
Subject: Ideally what new 3D printing materials would you like over the coming months?

Posted by [joris](#) on Thu, 26 Nov 2009 17:43:27 GMT

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Ideally what new 3D printing materials would you like over the coming months?

And why?

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [photosfromrob](#) on Thu, 26 Nov 2009 18:17:29 GMT

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Wax for lost wax casting, please

also, something strong and translucent for lamp shades

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [kyson](#) on Thu, 26 Nov 2009 21:25:51 GMT

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Do you have anything we can make ashtrays out of? Obviously heat resistant non deforming. If so, what colours??????

THANKS SHAPEWAYS

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [TomZ](#) on Thu, 26 Nov 2009 21:26:25 GMT

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Black, strong and flexible! It would be very convenient if I could just order the parts already dyed black instead of doing it at home, and I think many of my customers would agree. Twisty puzzles just look so much better in black.

Have you looked into mass finishing for the SF material? Would it be very expensive to offer tumble finishing?

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [chris3d](#) on Thu, 26 Nov 2009 21:33:43 GMT

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I would love to see sterling silver again if the process can be perfected.
Ideally jewellery-quality silver so that we can make skin-friendly pieces.

Maybe Aluminium? It might be cheaper than stainless steel and very easy to polish up.

RTV Silicone rubber or any Silicone would also be really cool for jewellers and other makers as you could get one RTV mould made by Shapeways and use that to make:

- 1: pewter casts - you can melt pewter on your stove at home - polishes easily
- 2: wax copies for lost wax silver/gold casting.
- 3: resin casts - including water clear resin - very cheap

I really love what Shapeways are doing - It keeps improving!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by ant.j.green@gmail.com on Thu, 26 Nov 2009 21:35:56 GMT

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Hi. Elastomer materials at shapeways prices!

This would be helpful for prototyping diaphragms and gaskets. I think this can be done on the Objet printers, and the material is known as TangoPlus / TangoBlack etc

Also Transparent material - SLA? "transparent detail" is no good for optical applications.

As an aside, it would be helpful to show the process next to the material description. Eg "White

strong and felxible (SLS)" or "Cream Robust (FDM)"

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Venksta](#) on Thu, 26 Nov 2009 21:58:38 GMT

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TomZ wrote on Thu, 26 November 2009 21:26Black, strong and flexible! It would be very convenient if I could just order the parts already dyed black instead of doing it at home, and I think many of my customers would agree. Twisty puzzles just look so much better in black.

Have you looked into mass finishing for the SF material? Would it be very expensive to offer tumble finishing?

I would like to see this type of material as well.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [rjlang](#) on Thu, 26 Nov 2009 22:02:01 GMT

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Two requests for materials:

- (1) Bronze. (Bronze infused stainless would be OK, as long as the bronze forms the surface.)
 - (2) Reduce minimum wall thickness for stainless, so that finer detail can be made.
-

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Ushanka](#) on Thu, 26 Nov 2009 22:02:46 GMT

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Wax!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [renegourley](#) on Fri, 27 Nov 2009 00:53:47 GMT

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I would love to see a material with the minimum wall thickness of WSF with the detail and smoothness of White Detail. In fact, I would really love to see minimum wall thicknesses come down in general.

Oh the places I would go if you could print to say .5 mm!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [dadrummond](#) on Fri, 27 Nov 2009 02:43:22 GMT

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Brass. Jewelry is a huge hit on SW. We need a golden material. Gold is out of the question. Brass is it.

Ceramic. I want to print out radiolarians, some of the finest 3D designs ever not designed, and a white ceramic would probably have other takers as well. How many gift shops are filled with bone-white gorgeous sculptures? We should be competing there.

Wood. Preferably teak, but I would settle for a nice old-growth oak.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [tanix](#) on Fri, 27 Nov 2009 02:49:01 GMT

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Anything with higher detail... wax is probably the most likely choice.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [joris](#) on Fri, 27 Nov 2009 07:45:18 GMT

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David,

Was touched by "We should be competing there."

