

The Axenics Process: Excellence and Quality in Manufacturing

www.axenics.com





Overview:

The Axenics team combines years of industry experience with a high degree of technicality and skill. The breadth of our services and capabilities allow us to be extremely useful consultants to our clients, and often we are instrumental in saving them time and money. From the aerospace and healthcare industries, to the semiconductor, life sciences, and alternative energy industries, our experience and our processes always result in a quality product.

Design Services:

The Axenics team helps our clients turn an intangible idea into a finished product while saving time and money. Our designers and engineers are uniquely qualified to work with the products, subsystems and assemblies we build for semiconductor manufacturers, medical equipment manufacturing and other OEM manufacturing companies. Whether you're looking for CAD services, electromechanical engineering, designs employing tube bending, stainless steel tube welding, helium leak testing, welded components, or anything requiring sophisticated assemblies, our expertise and experience is unprecedented.

***Phase 1: Concept Development:** We work with our clients closely to understand their needs and performance requirements. During initial meetings we determine the product specifications and establish specific design variations to meet these needs.*

***Phase 2: Design Feasibility:** This phase takes us back to the engineering desk where we conduct an analysis and establish a manufacturing process will execute the concept determined in Phase 1. Here we break down the 3D CAD model into build phases, focusing on maximizing the performance requirements of the project while saving the most time and money. We conclude this phase with a detailed manufacturing plan.*

***Quick Note:** Our recent acquisition of a state of the art dual stack tube bender machine gives us the ability to upload CADs and instantly analyze design feasibility and potential engineering inefficiencies. To learn more about this new machine read our blog post, [Increasing Efficiency with a Dual Stack Tube Bender](#).*

Prototyping Services:

Innovating and creating new components and devices is a passion for us. We infuse an 'out of the box' thinking process with our technical experience and knowledge. Our engineers, designers and prototype technicians partner closely with our clients to develop new products that achieve the goal of the client without sacrificing reliability and cost effectiveness. From



a single component to a full assembly, we provide prototyping services for plastics as well as stainless steel, aluminum, copper, and other alloys.

***Phase 3: Design Verification:** The purpose of this phase is to ensure that the design meets the initial requirements, specifications and regulations initially identified in phase 1. We perform special tests to model or simulate a portion, or the entirety, of a product, service or system. Axenics will then review and analyze the modeling results. We work closely with the customer to identify any applicable standards and testing methods for the product and will manage the testing processes to suit the customer's needs.*

***Phase 4: Design Validation:** This phase is the culmination of all the efforts of the previous phases to ensure that the design will meet the needs and desires of the customer given its specific variations in components, materials, manufacturing, the environment it will be used in.*

Manufacturing Services:

Once the prototype has been developed and the most efficient method of assembly has been identified, a work manual is created and the appropriate staff is trained accordingly. Only then does the process move to the Axenics ISO 9001/2015, a certified contract manufacturing facility in Nashua, NH where the production and assembly takes place.

***Phase 5: Production:** We work closely with our customers to ensure the production process meets your requirements. We also encourage our customers to visit our facility to oversee this process and interact with our Engineers and Technicians.*

Finished Products:

Once the finished product is completed we hand it off to our clients with a manual and a full support team should they need assistance. Our team is always available to give our clients the support they need!

*Many of our customers initially enlist our contract manufacturing services, but eventually enlist our component manufacturing and mechanical assembly services as well.
Our breadth of expertise is a testament to our obsession with quality.*

To learn how Axenics can help you with your manufacturing or design needs, **Contact us** for a quote or to discuss a project in development.