

# B9Creations

*Digital Manufacturing Technology*

## Product Guide

# B9Creations Introduction

Solutions designed to make your business **more efficient and profitable than ever before.**



B9Creations' additive manufacturing solutions are engineered to give users fast, dependable, and easy-to-use technology that delivers unrivaled print resolution and value. Whether it's custom design or large-scale manufacturing, lean on B9Creations' additive manufacturing solutions and know you've got the best value in the industry.

## Cutting-Edge Technology & Timeless Value

B9Creations lives out this commitment by keeping operating costs low, not requiring maintenance contracts, and including world-class factory startup assistance with every B9 Core Series sold.

## End-to-End Additive Manufacturing Solution

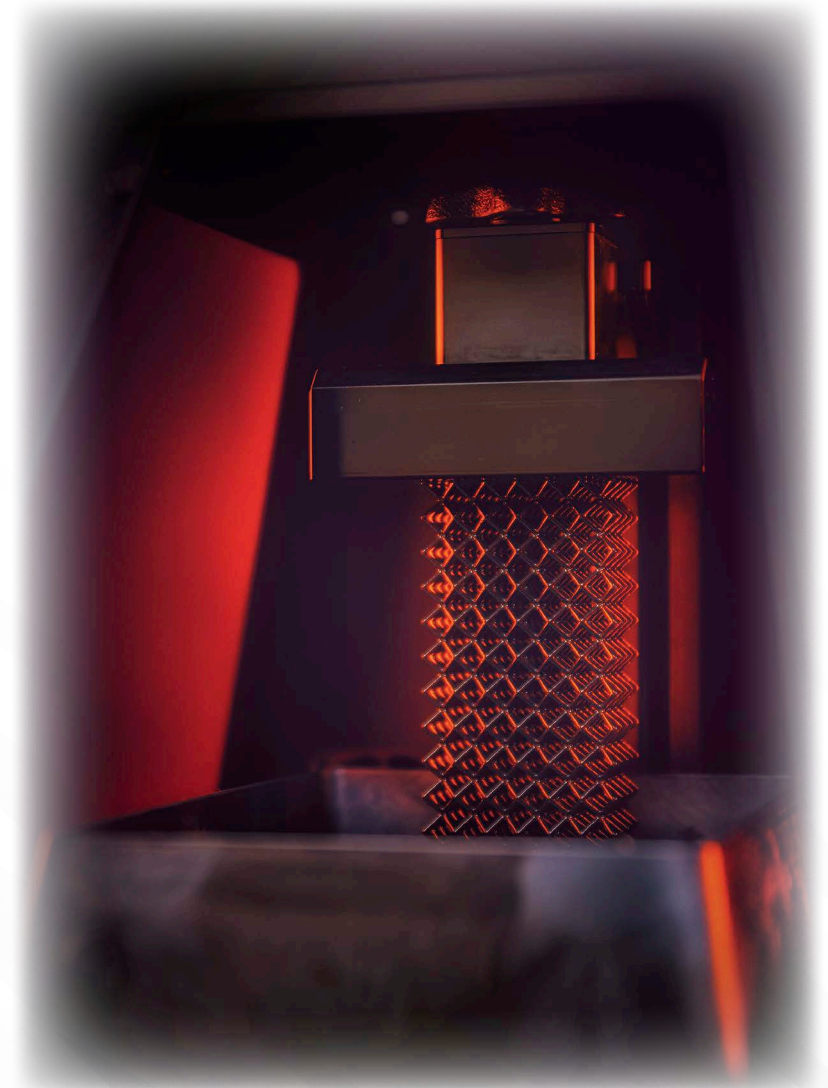
B9Creations offers top-of-the-line 3D printers, accessories, materials, software, and customizable options. Our professional additive manufacturing solutions are setting a new industry standard for repeatability, dependability, and ease-of-use.

## Industry-leading Customer Support

Our customers receive technical assistance from trained and experienced service technicians who are prepared to respond quickly to your service requests, free of charge.

“To stay competitive, you’ve got to have technology that enables you to move faster, reduce costs, and serve your customers better. That’s really our focus – serving our customers as an innovation engine, bringing them easy-to-use technology at a great price point, with a customer experience that enables their business to grow.”