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [chris89](#) on Fri, 27 Nov 2009 12:21:16 GMT

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something that can print multiple colors on a model directly would be handy.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [PaulSep](#) on Sat, 28 Nov 2009 00:07:54 GMT

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the highest copper content possible would be ideal.
otherwise wax would work

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [fil47](#) on Sun, 29 Nov 2009 00:27:30 GMT

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glass would be really nice... eco-friendly (except for process) and compatible with diner-wear, jewelry.. plus it should be quite cheap.. (it already exists, I saw it done in a US university but can't remember which one...

any material with a very fine grade, basically which would look like a polymer cast...

keep up the good work !!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [iguffick](#) on Sun, 29 Nov 2009 20:12:09 GMT

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I'd love to see an SLS powder mixed with aluminium or carbon, providing it does not significantly increase the price (for me personally, double would be ok!).
Also known as Alumide or Carbonide.

The aluminium mixture gives a dull metallic finish that has the look of aluminium but is much lighter. It can be finished by grinding or polishing. Unlike standard SLS the resulting object should be non-porous, which leads to uses for liquid containers etc.

The carbon mixture gives a black smooth surface finish, ideal for all those twisty puzzles! It is also MUCH more resilient to wear, so it makes better surfaces for bushes and other moving parts.

I'm not sure if either of these materials are easier to electroplate for other metallic surface finishes ?

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [crsdf](#) on Mon, 30 Nov 2009 01:43:35 GMT

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iguffick wrote on Sun, 29 November 2009 20:12 I'd love to see an SLS powder mixed with aluminium or carbon, providing it does not significantly increase the price (for me personally, double would be ok!).

Also known as Alumide or Carbonide.

These materials are actually cheaper thanks to the fact that less Nylon needs to be used in the mixture. Nylon is much more expensive than both Aluminum and Graphite.

I imagine the next step for Shapeways is one of the desktop printers, Z-Corp or Objet. Objet is better suited for engineering applications, as most of its features are for making different shore strengths and making overmolds etc. Z-Corp does your full colour prints, but unfortunately requires significant and involved post processing work. Failure rate is also astronomical. Though the Z-Corp casting materials may be worth a look.

Subject: Re: Ideally what new 3D printing materials would you like over the coming

months?

Posted by [aortic001](#) on Tue, 01 Dec 2009 18:52:26 GMT

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Bronze or copper would be nice for jewelry pieces, as they're easier to polish and workable than stainless steel.

Also any chance to introduce titanium? Since SLS/DMLS are probably the only economical options to its production.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [odd](#) on Thu, 03 Dec 2009 17:52:11 GMT

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I second alumide!!

Also tumble finishing and vibratory polishing would be very very useful...

..currently looking into buying my own - but if you can do it I'd prefer that not just from a cost standpoint but also time & space wise.

Thanks SO much for bringing all these technologies to us...and so cheap too!

cheers

//O.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [stardust4ever](#) on Thu, 03 Dec 2009 19:11:48 GMT

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Is there any chance that you could bring back the white glaze? I missed the opportunity to order a couple of items I wanted in it. Certain art pieces would look much better with a nice glossy coating than with the normal dull grainy finish of most other materials.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [aurifex](#) on Thu, 03 Dec 2009 20:21:56 GMT

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type of resin used in jewelry prototyping and walls 0.5mm

and very cheap of course!...

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [locodan](#) on Thu, 03 Dec 2009 22:46:27 GMT

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Bronze with a good to fair machinability rating so live steam cylinders could honed and tapped for heads and mounts. My second choice would be wax so I can do my own casting of the cylinder and other live steam parts.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [TreadshotA1](#) on Fri, 04 Dec 2009 08:39:11 GMT

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Bring back White Glaze. I need that. Also would help if there was a black version of the same thing. Black Glaze!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Quesera](#) on Fri, 04 Dec 2009 10:27:15 GMT

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A mould out of flexible silicone material, usable for food and so high-low temperature resistant would be great!

It should be flexible enough to easily remove the content once cooled, baked....and strong enough to keep in shape without support.

