Subject: Fixed Orientation Option for FD & FUD
Posted by TomBurns on Sat, 19 Nov 2011 18:45:44 GMT
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I believe this issue has been discussed before, but I would like to raise it again with the hope of generating enough interest to make it happen.

As I understand it, the lack of an option to specify printing orientation for Frosted Detail and Frosted Ultra Detail is not based on any technical issues. It is rather a question of the production staff trying to maximize printing efficiency. FD and FUD models are printed in a single layer, so they prefer that each batch of parts have roughly the same "height" above the printing surface. Printing jobs can take many hours, so any wasted space above parts reduces the average efficiency of the printers. Reserving the option to rotate models as needed gives the production crew the flexibility to reduce such wasted volume. For models where orientation is not particularly important, this is a good thing because it helps make printing less expensive, and probably helps reduce average production time.

However, as some here are no doubt keenly aware, for some models the orientation is critical to ensuring that details and interlocking parts print correctly. Controlling the surface marring that occurs due to contact with the support material can also be an important consideration. Not being able to predict the print orientation also adds uncertainty to the quality of repeat prints of a given part. Given that orientation can be so important in many cases, I would like to request that Shapeways add an option to specify a fixed orientation when printing a part in FD or FUD. Some possible ways to facilitate this would be:

1) Add a small additional start-up fee for parts using the fixed orientation option to compensate for the slight decrease in printing efficiency

2) Extend the delivery time of orders using the fixed orientation option to allow the production crew more flexibility in gathering enough other part orders of similar height

3) Both of the above

Can we at least get some kind of short-term pilot program to test this out? If anyone else considers this a priority, please speak up!

How Important is Print Orientation for FD & FUD?(total votes: 32)

Critically Important 22/(69%)
Very Important 7/(22%)

Somewhat Important 3/(9%)
Not Very Important 0/(0%)
Not at All Important 0/(0%)
Don't Care 0/(0%)

Subject: Re: Fixed Orientation Option for FD & FUD
Posted by ancientbuzzard on Sun, 20 Nov 2011 11:18:53 GMT
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My comments on FUD and the related quality issues have appeared on several previous threads.

I would prefer Shapeways concluded their "confidential" efforts to improve FUD quality first, but I do strongly support your suggestion for a print orientation option.

However I don't think this is just an issue for FD/FUD. It also applies to WSF, which has also been raised by others recently, and probably other materials. Balancing the drive to reduce the cost to all customers, with the desire for more control over the process by the designer in some cases, is one of the toughest challenges Shapeways faces.

Andrew

Subject: Re: Fixed Orientation Option for FD & FUD
Posted by TomBurns on Tue, 22 Nov 2011 20:58:38 GMT
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UPDATE

I had an opportunity to discuss this with someone in customer service and was told that Shapeways plans to look into a custom orientation option in Q1 of next year. It would probably involve an additional cost per part to make up for the loss in printing efficiency. However, the person was not able to say when, or even if, this might actually be implemented.

The more people that post to express a desire for this (either here or elsewhere), the more pressure there is to make it happen.

Subject: Re: Fixed Orientation Option for FD & FUD
Posted by Hknora on Wed, 28 Dec 2011 13:11:01 GMT

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Hi everyone, hi Tom!

I totally agree with You!

I have a small business: I make individual train models in 1:160. In this size is the surface smoothness of the model very important. I have models from SW that have rotated and so the surface quality become so bad, that I must to throw the model out the trash. It is for me a commercial disaster. I can't calculate the cost of production. How many times must I order a model, as I have in the right rotation? Is it gambling?

I agree completely the solution proposed.

1. It is clear that mean additional cost for SW, that me must pay. It is absolute OK. It is for me still cheaper than the cost of printing multiple unsuccessful.

2. The delivery time can more longer. For me and for my customers is the quality the first! What should I do with a in-a-week-produced-and-shipped bad quality model?

So please Shapeways, make this option!
It would very critical important!

Best regards,

Hknora
from Hungary

P.S.: Sorry, my English is not too good, my helping friend was the Google translater.

Subject: Re: Fixed Orientation Option for FD & FUD
Posted by jzichek on Wed, 28 Dec 2011 21:04:19 GMT
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Count me in - I also vote that being able to specify print orientation of FD/FUD is critically important.