
Subject: Already printed model being rejected
Posted by [Calistotash](#) on Thu, 13 Sep 2012 19:29:08 GMT
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This has been mentioned a few times now, but I have a model, being held in my hands right now, been through minor stress test (being shipped, and being held by weak points), and so I put it for sale in my shop yesterday.

Today I have a few emails saying it can't be printed as the tail would snap off. The model I'm selling is the exact same model I ordered for myself, and while I know other models (in other people's shops) have had this issue, my models are smaller and slightly sturdier.

I have emailed Support back about this to get an answer, but I also want to double check something. A while ago, I saw a post by a Shapeways worker mention something about adding a tag onto models that have been successfully printed, so that all future prints of that model can guarantee bring printed. I'd love to see this implemented sooner rather than later; it would save me and a lot of others heartache on having to go around apologising to customers. I hate disappointing them.

Model I'm on about: http://www.shapeways.com/model/685010/multicoloured_sprinter.html (I've taken it off for sale for now until this situation is fixed.)

Subject: Re: Already printed model being rejected
Posted by [natalia](#) on Thu, 13 Sep 2012 19:47:07 GMT
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Hi Calistotash,

I'm glad you've already emailed service, so they can help you.

InShape 2.0 is going to allow us to do these 'Printed Flags' and I am adding your vote to the sooner rather than later side!

Thank you,
Natalia

Subject: Re: Already printed model being rejected
Posted by [Calistotash](#) on Thu, 13 Sep 2012 19:51:13 GMT
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Oh excellent, thank you! Now I can only hope I can get this model available for sale again soon, and not have to run into this problem again. That's why I order nearly everything I upload into my shop, afterall, to test it.

Subject: Re: Already printed model being rejected
Posted by [natalia](#) on Thu, 13 Sep 2012 19:57:32 GMT
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Actually, this is great, and what we suggest everyone do - not only to test that your model is exactly as you imagined it, but to check for printability, and to TAKE MAGNIFICENT PHOTOS of it for you shop too

Natalia

Subject: Re: Already printed model being rejected
Posted by [Calistotash](#) on Fri, 14 Sep 2012 09:06:41 GMT
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I got a reply back from Support; I want to keep this thread updated until the issue is solved, just in case anyone else has similar problems, and finds this thread.

"Unfortunately we are currently not able to print your model due to previous experiences, 9 out of 10 models break during the shipment, leaving a lot of unhappy customers as they will have to ask for a reprint, which will take time.

This is mostly because of the connection between the tail and the body."

What I take from this is that I'll have to fix the model myself with the suggestions they've suggested (hollowing out the tail and making the tail to body connection thicker), until Shapeways implements the "Printed Flags" system. Annoying, but doable, it's just a shame, as I know the model I have is incredibly sturdy.

I further stress tested it last night by holding it by the tail only and waving it around (I would not dare suggest this to any customers buying the models), and I'm confident that it would work. Nevertheless, I'll spend today making the necessary alterations.

Subject: Re: Already printed model being rejected
Posted by [Yartek](#) on Fri, 21 Sep 2012 14:10:40 GMT

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Well, I have had a similar experience with some minis I have been working on.

I had to do 2 print runs on a variety of 30-32mm high figures. They were mostly ordered in White Detail and whilst there were some initial difficulties with the first order most of these printed out OK. I actually decided that the figures were too small and so did a second order with larger figures and a few more new files I had uploaded. Again these were produced in White Detail and they were returned to me in a short space of time looking excellent. That was 25 figures in two orders printed with no problems.

So I opened up my shop in full confidence everything was checked and double checked, literally.

Yet as soon as my first customer ordered their figures they were rejected as being 'unprintable'!

Shapeways have sent me two emails apologising for not telling me that these files were printed but were 'difficult to produce' and that the print people were scared that the fragile nature of my figures would cause a crash that could affect a whole batch of products.

I have been given a real runaround by Shapeways and poor communication.

And I can't 'beef up' my files as they suggest as this makes the miniature figures the wrong scale for my target market.

Subject: Re: Already printed model being rejected
Posted by [Calistotash](#) on Fri, 21 Sep 2012 15:32:58 GMT
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I wouldn't say Shapeways has poor communication; I've very much had only good experiences when talking to the Support staff via email and on this forum.

I will agree that it is annoying that I've had to alter my designs, and I'm in the middle of my testing now, awaiting a prototype to be printed and shipped. But I can understand fully that 3d printing still has it's limitations in the world. I can only trust that the printing flags mentioned will come into affect sooner rather than later.

That would help us both, and maybe if there was an option we could select, to show the print checkers that we intend to sell certain designs in our stores; maybe then they could check for that. It would have saved us both some hassle right from the very start. Thanks for sharing your story though, it's good to know there's others suffering from the same issue.

Subject: Re: Already printed model being rejected
Posted by [Yartek](#) on Fri, 21 Sep 2012 16:11:44 GMT
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Well this only happened yesterday so I'm still a bit fired up about it. And your experience just sounded so like mine. It is small comfort that I'm not alone in this experience.