**Shon Anderson**  
B9Creations CEO



# B9Creations Overview

Making additive manufacturing solutions **work for you.**



## Quick Setup

Out of the box and printing in 15 minutes with 5 button pushes. Each B9 Core Series 3D printer will come with everything you need to immediately start printing, including our world-class Factory Startup Assistance.



## Unmatched Precision

Leveraging B9Creations' patented & patent-pending technology, the B9 Core Series delivers precision engineering and surface finish to set a new standard whether you're producing one part or thousands.



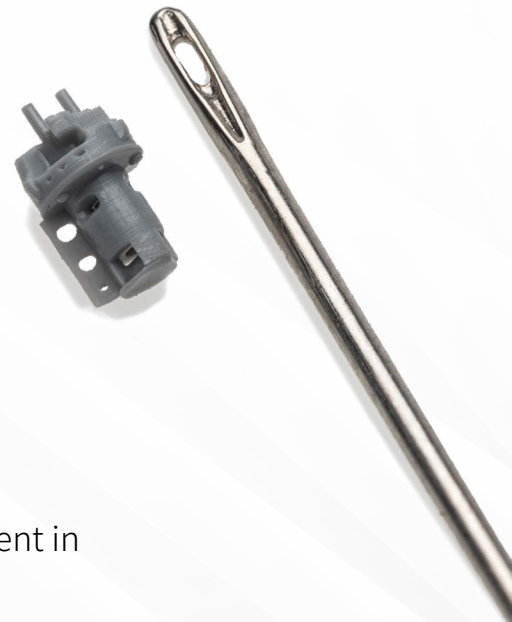
## High-Speed

The exceptional speed of the B9 Core Series allows users to print hundreds of models in a typical 8-10 hour workday. Now you can design, print, and finish your product in the same day.



## Profitable

With the B9 Core Series 3D printer, you can see a return on your investment in just 12-18 months, or less. We also have financing options available.



# B9Creations Technical Performance

Additive Manufacturing Solutions that **make sense for your business.**



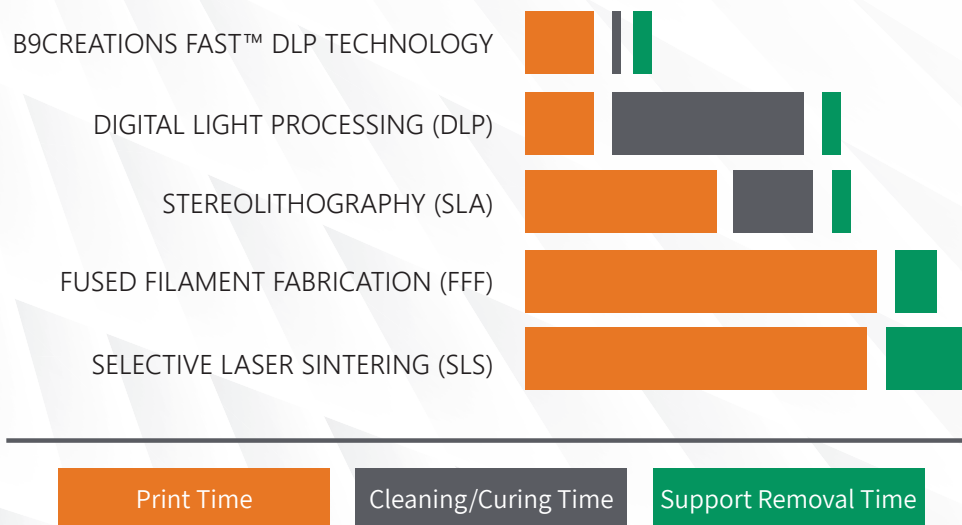
**When you're considering investing in a 3D printer, it comes down to one question:**

**Does it make financial sense for your business?**

If you're looking to accelerate design cycles, lower production costs, create a more resilient supply chain, or gain flexibility throughout your product's life-cycle, B9Creations FAST™ DLP technology offers rapid, reliable, high-resolution 3D printing – with low operating costs and no maintenance, calibrations, or service contracts required.