Why? Because there definately is a considerable market for custom made shapes with this

material.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Youknowwho4eva](#) on Fri, 04 Dec 2009 13:25:45 GMT

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Only problem with that is it will be a long time before Shapeways says it is usable in food. Now, if you printed the inverse shape in stainless, and wrap it in the in soft bakeable material. Then again Shapeways wouldn't suggest using any printed model in this way.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [SDabbs](#) on Fri, 04 Dec 2009 13:47:51 GMT

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silicone, or any type of flexible rubber.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Kapusta](#) on Sat, 05 Dec 2009 14:06:32 GMT

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Black Strong and Flexible, Definitely! The puzzle I'm working on is dying to be printed in black!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [TomZ](#) on Sat, 05 Dec 2009 15:47:23 GMT

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Kapusta wrote on Sat, 05 December 2009 14:06Black Strong and Flexible, Definitely! The puzzle I'm working on is dying to be printed in black!
It's out there already!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [__DF__](#) on Sat, 05 Dec 2009 18:14:59 GMT

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Wax!

I think wax is a very important material to include. Wax can give the opportunity of transfer the model into any kind of metal used in a foundry.

I would also suggest titanium and aluminum, but I am afraid this going to get very expensive for existing models.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [chris3d](#) on Sun, 06 Dec 2009 05:59:59 GMT

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Re: Qesera's food safe suggestion -

One very easy way to make Food safe moulds would be:

1: Buy some food-grade Silicone Putty. (u can google for it)

2: Make a "positive" at Shapeways from White Detail (whatever material is most cleanable and least porous I guess)

3: Clean, Smooth and Polish your positive. Perhaps seal with a food-safe lacquer.

4: Make a mould from your positive wuth silicone putty.

5: Eat your Chrysler building shaped cupcakes or whatever.

I guess the food safe silicone will come into contact with the non-food safe shaeways print one time.

You could run your Silicone moulds through the dishwasher before castiing positives to be safe.

I there must be some kind of food hygeine standards you can look up and probably modify this process to conform to it.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [ibec](#) on Mon, 28 Dec 2009 09:25:17 GMT

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How about cheap material like cardboard (karton) and polystyrene (piepschuim)? That would even lower the barrier for more prototyping and printing. And the already mentioned wood (something similar to MDF).

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Ushanka](#) on Mon, 28 Dec 2009 20:52:43 GMT

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The only way to print in cardboard would be to use an LOM machine, like the MCOR Matrix or the Solido machines. I'd really like to see the MCOR Matrix on here, because from what I understand, it would make prototyping a lot cheaper!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [huan80](#) on Tue, 12 Jan 2010 05:43:12 GMT

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I would love to have access to Stainless Steel, Antique bronzed and polished for my own designs. What are the chances that you will offer that soon?

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Laserschwert](#) on Fri, 05 Mar 2010 09:09:36 GMT

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Although I haven't tried any of the other materials, I really like the feel (plus the price, detail and stability) of WSF. Therefore I hope for:

Multi-colored Strong Flexible

Yeah, WSF plus textures... that would be awesome!!!

Another idea:

Chocolate

Yep, very cool for edible personalized presents. Yummy!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [virtox](#) on Fri, 05 Mar 2010 09:53:43 GMT

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Although I'm still dreaming of full-color SF

More realistically, I would be very interested in materials like

- Carbonide
- White or any-color glaze

At least for a (second) round of trials

And materials like

- Ceramics
- Wood
- Glass/transparent plastic

At the right price this would be an almost guaranteed hit.

And I would love access to the creator metal

- Stainless Steel, Antique bronzed and polished

But for now I'm happily waiting for my Alumide order

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [akeno](#) on Fri, 05 Mar 2010 10:12:50 GMT
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waxxxxxx!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?
Posted by [Salokannel](#) on Fri, 05 Mar 2010 11:52:27 GMT
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Well, of course it's about price but as materials
GOLD & TITANIUM
would be very interesting...
Both are perfect for small jewelry and
in Shapeways there's a lot of them.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?
Posted by [derekh](#) on Sun, 07 Mar 2010 12:38:24 GMT
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WXX!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?
Posted by [dymihail](#) on Sun, 14 Mar 2010 03:01:44 GMT
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Vero Gray, which I assume you guys would call Gray Detail. It has better mechanical properties than any of the other Vero materials, it's light enough that it can be painted over without showing through (unlike Black) and dark enough that it can actually be photographed to show detail (unlike White).

