

Fast Production with Direct Casting!



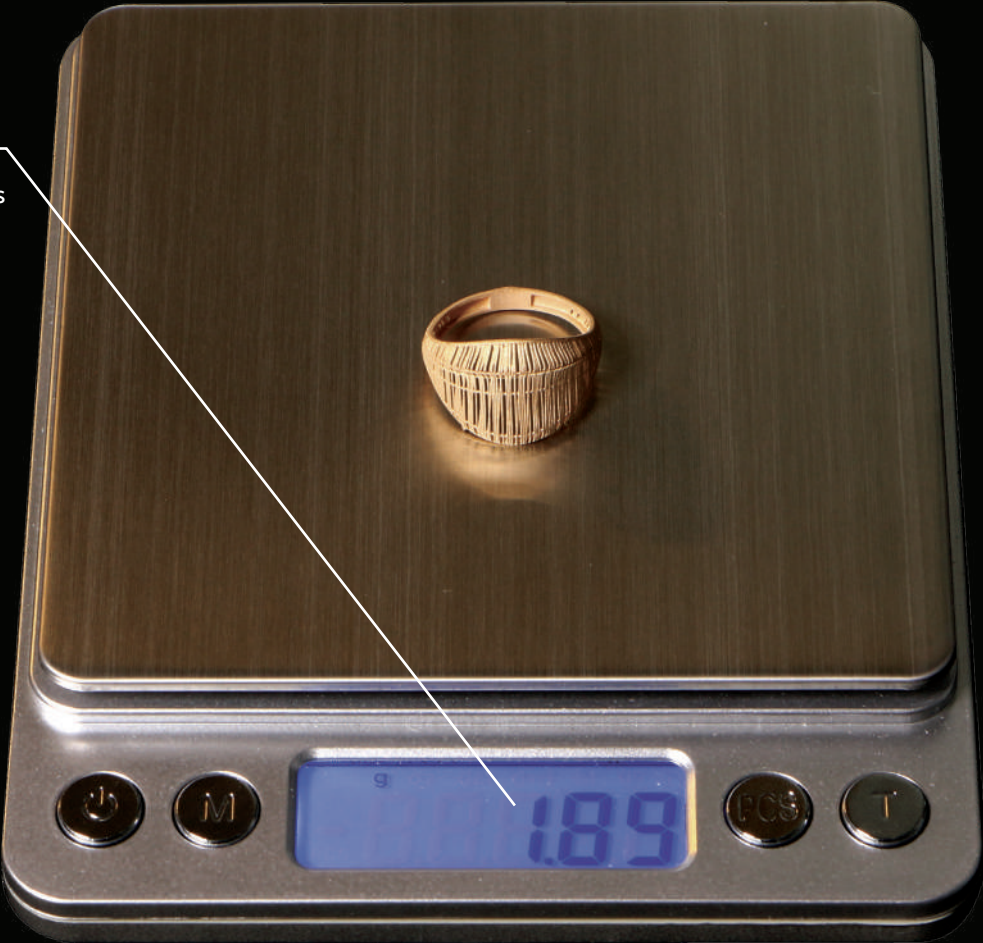
NovaFab 

Light Production

You can manufacture very light jewelry that is not feasible with traditional rubber molds. Design at extreme thin thickness or use light strings of filigree in order to decrease jewelry weights.