Unlike low-resolution FFF or costly SLS printers, DLP technology offers high fidelity to your CAD files with a quick return on investment – and better resolution, higher accuracy, and faster speeds than SLA printers. B9Creations DLP technology is differentiated even within its own field. Unlike other DLP platforms that offer fast print times but painfully slow post-processing, B9Creations' workflow includes automated post-processing that cleans and cures models in minutes. Powered by FAST™ technology, users gain production-grade parts, pinpoint accuracy and precision, and a flawless finish on all B9Creations 3D printers.

## 3D PRINTING PRINT PROCESSING TIME COMPARISON





# B9Creations FAST™

Engineered to bring you unmatched **precision at unbeatable speeds.**



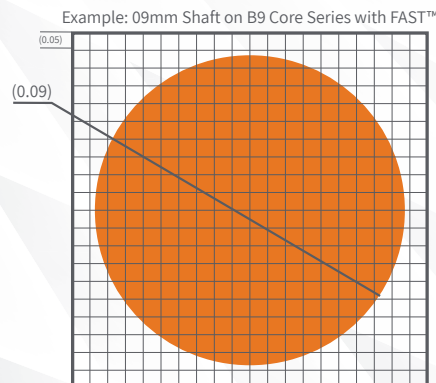
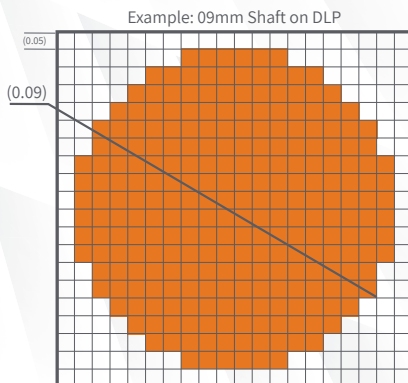
## Resolution, Accuracy, Precision, and Finish

Just because a 3D printer claims high resolution in its technical specifications doesn't mean your parts will be accurate or precise. Low-quality components, calibration requirements, material properties, and post-curing can all affect accuracy (how close your 3D printed part is to your CAD file) and precision (how consistently your printer delivers the expected output). Plus, historically if you wanted a printer with great surface finish, the accuracy of your part would suffer because smoothing the edges of your print comes at a cost to dimensional accuracy.

## Patent-pending FAST™ Technology

With FAST™ users no longer have to choose between precision and surface finish – and in fact, get to upgrade. You benefit from an even better surface finish and pinpoint accuracy with absolute fidelity to your CAD model. This means you get perfectly sized prongs and holes, seamless-fit settings and snap-fits, and even the finest filigree or feature set comes out flawlessly every time – all with a smooth finish that cuts down on post-processing.

FAST™ enables customers of even our larger-format printers to benefit from a smooth finish and unbeatable accuracy. With FAST™, the B9 Core 5 Series XL still delivers effective resolution finer than 25 microns, even though its print volume is 5 times larger than the Core 530 and 2 times larger than the Core 550.



Accurate & Precise  
(B9Creations 3D Printers)

- High fidelity to CAD model
- Consistent, reliable output
- High-resolution
- Smooth Finish



Not Accurate & Precise

- Low fidelity to CAD model
- Consistent, but inaccurate



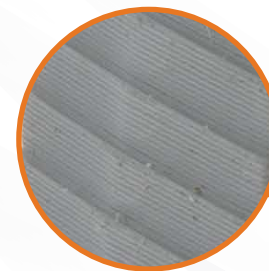
Accurate & Not Precise

- High fidelity to CAD model
- Inconsistent, unreliable performance

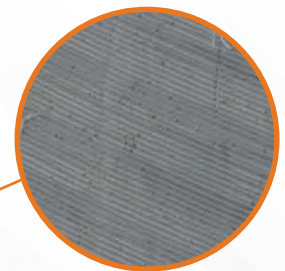


Not Accurate & Not Precise

- Low fidelity to CAD model
- Inconsistent, unreliable performance



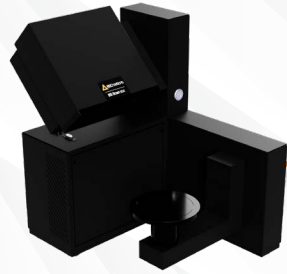
Traditional DLP  
Surface Finish



B9Creations FAST™  
Surface Finish

# B9Creations Workflow

Print your product in six steps with **B9Creations**.

