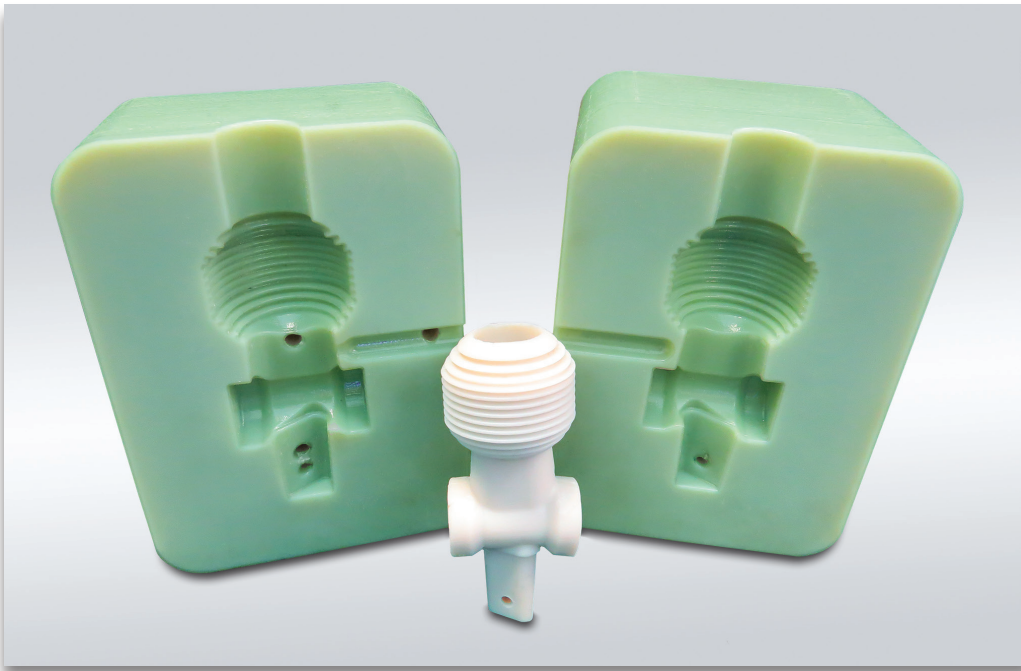




**Diversified  
Plastics, Inc.**

*Small Company Values – Big Company Ideas*



## ADDITIVE MANUFACTURING

**P**rototyping today isn't just about creating a sample part, it's about producing something that not only looks like the final product, but feels and works like the real thing. At Diversified Plastics we use state-of-the-art equipment and a variety of prototyping methods to help our customers get to market quickly, while reducing product costs and helping them keep their competitive edge.

### 3D PRINTED PROTOTYPES

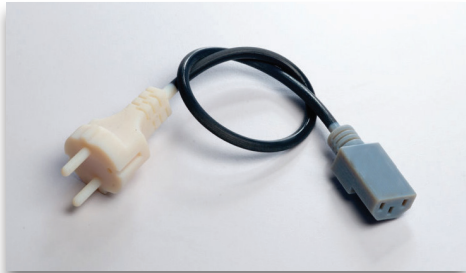
Diversified Plastics offers fast, high-precision, prototype production using 3D PolyJet printing technology. You can get extremely accurate prototypes using a wide variety of materials, from transparent and rigid to rubber-like and polypropylene-like materials. Your prototypes will simulate the precise look, feel and function of a final product. Ultimately, this helps you compress product design times and speed final product to market, while reducing development costs.

### 3D PRINTED INJECTION MOLDS

Taking PolyJet 3D printing technology to the next level, we are able to print 3D injection mold components. This allows us the ability to produce injection molded prototype parts using the product's final plastic material. Thanks to this innovative prototyping approach, you can save time and money proving your product design.



Using PolyJet 3D printing technology, Diversified Plastics can create prototypes that simulate diverse mechanical and physical properties, from rubber to rigid; opaque to transparent; and standard to ABS-like. A remarkable level of detail and final-product realism can be accomplished with over 120 types of materials. Up to 14 types of materials can be printed simultaneously in a single part.



The ultra-thin build layers, from PolyJet technology, create parts that are high density with complex shapes. The fine resolution can produce mold cavities with intricate details and smooth surface finishes for low run prototype injection molding.

BASIC MATERIALS	DIGITAL MATERIALS
Transparent rigid	Engineering plastics such as Digital ABS
Rubber-like	Transparent shades and patterns
Transparent general-purpose	Rigid opaque shades
Rigid opaque	Different shore value rubber-like material
Polypropylene-like	Polypropylene-like material with improved thermal resistance

## POLYJET MANUFACTURING TECHNICAL SPECIFICATIONS

### Layer Thickness (Z-axis)

- Horizontal build layers as fine as 0.0006 in. (16  $\mu$ m)

### Tray Size (X x Y x Z)

- 10.2 x 10.2 x 7.9 in. (260 x 260 x 200 mm)

### Net Build Size (X x Y x Z)

- 10.0 x 9.9 x 7.9 in. (255 x 252 x 200 mm)

### Molded Part Size

- 6 x 6 in. with depth up to 0.5 in.
- 4 x 4 in. with depth up to 2.0 in.

### Build Resolution

- X-axis: 600 dpi
- Y-axis: 600 dpi
- Z-axis: 1600 dpi

### Typical Accuracy

- 0.0008 - 0.0035 in. (20-85  $\mu$ m) for features below 2 in. (50 mm)
- Up to 0.0078 in. (200  $\mu$ m) for full model size (For rigid materials only, depending on geometry, build parameters and model orientation)

### CAD Format

- STEP, IGS and SolidWorks

### Surface Finish

- Matte = 375 Ra( $\mu$ in) (N9 - N10)
- Glossy = 63 Ra( $\mu$ in) (N7)



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ISO 13485:2003



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