I'd also like to see Objet jobs run on High Resolution rather than High Speed. And I'd like to see wall thicknesses come down to ~0.5mm, which I prove is possible on a regular basis. You just can't man-handle the parts when cleaning them.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [lensman](#) on Mon, 15 Mar 2010 23:52:28 GMT

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W A X

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [photosfromrob](#) on Tue, 16 Mar 2010 05:52:48 GMT

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[lensman](#) wrote on Mon, 15 March 2010 23:52W A X

I agree wholeheartedly

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Youknowwho4eva](#) on Tue, 16 Mar 2010 12:47:56 GMT

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I believe it's been said, but glow in the dark. Add it to the Sandstone? Add it to the WSF? either way. would be awesome. Now that I mentioned it, especially the sand stone.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Sledgehammer](#) on Tue, 16 Mar 2010 16:14:31 GMT

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A reasonably-affordable material akin to Polyjet HD, but without the severe wallet trauma. Something along that line would be the perfect stuff for making properly smooth-surfaced mold masters, as White Detail is still a little bit too steppy IMO, and the Polyjet stuff costs an arm and both legs.

That, or coloured versions of Transparent Detail - red, blue, green and yellow in particular would be outstanding.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [dymihail](#) on Wed, 17 Mar 2010 15:27:46 GMT

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White Detail = Polyjet

I've been using it for masters for silicon molds for going on three years now. The most I ever do to prep it is give it a coat of primer.

For the models that I'm doing now, I frequently find that one of the Detail colors is cheaper than WS&F because it doesn't have the \$1.50/model surcharge of WS&F. I personally feel that polyjet is superior to SLS. YMMV.

Back on topic... Invision HD might be a nice product to try, though I believe that would require the purchase of a new printer. It actually has better X & Y resolution than polyjet.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [akeno](#) on Wed, 17 Mar 2010 22:36:34 GMT

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@Youknowwho4eva it'd be cheaper just to buy the paint and paint over it in thin layers for desired effect since a powder doesn't really exist.. its not that hard to do.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Mark_Kendrick](#) on Thu, 18 Mar 2010 00:29:35 GMT

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As much as i'd like wax, im not sure if it would survive being posted around the world. Has anyone else had wax parts from another source airfreighted to the hotter parts of the world?

It can get awfully hot in an uninsulated truck in Australia.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [coins23](#) on Thu, 18 Mar 2010 19:42:47 GMT

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I'd like to see the Vero Grey (or grey detail) that David mentioned.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Youknowwho4eva](#) on Thu, 18 Mar 2010 20:01:38 GMT

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akeno wrote on Wed, 17 March 2010 22:36@Youknowwho4eva it'd be cheaper just to buy the paint and paint over it in thin layers for desired effect since a powder doesn't really exist.. its not that hard to do.

Powders Exist. I was doing the research for a project I've been looking at.

Glowinc.com

24 hour 9.29 an oz

12 hour 7.89 an oz

glownation.com

12 hour 6.95 an oz

teachersource.com

5.50 an oz

riskreactor.com

100 hour 19.00 an oz

That's the list of sites I came up with. The hours are the how long it glows at full charge. All are for powder (pigment for paint)

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [magicmodel](#) on Mon, 28 Mar 2011 20:36:21 GMT

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Vero Blue for Objet would be very nice to have because it allows you to see the contrast of the surface a lot better than white detail or black detail. It gets used heavily in the 3d printing of cg characters and sculptures from zbrush and mudbox. When can you get it? Please get vero blue. I'll be your best pal Shapeways

Subject: Re: Silicone, please?

