

Using FunToDo resins on the 1200 projet

Nicolas is the fundator of [Vivalatina](#), an online jewelry that use 3D printing for jewelry production. Throught this article, he shares with us his experience about FunToDo resins printing on the 1200 Projet.

As many of you might know, the 1200 Projet from 3Dsystems is a pretty precise machine that is completely closed to third party resins and improvements by the manufacturer.

The cartridge systems includes a chip that limit the owner capability to use other resins than 3dsystem's resins.



The 1200 projet fits on the desk

As a jeweler, i choose the 1200 projet for his capacity to print precise resins that were supposed to be castable to produce silver and gold jewelry.

Pretty fast i realize that this would not be so easy due to the many problems that gives 3DSystems resins (the green and cast resins). They do not incinerate well at all and are pretty aggressive for your eyes, skin and lung when you burn them.



FTX green resins printed on the 1200 projet

By the way, the castable resin from 3dsystems (FTX Cast) is so brittle that i hardly succeeded in detaching my prints from the support without breaking them appart.

For all this reasons i made tries with FunToDo resins on the 1200 projet.

The Funtodo castable resin

This red resin is cheap (20 times cheaper), way less nocive that 3dsystems resins to manipulate and most important, prints very well on the 1200 projet.



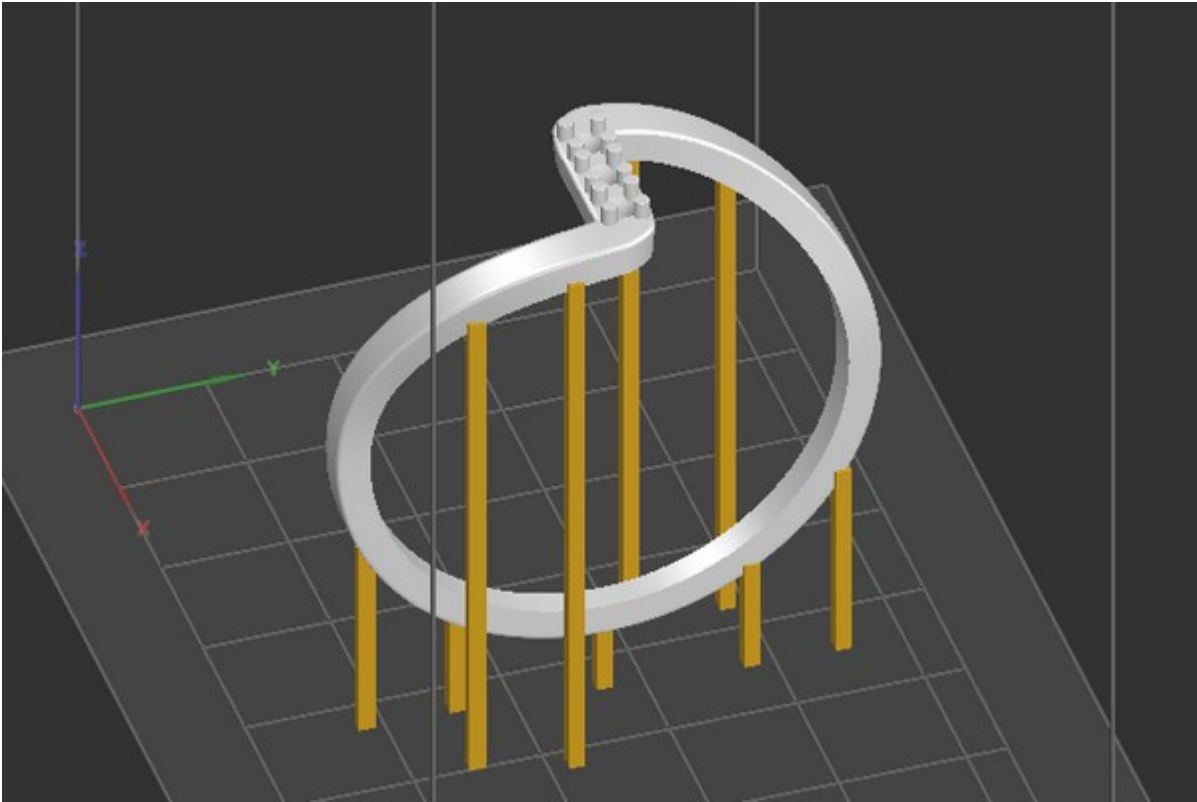
Rings printed with castable FTD resin on the 1200 projet

One of the key factors for printing a third party resin on your machine, and especially for the 1200 projet, is the effectiveness of the photo initiators contained in the resin you want to print.