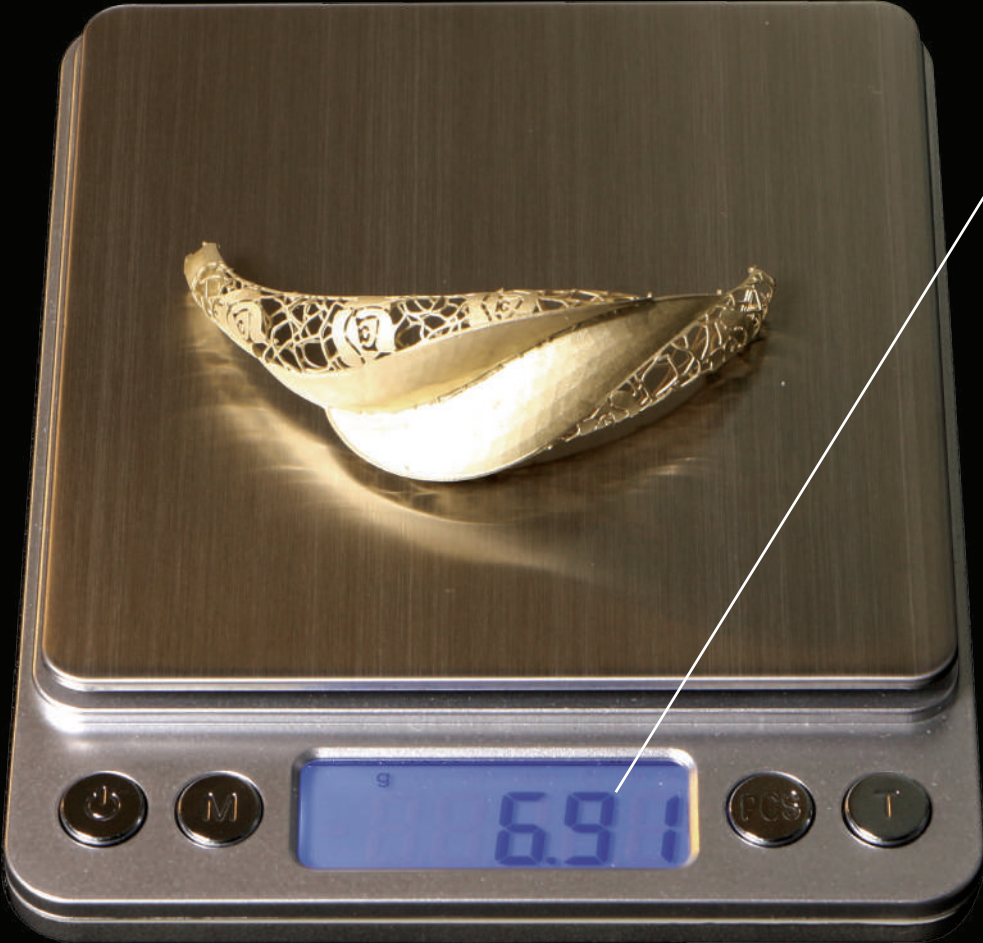
21 K Gold

Produce large 21k gold rings at 3 grams or below.



14 K Gold

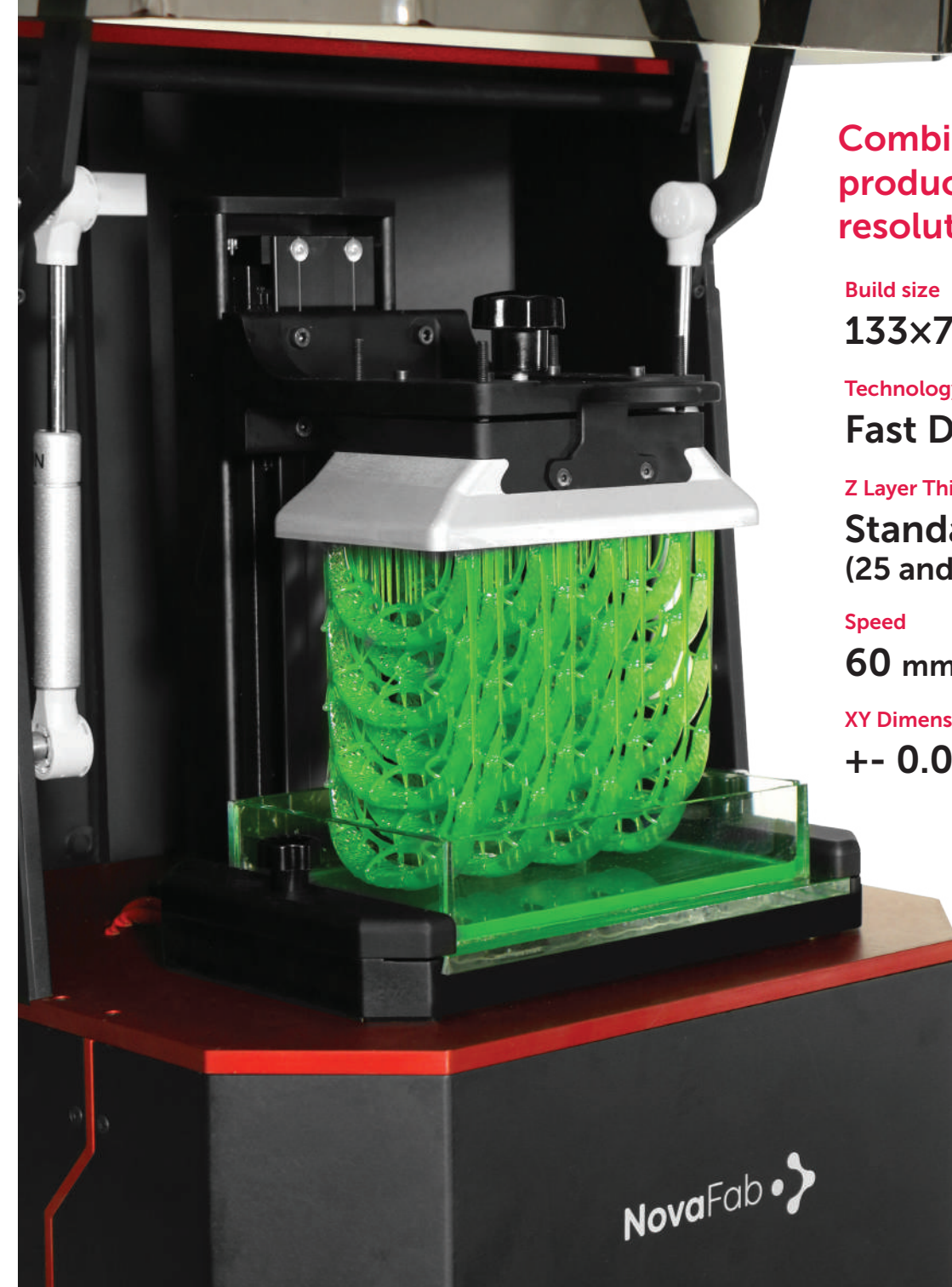
Produce large surface with thickness of 0.2mm and reach finished sets of bangles below 10 gram.



