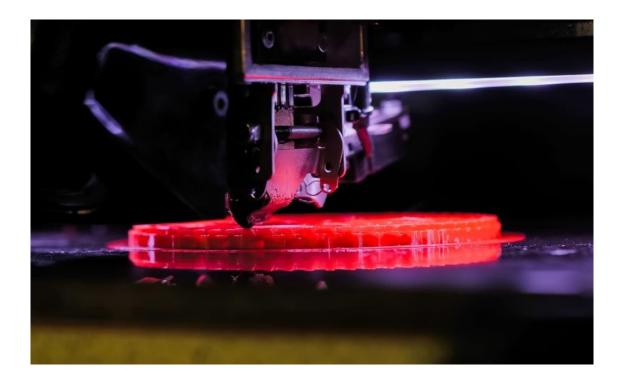


How Rapid Prototyping Can Be Used to Make Rubber Parts



Rapid prototyping is an excellent tool for making rubber parts. This application makes it easier to prototype elastomer parts at a fast pace. If you need a prototype as proof of concept or for testing, you can count on companies that offer rapid prototyping for manufacturing.

But this form of additive manufacturing is not always ideal for elastomer prototyping. Many manufacturers deploy traditional methods for printing rubber parts.

Here's everything you need to know.

CNC Milling

One of the most common methods of elastomer prototyping, CNC machining helps you print rubber parts of all sorts. In this manufacturing process, you can use specific machinery to cut flat metal stock into rubber molds. Just like 3D printing, CNC machining also uses computer-aided software. This means it is pre-programmed to perform functions specific to rubber prototyping.

Once you've established the tool path, you can feed instructions to the CNC program to initiate machining. This manufacturing process is perfect for crafting complex rubber parts.



It can make accurate cuts at increased speeds. Since it's automated, the machine ensures a quick turnaround time that helps reduce downtime.

RTV Molding

RTV or silicone molding allows you to make parts with the use of a mold. The mold itself is either plastic or metal based. In this method, you can create a silicone mold around a master design that features the exact geometry of the desired part. Once the mold sets, you can cut and create accurate models or replicas of the master pattern.

With the right **prototype manufacturing company**, RTV molding is a low-capital investment that doesn't require a lot of resources. For instance, urethane casting allows you to craft soft rubber parts. This process allows more flexibility in terms of colors and patterns. You can also use die-cut elastomeric sheets for manufacturing gaskets and seals.

3D Printing Technology

3D printing is a cost-effective option for elastomer prototypes. It can print parts or products without a mold using computer-aided software. Most 3D printers used for rubber prototyping help deliver speed and accuracy. Upon uploading your CAD file, you can manufacture parts in less than a day, reduce downtime, and maximize production runs.

However, the elastomeric material doesn't contain actual silicone rubber. This is the only drawback of 3D printing for rubber prototyping. For instance, the PolyJet technology that enables engineers to print multiple materials from the same head. The application uses different combinations to simulate the properties of rubber but lacks the original strength of rubber.

Rubber Rapid Prototyping in Manufacturing

It's important to streamline your manufacturing process from concept to delivery. To achieve this, get in touch with an expert rapid prototyping company. Some of the best **rapid prototyping companies** may also help you through each phase of the production cycle.

We can help you optimize a part design and select the best quality materials for prototyping. As leading experts in 3D technology, we can offer you custom-made solutions and time-efficient production.

Contact us now to get started.

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