I have faced many troubles with other kinds of third party resin on my 1200 projet but the FTD castable prints so well that it's a pleasure to send it to print.

Once printed, this resin is pretty hard and can be manipulated easily. And if your part fall on the floor, nothing happens, no worries.

As you know, for starting a print on the 1200, you need to choose the parameters of printing. This choice impact the printability and speed of your print.



For months i have used the gold resin parameters of my software just to realize that i could also use the grey resin parameters to make my prints.

What is the benefit ?

I can print in 1 hour and 28 minutes the same print that would need 2 hours and 35 minutes with the gold parameters.

The FunToDo Snow White resin

The Snow White resin is harder than the castable and heat resistant so that it fits well for silicon mold making in jewelry.

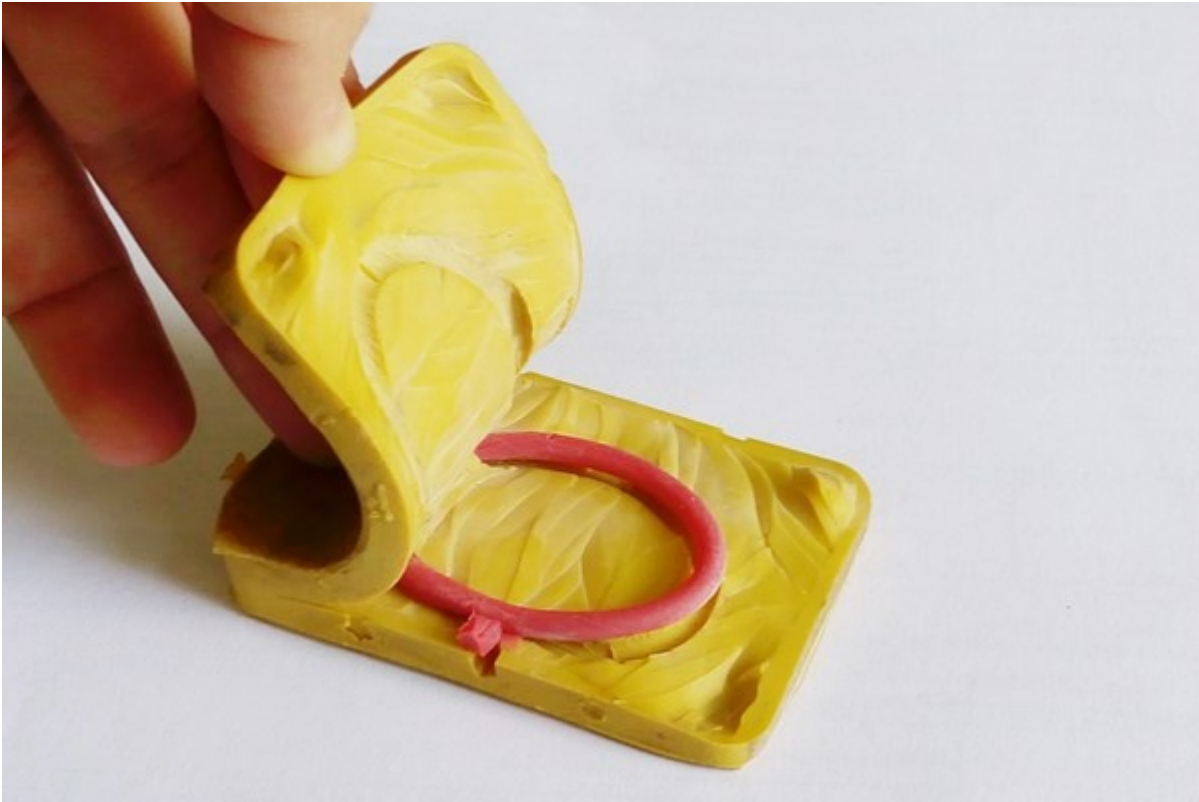
I have tested its printing with the green parameters on my 1200 and worked well, i supposed it would work fine with the grey parameters two.

