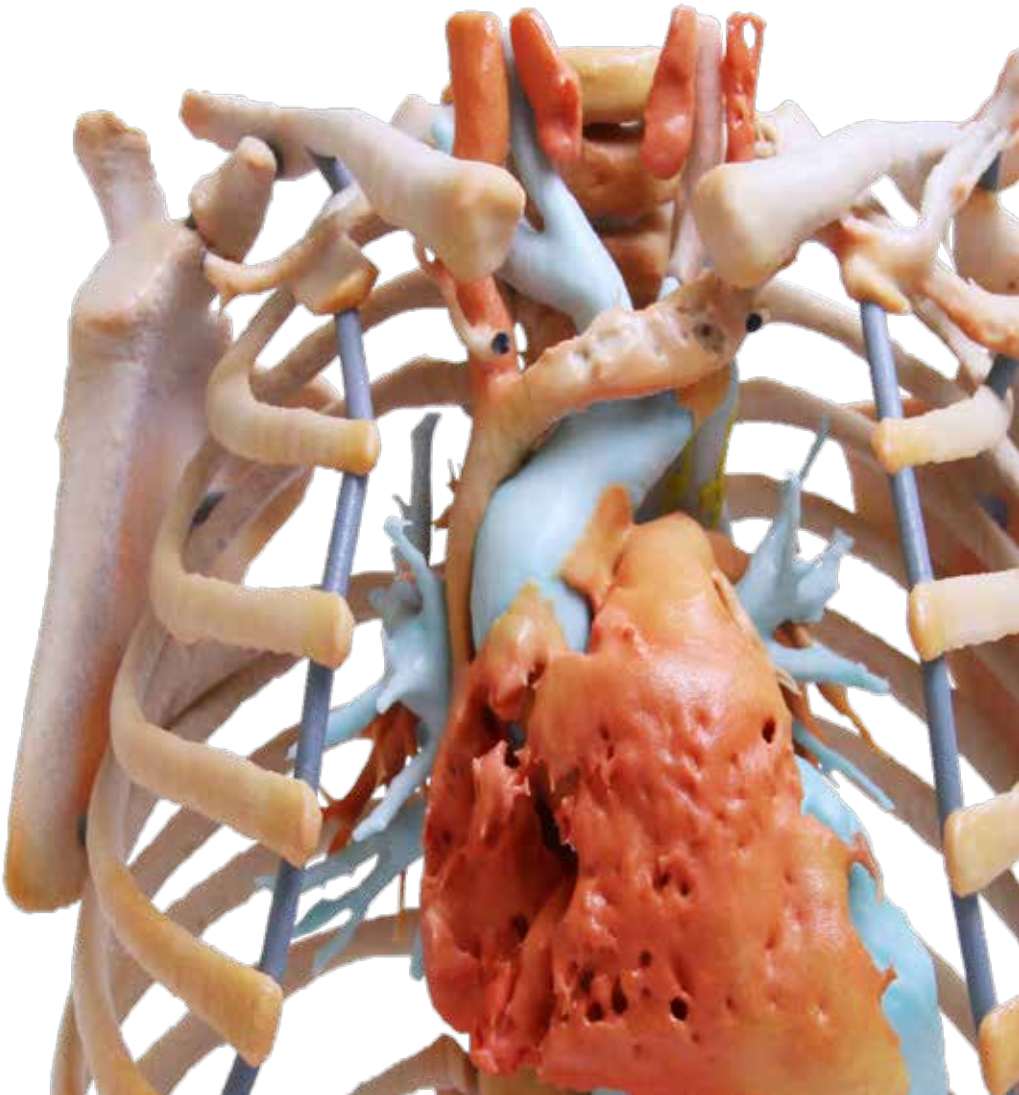# 3D SYSTEMS

ColorJet Printers

**Affordable, photo-realistic full-color parts,
in record time with ProJet® CJP 3D printers**

Make Your Designs Stand Out

IMPROVE COMMUNICATION

Communicate the look, feel and style of product designs with high-resolution, vivid color prototypes printed in one step. You will win business by bringing realistic final product-like models to prospective accounts, sponsors and focus groups.

REDUCE DEVELOPMENT COSTS

Create affordable prototypes early in the ideation stage of product development to identify design changes earlier. By accurately conveying the concept of the final part, all stakeholders will select the right design and reduce costly changes later in the development process.