Shapeways have been quick to communicate once it was established there was a problem and I too have only positive things to say in terms of their feedback. The communication problem was that they didn't tell me there was a problem in the first place which led me to carry on blindly creating files unaware that there was a potential banana skin.

It would seem that you are able to take steps to rectify your problem calistotash, whereas I can't really scale up my files, which is basically the only way I can solve this.

The flag system sounds like it could be useful if it works effectively. Here's hoping!

Subject: Re: Already printed model being rejected
Posted by [Calistotash](#) on Fri, 21 Sep 2012 16:16:07 GMT
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Maybe if you posted up an example of your models, and the exact comments you recieved from Support, maybe others can suggest alternate methods? Try it out in Work In Progress, I'm sure there has to be a different method other than scaling them up.

For example, the suggestion for my models was to hollow out the tail and part of the model; but as the model is so small, this just isn't feasible. So I just moved the tail, the weak link, and now it's connected at two points on the model, making it much more secure.

I can understand perfectly, and can imagine you'll be fired up for a few more days at least over this, I can only imagine how much work you've put into it so far. I can only wish you luck, and hope that there is another method.

Subject: Re: Already printed model being rejected
Posted by [stonysmith](#) on Sat, 22 Sep 2012 04:19:02 GMT
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Calistotash wrote on Fri, 21 September 2012 15:32.... an option we could select, to show the print checkers that we intend to sell certain designs in our stores

Shapeways has said more than once.. if you have a model that you think might be trouble, sent it to service@shapeways.com and ask for a "Thin Walls Check", etc.

I keep advocating that they shouldn't do this for free.. there should be a nominal (\$1) charge for the service since it takes labor on their part to do this work.

But.. whilst it is free... use it!

Subject: Re: Already printed model being rejected
Posted by [Dragoman](#) on Sat, 22 Sep 2012 04:43:19 GMT
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stonysmith wrote on Sat, 22 September 2012 04:19

Shapeways has said more than once.. if you have a model that you think might be trouble, sent it to service@shapeways.com and ask for a "Thin Walls Check", etc.

I keep advocating that they shouldn't do this for free.. there should be a nominal (\$1) charge for the service since it takes labor on their part to do this work.

Even if it's free, it might be good business for them, the alterenative often would be that the problem gets caught only when the item is ordered, which I assume is rather more hassle than doing the check earlier - and also poor customer relations.

But this service only helps if it actually guarantees that the checked item will be printed when it is ordered i.e.setting the promised "Has been printed" flag. If it could still happen that the operator doing the printing sees problems which the service checker didn't, it would not solve the issue.

Greetings
Dragoman

Subject: Re: Already printed model being rejected
Posted by [japhyr](#) on Sat, 22 Sep 2012 07:31:09 GMT
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It sounds like a simple "has been printed" flag isn't quite enough. It sounds like Shapeways will do

some work to get a single copy printed right, but does not want to get into large print runs of really delicate (borderline breaking) models.

It sounds like a useful flag would be "has been printed, and we are confident we can print this repeatedly".

Subject: Re: Already printed model being rejected
Posted by [Calistotash](#) on Sat, 22 Sep 2012 09:21:58 GMT
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stonysmith wrote on Sat, 22 September 2012 04:19Calistotash wrote on Fri, 21 September 2012 15:32.... an option we could select, to show the print checkers that we intend to sell certain designs in our stores

Shapeways has said more than once.. if you have a model that you think might be trouble, sent it to service@shapeways.com and ask for a "Thin Walls Check", etc.

I keep advocating that they shouldn't do this for free.. there should be a nominal (\$1) charge for the service since it takes labor on their part to do this work.

But.. whilst it is free... use it!

It may be free, but I'm also kind of concerned about doing this for every single model I make in the future. If they did charge \$1 or something small for it, then I'd feel a lot better about using that service, as odd as it may seem.

Japhyr: I very much agree with that printed flag idea; I get the feeling that Shapeways tries it's best to print everything that comes it's way, just the problem arises when they have to sort of mass produce it.

Subject: Re: Already printed model being rejected
Posted by [Yartek](#) on Sat, 22 Sep 2012 09:34:06 GMT
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japhyr wrote on Sat, 22 September 2012 07:31It sounds like a simple "has been printed" flag isn't quite enough. It sounds like Shapeways will do some work to get a single copy printed right, but does not want to get into large print runs of really delicate (borderline breaking) models.

It sounds like a useful flag would be "has been printed, and we are confident we can print this

repeatedly".

I suspect you may be correct japhyr. The two print runs I did were for 12 and then 17 figures. I was a new customer too.

My first customer order was for just 6 figures but of course I was hoping that many more figures would consequently be ordered. Maybe someone looked at this scenario and didn't fancy having to print out 'borderline' cases. Of course , I was unaware that anything was borderline.

Subject: Re: Already printed model being rejected
Posted by [BillBedford](#) on Sat, 22 Sep 2012 09:41:25 GMT
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One of the things that is happening as a result of the recent update is that Shapeways is using new automated software to check the STL files so it maybe finding problems that were missed by the manual checks.

Subject: Re: Already printed model being rejected
Posted by [Yartek](#) on Sat, 22 Sep 2012 09:52:02 GMT
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Good point.

