
Subject: Grit blasting
Posted by [Atso](#) on Wed, 12 Dec 2012 23:28:39 GMT
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Has anyone tried using one of these on their 3D print?

http://www.everythingairbrush.com/acatalog/info_AB_178.html

Subject: Re: Grit blasting
Posted by [pumpjet](#) on Fri, 12 Apr 2013 03:30:56 GMT
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I use it now.

Be forewarned though. Do NOT use Aluminum Oxide or Silicon Carbide grit!! It is nasty stuff and you need a face respirator to keep from getting Silicosis. The little mask in the kit is useless with these grit.

Ok I had to modify mine to allow more air flow because I use Baking Powder. It is a mild abrasive so it can do a good job with out cutting into your designed part. It is like talc so the holes need to be opened up to allow more air flow. I have tried an unmodified one and it seems to work fine with out the modification. Go figure.

Ok you need absolutely dry air for this to work. A small compressor with a moisture trap in line plus the trap in the hose and you are OK. Pressure setting is between 25-65 PSI. I set mine to 40 to defrost the FUD parts I have and it works great. But I had to try different PSI settings to get it right.

The Baking Powder is dirt cheap and I have about 7 pounds and it cost less then 5 bucks. Once you get it pushing the baking power, it gets everywhere. I use the face respirator too. The kind with cartridges on it.

I use mine outdoors so it isn't too bad. The tip has a tendency to get clogged up with baking power too. Not much but you will need to use a piece of 30 gauge wire to push it down the opening. Be careful or you can damage the air tube behind the tip insert. I just unscrew my tip and use a needle to open the orifice back open. And then once you depress the trigger you get a cloud of powder before the pressure kicks in and at that point you start cleaning your parts. The more delicate the detail, the less air pressure and longer time to clean them up.

Good luck!

Bob

Subject: Re: Grit blasting
Posted by [dcyale](#) on Mon, 29 Apr 2013 11:47:40 GMT
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Do you have any before and after pics to show the difference?

Subject: Re: Grit blasting
Posted by [pumpjet](#) on Mon, 29 Apr 2013 13:30:37 GMT
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I'll have to find some un blasted parts. I'll keep you posted when I get them

Bob

Subject: Re: Grit blasting
Posted by [pumpjet](#) on Sun, 26 May 2013 03:38:13 GMT
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Just got finished soda blasting some FUD that was really heavily frosted.

Pics are before and after the soda blasting. 35 PSI setting.

File Attachments

1) [DSCN1022.JPG](#), downloaded 96 times

Subject: Re: Grit blasting
Posted by [pumpjet](#) on Sun, 26 May 2013 03:39:47 GMT
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1) [DSCN1023.JPG](#), downloaded 560 times

Subject: Re: Grit blasting

Posted by [pumpjet](#) on Sun, 26 May 2013 03:41:26 GMT

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soda blasting completed

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Subject: Re: Grit blasting

Posted by [pumpjet](#) on Sun, 26 May 2013 03:42:48 GMT

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back side image

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Subject: Re: Grit blasting

Posted by [dcyale](#) on Sun, 26 May 2013 04:13:24 GMT

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That's kind of amazing. I guess I need another toy to play with.

Subject: Re: Grit blasting

Posted by [patmat2350](#) on Tue, 18 Jun 2013 01:26:55 GMT

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Pumpjet- did you use standard kitchen baking soda? Or the large grain stuff intended for grit blasting?

The large grain should flow better... but I don't know if I want to order a big bag of the stuff!

I also see mention of corn starch being used, I may give that a try...

Subject: Re: Grit blasting

Posted by [pumpjet](#) on Tue, 18 Jun 2013 03:36:37 GMT

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Hi Patman

I use the standard Arm and Hammer baking powder. The stuff you find in the supermarket. I did find that sifting the baking powder through a mesh coffee filter (the kind you can get at Walmart) really improved grit flow as the sifting allowed me to remove the chunks that were in the in box of powder.

My parts are very small and very intricatly detailed. So I have to adjust the pressure down as I have

blown some part details off the FUD. Then I git to find them and superglue it back on the part.

I get my IJN parts here:

<http://www.shapeways.com/shops/modelshipjp>

and

<http://www.shapeways.com/shops/modelship>

Nice funnel vents by the way.

Any luck on the 14 LPI stud link chain? I have found no stud link 14/15 LPI chain, only regular chain (rats)

Bob

Subject: Re: Grit blasting

Posted by [pumpjet](#) on Tue, 18 Jun 2013 03:38:23 GMT

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Opps my bad, patmat2350 not patman. begging for forgiveness here

Bob

Subject: Re: Grit blasting
Posted by [patmat2350](#) on Wed, 19 Jun 2013 00:38:23 GMT
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Perfect! Got a new/old Paasche air eraser on ebay, \$40, and a pound of baking soda from the kitchen, it worked great... parts are all clean now (finally).

No love on the small chain, Shapeways refuses to print the small size (wire < 0.6mm).

Subject: Re: Grit blasting
Posted by [pumpjet](#) on Wed, 19 Jun 2013 03:02:26 GMT
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Welcome to grit blasting!! There are vids on you tube about this process. Interesting stuff.

I don't understand why Shapeways won't go smaller then .6mm. The radars I have have smaller that .6 for sure. Those are the ones's that the air eraser can blow off the simulated radar array.

I wonder if they changed their file qc processes. I suspect that it could be the file format, .STL vs cad vs whatever. I do know that the IJN parts are done in a stl file format as Shingo did a screen capture of one of his designs. And it said stl.

I believe the smallest nozzle size .3mm. Maybe the printer is different from your chain and my IJN stuff...

I just checked on one of my screwed up radars and it is definately smaller then .6mm

Bob

Subject: Re: Grit blasting
Posted by [dcyale](#) on Wed, 19 Jun 2013 05:33:38 GMT

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Shapeways is getting very tight on the minimum size rule. I had some models that printed fine previously they will not print anymore- back to the CAD program.

I pointed out my "wire" was square and that the area of the cross section was the same as a round wire, but no good. It was a small scale chair leg. So I redesigned my chair with round legs. Now I'll see if some other part of the design fails.

Getting a bit off topic- sorry.
