



# Design Without Limits

Prototype With the Stratasys J850 3D printer

Brilliant designs shouldn't have limitations. Realize and elevate your ideas more quickly, precisely and reliably with the Stratasys® J850™ 3D printer — designed for designers.





## **Explore More Through Iteration**

In the time it takes to make a single prototype using traditional methods, you can get 5x more design iterations with the Stratasys J850 3D printer.

The large, seven-material capacity allows you to load your most used resins and avoid downtime associated with material changeovers. Plus, you can print each design alternative quickly and reliably with the Super High-Speed draft mode, elevating your design early in the process and leaving more time for refinement of your detailed design.

This accelerated workflow also provides benefits to the medical and education spaces. When developing medical products, manufacturers can expedite their design process to get products to clinical trials faster. And in classrooms and universities around the world, students can test, design and discover in a matter of days, not weeks.





### Make Faster Design Decisions



## **Communicate** With Reality **Not Renderings**



Create prototypes that look, feel and function like the finished product. The J850 can produce more than 500,000 color combinations, print seven resins simultaneously and provide multi-material capabilities that bring even the most imaginative ideas to life allowing you to make more accurate design decisions earlier in the process.

From product design and medical devices to applying concepts learned in the classroom, the J850 can help you realize any number of design ideas. Simulate a variety of realistic textures or use transparent materials to achieve more realistic finish for your product prototypes. Create intricate anatomical models for surgical preparation or training models that mimic the look and feel of living tissue. Plus, empower students to explore the complexities of design.





Pantone Colors with color simulation indicator (sample).

GrabCAD Print.

#### **Power Designs With Color**

Improve the speed, efficiency and color fidelity of your prototypes by 3D printing with PANTONE® colors. As a PANTONE Validated™ 3D printer, the Stratasys J850 enables you to match Stratasys CMYK colors to more than 1,900 printable PANTONE Colors, Solid Coated and SkinTones™.





## Lower the Cost to Create

In general, prototyping with 3D printing is more cost effective than traditional methods and eliminates the need to outsource or hire specialized experts. You can also create a digital inventory of all your parts and prototypes, helping cut storage costs. With the J850 specifically, you can lower prototyping costs by more than 70% using CNC methods.

### **Prep Files for a Successful Print**

Streamline your workflow with GrabCAD Print™ software. GrabCAD Print lets you print directly from your favorite professional CAD formats, avoiding time usually spent converting and fixing STL files. You can also get detailed previews of your model, tray and slice so you can make adjustments before going to print. And the smart default settings, tooltips and notifications will help guide you through a seamless printing process.

Learn more about GrabCAD Print at grabcad.com/print

70%

70% Lower Cost to Prototype\*

**5**x

Model 5x more design iterations\*

## Start Refining at an Earlier Stage

When you're able to make more iterations in the early design stages, you get more time for refinement. The speed, accuracy and repeatability of the J850 allows you to hone your designs through rapid testing of form, fit, function and manufacturability. This enables you to iron out potential issues ahead of time so you can reduce mistakes at the manufacturing stage.



### Design to Impress

Achieve unprecedented combinations of color, transparency and flexibility in a single print by leveraging the multi-material printing capabilities of the J850 and the virtually endless possibilities of PolyJet™ materials.



### **Achieve Transparency**

Use  $VeroUltraClear^{m}$  to 3D print translucent parts or combine with colors to create stunning transparent shades.



#### **Enhance the Vibrancy**

Achieve a near match for fit, form, color and texture during rapid prototyping with VeroVivid™ multi-color materials.



### **Concept in Grayscale**

Produce low-cost concept models that simulate the appearance of production parts with DraftGrey™.



### **Create Flexible Parts**

Use Agilus $30^{\text{\tiny M}}$  to create flexible parts and prototypes that can flex, bend and elongate.

## See the Specs

J850 Product Specifications	
Model Materials	<ul> <li>Vero<sup>™</sup> family of opaque materials including neutral shades and vibrant VeroVivid<sup>™</sup> colors</li> <li>Agilus30<sup>™</sup> family of flexible materials</li> <li>Transparent VeroClear<sup>™</sup> and VeroUltraClear<sup>™</sup></li> </ul>
Digital Model Materials	Unlimited number of composite materials including:  Over 500,000 colors  Digital ABS Plus™ and Digital ABS2 Plus™ in ivory and green  Rubber-like materials in a variety of Shore A values  Translucent color tints
Support Materials	SUP705™ (water jet removable) SUP706B™ (soluble)
Build Size	490 x 390 x 200 mm (19.3 x 15.35 x 7.9 in.)
Layer Thickness	Horizontal build layers down to 14 microns (0.00055 in.) 55 microns (0.002 in.) in Super High Speed mode
Workstation Compatibility	Windows 10
Network Connectivity	LAN — TCP/IP
System Size and Weight	1400 x 1260 x 1100 mm (55.1 x 49.6 x 43.4 in.); 430 kg (948 lbs.) Material Cabinet: Pending
Operating Conditions	Temperature 18 – 25 °C (64 – 77 °F); relative humidity 30-70% (non-condensing)
Power Requirements	100-120 VAC, 50-60 Hz, 13.5 A, 1 phase 220-240 VAC, 50-60 Hz, 7 A, 1 phase
Regulatory Compliance	CE, FCC, EAC
Software	GrabCAD Print
Build Modes	High Quality: up to 7 base resins, 14-micron (0.00055 in.) resolution High Mix: up to 7 base resins, 27-micron (0.001 in.) resolution High Speed: up to 3 base resins, 27-micron (0.001 in.) resolution Super High Speed: 1 base resin, 55 micron (0.002 in.) resolution
Accuracy	Typical deviation from STL dimensions, for models printed with rigid materials, based on size: under 100 mm – $\pm 100 \mu$ ; above 100 mm – $\pm 200 \mu$ or $\pm 0.06\%$ of part length, whichever is greater.

## Dream It. Print It.

**Contact Us Today.** 









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