The update began between my final test print run and my customers order. And there were some very finickity measurements being pointed out to me as 'problem ' areas.

Subject: Re: Already printed model being rejected
Posted by [stonysmith](#) on Sat, 22 Sep 2012 15:30:19 GMT
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Bill: yes, there are automated checks now, and yes, those checks are used by the system to indicate that some model is not available in a certain material.

HOWEVER: there are still the "human" checks being performed again as each batch is assembled just before they hit "go" on the printer.

There is also the whole issue about stuff that tends to break AFTER printing.

Subject: Re: Already printed model being rejected
Posted by [mkroeker](#) on Sat, 22 Sep 2012 17:21:45 GMT
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Hmm. I guess I also like the idea of a (surcharged) option where all the human checking is done when the order is received, or at least well before the model is batched for printing. The current system feels a bit like standing in line for two weeks, fearing to be turned away by the doorman in the end.
(Yes I am new to it, and yes some of my models may turn out more fragile than I thought...)

Martin

Subject: Re: Already printed model being rejected
Posted by [Youknowwho4eva](#) on Mon, 24 Sep 2012 16:27:47 GMT
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The plan is not only to improve the checking software, but to also have quicker model checking.

Subject: Re: Already printed model being rejected
Posted by [Dragoman](#) on Tue, 09 Oct 2012 14:45:06 GMT
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natalia wrote on Thu, 13 September 2012 19:47
InShape 2.0 is going to allow us to do these 'Printed Flags' and I am adding your vote to the sooner rather than later side!

Count me in on the "sooner rather than later" vote, too.

Today, a customer's order for this model was rejected because of thin walls:
www.shapeways.com/model/653082/

And I don't just have a single test shot in that material (Transparent Detail), but two samples printed on different occasions

From the Shapeways E-mail I have a good idea on how to fix the problem, but this definitely is a nuisance.

Greetings
Dragoman

Subject: Re: Already printed model being rejected
Posted by [cbfasi](#) on Tue, 20 Nov 2012 18:35:43 GMT
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I too am suffering from successfully printed models getting rejected...

I personally have 18 successful prints, and there are another 12 outside, yet it fails on a curved area...

I think each time they check different areas, even with successful prints before.

If they knew it had successful prints then this knowledge would mean less time spent checking, and could improve order turnarounds..

Subject: Re: Already printed model being rejected
Posted by [Dotsan](#) on Fri, 23 Nov 2012 12:42:13 GMT
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Yep, been getting a lot of rejections for models that have previously printed. To save on printing costs my designs use minimal material and wall thickness where possible. It seems recently new processes have been introduced which have increased rejections. I also see inconsistency in the error reports a model rejected one day is accepted another.

To avoid rejections for future designs, I suggest updating the material design rules and increase minimum wall thickness which seems to be the biggest issue.

Subject: Re: Already printed model being rejected
Posted by [decapod](#) on Fri, 23 Nov 2012 14:08:24 GMT
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Not that it contributes much to this discussion but it's happening to me too.

Successful prints, often within the guidelines are being rejected now. The problem seems to be interpretation of the design rules.

I'm getting a bit fed up with having to contact the service department each time (next e-mail on it's way soon)

Subject: Re: Already printed model being rejected
Posted by [BattlegroundToys](#) on Sat, 24 Nov 2012 16:04:31 GMT
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decapod wrote on Fri, 23 November 2012 14:08 Successful prints, often within the guidelines are being rejected now. The problem seems to be interpretation of the design rules.

Yes, this is certainly what it feels like is happening. Perhaps the result of different people scanning the file on different days, months or something. I've also wondered if there were two different teams and depending on the load an upload may go to a team that isn't used to a specific designers quirks.

I follow the approach that it sounds like most of you use. Once the model is uploaded and passed, I order one or more myself to make sure it is right before placing it in the store. There is usually an issue or two and once those are resolved, the models print and are shipped to me. If they pass my own little quality test (I don't swing them around, but for some models I do drop them on the carpet!) , if they are good to go, I then put the item for sale in the shop.

Until recently that has been working pretty steadily.

A month or two ago, I chose to improve some of the models. Geometry that had passed previously was suddenly a problem when the updated model was uploaded. The changes that were made, like adding tread to a previously smooth tire, were not an issue. It was previously accepted and repeatedly printed geometry that suddenly had problems. The majority of the issues were the old supported / unsupported wire and details versus supporting geometry interpretations that I thought I were in the past or at least already resolved on printed models.

The other issue was the use of a sprue to connect parts together. In the latest batch of prints the sprue was being interpreted now as an unsupported wire. That sprue, which based on printing successfully in the past, had been considered necessary due to loose shells issues. It is apparently now optional. No sprue is good as it does save some material volume, but now that has to be deleted for 20+ models that have an average of 5 parts each. Yikes!

Again, I'm ok with that but am concerned the interpretations will change again and the sprues will have to be added back. In this case tags wouldn't have helped as any change to the model, afik, results in a brand new interpretation check.

All that said... this process and Shapeways in general is leaps and bounds from where it was two to three years ago. Consistency in service is the hardest thing to maintain when a company grows. I'm not making an excuse for them as this is impacting me significantly, but it's my hope that posts like these and ideas like the tagging get attention sooner than later.