Posted by [ErkDemon](#) on Thu, 31 Mar 2011 23:21:57 GMT
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Casting my vote with the people asking for some sort of flexible rubbery stuff. I think it's the main thing missing from the catalogue.

You could use it to print flexible lids for containers, soft shock-absorbing smartphone sleeves and portable harddrive wallets, anti-vibration feet and mountings for consumer electronics, flexible hinges and handgrips for composite pieces ... all sorts of cool things and components become possible.

But some of the applications would need it to be food-safe and perhaps dishwasher-safe (flexible lids for food containers, beakers, etc).

I suppose that for simple shapes, we could print a "negative" version as a mould, and use something like silicone or Sugru to make the components ourselves, at home ... but that means that anything we design that relies on those parts can't be sold in the Shapeways shop.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [artfulshrapnel](#) on Fri, 22 Apr 2011 08:18:52 GMT
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I know it has been said before, but:

WAX!

My experience has been that shipping wax isn't an issue. It has to get to at least 150 degrees to start showing signs of wear, and is nearly as sturdy as plastic for smaller objects (like jewelry) if it is simply placed in a plastic bag and surrounded by styrofoam peanuts.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [stannum](#) on Sun, 24 Apr 2011 02:03:01 GMT
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Which kind of degrees? Kelvin, Celsius, Farenheit, RÃ©aumur... ^_^

You should try the frosted materials (HD 3000 with SR200), they seem to be castable, melt above 80C and have low ash content... just like many other "waxes" by other companies.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [thehelmosengine](#) on Fri, 10 Jun 2011 02:38:53 GMT

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Having RTV molds printed is a genius idea I second wholeheartedly! It would save me tons of time and materials to be able to just order a mold ready to make my parts! I love it.

Also admittedly I'm new to this and somewhat new to casting, but I will throw another vote in for WAX if I can.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [simonbrblue](#) on Thu, 16 Jun 2011 17:37:45 GMT

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What about a low cost option so that larger parts/items can be printed without costing lots of money.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [dhammond](#) on Tue, 28 Jun 2011 06:02:19 GMT

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I would like to see a transparent material such as Objet VeroClear. There would have to be a note on the system that the material would need a lot of polishing by the customer to get the object optically clear and that the material does yellow with UV. I have used this type of material in the past from other suppliers to make concept models.

Also a material that simulates polypropylene such as Objet DurusWhite to have snap fits and living hinges in parts with quite high detail and relatively smooth finish.

Direct metal laser sintered materials for making metal parts with higher levels of detail.

And another vote for wax for making molds using the lost wax process. I use molds for making replacement rubber parts on classic vehicles where replacement parts are no longer available.

Subject: Re: Ideally what new 3D printing materials would you like over the coming

months?

Posted by [Dungeon Beast](#) on Mon, 11 Jul 2011 05:44:21 GMT

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Count me in there as a vote for high detail wax. I would also like to have access to gold on this system. Yes, gold costs more but you also make more money on gold. And something pink, high detail, flexible and affordable would be very saleable.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [reecejames](#) on Wed, 20 Jul 2011 12:36:18 GMT

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As much as wax would be useful for the casters, I'd like to see more materials cast by Shapeways. This is in keeping with the 'product' philosophy and also helps out the guys who have no interest in casting items.

I'm specifically interested in brass, but bronze would also be welcome. I'd expect figurine/model railway guys to die for white metal as a choice.

As it costs Shapeways effectively nothing to print the wax, the majority of costs are in the casting process. The cost of the end product isn't a problem. Brass or bronze casting costs a lot for one of pieces at the local foundry.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Dungeon Beast](#) on Wed, 20 Jul 2011 16:57:04 GMT

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Maybe we can simplify the wax discussion. Here's a question for the guys who want models in wax. If you want wax models what metal do you plan to cast those wax models in?

For me, I want wax models because shapeway does not offer casting in gold. If I had casting in gold I would not need wax models.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [artfulshrapnel](#) on Wed, 20 Jul 2011 17:20:47 GMT

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Well, I for one cast my models in resin or pewter, though I am looking at casting some stuff up in silver for jewelry applications.

