THE FASTEST,
MOST AFFORDABLE
COLOR 3D PRINTING

Z CORPORATION®

DESIGN PROTOTYPES
Size: 3.5 x 2 x 0.7 inches
(9 x 5 x 2 cm)
Printing Time: 0.5 hours

EDUCATION
Size: 8 x 5 x 2.5 inches
(20 x 13 x 6 cm)
Printing Time: 3 hours

Created by Munson3D.com
and Jard3D.com

ARCHITECTURE
Size: 7 x 5.5 x 8 inches
(18 x 14 x 20 cm)
Printing Time: 9 hours

METAL CASTINGS
Size: 7.9 x 13 x 5.1 inches
(20 x 33 x 13 cm)
Printing Time: 7 hours

GEOSPATIAL
Size: 8 x 8 x 2 inches
(20 x 20 x 5 cm)
Printing Time: 3 hours

ENTERTAINMENT AND THE ARTS
Size: 3 x 3 x 5 inches
(8 x 8 x 13 cm)
Printing Time: 3 hours

HEALTHCARE
Size: 9.8 x 7.9 x 3.9 inches
(25 x 20 x 10 cm)
Printing Time: 5.5 hours

From educational settings to the most demanding commercial environments, Z Corporation's family of 3D printers meets the needs of specialized applications, including:

- **Design Prototypes:**
  3D print concept models, functional prototypes and presentation models for evaluating and refining designs, including finite element analysis (FEA) results and packaging.

- **Education:**
  Engage students by bringing digital concepts into the real world, turning their ideas into real-life 3D color models that they can actually hold in their hands.

- **Architecture:**
  Create models of architectural designs and prototypes for the design of critical elements.

- **Metal Castings:**
  Directly print molds, mold inserts and patterns for metal casting.

- **Entertainment and the Arts:**
  Produce custom avatars and figurines from 3D data generated by electronic games — and other creations — with ease.

- **Geospatial:**
  Easily convert GIS data into 3D landscape and cityscape models.

- **Healthcare:**
  Rapidly produce 3D models to reduce operating time, enhance patient and physician communications, and improve patient outcomes.

A WORLD OF POSSIBILITIES

Z Corporation, producers of the world's fastest, easiest-to-use and most affordable color 3D printers, makes 3D printing accessible to everyone. Z Corporation printers produce physical color models quickly, easily and inexpensively from computer-aided design (CAD) and other digital data. The most successful companies have adopted 3D printing as a critical part of the iterative design process to:

INCREASE INNOVATION

- Print prototypes in hours, obtain feedback, refine designs and repeat the cycle until designs are perfect
- Create affordable prototypes early in the ideation stage of product development

IMPROVE COMMUNICATION

- Hold realistic 3D models in your hands to impart infinitely more information than a computer image
- Communicate with various audiences using fast, affordable and easy 3D printing

SPEED TIME TO MARKET

- Compress design cycles by 3D printing multiple prototypes on demand, right in your office

REDUCE DEVELOPMENT COSTS

- Cut traditional prototyping and tooling costs
- Identify design errors earlier
- Reduce travel to production facilities

WIN BUSINESS

- Bring realistic 3D models to prospective accounts, sponsors and focus groups

HOW Z CORPORATION TECHNOLOGY WORKS

Z Corporation technology works by creating a 3D physical model directly from digital data, layer by layer, turning concepts and ideas into real, physical 3D models that you can hold, examine and evaluate.

1

A 3D CAD file is imported into ZPrint™ software. The software slices the file into thin cross-sectional slices, which are fed to the 3D printer.

2

The printer creates the model one layer at a time by spreading a layer of powder and inkjet printing a binder in the cross-section of the part.

3

The process is repeated until every layer is printed and the part is ready to be removed.

ZPRINTER ADVANTAGES

ZPrinters set the standard for speed, color, affordability and ease of use.

FASTEST PRINT SPEED

High speed and throughput for a range of applications

- 5x-10x faster than all other technologies
- Output models in hours, not days
- Build multiple models at the same time
- Support an entire engineering department or classroom with ease

UNIQUELY MULTICOLOR

Color and high quality dramatically communicate design intent

- Produce realistic color models without paint
- Better evaluate the look, feel, and style of product designs
- 3D print text labels, logos, design comments, or images directly onto models
- Full, 24-bit color (just like a 2D printer) produces millions of distinct colors
- Multiple print heads provide the best range of accurate and consistent colors

HIGH RESOLUTION

Realistic models and precise details

- High-definition 3D printing produces models with complex geometries and small, detailed features
- 3D print the most intricate detail, such as a thin wall on a mechanical prototype or a railing on an architectural model

LOWEST OPERATING COST

Affordable for all environments

- One-fifth the cost of other technologies
- Unused materials are recycled for the next build, eliminating waste
- Based on reliable, affordable inkjet technology

