

# MANUFACTURING

## TECHNOLOGY INSIGHTS

FEBRUARY - 20 - 2020

ISSN 2644-2493

MANUFACTURINGTECHINSIGHTS.COM

## Top 10 Precision Manufacturing Tech Service Companies - 2020

The emergence of advanced manufacturing technologies has led to the outcome of smart factories. Precision manufacturing technology is gaining immense traction owing to its accurate drawings, greater efficiency and higher productivity.

Amongst several trends, nanotechnology has been named as a crosscutting technology that can be applied in several spheres to get a job done. A number of minute parts or materials are often designed with the help of nanotechnology to match the required precision. At a time when everyone is stepping into the new era of Industry 4.0, nanotechnology is a worthy addition to the workshop of any company. Moving on to other trends, several operations can be made to work in a collaborative manner through the use of electronic data interchange function and by implementing an interactive working function on-line. After the sophistication of nanotechnology, there is additive manufacturing, which makes the manufacturing process easy. Additive manufacturing or AM is being used these days by various companies as the method to reduce the time of production, improve the quality of the product, and reduce the cost. The thermal process for a chip or material removal is another relatively new trend in the space of

precision manufacturing, which goes by the formal name of laser micromachining (LBM). With the help of LBM, metallic and non-metallic materials are removed in the wink of an eye through fusion and vaporization. Removal of a part in any substance, be it wood or metal, is not enough. It is essential to attain a glossy and shininess, which is where the robotic abrasive blasting system enters the scenario that offers an unmatched improvement in giving a finesse touch to any part of a product.

With so many varieties of trends making an introduction in the industry, a manufacturing company needs to find a suitable solution provider who can provide an adequate servicing of those types of machinery at regular intervals. In this edition, we are glad to feature various Precision Manufacturing Tech Solution and Service Providers that are at the forefront of revolutionizing the manufacturing sector through their groundbreaking services. We hope this issue of the Manufacturing Technology Insights helps you build the partnership, you and your firm need to foster technologically-driven designing processes.

We present to you, Manufacturing Technology Insights' "Top 10 Precision Manufacturing Tech Solution Providers - 2020" and "Top 10 Precision Manufacturing Tech Service Companies - 2020."



### Company:

Global Precision Products, LLC

### Description:

Global Precision Products, LLC is an AS9100D, ISO 9001:2015, ITAR registered contract manufacturing company that manufactures high precision, tight tolerance machined components for aerospace, defense, commercial and industrial, automotive, and test and measurement industries

### Key Person:

Mark Higgins,  
President & CEO

### Website:

globalppi.com



**GLOBAL PRECISION PRODUCTS, LLC**  
PRECISION MACHINING SOLUTIONS



## High Precision, Tight Tolerance

**T**oday's high-tech manufacturing companies require high precision components at competitive prices, delivered on time. This is where Global Precision Products, LLC has built its reputation. Global Precision Products is an AS9100D, ISO 9001:2015 certified and ITAR registered contract manufacturing company that manufactures high precision, tight tolerance machined components for aerospace, defense, commercial and industrial, automotive, and test and measurement industries. Global Precision Products boasts on-time delivery over 98% and first time right shipments over 99.5%.

The company was started in Rush, NY, a suburb of Rochester, in 1997 by three brothers, Mark, Jamie and Doug LaBell. The company's initial capital investments were in a Haas vertical mill and a Haas lathe. As Mark LaBell started to develop the business, he saw a niche opportunity in small, high volume turned-milled components. To take advantage of this market, the company's next purchase was a Star Swiss CNC lathe with an auto-loading, twelve-foot bar feeder. Today, Global Precision Products has grown from a small three person operation to a 25,000 square foot facility employing 50 people. The company now possesses twenty Star Swiss CNC Lathes, nine twin-turret twin-spindle Doosan and Eurotech lathes, and four CNC mills, including its latest purchase, a Makino a51nx.

Global Precision Products utilizes highly skilled programmers to make sure machine cycle times are minimized, tool life is optimized, and parts are manufactured to the highest levels of precision. The company differentiates itself from other contract manufacturers by ensuring the parts come out of the machining centers free of burrs. This eliminates the need for any expensive and time-consuming secondary deburring operations. A vital part of the organization's manufacturing strategy is thinking outside the box. Often, the company manufactures what

would typically be a milled part on a twin-spindle, twin-turret lathe. Running the parts on a twin-spindle, twin-turret lathe allows the organization to have up to three tools in the cut at the same time. This approach greatly reduces the cycle time and provides cost-saving to its customers.

Global Precision Products partners with its customers to help drive costs out of their products. The company's engineers and programmers work directly with the customer to improve the design for manufacturability of their components. These modifications to the design have led to significant cost savings and lead time reductions for their customers.



Mark Higgins



“

**We are an AS9100D, ISO 9001:2015 certified and ITAR registered contract manufacturing company that manufactures high precision, tight tolerance machined components for aerospace, defense, commercial and industrial, automotive, and test and measurement industries**

”

To request its services, the clients of Global Precision Products typically send them a drawing of the required part and request a quote. The organization's highly skilled team of engineers and CNC programmers then review the drawing and develop a process that can be utilized to manufacture the component. Finally, a pricing model is put together, and the customer is presented with a quote.

Global Precision Products has also heavily invested in the required inspection equipment to ensure all your critical dimensions are measured properly. The organization possesses a full line of quality inspection equipment ranging from CMMs(Coordinate Measuring Machines), Zeiss Profilometer for surface finish to microscopes at all workstations. The company also has OGP

Smartscope, Oasis Optical and Keyence Visual Inspection machines as part of its visual inspection equipment.

Global Precision Products puts a heavy emphasis on factory automation. The company currently utilizes 3 Universal Robots in their manufacturing operations and plans to continue to invest in this technology. The company has also developed a machining cell that incorporates a twin-turret, twin-spindle lathe with a robot that loads and unloads the raw and machined parts. The cell contains a CMM, and its measurements are fed into Statistical Process Control software. The SPC software monitors the performance of the machine, and when the parts begin to reach a process control limit, a tool offset is automatically sent to the lathe. This offset then ensures that the dimension is within the manufacturing tolerances. This closed-loop cell ensures Global Precision Products can run lights out production with perfect quality parts and zero scrap.

The market's demand for high precision parts at reduced costs is ever increasing. That is why Global Precision Products is planning to continuously invest in factory automation and intelligence. The organization intends to utilize Industry 4.0 technologies in its factory to improve its efficiencies and allow for continued growth in aerospace, defense, and high-end industrial test and measurement markets. 