Mega 3D Printer

Mega 3D Printer is a DLP Projector 3D Printer specifically designed for large production of high quality jewelry. It has very fast printing speed, high accuracy and proven long term stability for mass production.

- Extremely fast speed designed for jewelry production
- Large production capacity
- High details and accuracy
- Over 99.9% print success ratio and efficiency
- 1 year manufacturer warranty
- Projector warranty of 20,000 hours of printing
- Perfect stick technology that does not require extra base



Combine very fast production with high resolution and accuracy!

Build size

133x75 mm

Technology

Fast DLP

Z Layer Thickness

**Standard at 50 micron
(25 and 35 micron optional)**

Speed

60 mm/hour at 50 micron

XY Dimensional accuracy

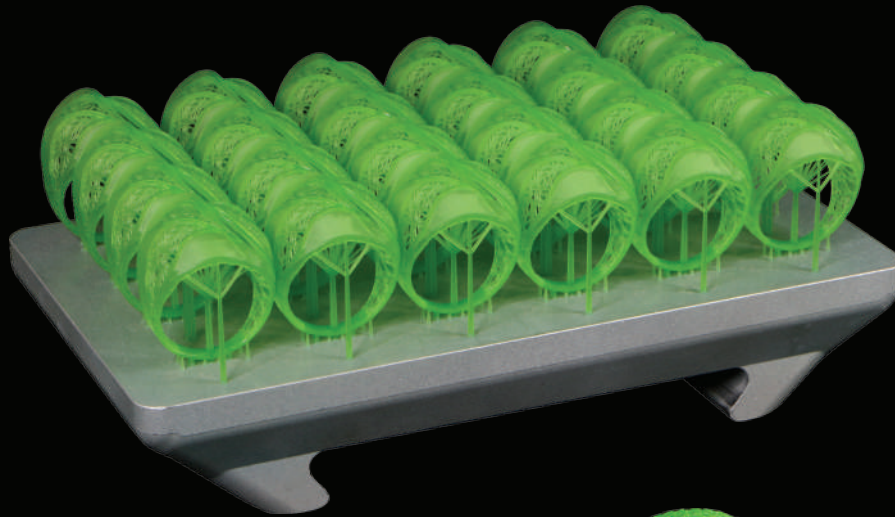
+/- 0.03 mm

Very Fast Production

Print and produce at very high speed! With over 99% reliability and repeatability success rate, NovaFab Mega 3d printer enables you to reach unseen speed of production.

🕒 30 min

- Print a full plate of 24 rings in just 30 minutes.
- Layer thickness of 50 microns.



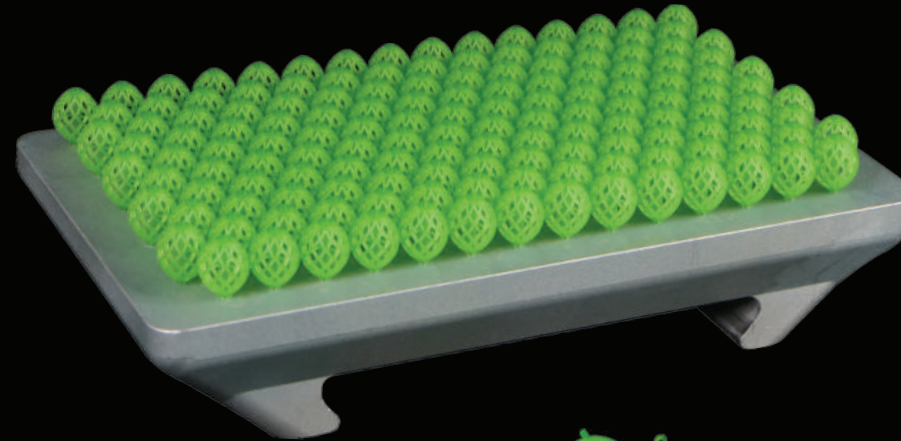
🕒 39 min

- Print 6 bangles at in 39 minutes.
- Layer thickness of 50 microns.