This resin prints very well on the 1200 projet.

You can use the small support to print your parts with no troubles and obtain an almost perfect part at the end.

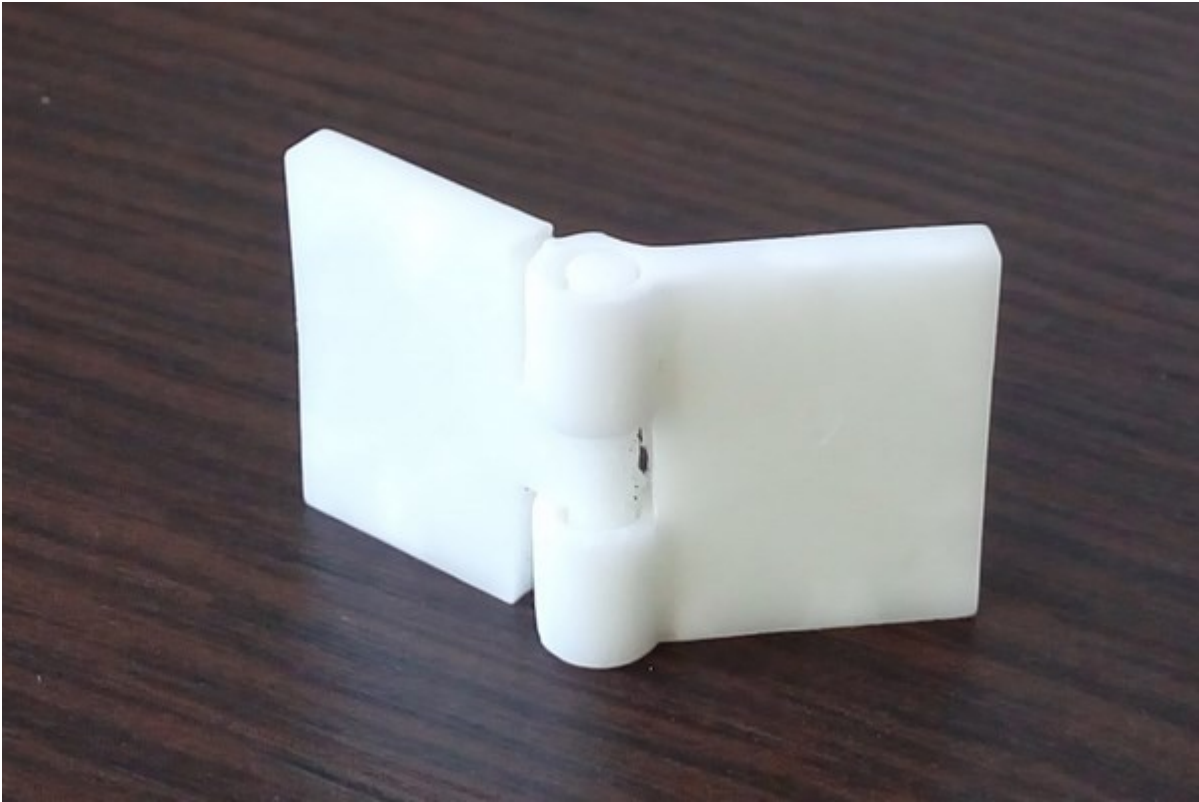


Perfect print of snow white resin on the 1200 projet, with thin supports



The printed part is used for silicon mold making in jewelry

The snow white is pretty resistant after printing, which makes its manipulation very easy. It seems also very resistant after curing, so i started to make some trials to make mechanical parts with it. This is a door hinge i printed recently for a futur project of UV curing box. The part is printed fast in one fonctionnal piece.



Door hinge printed with the snow white resin on the 1200 projet

Remark:

The possibility to print the resin you want with the parameters you want in any cartridge from 3dsystems may depend on the version of the soft you use. I use an old version of geomagic print. For what i know, the newer version of the software 3DsPrint retriect the possibility to print with parameters different from the indication of the chip on the cartridge in the machine. After some times, the chip of your cartridge will empeach you to use it anymore. This is a way for 3Dsystem to make sure you will still buy from them by obligation rather than because of the quality of their resins.