To me, the reason behind hi-def wax casting isn't the "wax" part, it's the "hi def" part. Current generation 3d printing technology for wax is light years ahead of where it is for plastics and metals in terms of resolution and print clarity. I do miniature designs and jewelry, and both would benefit greatly from a more detailed, smooth print job.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [thehelmosengine](#) on Wed, 20 Jul 2011 18:30:06 GMT

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I also do resin casts of my printed and hand sculpted parts and my only issue is the surface quality. I need a high level of detail and super smooth surface quality. The plastics I get printed are great in detail but the surface smoothness is always an issue and makes for less than perfect parts. Great detail and an actually smooth surface are what I'm looking for and if wax provides that I'm all for it.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [SIXTHSCALE](#) on Thu, 28 Jul 2011 22:08:44 GMT

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wood

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [TreadshotA1](#) on Fri, 29 Jul 2011 12:03:46 GMT

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I doubt i'm the first one to say this, but a plastic that is full color. I'd prefer WSF-like, in that it should be able to flex slightly. It'd just be so useful, being able to print it in the colours i want. That way, i don't have to take a guess at how much tolerance i have to leave, taking into account painting.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Drawn-SteelHero](#) on Fri, 29 Jul 2011 20:21:09 GMT

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I think the problem with that is cost. If it was economically viable to offer to dye the plastics in any colour you wanted, they'd offer more than the three or four colours they do. That said, it would be nice if there were a way to print coloured plastic like you can the 'sandstone'.

While I wouldn't want it myself, I do wonder if it would be feasible to offer WSF both dyed and polished (or polished and dyed, I'm not fussed).

For the record, I don't think I ever allow more than 0.1mm tolerance each side, and even after painting, I still sometimes get loose bits.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [TreadshotA1](#) on Mon, 01 Aug 2011 12:00:37 GMT

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Well, I was thinking to stray away from actually dyeing the models. I was really hoping you could get more than one colour on a certain part. I always imagined SLS as like mini-Lego, like the machine was building up the model with little White bricks. I guess I just assumed that it wouldn't be too far a leap to give the machine reservoirs of different colours of the powdered plastic, and then telling the machine which colours to build where. The actual colors would obviously have to be limited, like a certain shade of red, another of blue and what have you, rather than any shade you could possibly imagine as that wouldn't be practical.

I understand it would add to the cost, but it'd be great to have it as an option. Well, as long as it doesn't add too much to the cost.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [dhammond](#) on Tue, 02 Aug 2011 12:02:33 GMT

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As far as I know, the only system that allows printing in different colour plastics that is relatively cheap to switch over the materials is fused deposition molding (FDM). The Objet system allows different colours but the cost and labour of purging the system to change to a different material would be the issue.

An ideal solution would be for Shapeways to offer polyurethane castings as you dye the resin to suit prior to putting into the mold however it is a labour intensive process.

The ability for users to order wax models so that we could make our own RTV moldings to use for the final polyurethane castings would probably be the best solution.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Dungeon Beast](#) on Tue, 02 Aug 2011 16:53:30 GMT

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Or wax models so those of us who cast in precious metals may do so as well.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [FoxholeAtheist](#) on Thu, 04 Aug 2011 14:24:53 GMT

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I'd like to see wax (for casting) and marine grade bronze (specifically a silicon or aluminum bronze).

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [CaseyZ](#) on Thu, 18 Aug 2011 21:18:57 GMT

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PEEK for SLS would be good, I need something with better mechanical properties, Am I dreaming?

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [sgheeter](#) on Fri, 26 Aug 2011 22:41:42 GMT

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RTV Please!!!!

while you are at it, it might be a straightforward app to design master here as always, input external dimensions of the mold desired, the "split line", the "cone" and "vents" and then let the app make the two halves.

PLEASE!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [D_man](#) on Wed, 21 Sep 2011 13:23:47 GMT

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SIXTHSCALE wrote on Thu, 28 July 2011 22:08wood

Yep,
WOOD
for me too !