Subject: Re: Already printed model being rejected
Posted by [Dragoman](#) on Sat, 24 Nov 2012 21:09:59 GMT
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A few days ago, I have (again) been hit by the rejection of a model that was successfully printed earlier.

There have been hints that Shapeways is thinking about marking successfully printed items so that they will not be rejected later. Would be nice if that was implemented at last.

Greetigns
Dragoman

Subject: Re: Already printed model being rejected
Posted by [Calistotash](#) on Sat, 24 Nov 2012 23:23:24 GMT
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I am still awaiting the wonderful news of already printed models being tagged, so that they are able to be printed again and again without worry. I'm working on a model at the moment that is really going to push the limits, and I may have to make some sacrifices on the design. I'd feel a lot better if I knew that after my initial print, it would print again and again without worry.

Subject: Re: Already printed model being rejected
Posted by [stonysmith](#) on Sun, 25 Nov 2012 02:29:08 GMT
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Several months ago Shapeways (in another forum posting) described their process where they looked at the revision # of the file and whether there had been any sales for that file. It turns out they don't need a new flag to tell them that it's been previously printed. I still wish that they'd bring it out where the customers can see it, but that's a different subject.

The process IS in place now. What I'm not sure of is whether all operators are following the process or not.

Please note: I have ZERO interest in starting a flame war here. Please keep any comments polite. I just wanted to point out that the current process should be handling the situation. I am every bit as frustrated with the rejections as anyone else.. they happen to me also.

I would imagine that as the New York facility gets built out, we'll have less of this happening, but it will take time.

===

Please be aware that there are two situations here. One is where a model DOES fit the design rules and is rejected erroneously. The other situation however is when you have a model that is particularly troublesome. This model <http://shpws.me/lmd5> had very very thin railings that kept breaking during cleaning. It would print just fine, but then break during cleaning or shipping. The production team asked me to beef up the railings.. which I was happy to do. I don't expect for Shapeways to have to print my models 2-3 times for every order just to get one successful print.

BattlegroundToys: you should not have to remove those sprues, but at the same time, what you may need to do is beef up the sprue to the point where it can actually support the parts connected to it. You need to try to put together assemblies that can be picked up by human fingers and not break apart.

Subject: Re: Already printed model being rejected
Posted by [mkroeker](#) on Sun, 25 Nov 2012 10:42:13 GMT
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I think there are at least two other loopholes in the procedure:

- a) a model does not fit the design rules everywhere, but the flaw is either overlooked or deemed harmless during checking and the printing, cleaning and shipping proceeds without problems. Then a minor design change in another part of the model leads to re-evaluation and this time the flaw happens to be found.
- b) the model "has been printed successfully" from the point of view of the customer, but not on the first attempt, and repeats would be too expensive for shapeways. (cf the recent "stag head") perhaps even
- c) the model "has been printed successfully", but at a time when the work volume was much lower and the cleaner could afford to spend more time with more delicate tools.

(And no, I do not have a solution)

Subject: Re: Already printed model being rejected
Posted by [Yartek](#) on Sun, 25 Nov 2012 10:59:26 GMT
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Maybe there should be an advanced option to have the products delivered for home cleaning?

I received some very greasy white detail products which took me a couple of hours to clean myself, but I had time to take care over them. Perhaps if this were an option at a reduced price then perhaps more borderline fragile products could be printed? Just a thought.

Subject: Re: Already printed model being rejected
Posted by [glehn_USA](#) on Thu, 29 Nov 2012 10:59:41 GMT
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As most designers here, I always test print my models before making them available for sale in my shop. So, whenever I received a successfully printed model, I always assumed that the model was ok and immediately made them available in the store.

I think that if the operators need more than one attempt to get the model printed, they should warn the designer, so we can modify it BEFORE we make them available in the store, thus avoiding that someone order it just to have it rejected later.

Usually I only receive this feedback after a model from a customer is rejected, which is really annoying.

Just my 2 cents.

Regards
Luis

Subject: Re: Already printed model being rejected
Posted by [7777773](#) on Thu, 29 Nov 2012 14:29:28 GMT
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Add me to the list of people getting these errors more often again.

This issue appears to move in cycles: Everything generally prints OK for a while, then everybody starts having every print rejected for a few weeks, then eventually things return to normal.

I've noticed that when these rejections begin re-appearing, it is predictably near-100% of the time issues with points and similar details. For example, picture a cone shaped model. You print it OK a few hundred times, and then suddenly get a rejection because the point becomes too narrow to print.

As a designer, you lop off the point and re-submit, but then it is rejected because the base becomes too narrow at the edge... and so on.

The solution is either the designer accepts that cones are an unacceptable geometry and never uses them again, or they redesign everything that they had printed before to suit the newly undocumented aesthetic, or they send the models elsewhere and give up on Shapeways, or they just ignore the problem and wait for whoever is sending those bogus rejections to figure out what they were doing wrong.