🕒 12 min

- Print 145 balls in only 12 minutes!
- Layer thickness of 50 microns.



🕒 62 min

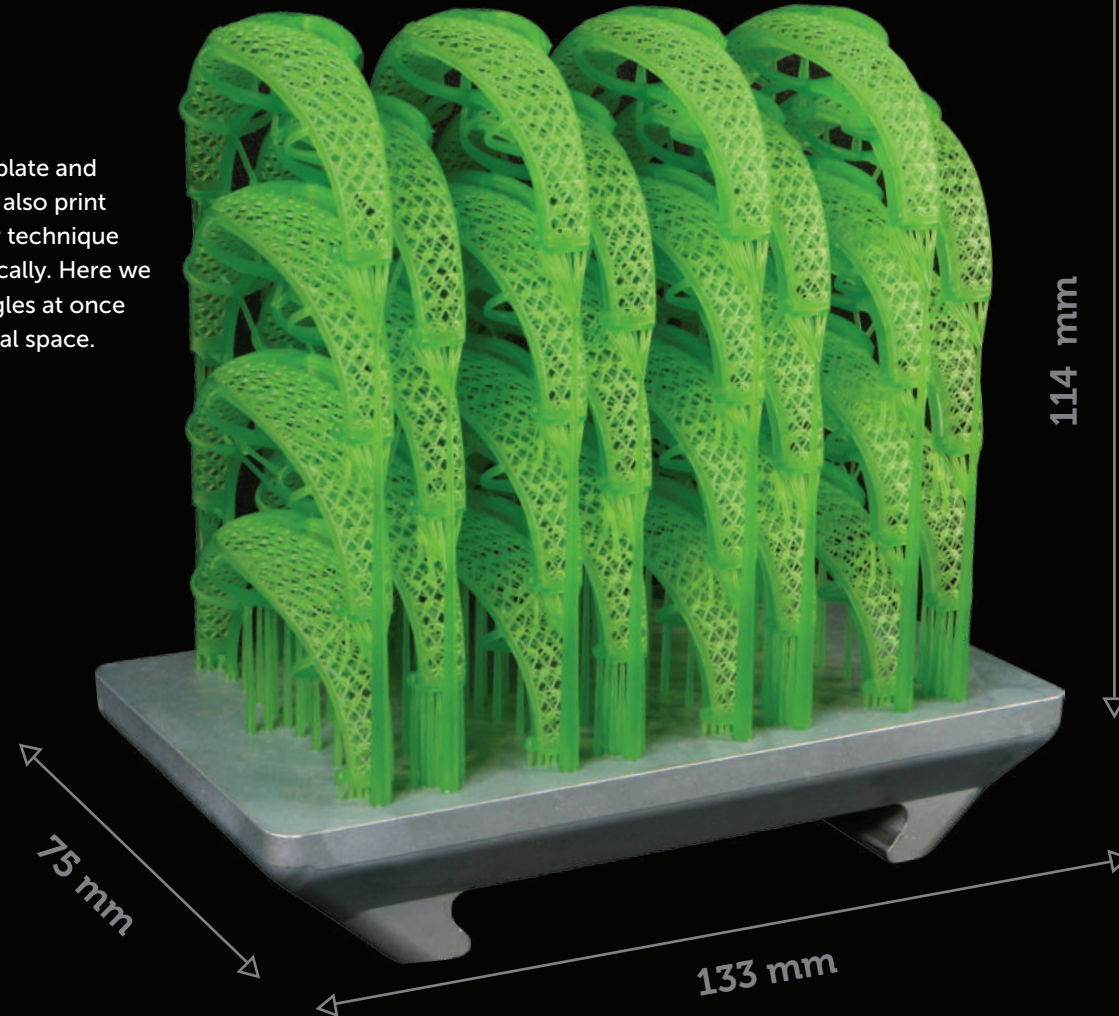
- 24 large parts printed in 62 minutes.
- Layer thickness of 50 microns.



Big Capacity

Our solution provides you with a very big daily production capacity. You can see the production capacity of 1 Mega 3d printer working 10 hours. This gives you an estimate of 21k daily gold production per machine.

With the large build plate and high height, you can also print using the multi-layer technique by adding parts vertically. Here we have printed 28 bangles at once optimizing the vertical space.