**Scan**

B9 Scan 500

**Prepare**

B9Create &amp; B9Captive

**Customize**

B9Creations Resin Suite

**Create**

B9 Core Series

**Clean**

B9Clean

**Cure**

B9 Model Cure

# B9 Core 5 Series






B9 Core 530 | B9 Core 550 | B9 Core 5 Series XL



The 3D printer leading in **speed, simplicity, and value.**



Available in three configurations, the B9 Core Series is a professional 3D printing solution designed to suit a multitude of applications including jewelry, rapid prototyping, manufacturing, industrial design and engineering, and more. The B9 Core Series 3D printers print at exceptional speeds without sacrificing print resolution or surface quality.

	B9 Core 530	B9 Core 550	B9 Core 5 Series XL 405 or 385
 Max Print Dimensions	57.6 x 32.4 x 127 mm	96 x 54 x 127 mm	124.8 x 70.2 x 127 mm
 Wavelength	405 nm	405 nm	385 or 405 nm
 Print Speeds	40-120+ mm/hr	25-100+ mm/hr	15-85+ mm/hr
 Effective Resolution with FAST™	<15µm	<25µm	<25µm
 Machine Dimensions	267 x 420 x 593 mm		

## Features

- 4x faster than industry average
- Plug-and-play operation
- Resin vats lasting over 1,250 prints
- Wide selection of resins
- Open to third-party materials
- 0 calibrations
- Out of the box and printing in 15 min
- Prints reaching 120+ mm per hour

**Core 530**  
57.6 x 32.4 mm

**Core 550**  
96 x 54 mm

**Core 5 Series XL 385, 405**  
124.8 x 70.2 mm

**Build Size**  
X-Y Resolution

# B9 Core Med Series






B9 Core Med 550 | B9 Core 5 Series Med XL



Helping you deliver the **best possible patient outcomes.**



Designed and engineered to be a class of one in the healthcare industry, the B9 Core Med Series paired with our suite of 10993 biocompatible and engineering-grade resins integrates medical-grade additive manufacturing into the design, production, and use of medical devices, anatomical modeling, surgical tools, and more. This medical upgrade to our award-winning B9 Core Series 3D printer line is built in world-class manufacturing facilities in the USA, boasting IEC 60601-1 and IEC 60601-1-2 medical equipment compliance.

	Core Med 550	Core 5 Series Med XL 405	Core 5 Series Med XL 385
 Print Dimensions	96 x 54 x 127 mm	124.8 x 70.2 x 127 mm	124.8 x 70.2 x 127 mm
 Wavelength	405 nm	405 nm	385 nm
 Print Speeds	15-120+ mm/hr	15-85+ mm/hr	15-85+ mm/hr
 Effective Resolution with FAST™	<25 µm	<25µm	<25µm
 Machine Dimensions	267 x 420 x 593 mm (10.5 x 16.5 x 23.5")		

## Features

- Out of the box and printing in 15 minutes with factory startup assistance included and never requires calibration
- 4x faster than industry average
- IEC 60601-1 and IEC 60601-1-2 medical equipment compliant
- Approved for prolonged skin duration of up to 30 days, ISO 10993 biocompatible, engineering-grade, and castable materials
- Intelligent print preparation, management, and monitoring software

Core Med 550  
96 x 54 mm

Core 5 Series Med XL 385, 405  
124.8 x 70.2 mm

**Build Size**  
X-Y Resolution



# B9 Elite Series

B9 Elite Micro






Advanced Micro 3D Printer Performance **at 1/4 the price.**

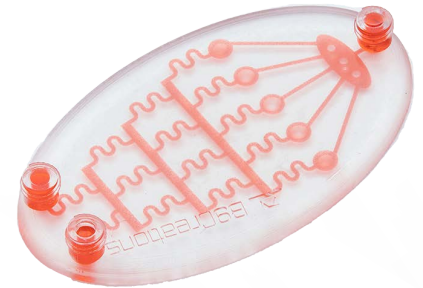


B9Creations' Elite Micro enables users to 3D print geometries that would be impossible to create any other way – redefining additive's place in the manufacturing ecosystem and fueling a new revolution spanning several medical and industrial applications.

