

# Frequently Asked Questions Z Corporation ZPrinter® 310

Updated February 3, 2003



## 1. What is new and unique about the ZPrinter 310?

Z Corporation's product lines have gained strong adoption in the marketplace for their speed, low operating cost, ease of use and versatility. In the ZPrinter 310, those product attributes have been further enhanced. We have obtained feedback over the years from our customers and Partners and we have incorporated that feedback and additional design enhancements to make the ZPrinter 310 the fastest, lowest cost and simplest 3D Printing solution available on the market today.

## 2. How does the ZPrinter work?

Like Z Corporation's previous entry-level model, the ZPrinter 310 constructs a part by taking a CAD file in .STL format and building up the part layer by layer. The geometry is constructed by spreading a layer of powder, printing the cross section of the part and then printing the next layer. The layers are built one on top of the other until the part is complete. The geometry is supported by un-printed powder allowing a wide range of part complexity. The technology does not rely on support structures to hold up the part during the build phase.

## 3. What is the customer price of the ZPrinter 310?

The U.S. list price for the ZPrinter 310 bundled with the ZD4i Depowdering Station is \$27,800. This price is exclusive of shipping, materials, installation and training.

## 4. What are the key differences between the ZPrinter 310 and the Z400 Printer, Z Corporation's previous entry-level monochrome Printer.

**Faster**

**Lower Operating Cost (Print Head Amortization)**

**Simpler to operate, maintain and service**

**Network compatibility**

**Hewlett Packard print head technology**

The ZPrinter 310 has been completely redesigned to offer a number of operation and performance improvements. These include design features to simplify operation, maintenance and service. The system uses Hewlett Packard (HP) print head technology and has been optimized to offer speed enhancement over the Z400. Also, the operating costs, specifically the print head amortization of the ZPrinter 310, is lower than the Z400. The ZPrinter 310 may be run via serial connection direct to

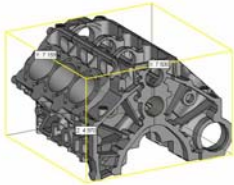
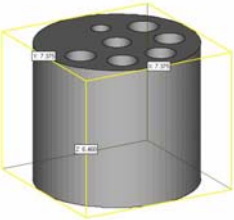
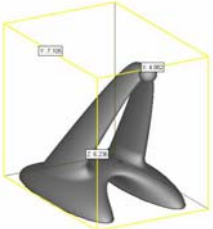
the PC or via Ethernet network connection. The build size of the ZPrinter 310 is 8" x 10" x 8", the same as the Z400 and Z406 3D Printers.

**5. What are the key differences between the ZPrinter 310 and the Z406 Printer, Z Corporation's high speed, 4 print head, full-color printer?**

The ZPrinter 310 utilizes one HP print head while the Z406 Printer utilizes four HP print heads. The four print heads used on the Z406 allow higher print speed, especially for larger parts and the ability to print in full color. The ZPrinter 310 is a monochrome-only printer.

**6. What is the difference in speed between the ZPrinter 310 and Z406 Printer?**

The ZPrinter 310 is faster than the Z400 Printer but not as fast as the Z406 Printer. Attached is a range of examples printed on all three machines for comparison. Times are shown as hours:minutes.

<b>Part</b>	<b>Dimension (XYZ)</b>	<b>Description/Picture</b>	<b>ZPrinter 310</b>	<b>Z406</b>
<b>Engine</b>	7.5" x 7.1" x 4.9" (190 x 180 x 125 mm)		4:19	3:25
<b>Pump Housing</b>	7.3" x 7.3" x 6.5" (185 x 185 x 165 mm)		9:59	6:34
<b>Monitor Stand</b>	4.8" x 7.1" x 6.2" (122 x 180 x 158 mm)		4:10	3:24

**7. What materials will run on the ZPrinter 310?**

The ZPrinter 310 will use the same material set as the Z406 and Z810 3D Printers. This includes zp102, zp14 and zp15e, zp250, ZCast 501 powders as well as zb51 and zb56 binders.

**8. How much do the materials cost?**

Powder, binder and print heads are consumed in the part printing process. The strength of the part may be enhanced using a range of infiltrants. Depending on the geometry and infiltrant choices, the cost of these consumables range between \$1 and \$2 per cubic inch of finished part. Any powder not printed can be fully recycled.