Daily Production Capacity

Sample Plate	Qty Print Time	Qty for 10 hours work (Qty / Day / Machine)	Daily Production of 21k Gold per Machine
	24 Rings in 30 Min	480 Pcs	3.6 Kg
	145 Balls in 12 Min	7.250 Pcs	9.8 Kg
	6 Bangles in 39 Min	90 Pcs	1.8 Kg
	28 Bangles in 112 Min	140 Pcs	2.8 Kg

Best Direct Casting Quality

With NovaFab solutions, you can reach outstanding direct casting quality with any type of investment. Our castable resins do not require any post-curing or special treatment for casting. Simply print, wash and cast it to get perfect results!

Raw 14k Gold casting printing with our PowerCast Burn Opaque resin

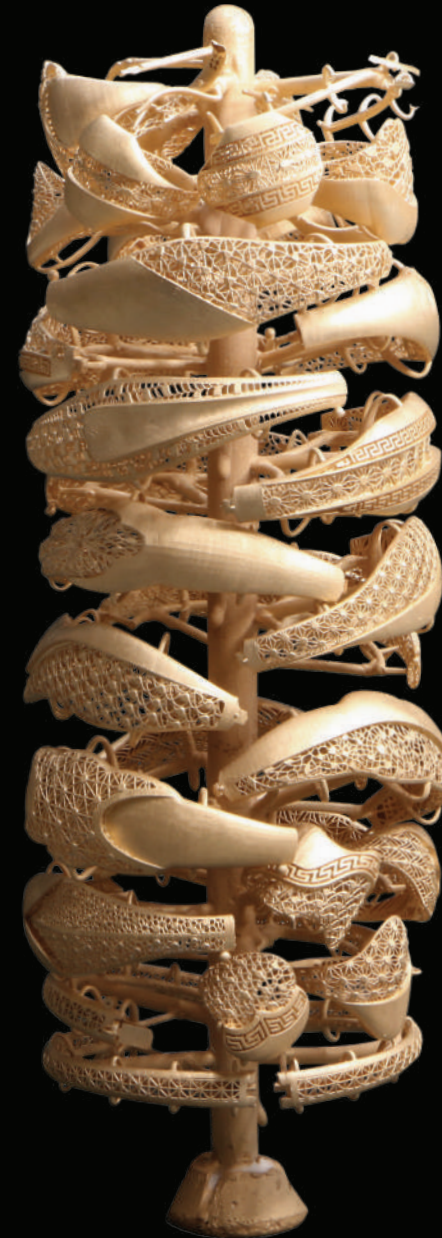
14 K Gold



Silver

14 K Gold

Parts printed in 2 hours and casted 21k Gold



42 rings printed in 1h20 minutes and casted 21k Gold



Direct Casting Examples

All these samples were printed using our PowerCast resin and our Mega 3D Printer. The parts are raw casting with no polishing.