The Elite Micro brings 3D printing to the forefront of modernization. With ultra-high resolution, accuracy, precision, and repeatability, the first platform of this hardware series offers native pixel size of 20 microns with wall thicknesses down to 30 microns and holes down to 100 microns, delivering even the most challenging micro parts at production quality – for one-fourth the cost of high-end micro 3D printers.

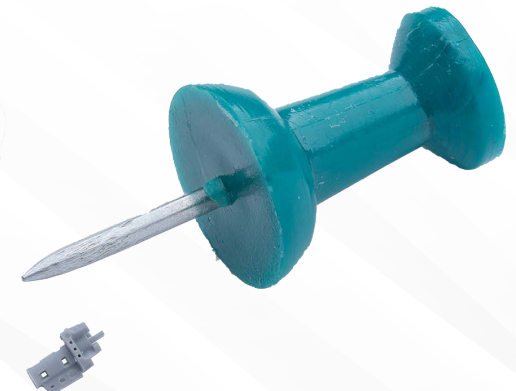


 Print Dimensions	38.4 x 21.6 x 127 mm
 Wavelength	385 nm
 Print Speeds	1-7+ mm/hr
 Effective Resolution with FAST™	<20 µm native pixel size XY, 10-20 µm Z
 Machine Dimensions	267 x 420 x 593 mm (10.5 x 16.5 x 23.5")



## Feature Size by Material

Feature Size	HD Slate (High-detail Design)	HD Clear (Acrylic-like)	Robust ABS/PC (Engineering Material)
Wall Thickness	40 µm wall	30 µm wall	80 µm wall
Self-Sup. Overhangs	50 degrees	75 degrees	55 degrees
Vertical (Z) Holes	150 µm	175 µm	100 µm
Horizontal (XY) Holes	200 µm	350 µm	300 µm








38.4 x 21.6 mm  
**Build Size**  
X-Y Resolution

# B9 Core 5 Ascent Series

The 3D printer leading in **speed, simplicity, and value.**



Take your creations to new heights with the B9 Core 5 Series Ascent XL. With a 12.5-inch Z-height, this platform is ideal for producing taller parts in medical, aerospace, and other applications where precision is paramount. Boasting a powerful 385 nm light engine, the Ascent XL enables you to print with clear or other specialty materials—while delivering both the design space and accuracy required for your projects.

 Print Dimensions	124.8 x 70.2 x 320 mm
 Wavelength	385 nm
 Print Speeds	15-85+ mm/hr
 Resolution	<25µm
 Software	FAST™ Technology Powered by B9Create

## Features

- 4x faster than industry average
- Plug-and-play operation
- Wide selection of resins
- Open to third-party materials
- 0 calibrations
- Out of the box and printing in 15 min

# B9Creations Software

**Additive manufacturing solutions** that power your business and change our world.



## B9Create

Our next-generation software will optimize your print processes like never before — with better surface finish, accuracy, and painless post-processing. Leverage our Workflow Mode for seamless layout and supporting or drop into Design Model to adjust a breath of parameters to fine-tune results.

### Special Features

- Equipped with FAST™ technology
- Advanced supports and foundations, including mirroring supports and reinforcement bars
- Auto support templates
- Slices in minutes
- Highlighted unsupported area indicator
- Expanded import file format capabilities
- Robust print analytics and material print usage estimates
- Sectioning tool
- Build your own part library

### COMING SOON

#### Dark Site Capabilities for B9Create & B9Captivate

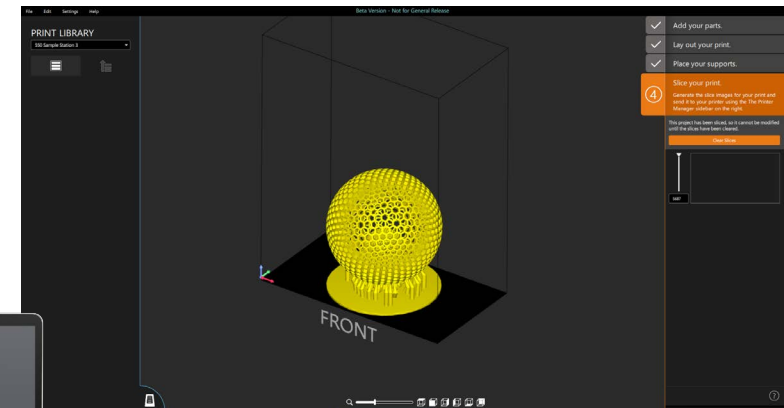
In addition to the standard Open Network licensing option, two new ways to license will be added: Limited Network and Private Network.