**9. What is the standard delivery time?**

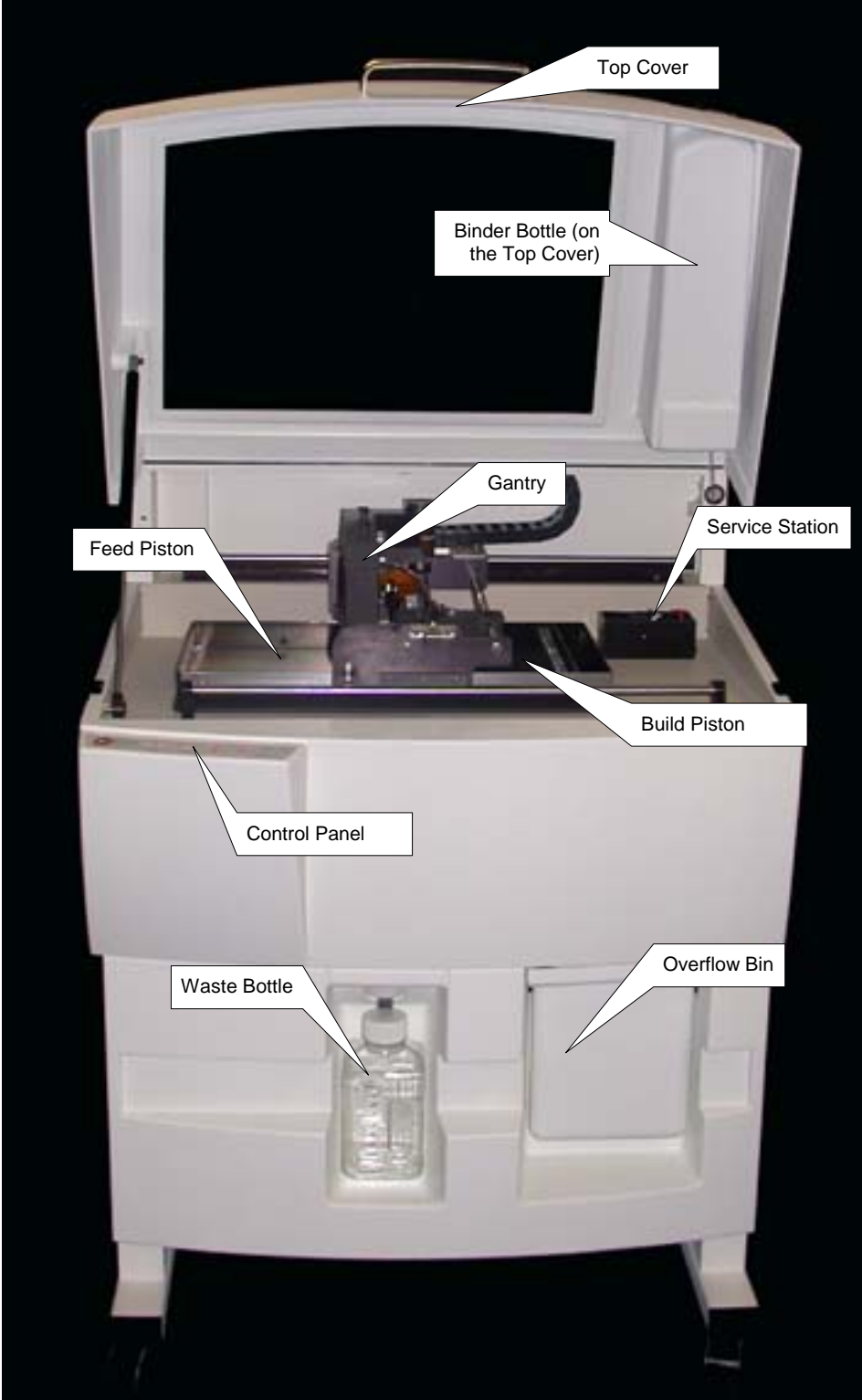
Units are generally available within four weeks of order placement.

