutorial, it's

acceptable due to not extending out from the wall greater than the minimum wall thickness. Can anyone explain this better?

Depending on how this is determined, it drastically affects how items are modeled, especially where it comes to things such as eaves. (1.0 eaves as opposed to ~0.3 is huge in a model 18mm high)

I also just realised, in the above error check render, the rear wheel is filled in. Wasn't like that in the last error check, nor on the preview.

File Attachments

1) [196631.v0.s14.blender.large.jpg](#), downloaded 298 times

Subject: Re: Problems with Detail

Posted by [Youknowwho4eva](#) on Fri, 07 Jan 2011 13:27:31 GMT

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It's hard to tell in the image, but it appears the teeth on the gears are just rectangles? Perhaps it would help if you tapered them or added a radius to the bases of them? to save polygons you could use a chamfer instead of a radius.

Subject: Re: Problems with Detail

Posted by [dizingof](#) on Fri, 07 Jan 2011 14:57:51 GMT

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I had the same annoying issue - it seems shapeways has new employees..(Welcome!) who consider surface details as walls..

You should contact Kevin from support to help you out on this and he will probably approve the model for printing.

Subject: Re: Problems with Detail

Posted by [reecejames](#) on Fri, 07 Jan 2011 21:58:24 GMT

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Youknowwho4eva wrote on Fri, 07 January 2011 13:27It's hard to tell in the image, but it appears the teeth on the gears are just rectangles? Perhaps it would help if you tapered them or added a radius to the bases of them?

I'm using the lightwave gear generation tool, with a boolean for the hole and a triple to keep it all nice. Adding a radius on that smaller geometry has to be asking for more problems.

Thanks dizingof I'll give kevin a try.

File Attachments

1) [Screen shot 2011-01-08 at 8.54.18 AM.png](#), downloaded 232 times