**Open Network Licensing:** Will require an internet connection, however, can be used for up to a week offline.

**\*Limited Network Licensing:** Computers never need an internet connection, and instead, can annually transfer a license file to the offline computer.

**\*Private Network Licensing:** A local licensing server runs on the user's private network. The software connects to the local server and never needs an internet connection.

\*Available with paid custom upgrade



## B9Captivate

### Material Development Software

A material development toolkit that helps you optimize for the chemistry of your custom materials and the geometry of your part — so you can develop settings perfectly engineered for your application.

### Basic

Free and included in your B9Create software. It allows you to modify slice thickness and exposure.

### Professional

Includes Basic settings plus mechanical cycle settings, version control and optimization.

### Enterprise

Includes Professional settings, plus dimensional fine tuning, third-party distribution, and material development support.



# B9Creations Accessories

Take the work out of your **workflow.**



## B9 Clean XL

Automate your post-processing with thorough, no-mess cleaning. Parts can be transferred directly from B9 Core Series 3D printers to the B9Clean while still on the build platform or as loose models on the part tray.

### 0 Touch Points

Before your part is printed, clean, and dry

### 1.3 Liters

IPA volume for wash bucket  
Uses 75% less cleaning solution than other wash units  
Can hold up to 2 liters for larger parts

### 10 Minutes

Approximate clean time with fresh isopropyl alcohol (IPA)

### 50 Uses

Amount of uses per IPA refill in regular use



## B9 Scan 500

Designed specifically for scanning jewelry and small objects, the B9 Scan 500 can precisely capture each detail, cut, or facet of your most intricate designs in minutes.

### Scan

Small objects in under 5 minutes

### Capture

Perfect replica of objects

### Design

Complementary pieces



## B9 Model Cure XL

Deliver a better cure penetration in minutes with our high-powered, customizable, user-friendly B9 Model Cure XL

### Customizable

Adjust the intensity of your wavelength from 375-405 nm, duty cycle, and time of your cure with the push of a button

### Digital Timer

Digital timer displays from 5 seconds to 30:00 maximum

Chamber Dimensions	140 x 140 x 83 mm
Ideal for Printers	B9 Core 5 Series: XL & Med XL



## B9 Model Cure

With a powerful design that reduces curing time, the B9 Model Cure boasts memory settings for fast, repeatable workflow.

### Memory Settings

3 memory settings allow for repeatable workflow

### Digital Timer

Digital timer displays from 10 seconds to 9:50 maximum

Chamber Dimensions	127 x 170 x 70 mm
Ideal for Printers	B9 Core 5 Series: 530, 550 & Med 500





# Engineering Materials

**Bring your ideas** to life with our industrial-grade engineering materials.



Optimize your manufacturing process with our engineering materials, iterating designs more quickly, assessing form and fit, and bringing better products to market - all while increasing efficiency and adding more profit to your bottom line. Perfect for rapid prototyping and end-use applications, our engineering materials that can withstand the manufacturing environment.

## Engineering Materials



**RUGGED - NYLON 6**  
Impact Resistant



**ROBUST - ABS/PC**  
High Flexural Modulus



**ROBUST - ABS**  
Rigid and Durable



**ESD - RIGID**  
Static-Dissipative



**RESILIENT - SILICONE**  
Elastomeric

# Design Materials

**Bring your ideas** to life with our design materials.



Our suite of design materials are ideal for high-resolution rapid prototyping and design verification. With smooth surface finish, dimensional accuracy, and precise detail, these resins produce excellent prototypes for iterative product design for and make a great base for parts that will be primed or painted.