EASY TO USE

Spend time generating ideas, not operating a 3D printer

- Requires minimal training and expertise
- Only ZPrinters perform most operations automatically
- Automated setup and self monitoring
- Automated powder loading and recycling
- Snap-in binder cartridges
- Intuitive control panel for easy operation

SAFE AND OFFICE FRIENDLY

Ideal for everyday use in any standard office or school environment

- Quiet, safe, odor free
- Closed-loop powder loading, removal, and recycling
- Continuous negative pressure for containing airborne particles within the machine
- Eco-friendly, non-hazardous build material
- Zero liquid waste
- No physical support structures to remove with dangerous cutting tools or toxic chemicals
- Noise-suppression technologies for quiet, intrusion-free operation

"We get prototypes quickly, we refine them quickly, we create new ones, and we derive our elite designs...."

Eskild Hansen
Head of European Design Centre
Cisco Consumer Business Group

MATERIAL OPTIONS

Z Corporation provides 3D printing materials to meet many business needs.

- **High performance composite material** can be used to make strong, high-definition parts and is the material of choice for printing color parts

- **Investment casting material** can be used to quickly fabricate parts that can be dipped in wax to produce investment casting patterns

- **Direct casting material** can be used to create sand casting molds for non-ferrous metals

- **Elastomeric material** has been optimized for infiltration with an elastomer to create parts with rubber-like properties

- Z Corporation parts can be sanded, drilled, tapped, painted and electroplated, further expanding the options available for finished part characteristics

THE DIFFERENCE IS IN THE DETAILS

CREATE ULTRA-REALISTIC
PARTS WITH EASE

DISPLAY THE MOST
INTRICATE DETAIL

3D PRINT VIBRANT COLOR—
A Z CORPORATION EXCLUSIVE

APPLY HIGH-IMPACT GRAPHICS
AND ANNOTATIONS

ZPrinter® Product Line

	ZPrinter® 310 Plus	ZPrinter® 350	ZPrinter® 450	ZPrinter® 650
OVERVIEW				
	Monochrome, most affordable, great parts	Monochrome, office friendly, affordable	Multicolor, easy to use, office friendly	Premium color, highest resolution, largest build size
FEATURES				
Resolution	300 x 450 dpi	300 x 450 dpi	300 x 450 dpi	600 x 540 dpi
Color			■	■
Automated Setup and Self Monitoring		■	■	■
Automated Powder Loading		■	■	■
Automated Powder Recycling and Removal			■	■
Snap-in Binder Cartridges		■	■	■
Intuitive Control Panel		■	■	■
Vertical Build Speed	1.0 inch/hour (25 mm/hour)	0.8 inch/hour (20 mm/hour)	0.9 inch/hour (23 mm/hour)	1.1 inch/hour (28 mm/hour)
Build Size	8 x 10 x 8 inches (203 x 254 x 203 mm)	8 x 10 x 8 inches (203 x 254 x 203 mm)	8 x 10 x 8 inches (203 x 254 x 203 mm)	10 x 15 x 8 inches (254 x 381 x 203 mm)
Material Options	High performance composite, direct casting, elastomeric, investment casting	High performance composite	High performance composite	High performance composite
Layer Thickness	0.0035 – 0.008 inches (0.089 – 0.203 mm)	0.0035 – 0.004 inches (0.089 – 0.102 mm)	0.0035 – 0.004 inches (0.089 – 0.102 mm)	0.0035 – 0.004 inches (0.089 – 0.102 mm)
Number of Jets	304	304	604	1520
SPECIFICATIONS				
Number of Print Heads	1	1	2	5
Equipment Dimensions	29 x 34 x 43 inches (74 x 86 x 109 cm)	48 x 31 x 55 inches (122 x 79 x 140 cm)	48 x 31 x 55 inches (122 x 79 x 140 cm)	74 x 29 x 57 inches (188 x 74 x 145 cm)
Equipment Weight	255 lbs (115 kg)	395 lbs (179 kg)	425 lbs (193 kg)	750 lbs (340 kg)
Power Requirements	90-110V, 5.3A 100-120V, 4.3A 200-240V, 2.4A	90-100V, 7.5A 110-120V, 5.5A 208-240V, 4.0A	100-240V, 15-7.5A	100-240V, 15-7.5A
File Formats for Printing	STL, VRML, PLY, 3DS, ZPR	STL, VRML, PLY, 3DS, ZPR	STL, VRML, PLY, 3DS, ZPR	STL, VRML, PLY, 3DS, ZPR
Workstation Compatibility	Windows® XP Professional and Windows Vista® Business/Ultimate	Windows® XP Professional and Windows Vista® Business/Ultimate	Windows® XP Professional and Windows Vista® Business/Ultimate	Windows® XP Professional and Windows Vista® Business/Ultimate
CE, CSA Regulatory Compliance	■	■	■	■
No Special Facility Requirements	■	■	■	■

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