My assumption here is there are humans tasked with analysis that are mistaking detail with support structure, and ignoring numerous "already printed" flags that have supposedly gone up at Shapeways (we really should get these PRINTED IN X flags on the actual model page). I've always figured they are new hires still learning how things work, and/or regular staff over-reacting to a meeting to watch out for Stag models and similar.

It's incredibly frustrating, but seems to sort itself out over a month or two... so if you're a designer and keep getting these errors, take your store down for a while and wait for the problem to be solved.

edit Also, advice for new designers: Now may not be the time to try to upload your 1st print. When these issues flare up, it can make the process seem a lot more difficult than it really is, and might frustrate you to the point of giving up.

Subject: Re: Already printed model being rejected
Posted by [ZoeBrain](#) on Thu, 29 Nov 2012 15:10:56 GMT
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From one designer....

Quote:I spoke too soon.

They've rejected the Buzzard again, despite 3 being currently accepted and printing.

They also rejected the I-153 with wheels up - which is the same as the I-153 with wheels down which has been printed once and accepted on the same order.

Someone there needs to get a better system in place.

Subject: Re: Already printed model being rejected
Posted by [natalia](#) on Fri, 30 Nov 2012 21:57:59 GMT
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Hi guys,

To provide an update:

This weeks release included a Printed Before tool into InShape (our internal system).

We now have Printed Before visibility in our rejection tool. This is not to say that all models which have been printed before should always be printable again--there are exceptions, like by material, or if it was printed several times unsuccessfully (as described belo), but we will be diligent about checking them, and we should no longer have any issues with mistakes in rejections of Printed Before.

What this means is things like your 84-times printed before model won't be incorrectly rejected again! I know it is a small step, but we are improving our tools as fast as we can.

The cycle of "everything is ok and then there are a lot of rejections" does indeed correlate with us growing, hiring new people, and getting more machines. To give you an idea, our New York Factory of the Future got another two machines last week and we're hiring another engineer. As we grow, we are streamlining the process, and improving so hopefully the cycle of disruption can be minimized.

To provide more insight into the process of why rejections happen in the first place, here is the process of ordering a model:

You upload a model.

We do an automatic check on upload.

When it gets ordered, it gets sent to the production facility, where they manually check it.

A person checks for printability within 1-2 days (which for the most part actually happens within 24 hours)

Sometimes we can see immediately that it should be rejected and sometimes we can't. If it gets rejected this usually happens right away (and we notify you with time to change your model)

If it gets approved, they print it and here is where delays can happen: they may try to print it once (which will take a few days) and it may break in post production, or crash the tray, or even break in shipping - so they will try to print it again (another few days) and the same thing may happen. At this point they reject it and tell Customer Service to tell you, but it is now officially late. (this is the worst case scenario)

The percentage of orders that this happens to is low (it hovers around 10% and is decreasing)

We do it this way to allow as many models to get printed as possible. To make it stricter means

making design rules stricter and rejections higher. So yes you would get faster rejections, but you would also get more rejections - and possibly models like the planes would become unprintable outright. We are pushing the boundaries of what is possible with this technology and any advances we make, we want to pass on to you to let everyone design things. So we let you push the boundaries, so we can learn together.

I hope this provides some insight!

Best,
Natalia

Subject: Re: Already printed model being rejected
Posted by [stonysmith](#) on Fri, 30 Nov 2012 22:23:08 GMT
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natalia wrote on Fri, 30 November 2012 21:57our New York Factory of the Future got another two machines last week and we're hiring another engineer

SO glad to hear that you're growing! Which materials can those printers print?

<joke> Send that new guy to Texas for a week and we'll teach him not to reject OUR models.
</joke>

Subject: Re: Already printed model being rejected
Posted by [Calistotash](#) on Fri, 30 Nov 2012 22:43:07 GMT
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Natalia; that news is amazingly welcome, thank you to the entire team for it. I really do appreciate everything that happens during the process; and really try hard to make sure my designs are as optimised for printing as possible. My latest order may prove a bit difficult, but if it does print, I'd wonder if it would actually print again...

To that extent, would you recommend that shop owners contact Service, to see if an already printed (but possibly fragile or difficult) model could be printed multiple times?

Also, wonderful news about the growth of Shapeways! Thank you again.

Subject: Re: Already printed model being rejected
Posted by [ZoeBrain](#) on Sat, 01 Dec 2012 01:40:03 GMT
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If a model prints but is impractical - too many attempts needed, breaks during handling etc - the designers should be notified of the exact problem.

[QUOTE]"Your model XYZ123 printed but will be rejected because...
[X] Multiple prints required
[X] Breaks in handling
[.] Other

Description:

Parts too fragile, Need 4 prints to get 3 successes.

Breakage at this point on model (include diagram - may be hand drawn)"

[/QUOTE]

That degree of detail would be enough for the designer to fix the problem, but hopefully not put too much burden on the production team.

If need be, omit the description, just have check boxes.

Thanks for the feedback here, and congrats to Customer Service - you do very well indeed.