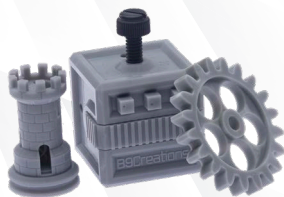
## Design Materials



**HD SLATE**  
Micro-scale Parts



**HD CLEAR**  
High-detail Acrylic-like



**GRAY**  
High-speed Prototyping



**BLACK**  
Vulcanized Mold Making



# Casting & Jewelry Mold-making Materials



**Bring your ideas** to life with our jewelry materials.

Our castable resins print in incredible detail, with a jeweler-approved burnout schedule that produces flawless results in silver, gold, platinum, and more. Coupled with our high-speed Gray resin for showing customers their rings to enable same-day sales and Resilient-Silicone resin for mold making.



**EMERALD RESIN**  
Clean Burnout



**RESILIENT - SILICONE**  
Mold-making



**FASTWAX RESIN**  
Easy-to-cast



**YELLOW RESIN**  
Premium Casting Resin

**Jewelry Materials**

Resins are optimized for specific B9Creations 3D printers. Please contact us for compatibility information.

# Biocompatible Materials

**Bring your ideas** to life with our biocompatible materials.



Ideal for medical manufacturing, clinical, and consumer tech environments, BioRes is ISO 10993 biocompatible for prolonged skin contact of up to 30 days. Durable, impact resistant, and polishable, this material is ideal for rapid prototyping of medical devices to production runs of thousands, surgical tools, anatomical models, medical research, and wearable technology.



## Biocompatible Materials



**BIORES MICRO PRECISION**  
Microscale Parts



**BIORES - SILICONE**  
Elastomeric



**BIORES WHITE**  
Smooth Surface, Polishable



**BIORES RED**  
Translucent, Polishable



# B9Creations Service Bureau

**Bring your ideas** to life with on-demand prints.

To help you explore the integration of additive technology into your business, B9Creations offers on-demand 3D printing services, from design validation to prototype parts, jigs & fixtures, and production runs of thousands of parts.



Why go with B9Creations Service Bureau?

Simply put – because we recognize and appreciate the uniqueness of our customers' projects. We don't just follow a set-in-stone framework and tick boxes along the way. Instead, we explore every aspect of your project to build a one-off process around its specifications.

The process of utilizing a 3D printing service bureau typically involves sending in a CAD file, selecting some parameters, receiving a quote, and then paying for your parts before they're shipped to you. B9Creations strives to reach beyond the conventional process – enhancing your experience by personalizing the entire route you'll take. We'll qualify and delve into your project, assess your unique needs, and take you along on the journey to help you understand the full potential of additive manufacturing for your application.

Schedule a meeting with one of our experts today to see if additive manufacturing as a service bureau, is right for you. Whether it's a series of one-off prints or medium-level full production, our team will do whatever it takes to help you succeed in your business endeavors.



# B9Creations Testimonials

Technology designed to **exceed expectations.**



At B9Creations, we value your 3D printing experience — commitment to customer satisfaction is the language of the company's culture. By taking feedback from our customers and transforming it into our patented technology, we bring you 3D printing solutions designed to exceed expectations.



"I could sing this machine's praises all day. That's the honest truth. I would not have been able to do half the things I do without it. I would never be able to get that detail into hand-carving a piece. I casted a pair of earrings and one did not come out. I was able to grow another in 12 minutes. It was so fast! I re-casted it, and it was perfect."

**Megan Proctor**  
Hubbell Jewelry Design



"When the B9 Core Series came out, it was an unbelievable relief. In the first year, I did 35 exhibitions, turned down 20 more, and did a number a TV-related jobs along with wholesale orders, some 3,000 figures or more. With the B9 Core Series, I can get them out incredibly fast, especially with the high-speed Gray Resin."

**Alan Butler**  
Modelu 3D



"As a medical device engineer, I have shown parts from B9Creations, Carbon, and HP Multi-Jet Fusion to engineers, and they can't correctly identify the printer used. This shows that B9Creations additive manufacturing system is really good. Plus, your 3D printed parts are sharper, higher resolution & higher quality than my injection-molded parts."