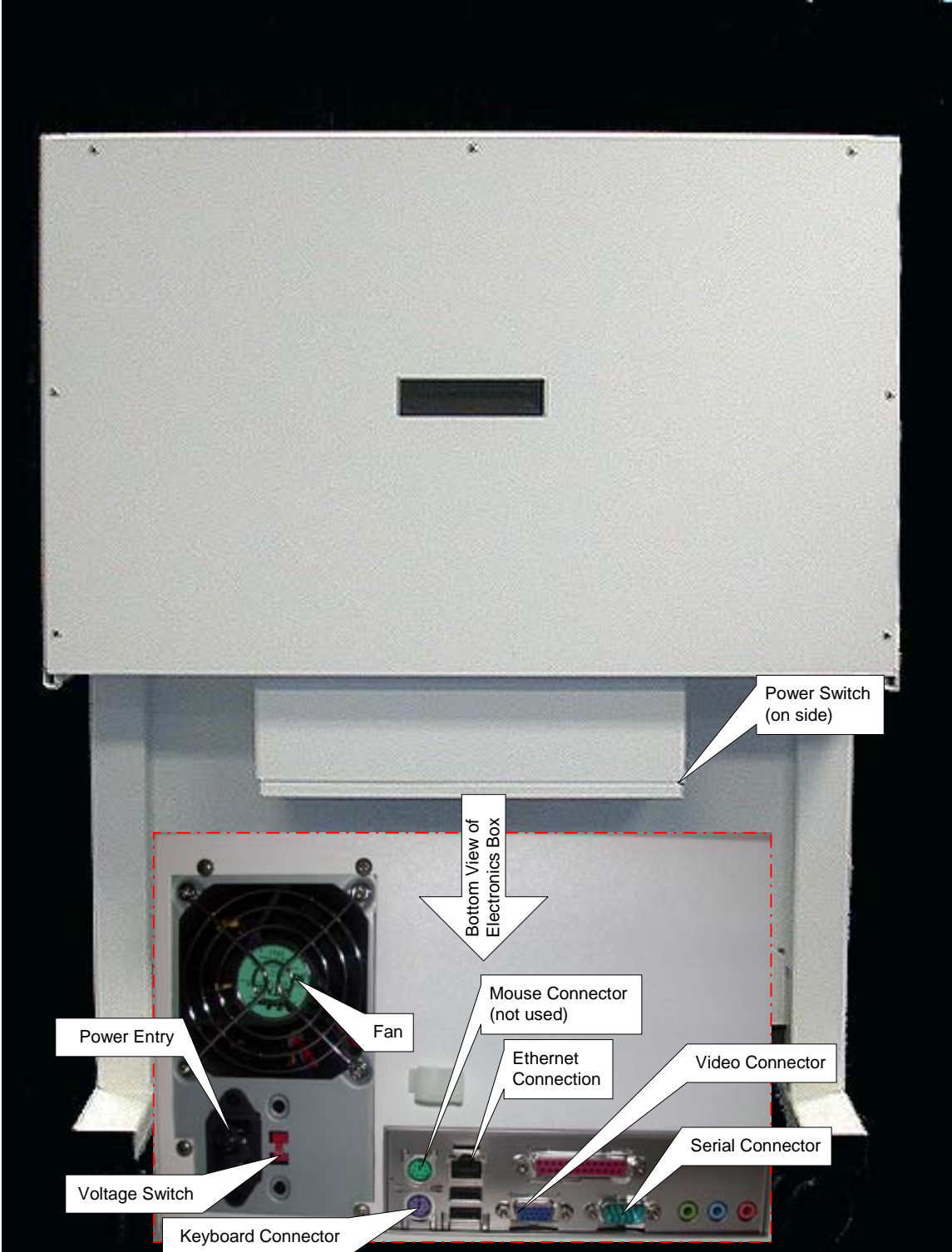
**10. Is ZCast® be available on the Z310 Printer?**