Subject: Re: Already printed model being rejected
Posted by [mkroeker](#) on Sat, 01 Dec 2012 12:48:55 GMT
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Even for folks like me without a shop (yet?), such information would be useful to help prevent under-designing future models. (Or to avoid nasty surprises when one wants to replace a worn/broken model later - be it game pieces or scientific models handed out in lectures)

I can imagine that the full-blown feedback system as suggested by ZoeBrain might impede your workflow, but how about a single status flag for a start, something that operators can set when they schedule a reprint (or that gets set automatically *by* scheduling a reprint) and which would add ***MARGINAL DESIGN*** to the model entry on the packing slip ?

Subject: Re: Already printed model being rejected
Posted by [natalia](#) on Wed, 05 Dec 2012 21:38:52 GMT
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@calistotash, yes definitely contact service to ask about a model you want to print multiple times

@stony the new printers are FUD and WSF printers in the NY factory

@Zoebrain, this is a really good suggestion, I've passed it onto the service team, will keep you posted about what we can do to implement this!

thanks everyone!

Subject: Re: Already printed model being rejected
Posted by [Bathsheba](#) on Thu, 06 Dec 2012 18:04:02 GMT
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+1 Zoe's suggestion.

Part of the issue, I think, is that the printers want to be awesome techno-cowboys. When they see a marginal model that's going to take a few tries, their natural impulse is to think OK, let's run a couple of extra parts and pull this off, the customer will be wowed and we'll have printed this difficult thing, let's gamble that they'll only want one of them and we'll get away with it. Sometime that's what happens and hey, you're surfing the edge and everybody smells like a rose. Other times you come back the next week and want 25 of them and then the printers are all, oh shit we can't print 100 parts to make this happen.

I think it's pretty much human nature to take those gambles in the hope of looking good; anyway after 15 years working with 3DP, I'm still dealing with it. So I think making it easy and guilt-free for the printers to report this situation before it escalates would be great.

Subject: Re: Already printed model being rejected
Posted by [stop4stuff](#) on Tue, 11 Dec 2012 11:25:35 GMT
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I think you've hit the nail on the head Bathsheba.

After many successful prints of my Small Twin Rail Mobius in Silver without any reported problems, it has now been decided that the model is too fragile. Whilst I must accept this, the

timing sucks for those who've ordered the model as a Christmas present as it is now too late to adjust the model for it to be re-ordered. Appologies to those effected by this late decision and my ability to change the model for you.

Paul

stop4stuff Modeller for hireShapeways ShopTwitterYouTube

Subject: Re: Already printed model being rejected
Posted by [mkroeker](#) on Tue, 11 Dec 2012 11:38:59 GMT
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Did you get confirmation from service on that rejection ? Just in case it was some new shapie who rejected a bunch of orders because s/he lacks the experience. (Seems odd to tighten the rules for jewelry in the midst of the holiday shopping without advance warning to affected designers)

Subject: Re: Already printed model being rejected
Posted by [stop4stuff](#) on Tue, 11 Dec 2012 12:00:58 GMT
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The rejections, three so far in the space of 5 days, came from Shapeways Production Partner via Shapeways Customer Service team. Apparently the model has been causing some hassle for some time, but it was only last Friday (7th) that I was first notified.

A snippet from the emails that have being going back & forth.

Quote:I understand Paul's frustration on this one. I spoke to production prior to the rejections and they have been having serious issues with this model for quite some time now, this model always needs a lot of hand made support stems to make sure it doesn't fail in printing or casting, and even then it can still fail. The reason for this is that very long round wire that is totally unsupported appart from both ends. The wax that we use to print our models is very very fragile and it is very difficult to not break this model. That's is why production rejected this model and they rejected it after trying it first, that is why you see other versions still in production. I'll see if we need to reject these models as well.

I've also asked what the recommended wire thickness should be to get the model printed first time every time, but alas, no response as yet and even if a response is forthcoming it will still be too late for those Christmas orders

Paul
stop4stuff Modeller for hireShapeways ShopTwitterYouTube

Subject: Re: Already printed model being rejected
Posted by [7777773](#) on Tue, 11 Dec 2012 14:30:31 GMT
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Silver definitely needs to have its rules revised. I've had silver prints rejected lately that print OK in stainless steel - and steel requires *much* thicker walls. Maybe a 4+mm minimum wall thickness for silver would help?

Subject: Re: Already printed model being rejected
Posted by [BillBedford](#) on Tue, 11 Dec 2012 14:58:05 GMT
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My take on this is that I need to see failed pieces so that I can design around any problems. Having the machine operators repeatedly rebuilding failed pieces seem a waste of time and effort when the solution is likely to take a few minutes work on the original drawing.

Being able to see your mistakes is the best way of learning how not to design.

Subject: Re: Already printed model being rejected
Posted by [mkroeker](#) on Tue, 11 Dec 2012 15:21:15 GMT
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I fear that production partners may be even more inclined than in-house workers to try doing the impossible, and less willing to disclose their misprint ratio.

Subject: Re: Already printed model being rejected
Posted by [7777773](#) on Tue, 11 Dec 2012 18:15:42 GMT
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Bill is absolutely correct - seeing a failure is extraordinarily helpful to help avoid future failures. I recently had several copies of <http://shpws.me/lnj8> delivered to a customer broken. The point of failure got past me, the reviewer, and the print cleaner... but the reason for the failure was

obvious to me the moment I saw pics sent to me from the customer.