INCREASE INNOVATION

With the capability to easily and affordably print full-color prototypes in hours, CJP users can quickly explore more design options, obtain feedback, refine designs and repeat the cycle until designs are perfect.

ACCELERATE TIME-TO-MARKET

CJP users around the world are bringing products to market faster and compressing design cycles by quickly and easily 3D printing on demand prototypes that look like the real product. Stakeholders can better visualize design intent, and can make faster and more effective decisions.

COMMUNICATION MODELS

3D print text labels, logos, design comments, or images directly onto concept and presentation models.

MEDICAL MODELS

Realistic 3D models reduce operating time, enhance patient and physician communication, and improve patient outcome.

INDUSTRIAL DESIGN VALIDATION

Rapid design iteration, evaluation and refining, including finite element analysis (FEA) results and assemblies.

EDUCATIONAL MODELS

Engage students by bringing digital concepts into the real world with 3D color models that they can hold in their hands.

Courtesy of WhiteClouds

ARCHITECTURAL AND GEOSPATIAL MODELS

Beautiful, highly detailed architectural and geospatial models improve communication and speed decision making processes.

ENTERTAINMENT AND ART PIECES

Produce stunning custom avatars, figurines, collectibles and more creations, with ease.

CJP parts realistically represent the final product's design intent

Courtesy of Decker Brands

Complex models, like this heart, can be printed with gradients on 3D Systems CJP printers

Benefits of ColorJet Printing

The ProJet CJP x60 Series employs ColorJet Printing technology to produce high-resolution, true full-color realistic models and prototypes.

FULL-SPECTRUM COLOR

Produce high-resolution photo-realistic color models with full CMYK capability to better evaluate the look, feel and style of product designs, without paint. Multiple print heads provide the best range of accurate and consistent colors, including gradients.

LOW OPERATING COSTS

Based on reliable and affordable ColorJet Printing (CJP) technology, ProJet CJP x60 printed parts cost a fraction of competitive technologies. Featuring efficient material use, you eliminate waste and reduce finishing time as no supports are necessary and unused core material is recycled.

FASTEST IN THE INDUSTRY

CJP technology allows the fastest print speeds to deliver models in hours, not days, so you can generate multiple iterations at the same time or large parts faster. Its high throughput supports an entire department with ease.

SAFE AND ECO-FRIENDLY

Closed-loop powder loading, removal, and recycling of natural products based build materials make it eco-friendly and safe to use. There are no physical support structures to remove with cutting tools or toxic chemicals.

FULL-COLOR TECHNOLOGY

3D printing CJP technology has the ability to deliver photo-realistic 3D models with the use of halftoning and variable drop-per-voxel techniques. This is possible by using cyan, magenta, yellow and, in some printers, black binders to print onto a white powder. Utilizing three or four channels of color, CJP is not limited to one section of the rainbow. Colors can be placed anywhere on the model and be printed using full texture maps and UV mapping.


Dithering, or halftone printing, produces a continuous tone effect at a sufficient viewing distance, forming gradients

ProJet® CJP x60 Series

The standard for true full-color printing, speed and affordability

With some of the fastest print speeds available, the ProJet CJP x60 Series can transform your ideas into photo-realistic concept models and prototypes in hours, at up to 7X lower part cost than other technologies.

Turbocharger concept model, with each component color coded for easy identification

Large-scale architectural models can be printed in one piece
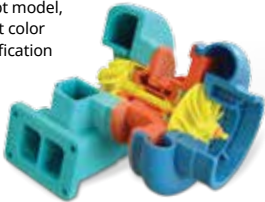
WIDEST COLOR SCHEME

Select from a range of printers and associated color options, from monochrome printing to professional quality color with full CMYK, to create stunningly beautiful, full-color parts.

HIGH THROUGHPUT

With up to 5x–10x faster print speeds than all other technologies, you can build large or multiple models at the same time in hours. Increase throughput with the stacking and nesting capability and select the "Draft" printing mode (monochrome) on Pro models to print up to 35% faster.

COMPACT TO GENEROUS BUILD VOLUMES

Access full color 3D printing with the affordable and compact ProJet CJP 260Plus printer, up to the large capacity ProJet CJP 860Pro with a build volume of 20 x 15 x 9 inches (508 x 381 x 229 mm) to create very large models or high volumes of prototypes.

