HOW TO CLEAN CLOGGED NOZZLE:

4 EASY TECHNIQUES TO CONTINUE 3D PRINTING IN NO TIME

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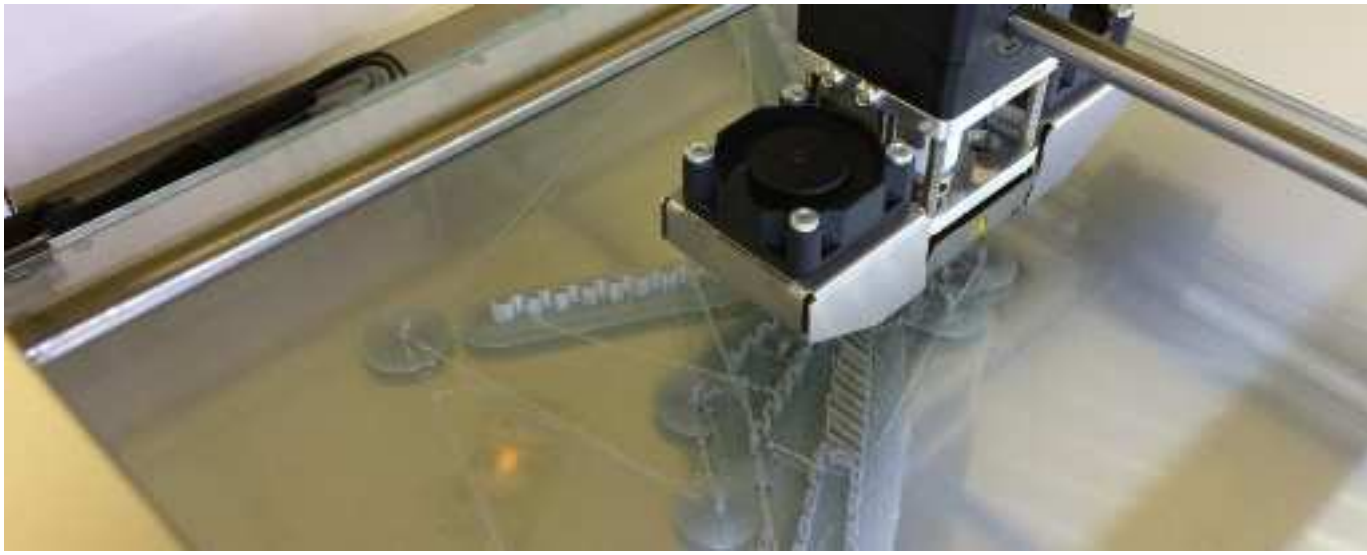
We have already learned about the ways to keep your nozzle away from clogging. But when it's about 3D printing, you cannot leave any stone unturned and any tip unrehearsed.

You must also know the tricks for 3D printer nozzle cleaning. That is when you would actually learn how to tackle the problem thoroughly.

The tricks and plans for 3D printer nozzle cleaning will depend on the severity of the jam. However, you may try one of the listed ways when encountered such a problem.

The methods and strategies for cleaning the 3D printer nozzles will vary depending on the severity of the clog. However, if you experience such an issue, you can try one of the methods given below.



Brushing the Outside of the Clogged

The simplest method for clearing the clogged nozzle is brushing it from the outside to remove any residues that may have become lodged in the ends. Remember to use the right brush for the job.

You need a wire brush for significant cleaning results. Brushing can remove the sticky blockage created by burnt material accumulation in the tip of the nozzle. In addition, using a brass thread brush will prevent your nozzle from tearing or being damaged.

When dealing with a clogged nozzle, this must always be the first step. If this one succeeds in the first place, you can skip all the other complicated tricks.

Keep in mind that brushing can only clean the nozzle tip. If the clogging problem isn't solved this way, the jam may be worse than you expected.