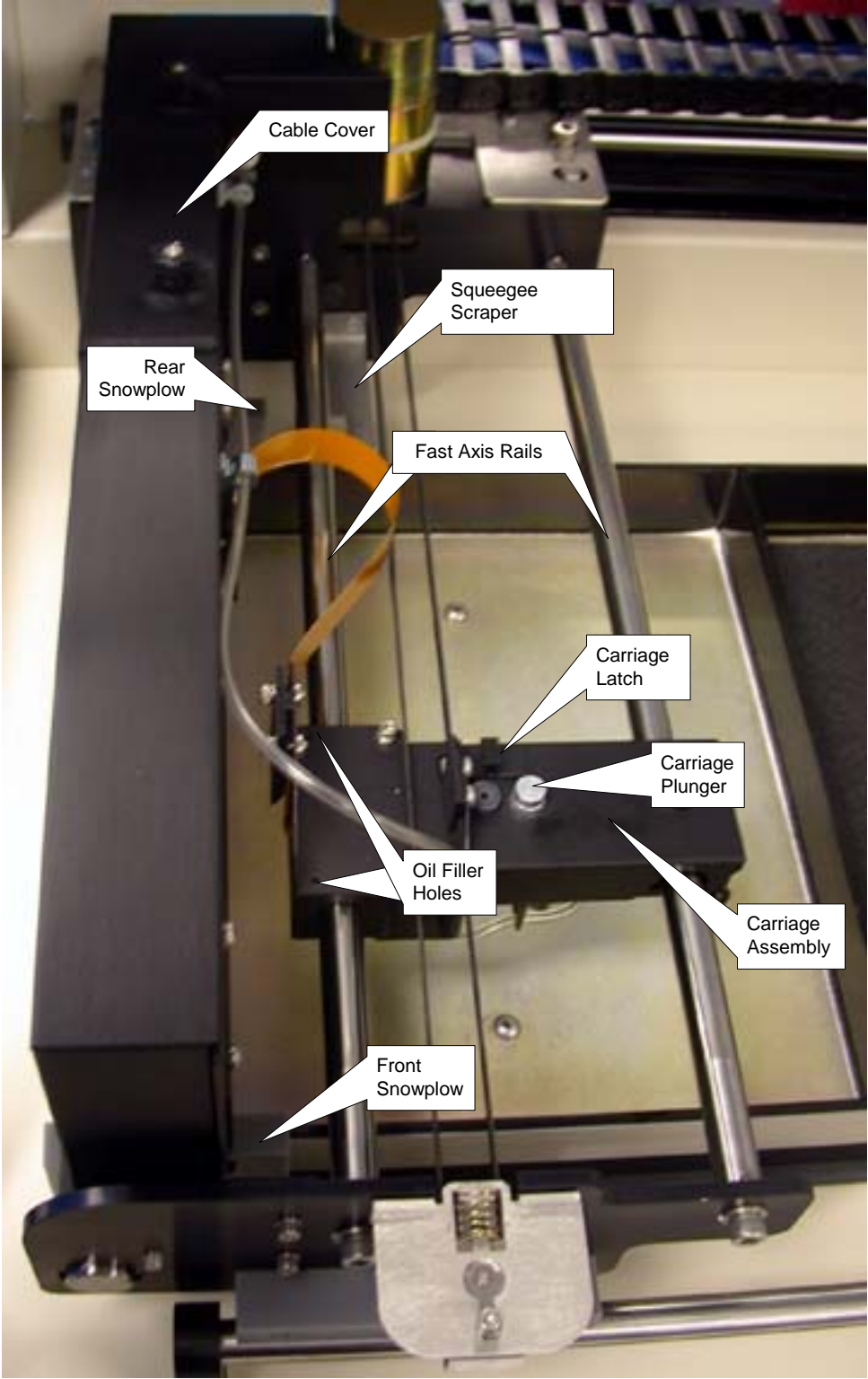
Yes, with an upgrade package which includes the purchase of materials starter kit and end-use license, ZCast powder is available for the ZPrinter 310. ZCast is a set of materials that allow the user to print molds for direct metal casting.

**11. Are Lease & Finance Options available?**

For customers in the U.S., we can introduce you to a preferred Leasing source to arrange for highly competitive monthly payment options.







Cable Cover

Rear Snowplow

Squeegee Scraper

Fast Axis Rails

Carriage Latch

Carriage Plunger

Oil Filler Holes

Carriage Assembly

Front Snowplow