Silver



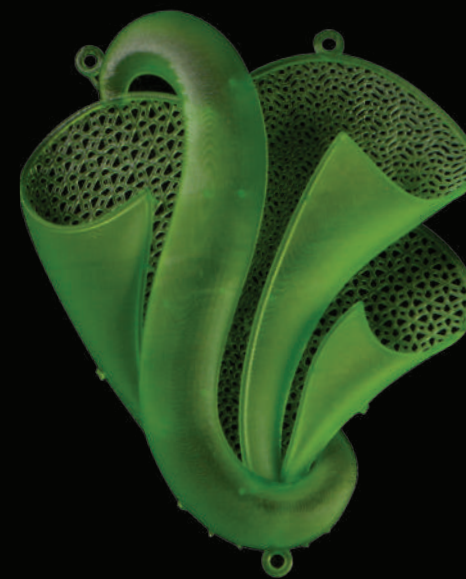
Silver



21 K Gold



21 K Gold



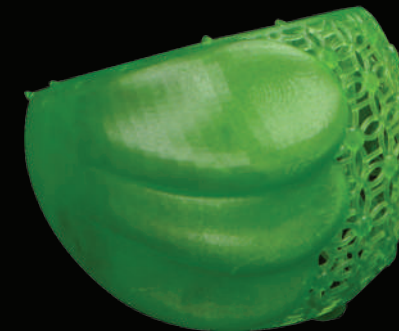
14 K Gold



Silver



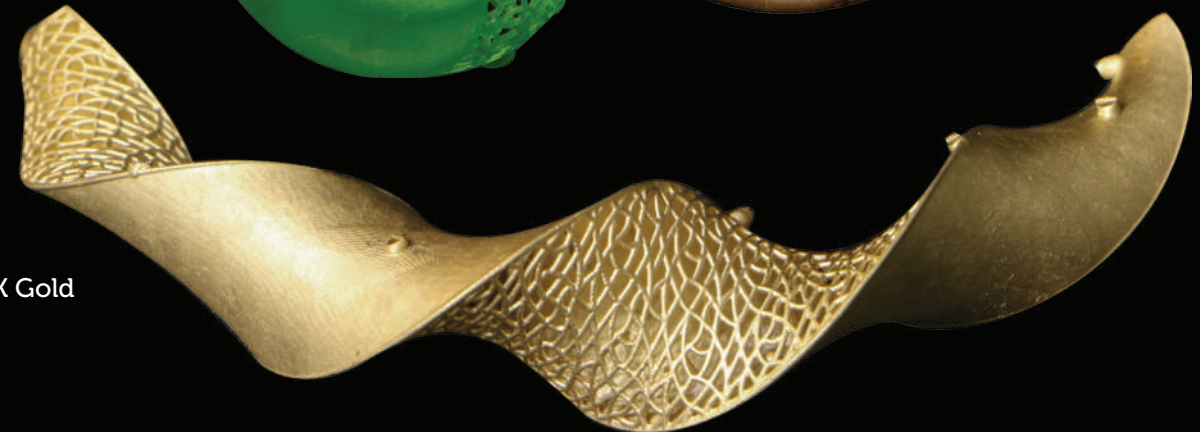
Silver



21 K Gold



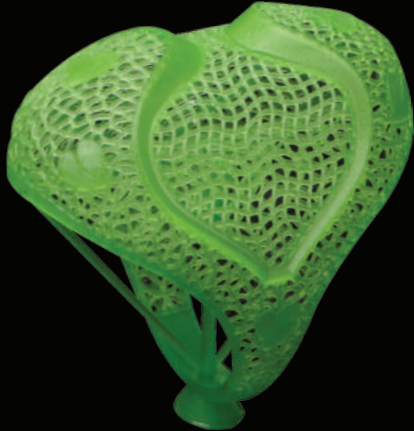
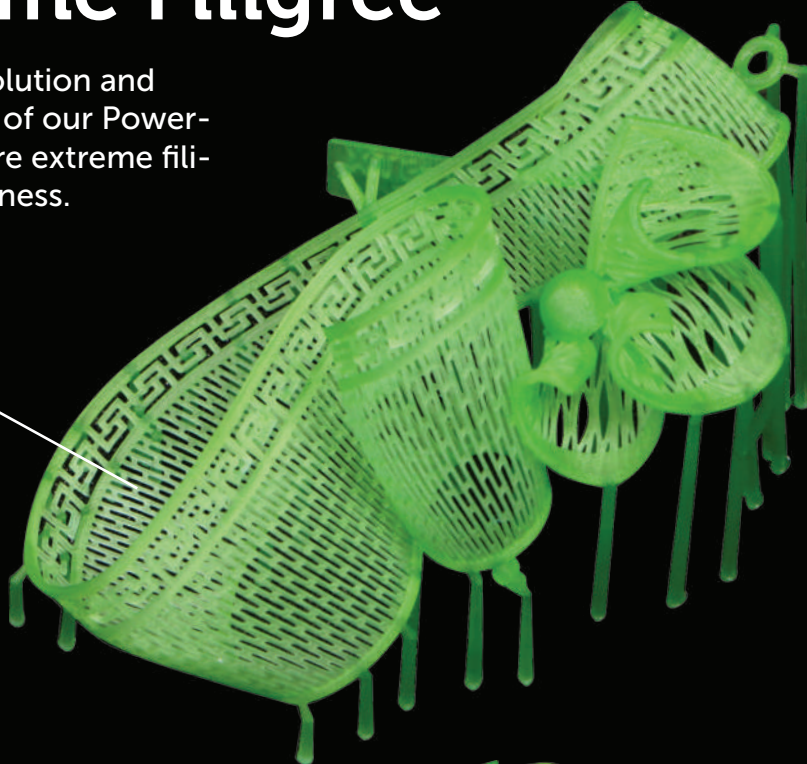
14 K Gold



Produce **Extreme Filigree**

Mega 3D Printer offers very high resolution and thanks to the the physical properties of our Power-Cast resin, you can easily manufacture extreme filigree with strings up to 0.15mm thickness.

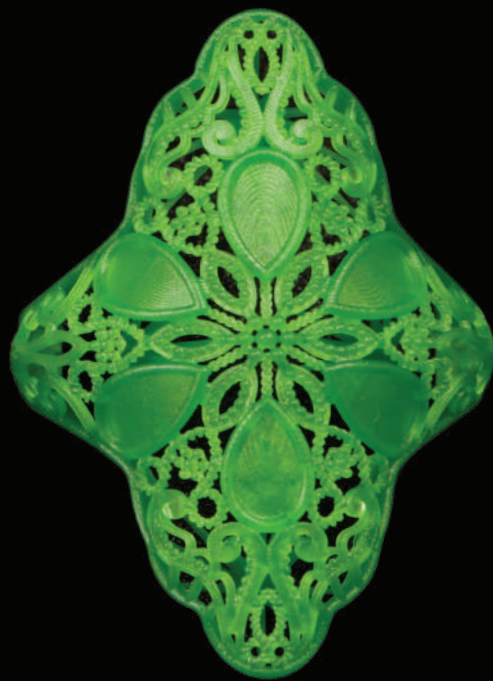
Create extreme filigree designs with strings of 0.15 - 0.25mm range



High Detail & Accuracy

Achieve very high details and accuracy even at 50 microns layers. You can manufacture smooth surfaces as well as highly detailed parts where you would hardly see the layers.