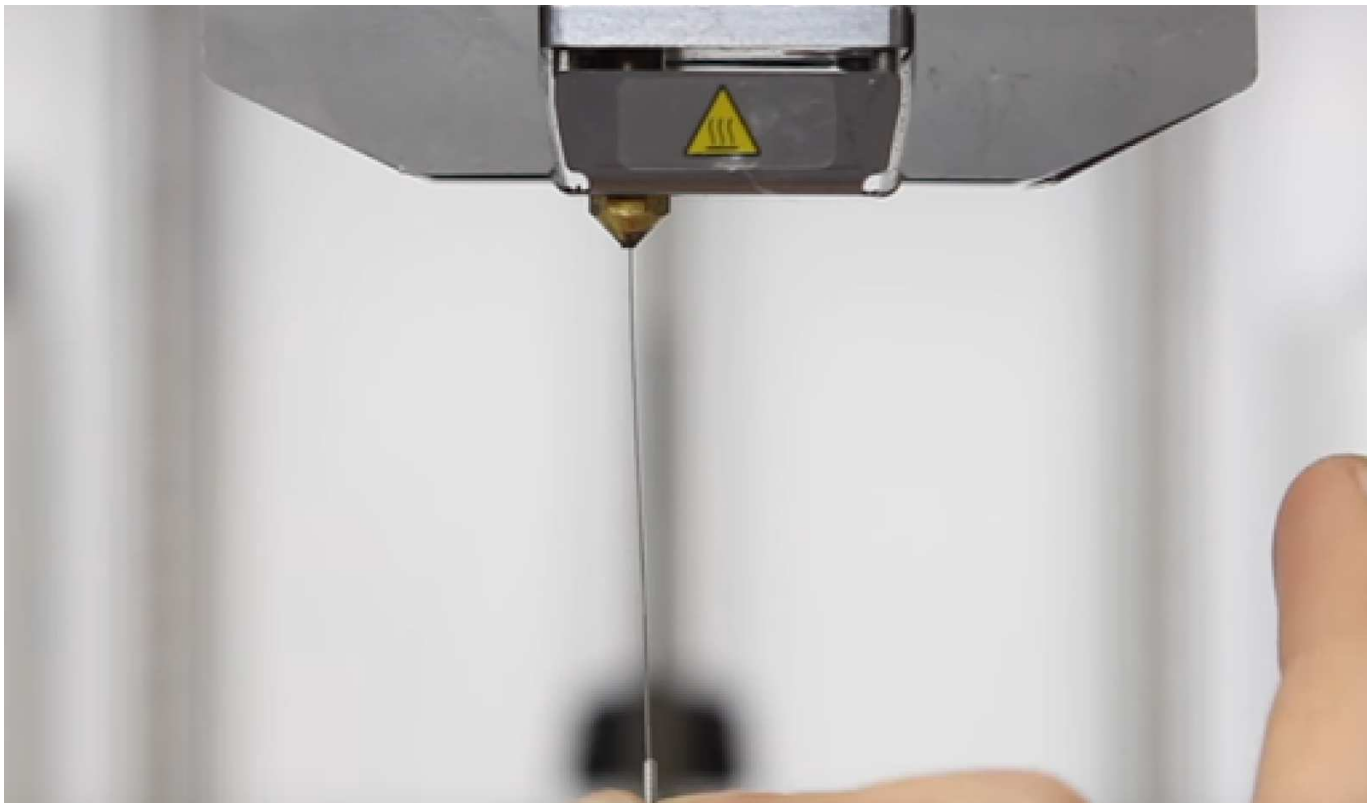
Use a Pin to Clear the Jam

You can use a pin if the clogging isn't too severe, and you only need to remove a tiny quantity of melted filament. Alternatively, a small needle can be used, but a nozzle cleaning set will be more efficient for different nozzle sizes.

The trick is simple to perform. Simply heat the nozzle to a temperature that softens but does not entirely melt the blocked filament.

Remember not to totally melt the clogged filament, whether you use a heat gun or adjust the temperature through the hot end assembly.

After that, all you have to do is use the needle's tip to push the clogged material out of the nozzle end.



Use Nylon Filament for Executing Cold Pull

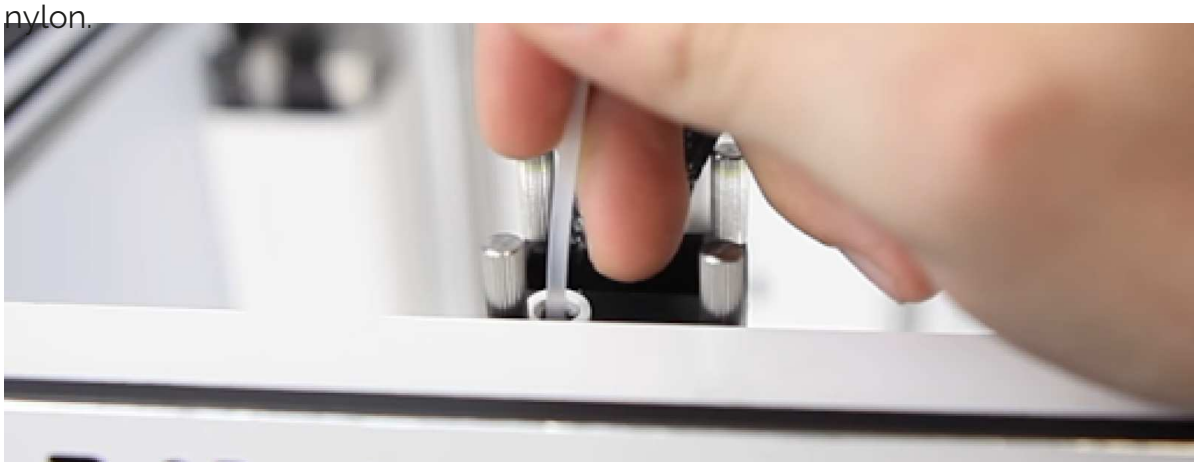
As you may know, a needle or a brush will not be able to remove all problematic jams.

In such instances, you'll require a reliable 3D printer nozzle cleaning method. This is what you can do if you're seeking an alternative: Cold-pull the trapped filament using the nylon filament.

