



Z CORPORATION™

# ZPrinter® 450

The World's Most Automated and  
Affordable Color 3D Printer



# Get More

## ZPRINTER 450 ADVANTAGES

### Color 3D Printing, Every Day

Now you can print 3D color models so quickly and affordably, you'll do it every day. Introducing the ZPrinter® 450.

The ZPrinter 450 makes color 3D printing accessible to everyone. The lowest priced color 3D printer available, the ZPrinter 450 outputs brilliant color models with timesaving automation and an even easier printing process. It is the ideal introduction to color 3D printing for a wide variety of applications from product design, production prototypes, and architectural concepts to education, healthcare, and the arts.

Build full-color 3D models when you want, where you want, with the remarkable ZPrinter 450.

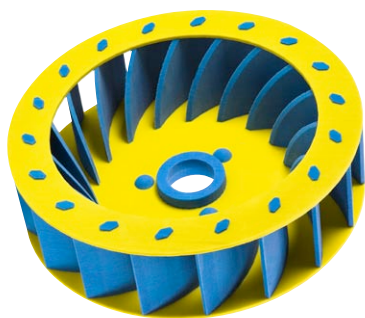
### More Models

- Experience the world's fastest print speed – 5X faster than all other systems
- Output models in hours, not days
- Build multiple models at the same time by stacking and nesting parts
- Support an entire engineering department or classroom with ease

### More Communication

3D models and product prototypes are about communication, and nothing communicates better than color. Color dramatically communicates engineering product designs, vividly renders architectural designs, and even brings animated characters into the real world.

- Produce realistic color models without paint
- Better evaluate the look, feel, and style of product designs
- Add highlights to models with annotations like text, arrows, and texture maps



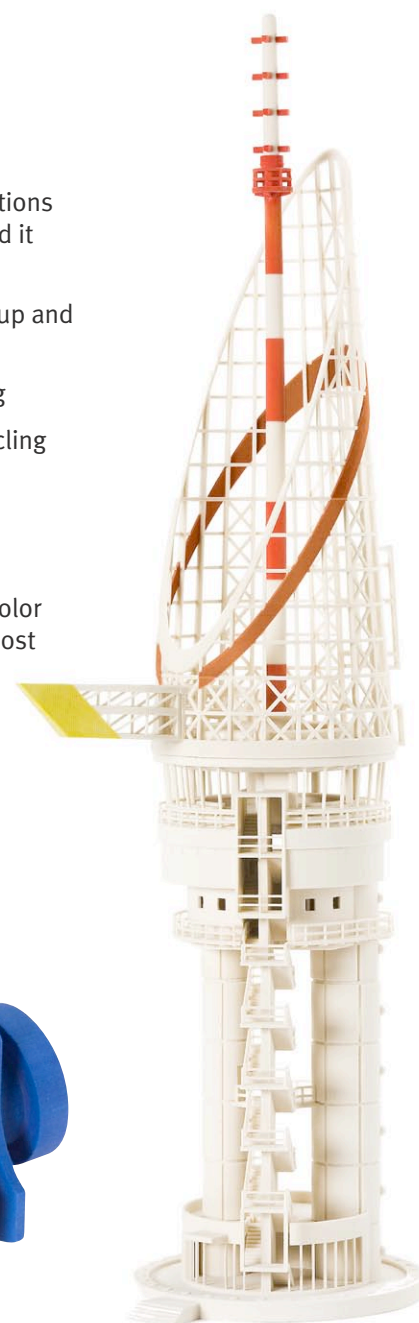
### More Free Time

The ZPrinter 450 performs most operations automatically so you don't have to, and it simplifies the rest

- 40% less operator touch time for setup and model removal
- Automated setup and self monitoring
- Automated powder loading and recycling
- New "snap-in" binder cartridges

### More Savings

The ZPrinter 450 is the lowest priced color 3D printer that you can buy. And the most affordable to use with a per-model cost one-fifth that of other systems.



# Office Friendly

## ZPRINTER 450 COMPATIBILITY

The ZPrinter 450 sets the standard for office compatibility with breakthrough innovations that make it ideal for everyday use in a standard office environment. It eliminates nearly all of the hazards, waste, noise, and disposal issues that are associated with typical rapid prototyping systems, and does so in a remarkably compact footprint.

### Clean

- Most advanced powder-management system available on an inkjet 3D printer
- Closed-loop powder loading, removal, and recycling
- Continuous negative pressure for containing airborne particles within the envelope of the machine
- Zero liquid waste to handle

### Quiet

- Noise-suppression technologies for quiet, intrusion-free operation

### Safe

- Similar to a common 2D inkjet printer
- Eco-friendly, non-hazardous build material
- No physical support structures attached to models, like other 3D printers. And no need to remove those supports with dangerous cutting tools or toxic chemicals

### Convenient

- Greater control from ZPrint™ software and printer
- Automatic powder loading
- Snap-in binder cartridges
- Easily changeable print heads

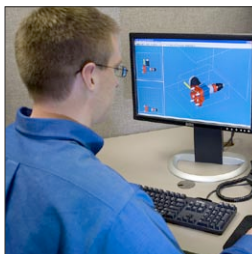


# Seven Easy Steps

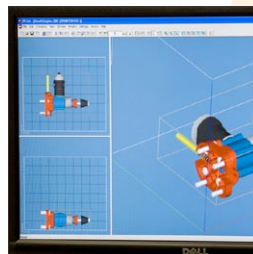
## TO THE WORLD'S BEST 3D MODELS

### STEP 1

Import your 3D data file into our next-generation ZPrint software, and position as desired. The system automatically checks printer readiness and material stores, ensuring you always have the right amount of material to complete the job.