**Medical Device Engineer**  
Large Medical Manufacturer

**In good company**

**ADA**  
American Dental Association\*



**APMM**  
ASSOCIATION OF  
PROFESSIONAL MODEL MAKERS

**Johnson & Johnson**

**B | BRAUN**

**nssc**  
NASA Shared Services Center  
nex gen



**P&G**

**3M**

**Medtronic**

**MADE  
IN SPACE**



# B9Creations Support

At B9Creations, we value your **3D printing experience.**



Our customers receive technical assistance from trained and experienced service technicians who are prepared to respond quickly to your service requests, free of charge. Through the B9Creations Support Portal you can access software downloads, support documents, instructional videos, FAQs, and more just by signing up.

## Talk to a human — never a machine.

### World-class Factory Startup Assistance

We'll show you how easy it is to get up and running with the B9 Core Series. In your startup training, you'll learn about importing files, orienting and supporting models, DuraVat care, cleaning procedures, and much more!

### Unrivaled Customer Support

At B9Creations, we value your 3D printing experience. If your machine ever needs to be serviced by our technicians, we know that you don't want to be stuck waiting while your production is halted. So, as soon as you send your printer in, we'll send a temporary replacement your way!

### On-Demand, Customer-Specific Training

If you're having trouble with a certain aspect of your 3D printing workflow, we're here to help! B9Creations offers free, personalized training sessions, held by service technicians who are ready to help with whatever, whenever!

B9Creations is available Monday - Friday from 8 am - 5 pm MST.

Feel free to contact us at +1 (605) 787-0771

# B9Creations Core Values

Not all technology companies are **created equal**.



## Customer-Driven Solutions

To develop solutions that solve real problems, we incorporate customers into every step of product development, translating their needs into innovative technology.



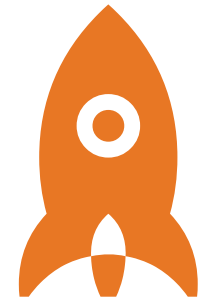
## Partner Network

Leverage our customized solutions as an OEM, or discover technology tailored to your needs through our global channel network of local experts.



## User Experience

As the leader in speed, simplicity, and value, we stake our brand on your success. Here, customer service isn't a department. It's the company.



## Innovation Engine

Driven by our competitive advantage of out-listening, we are an innovation engine that improves customer's lives with technology.

## About Us

As a global provider of digital manufacturing technology, B9Creations has become the industry leader in production, speed and value. It now stands as the additive manufacturing market leader in high-precision applications such as model making, prototyping and manufacturing, research, medical, and jewelry. B9Creations serves customers, from 3M to Medtronic, Procter & Gamble, and more, and certified dealers in nearly 70 countries around the globe. Ranked on Inc. Magazine's 2020 annual Inc 5000's list of the nation's fastest-growing private companies.

**Inc.  
5000**



# B9Creations Global Network

Experts spanning nearly 70 countries **across the globe.**



## B9Creations Headquarters

South Dakota, USA

## B9Creations Dealers

### Americas

Stuller  
Red Door Distributions  
The 3D Connectors  
3D Herndon  
Rio Grande  
Mid-West 3D Solutions  
Howle & Howle  
iMakr

### Europe

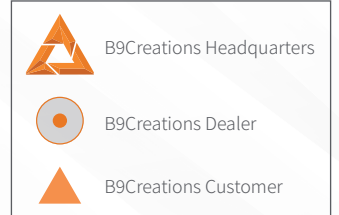
iMakr  
Davis D4  
Ruta Logistic LLC  
Redresins  
Print 3D Resin / Bluecast Jewelry

### Asia Pacific

Navbharat Carbon Co  
Bintang Saudara  
DDDJapan  
System Inn Nakagomi K.K  
IBC

### Africa & Middle East

Lipman & Son  
Cape Watch, Tools & Jewelry Supplies  
Javed Sheikh Trading Co. L.L.C.



# B9Creations Next Steps

Discover how high-resolution 3D printing **can work for you.**



## Want to find out more?

- Request a sample
- Get more product information
- Schedule a product demo
- Talk to a solutions expert

**Take the next step**

info@b9c.com

(605)787-0652

b9c.com