You'll have to manually feed the filament into the nozzle using this method. To make this possible, you must first dismantle the extruder's configuration. After that, heat the nozzle to around 250 ˚C. Allow 5 minutes once it reaches this temperature.

Although Nylon is the ideal filament to use for this process, ABS can also be used. Next, push the filament through the nozzle manually to clean it, maintaining your push firm and gentle.

At this temperature, the blocked filament will totally melt. As a result, it would emerge from the nozzle end alongside Nylon filament. As a result, you must continue extruding the filament until you no longer see any filament other than nylon.



Allow for proper cooling of the setup to reach room temperature. We haven't made up our minds yet. Heat the nozzle to around 130 ˚C once more.

This will help soften the nylon filament instead of melting it completely. Next, pull the left-out material from the nozzle. The cold pull will help remove the leftover plug, if any. Hence, ensuring the nozzle is completely free of dirt and residues.

Assume you believe the issue is still present. In that case, repeat the procedure until you are entirely sure that the 3D printer nozzle cleaning has been completed successfully.

Remember that if the filament is too difficult to draw, you can raise the temperature slightly to soften it before the cold pull.

Clean the Nozzle in Acetone

This is one alternative that should only be used when all other options have failed. The disadvantage of this procedure is that it takes longer to complete and may not work for all filament types consistently. ABS is the ideal material for this approach.

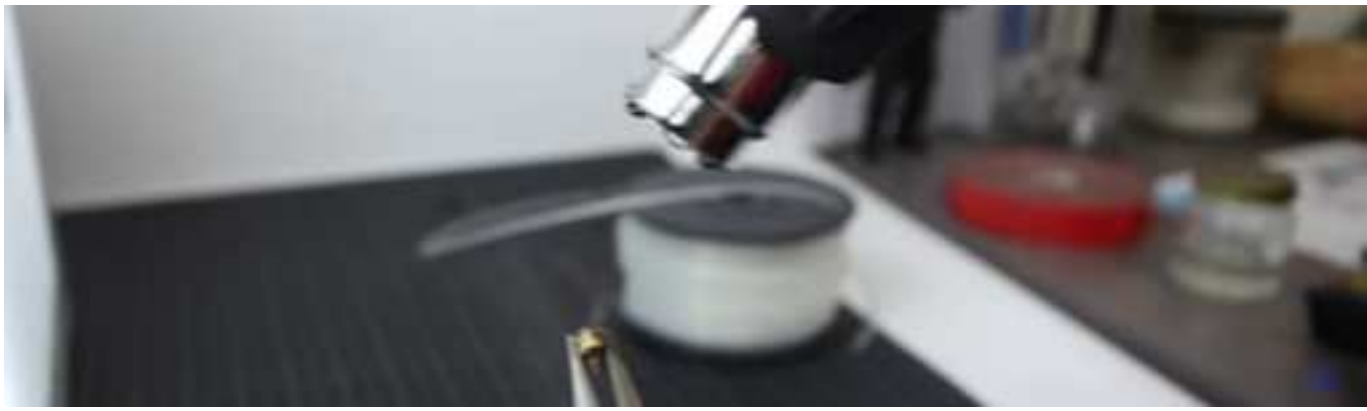
You must first remove the nozzle from the extruder settings to use this procedure. To perform this, you'll need a socket wrench.

The nozzle should be soaked in acetone for roughly 15-20 minutes. You can reinstall the nozzle to the extruder once the clogging has gone away. However, don't forget to clean the nozzle of any excess acetone.

This procedure will not work if the obstruction is caused by a material that is not soluble in acetone. However, a heat gun can still be used to melt the clog away.

If your nozzle is still clogged after trying the above procedures, there is one more thing you can do. That is, assuming you've been printing with ABS. Remove the nozzle from the print head, put it in acetone, and leave it there for a few hours. The acetone will melt the material in the nozzle and enable it to be cleared with a needle.

You should be aware that acetone can be hazardous if handled wrong. Therefore, acetone is highly flammable, so avoid using it near a fire or anything that could generate a spark. Also, operate in a well-ventilated environment because the vapor can induce headaches, dizziness, and a sore throat if inhaled too deeply.



The Conclusion

The biggest issue to deal with is a clogged nozzle. Many professionals have discussed the sticky jam that took hours to remove from the nozzle end.

It becomes considerably more challenging to continue ignoring the problem until it clogs the entire end, resulting in no filament extrusion.

As a result, the best method to care for your nozzle is to maintain it clean at all times. If possible, clean your nozzle after each print.

If it appears to be a difficult task, at least clean the nozzle after switching filaments. You may certainly do this if you enjoy using your 3D printer and desire to advance with technology to generate more fabulous models in the future.

These processes are straightforward and efficient. You should be able to continue 3D printing in no time if you follow these steps correctly. However, if your nozzle is still clogged after attempting the preceding techniques, there is one more option. Swap your nozzle with a premium-quality one, and to keep unclogged, follow the clog prevention techniques.

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