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [ZakK](#) on Thu, 22 Sep 2011 10:07:39 GMT

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I would love to see wax for casting too!

Wood would be pretty coolies tho!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [reecejames](#) on Thu, 22 Sep 2011 11:07:41 GMT

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Caseyhooligan wrote on Thu, 18 August 2011 21:18PEEK for SLS would be good, I need something with better mechanical properties, Am I dreaming?

Oh wow yes! I could make some of the most amazing seals with PEEK SLS!

Wood isn't printable that's a normal CNC process....

Looks like wax would be the winner, especially as Shapeways is already printing it.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [BillBedford](#) on Thu, 22 Sep 2011 12:31:18 GMT

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At the moment I would go for POM/acital, especially if could be as fine as FUD.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [ZakK](#) on Thu, 22 Sep 2011 14:48:07 GMT

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reecejames wrote on Thu, 22 September 2011 11:07Wood isn't printable that's a normal CNC process....

Hahaha!! Yup, that's why it would be so cool!! Super speed organic printing, hey, they can print kidneys nowadays, wood shouldn't be too far off!!!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Youknowwho4eva](#) on Thu, 22 Sep 2011 15:48:41 GMT

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I wouldn't say wood isn't printable. You could do wood dust and glue being like plywood, and in the case of the kidney, you could build it cell by cell.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Zakk](#) on Thu, 22 Sep 2011 16:13:21 GMT

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Youknowwho4eva wrote on Thu, 22 September 2011 15:48I wouldn't say wood isn't printable. You could do wood dust and glue being like plywood, and in the case of the kidney, you could build it cell by cell.

They are waaay ahead of you!! No 'could' about it...

http://www.ted.com/talks/anthony_atala_printing_a_human_kidney.html

Cmon shapeways, get on it!!!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Youknowwho4eva](#) on Thu, 22 Sep 2011 17:07:41 GMT

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Seen it, and they haven't printed kidney's yet. It was a demonstration on how it could be done. I was saying to use plant cells for a print. It would be kinda like a cheap pet

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [D_man](#) on Thu, 29 Sep 2011 12:12:59 GMT

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ant.j.green@gmail.com wrote on Thu, 26 November 2009 21:35Hi. Elastomer materials at shapeways prices!

This would be helpful for prototyping diaphragms and gaskets. I think this can be done on the Objet printers, and the material is known as TangoPlus / TangoBlack etc

Also Transparent material - SLA? "transparent detail" is no good for optical applications.

As an aside, it would be helpful to show the process next to the material description. Eg "White strong and flexible (SLS)" or "Cream Robust (FDM)"

I'd love to have some flexible material too ! Not too flexible of course, something that could both keep its shape and be soft and flexible.

Something with the soft touch of silicon they use for sextoys for instance !

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [rickhahn](#) on Wed, 05 Oct 2011 07:09:16 GMT

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I would like to see CarbonMide being added to the material list. We are just starting to use Rapid Prototyping here at work (a classic car restoration and modification shop) and I would love to have a material that is as strong or stronger than Nylon, but can withstand much higher temperatures!

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [volundr](#) on Fri, 18 Nov 2011 04:20:34 GMT

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I would love to see wax as an option, even if there is a chance of it breaking during shipping. Or selective shipping to countries where it won't melt in transit.

Lacking that, I'd love to see more metal choices: bronze/brass, copper, gold, tin, etc.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [Psychosama](#) on Fri, 18 Nov 2011 04:24:53 GMT

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High Detail Wax for Lost Wax Casting (maybe even with the option to LEAVE THE SPRUE ON!) and Leadless Pewter.

Subject: Re: Ideally what new 3D printing materials would you like over the coming months?

Posted by [reecejames](#) on Fri, 18 Nov 2011 04:26:27 GMT

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baldr wrote on Fri, 18 November 2011 04:20Lacking that, I'd love to see more metal choices:

bronze/brass, copper, gold, tin, etc.

This is what would really see 3d designs. I would love to get the most amazing cylinder assemblies cast in bronze.

(Stay tuned for my 3D printed steam engine in stainless)