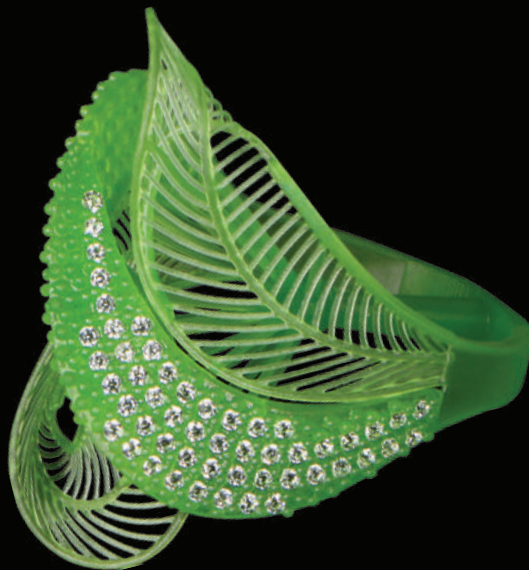
Reach high details and smooth surfaces without visible layers.



Set Stones Directly

With the high quality of print on our Mega 3D Printer, you can easily set stones directly on printed resin parts and cast with stones.

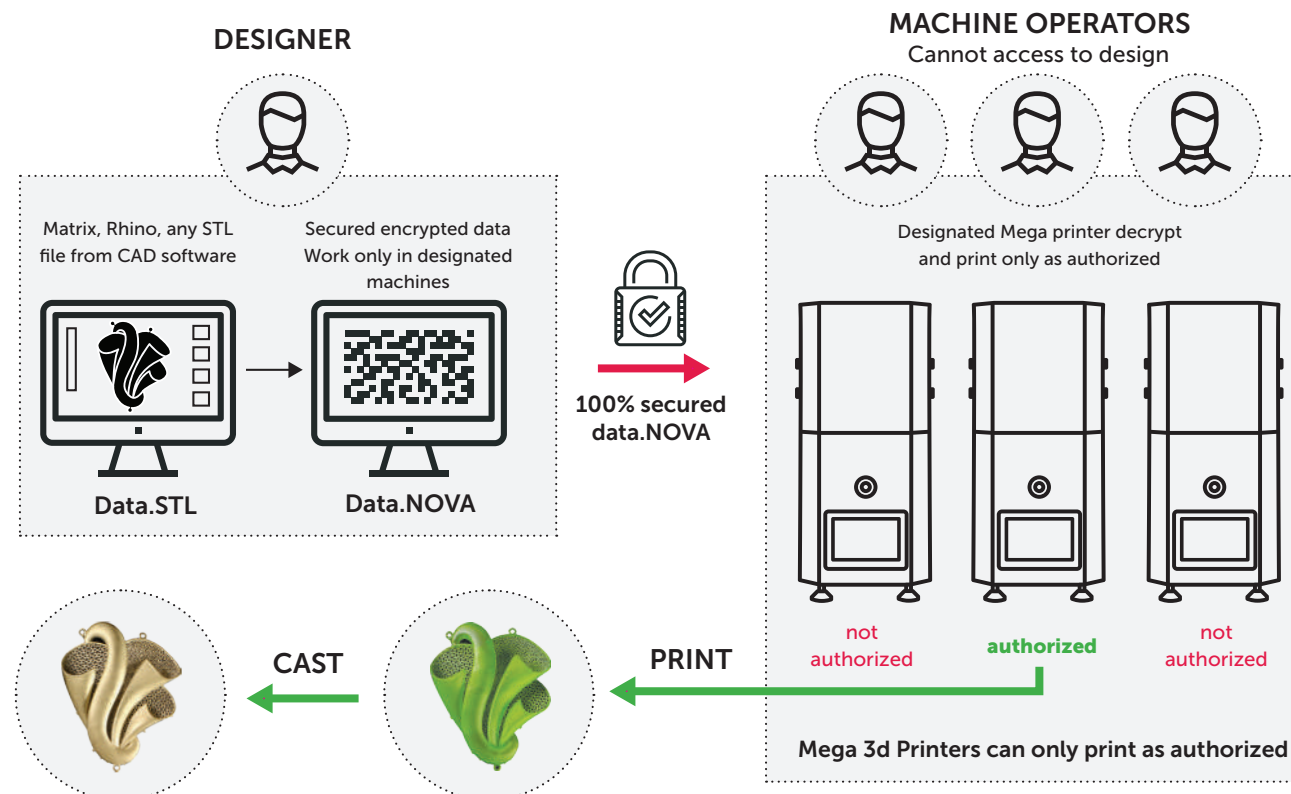
Set stones and micro stones directly using PowerCast resins and cast with the stones.