INCLUDES ZPRINT SOFTWARE



SET UP PRINT JOBS FAST

### STEP 2

If supplies do need to be replenished, simply insert a one-liter binder cartridge, connect a powder canister for automatic loading, or snap in a new print head.



LOAD BINDER IN SECONDS

LOAD POWDER  
AUTOMATICALLYCHANGE PRINT HEADS 66%  
FASTER

### STEP 3

Click "3D Print" and watch your 3D model emerge from the bottom up one cross-section at a time. A new, expanded status display keeps you apprised of the machine and job status.



ENJOY GREATER CONTROL



## STEP 4

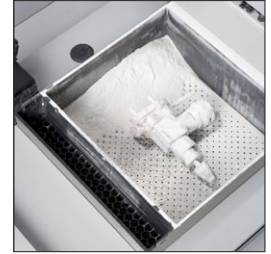
When printing is complete, a vacuum and vibration system automatically removes as much as 80% of loose powder – and recycles it for future use.



AUTOMATED POWDER HANDLING



RECYCLES POWDER FOR FUTURE USE



RAISES PART FOR EASY REMOVAL

## STEP 5

Remove the remaining powder with lightly compressed air, in a fully enclosed chamber that vacuums away powder as you go. Unlike other systems, there are no physical support structures to remove with scraping tools.



EASY POST-PROCESSING



NO DANGEROUS SCRAPING TOOLS REQUIRED

## STEP 6

Finish and strengthen your model by dipping in Z-Bond™ sealant, dripping Z-Bond over model, or lightly brushing with Z-Max™.



OPTION 1: DIP



OPTION 2: DRIP

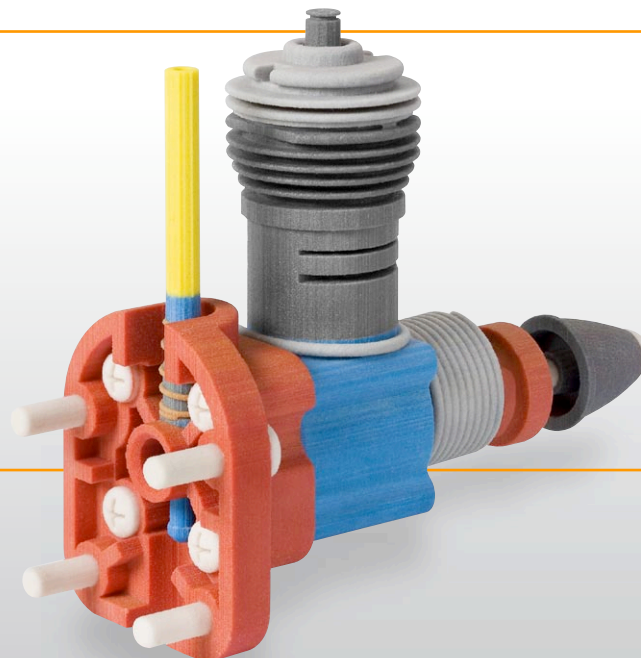


OPTION 3: BRUSH

## STEP 7

Enjoy a strong, brilliant color 3D model. Fast.

In fact, this model was printed and finished in less than four hours.



# All-in-One

## FEATURE-RICH COLOR 3D PRINTER

### Specifications

**Build Speed**

2–4 layers per minute

**Build Size**

203 x 254 x 203 mm (8 x 10 x 8 inches)

**Material Options**

High-performance composite

**Layer Thickness**

User selectable at time of printing;  
.089–.102 mm (.0035–.004 inches)

**Resolution**

300 x 450 dpi

**Number of Print Heads**

Two (one tricolor, one clear)

**System Software**

Z Corporation's proprietary software accepts solid models in STL, VRML, and PLY file formats as input. ZPrint software features 3D viewing, text labeling, and scaling functionality.

**Equipment Dimensions**

122 x 79 x 140 cm (48 x 31 x 55 inches)

**Equipment Weight**

193 kg (425 lbs)

**Power Requirements**

100V, 14.4A or 115V, 14.0A or 230V, 6.2A

**Network Connectivity**

TCP/IP 100/10 base T

**Workstation Compatibility**

Windows® 2000 Professional and Windows XP® Professional

**Regulatory Compliance**

CE, CSA

**Special Facility Requirements**

None

**Integrated Fine-Powder  
Removal Chamber**

**Quick-Load Binder  
Cartridge**

**New Single Print Head  
Color Technology**

**Expanded, On-Printer  
Controls**

**Closed-Loop, Automated  
Powder Loading,  
Handling and Recycling**



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