ProJet® CJP 660*Pro*

ProJet® CJP 360

ProJet® CJP 460*Plus*

ProJet® CJP 260*Plus*

COLOR AND MUCH MORE

From educational settings to the most demanding commercial environments, 3D Systems' family of ProJet CJP x60 3D printers is best known for its unparalleled color capabilities, but equally as impressive are its exceptional print speeds, efficiency and low cost of operation. It is the ideal 3D printer for concept models—with or without color.

VisiJet® PXL Materials

for ProJet CJP x60 Series

3D Systems ProJet CJP x60 3D printers use VisiJet PXL materials to build realistic, high-definition, full-color concept models, assemblies and prototypes. Parts can be sanded, drilled, tapped, painted and electroplated, which further expands the options available for finished part characteristics.

Choose from a range of finishing options to meet your application requirements, from ColorBond infiltration for stronger functional prototypes to wax for creating concept models quickly, safely and affordably.

VisiJet PXL + Salt Water infiltrant, ideal for very economical monochrome models

VisiJet PXL + Wax infiltrant for fast, affordable, beautiful color models

VisiJet PXL + ColorBond infiltrant for improved strength and color vibrancy of this bicycle seat model

VisiJet PXL + StrengthMax infiltrant to dramatically improve the strength of this paint gun ergonomic prototype

COLORJET PRINTING TECHNOLOGY

ColorJet Printing (CJP) involves two major components: core and binder. Core material is spread in thin layers over the build platform with a roller. After each layer of core material is spread, color binder is selectively jetted from inkjet print heads over the core layer, causing the core to solidify. The build platform lowers with each subsequent layer of core and binder until the high resolution model is complete.
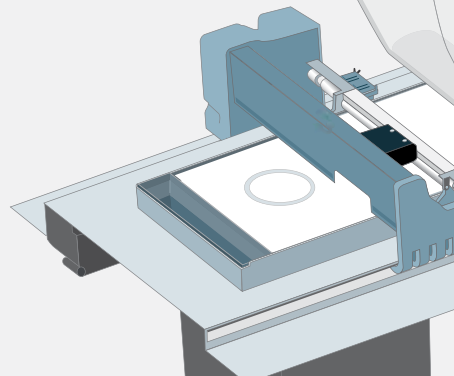
	ProJet CJP 260*Plus*	ProJet CJP 360	ProJet CJP 460*Plus*	ProJet CJP 660*Pro*	ProJet CJP 860*Pro*
Build envelope capacity (W x D x H)	9.3 x 7.3 x 5 in (236 x 185 x 127 mm)	8 x 10 x 8 in (203 x 254 x 203 mm)	8 x 10 x 8 in (203 x 254 x 203 mm)	10 x 15 x 8 in (254 x 381 x 203 mm)	20 x 15 x 9 in (508 x 381 x 229 mm)
Color	CMY	White (monochrome)	CMY	Full CMYK	Full CMYK
Resolution	300 x 450 DPI	300 x 450 DPI	300 x 450 DPI	600 x 540 DPI	600 x 540 DPI
Build material	VisiJet PXL	VisiJet PXL	VisiJet PXL	VisiJet PXL	VisiJet PXL
Layer thickness	0.004 in (0.1 mm)	0.004 in (0.1 mm)	0.004 in (0.1 mm)	0.004 in (0.1 mm)	0.004 in (0.1 mm)
Min. feature size	0.03 in (0.8 mm)	0.03 in (0.8 mm)	0.03 in (0.8 mm)	0.02 in (0.5 mm)	0.02 in (0.5 mm)
Max. vertical build speed	0.8 in/hour (20 mm/hour)	0.8 in/hour (20 mm/hour)	0.9 in/hour (23 mm/hour)	1.1 in/hour (28 mm/hour)	0.2 – 0.6 in/hour (5 – 15 mm/hour)
Draft printing mode (monochrome)	No	No	No	Yes	Yes
Number of print heads	2	1	2	5	5
Number of jets	604	304	604	1520	1520
Material recycling	Yes	Yes	Yes	Yes	Yes
Automatic build platform cleaning	No	No	Yes	Yes	Yes
Integrated part cleaning	Accessory	Integrated	Integrated	Integrated	Accessory

Multi-color globe model 3D printed with gradient blending

Cover photo courtesy of WhiteClouds

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