Purely by the numbers the model was OK.... however, the customer had ordered the model is WSF-Polished, and the engine pods broke off during polishing. I had designed the supports for the engines with well over the amount needed to print OK, and even to withstand the polishing process... but what I didn't take into account was the twisting forces experienced by polishing media was enough to torque the engines right off. This wasn't a case of having sufficient wall thickness - it was a case of the design in 3D looking perfectly OK on screen, but real-world forces proving otherwise.

I was (hopefully) able to correct the problem by adding 2 more supports farther off the center axis. This should stop that part from rotating and thus from being twisted off.

I bring this case up specifically because, if the failure had been reported to me in the standard Shapeways blue-model-red-circle "might break" minimal communications failure email, I'd never have figured out what the issue was.

I still have not been notified by shapeways of that failure, however. I did update the model a few minutes after the customer contacted me and he sent me a follow-up message later telling me it was being re-printed for him, so we'll see soon if the revised model is the one they are printing, or if they are reprinting the older version.

Subject: Re: Already printed model being rejected
Posted by [Bathsheba](#) on Tue, 11 Dec 2012 23:18:13 GMT
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stop4stuff wrote on Tue, 11 December 2012 11:25I think you've hit the nail on the head
Bathsheba.

After many successful prints of my Small Twin Rail Mobius in Silver without any reported problems, it has now been decided that the model is too fragile. Whilst I must accept this, the timing sucks for those who've ordered the model as a Christmas present as it is now too late to adjust the model for it to be re-ordered.

Yes, that's the phenomenon I have in mind. It bites you exactly at the moment when the model starts to get popular and you have a bunch of orders on deadline, because before that moment there wasn't a problem.

What's needed is to handle this in a way that doesn't blame or shame the people doing the printing. They're on our side...when they push the envelope and succeed with an iffy design, do

we write back and say "Hey, awesome print!!"? We do not.

If we get angry when they try and it doesn't work out, they'll get defensive and start pushing back with more restrictive rules, rejecting models preemptively rather than taking risks near the edge of what the machines can do. I feel like that's not the outcome we're looking for.

Subject: Re: Already printed model being rejected
Posted by [stop4stuff](#) on Wed, 12 Dec 2012 10:40:02 GMT
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And therein lays the crux of the problem.

If a design is decided as being iffy but falls within the scope of the material design guidelines and gives the production guys grief then surely (as Bill said before) the simplest solution is for the production guys to share their findings at the earliest opportunity so that everyone can move forward and be happy. With the small mobius pendant, it would take me mere minutes to adjust and upload if I was informed of a suitable wire thickness that would guarantee a successful print first time every time. As it stands the wire for that pendant is 1.30mm (+/- 0.02mm) thick and the Silver guidelines ask for 1mm as a 'free wire', so as anyone would, I thought I had covered the bases by making the wire 30% over the minimum.

Paul
stop4stuff Modeller for hireShapeways ShopTwitterYouTube

Subject: more rejections of successfully printed pieces
Posted by [vertigopolka](#) on Wed, 12 Dec 2012 18:34:46 GMT
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Well, it has happened again!

Silver models that were successfully printed in the past have been rejected. It is embarrassing to have models that I have for sale be rejected, especially after I have test printed the models so they wouldn't be rejected. It reflects badly on my shop as well as on Shapeways.

I have responded (rather emphatically) to customer service. My hope is that they quickly rectify the situation and fulfill the order(s) without having the customer go through hoops to get their prints.

I know that this is an old story, but every time it happens, it gets me kind of fired up, and I apologize for the rant, and I apologize to the customers who placed orders. If there were problems with printing the initial prints, I was not made aware of them.

Subject: Re: more rejections of successfully printed pieces
Posted by [Bathsheba](#) on Thu, 13 Dec 2012 01:52:02 GMT
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Exactly Paul, what we need from Shapeways is an open feedback channel that is available to the printers whether or not the model is printed.

Meanwhile I'll say it again: as users we've got to keep our good faith that the printers are doing their best even when things turn out inconvenient. 3D printing, like every other way of making things ever discovered, is a black art. There's no simple set of guidelines that will always predict exactly whether a model is printable. We make mistakes about what the machines can do, and so do the machine operators, and that's life on the cutting edge: we're doing science together.

If we start blaming them for trying and failing at the edge cases, they'll stop trying, and that would be sad.

Subject: Re: more rejections of successfully printed pieces
Posted by [ZoeBrain](#) on Thu, 13 Dec 2012 02:35:21 GMT
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Concur, with emphasis. You covered the issue exactly.

Subject: Re: more rejections of successfully printed pieces
Posted by [mkroeker](#) on Thu, 13 Dec 2012 07:58:22 GMT
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That silver casting company is probably going through pre-christmas hell, with every tricky part they were proud to have mastered over the year now returning in quantity all at the same time.

Subject: Re: more rejections of successfully printed pieces

Posted by [decapod](#) on Thu, 13 Dec 2012 14:52:02 GMT
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YET ANOTHER EXAMPLE!

This has printed before, I have the model.