Nova Platform Secure Cloud

With our Nova Platform security system, you can transfer any file to the Mega 3d printer without having the risk to lose your design.

- 100% secure encrypted NOVA file system technology
- Authorize your machines to print only a certain number of times
- Accept any type of STL or SLC file



Who **We** are?

We are a team of 3D printer and material experts developing solutions for jewellery manufacturers.

In current competitive global markets, we understand jewellers' needs:

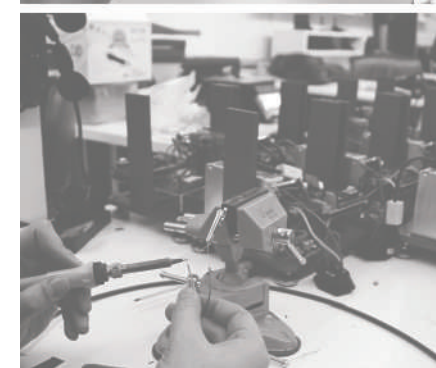
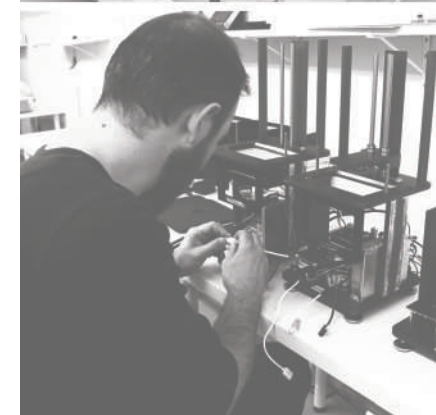
- Need for a trustable production system that ensures continuity and consistency in time.
- Need for high quality production at low cost in order to remain competitive.
- Always produce new designs and products in order to increase sales and follow trends.

As we understand these requirements of time, quality and cost we focus on providing you an end-to-end scalable production solution that lets jewelry manufacturers to focus on new designs and markets.

Our resin and 3D technology R&D team is focusing specifically on the Jewelry production. We develop new solutions by gathering feedbacks from Europe, Turkish, Middle-East and Eastern jewelry markets.

We continuously improve our products and services quality to make sure one thing that is:

We help you produce better, faster and easier!



100% ash-free Castable Resin PowerCast Burn Opaque



PowerCast Burn Opaque is a special 100% ash-free castable resin that is formulated for DLP 3d printers in order to get perfect printing and direct casting quality in jewelry manufacturing. It provides perfect detail and surface quality in printing and casting.

- Perfect surface and print quality for DLP 3d printers
- **100% ash-free burnout** for direct casting of jewelry. You may easily cast 21k, 18k, 14k gold or silver
- Can be used for any type of jewelry including engraving, smooth surface, high details or filigree jewelry.
- **No need for post-curing:** Only wash with ethyl alcohol and dry with air then it is ready for casting.
- **Use of standard burnout cycle, no need for special treatment**
- Not smelly or dangerous for health

Other Resins for Jewelry Manufacturing

We manufacture high quality resins for jewelry production that are compatible with different 3D Printers. Our various resins are compatible with LCD, SLA and DLP 3d printers.



Custom made OEM Resins for 3D Printer manufacturers

Aside from our PowerResins products, we also manufacture custom made resins (specific colours or applications) for industry professionals and other SLA or DLP 3d printer manufacturers. Our resins are available under OEM contracts and can be manufactured under custom labels.

Headquarter / R&D Center

Ihlamurkuyu Mah. Çanakkale Cad.
Eren Plaza No: 5 Kat: 4 Ümraniye
İstanbul, Turkey
Phone: +90 216 612 00 94 – 95
info@3bfab.com



Dubai Office

Unit 705, Jumeirah Bay X3, PO: 393915
Jumeirah Lake Towers
Dubai, United Arab Emirates
Phone: +971 4 244 31 35
Phone: +971 52 684 86 64
contact@3bfab.com

Kuyumcukent Office

Yenibosna Merkez mah. Ladin sokak.
Kuyumcukent Atolye Blogu 1. Kat
1.sokak No:8 Kuyumcukent, Yenibosna
İstanbul, Turkey
Phone: +90 533 652 28 59
Phone: +90 538 441 62 04
kuyum@3bfab.com