The FUD guidelines state:

How to design thin, unsupported walls

This pictures shows models made 0.6mm thick sheets (top), and 0.3mm thick sheets (bottom). You can see both models started to warp once the walls get big enough. Based on these tests, we conclude that for models in the 0.3-0.6mm wall thickness range, to keep free standing walls under 30x30mm. For walls of 0.6mm thickness, try to keep your free standing walls under 50x50mm.

Now the rejection image shows the walls are 0.4 to 0.5mm thick and only 1 or 2mm high!! well within the 30mmx30mm range.

Why the rejection?

File Attachments

1) [466777.JPG](#), downloaded 273 times

Subject: Re: more rejections of successfully printed pieces
Posted by [7777773](#) on Thu, 13 Dec 2012 15:29:27 GMT
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Quote:Why the rejection?

This is the key question. Rejection emails are too often extremely difficult to understand. While a picture is said to be worth a thousand words, a few actual words along with it would be a lot more helpful.

Subject: Re: more rejections of successfully printed pieces
Posted by [mkroeker](#) on Thu, 13 Dec 2012 15:30:25 GMT
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This thread mentioned (or introduced ??)
another rule - "for stability, details have to be as wide as they are tall". (Also in the context of

unexpected rejection of a proven model). Maybe you got bitten by the same head of that multi-headed monster that dwells in the caverns underneath the printer floor at shapeways ?

Subject: Re: more rejections of successfully printed pieces
Posted by [stop4stuff](#) on Thu, 13 Dec 2012 15:35:47 GMT
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Judging by the 0.97 and 2.30 measurements, I'd say the model has been erroneously rejected. IMO, the areas indicated are unsupported walls and fall well within the guidelines.

If you've not already, reply to the rejection email and ask Customer Services.

Paul
stop4stuff Modeller for hireShapeways ShopTwitterYouTube

Subject: Re: more rejections of successfully printed pieces
Posted by [decapod](#) on Fri, 14 Dec 2012 11:29:19 GMT
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Here's the reply from Christel:

=====
Hi Paul,
Thank you for writing in.
Unfortunately we can't see that this model has been printed before, but this rejected model also really has got too thin walls and needs to be made thicker as well.
<http://www.shapeways.com/materials/frosted-detail-design-gui> delines

Unfortunately I can't promise you that the model in order 179276 is going to be printed.
This is something which is being checked by our Production Facility and they will make the call if the model can be printed or not.
Sorry that I can't help you further with this.
Kindly,

Christel
Happy Holidays!
Kind Regards,
Mrs. Christel Hagens
Customer Service Agent
www.Shapeways.com

=====
Link to model: <http://www.shapeways.com/model/654487>

Here is the model printed a few weeks ago, about 12cm long and 2cm wide

File Attachments

1) [WP_000426.jpg](#), downloaded 233 times

Subject: Re: more rejections of successfully printed pieces
Posted by [stonysmith](#) on Fri, 14 Dec 2012 17:34:01 GMT
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After the print you show in the picture, did you upload an updated copy of the file?

Subject: Re: more rejections of successfully printed pieces
Posted by [decapod](#) on Fri, 14 Dec 2012 19:10:40 GMT
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After the print I discovered a detached shell which was fixed and updated on the same model id using the same file name.

I replied to the last email as I wasn't really happy about that and Christel has since replied that they're looking into it now.

If you believe you are right then I think it pays to persist as the first reply from customer service will try and put you off.

Subject: Re: Already printed model being rejected
Posted by [Youknowwho4eva](#) on Fri, 14 Dec 2012 21:17:37 GMT
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As I'm sure Stoney was getting to, if you update the file, it resets the printed before. Doesn't matter if it's the same file name. So that's why Christel can't see that it was printed before.

Subject: Re: Already printed model being rejected
Posted by [decapod](#) on Fri, 14 Dec 2012 22:22:22 GMT
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Youknowwho4eva wrote on Fri, 14 December 2012 21:17As I'm sure Stoney was getting to, if you update the file, it resets the printed before. Doesn't matter if it's the same file name. So that's why Christel can't see that it was printed before.

I know that's not true.

I've seen screen dumps of their system when i had similar problems and it shows file versions and prints.

Subject: Re: Already printed model being rejected
Posted by [stonysmith](#) on Sat, 15 Dec 2012 15:29:33 GMT
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Each time you upload, a new "Version #" is assigned (internally) to the model. The external model# does not change, and the file name is whatever you uploaded. The older versions of the model are kept.

Part of the reason for this is so that if you upload a model and order it, then change the model before it gets printed, you will get what you paid for: the first version (no changes allowed during the order stream).

If you upload any new version of a model, even if it is the same exact file as the previous time, that Version# is increased, and is then treated as though it has not been printed before. This is by design.. their system can't be sure whether you changed the model or not.

I have received in the past emails from Production "this model is particularly troublesome", but I will cut Shapeways some slack.. developing a method for that to be done on a consistent basis by 3rd party production teams (that may not speak my native language) is difficult. I don't know the specifics of how the files are transferred to the 3rd party. Imagine if they were sent over by CD.. there's no place to send messages (back)

Patience, Persistence, Politeness - the 3Ps will help us get us to Perfect Printed Products <grin>
