

A man with short brown hair and a light beard, wearing clear safety glasses and a white collared shirt, is holding a large, cylindrical metal part. He is looking directly at the camera with a serious expression. The background is a blurred industrial setting with various metal components and machinery.

We Do Things Differently!

Demand Innovation

When it comes to engineered solutions and precision manufacturing, Alexandria Industries is widely recognized for exceeding industry standards, advanced engineering and process ingenuity. But what does this really mean for your production line, or most importantly, your bottom line?

Simply put, our value-added supply chain will reduce your costs. We provide a single point of contact to satisfy a growing list of our customers' custom component manufacturing needs. As your partner, we will work directly with you to develop cost effective products with a return on your investment and competitive lead times throughout the entire process. This is what we do every day. This is why you can demand and expect innovation from us.

Custom-Engineered Product Capabilities

Custom aluminum extruded products from 6000 series alloys (up to 11" in diameter)

- Custom tailored heat dissipation components and more than 225 standard heat sinks
- Precision machining of ferrous and non-ferrous materials
 - Material types include low/high carbon steels, alloy steels, stainless steels, aluminum, brass/bronzes, gray/ductile irons, plastics
 - Material forms include aluminum extrusions, bar stock, sand cast, die cast, forgings, investment cast, permanent mold*
 - 4th axis machining
 - 5th axis machining
 - Long bed machining up to 255 inches in length
 - Turning, honing, and broaching
- Fabrication
 - Notching and swedging to complex multi-stage punching and precision cutting
- Precision stretch forming and bending
- Thermoplastic injection molding up to 350 tons
- Polyurethane foam molding and engineered resin prototype casting
- Mechanical and chemical finishing, painting and plating
 - Type II anodize and Type III hardcoat
 - ExtremEtch™ – deep matte chemical finishing alternative to sand or bead blasting
 - Variety of colors available
- Laser etch
- Welding – TIG and MIG
- Sub-assemblies to consumer ready, packaged full-assemblies

Value Analysis/Value Engineering

Our engineering teams analyze and assess product concepts with emerging technology and advanced manufacturing practices to create value to our customers' overall design.

Manufacturing and Process Development

With an analytical approach to each manufacturing process, Alexandria Industries offers undoubtedly the most comprehensive, engineered, and process driven operations to its customers. Each of our facilities are capable of providing documentation and supportive studies (PPAP, FAI, PFMEA, etc.) to help develop the most effective design and expectation of product performance.

Alexandria Industries

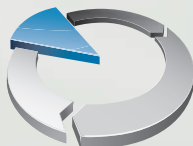
From day one, we have built a business and developed strategies that adjust to the rapidly changing environment of contract manufacturing. Since 1966, we continuously reinvest in our organization to vertically integrate and expand our service offerings and be an integral link in the supply chain for customers. Through acquisitions and ongoing strategic process investments, we bring innovative manufacturing services to new and ever-exciting levels for our customers.

From precision machining and fabrication of ferrous and non-ferrous materials, aluminum extrusions and heat dissipation components to plastic injection, and foam molded products, finishing and assembly, each of these services enhance the engineered product capabilities of Alexandria Industries. With a single point of contact, we serve customers across America and around the world. Alexandria Industries has proven to be more than a supplier, by becoming the supply chain itself.

Our forward-thinking mission will continue to push us to create business strategies that support tomorrow's innovative supply-chain initiatives for our customers. With this mission, we will continue providing superior value by eliminating the frequent struggles of managing multiple supplier schedules, lead times and performance metrics.

One Call

One call, hassle free.



**Materials formed at Alexandria Industries include aluminum extrusions and some aluminum bar stock*

Manufacturing Strategies

Demand Innovation

Striving for Operational Excellence through Continuous Improvement

Our customers experience the benefits of our commitment to continuous improvement. From the highest quality manufacturing capabilities and short lead times, to exceptional customer support. We are sure you too can benefit from our unique business structure.

QRM – Quick Response Manufacturing

Today's fast-paced business climate is one of the key drivers to select a QRM supplier. QRM relentlessly pursues the reduction of lead time in all aspects of an organization.

Implementing QRM allows Alexandria Industries to respond to customer needs by rapidly designing and manufacturing products customized to meet your needs.

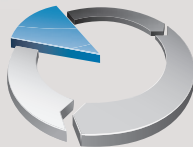
QRM provides internal focus on reducing lead times (up to 90%) throughout an operation – from the front office to shipping – to improve quality, reduce cost, and eliminate non-value-added waste.

Lean

Did you know aluminum has the highest rate of recycling than any other industrial material? One third of all aluminum produced is made of recycled aluminum. Now that is lean! As a manufacturer of aluminum products, we take great care that our product manufacturing follows lean practices every step along the way. From raw material to your shipping door, we examine each process to determine new ways to do more with less.

One Call

If you are considering an innovative manufacturing partner that you can find value in, give us a call today.



Aluminum Extrusions

Demand Innovation

As a full-service supplier, Alexandria Industries provides the perfect environment to develop your precision aluminum extrusions. Along with our extruded aluminum component services, we provide machining, fabrication, heat sinks, welding, finishing and assembly services.

You no longer need to shuttle your product from supplier to supplier, or place to place. With a comprehensive line of manufacturing services, and design-for-manufacturability expertise, Alexandria Industries simplifies and streamlines your product manufacturing needs.

Engineering

You may not always get what you want, but our engineers, manufacturing specialists and market experts, work closely with you to ensure you get what you need. We openly share our industry knowledge, experience and insight to create the best profile design for your product needs. We do this by evaluating your part's aesthetics, durability and weight requirements to ensure your design's tolerances and dimensional specifications are manufacturable and repeatable.

6000 Series Alloys

Choosing the correct aluminum alloy, is a critical step in the product development process. While some alloys extrude at a faster rate, others are easier to bend and some are better for machining. You can trust that with expertise in aluminum extrusion, we consistently provide quality products that meet our customers' needs.

Alexandria Industries extrudes the highest quality 6000 series aluminum alloys, the most popular series for most industry applications. We use primary and secondary (recycled) billet, which includes all the mechanical and physical properties as primary aluminum, and is 92 percent more energy efficient to produce.

Short Lead-Times

Alexandria Industries offers some of the industry's shortest lead-times using the principles of Quick Response Manufacturing (QRM) for both extrusion-only and value-added products. With lead times that are sometimes as short as five days, we have helped many customers discontinue their inventory stocking programs. Our commitment to continuous improvement and set-up reduction times allows us to make process improvements for the best use of our equipment.

Press Capabilities

Four extrusion presses, give us the ability to run both small and large profiles efficiently.

- 3.5 inch diameter Youngstown 550 ton aluminum extrusion press
- 7 inch diameter Presezzi 2472 ton aluminum extrusion press
- 7 inch diameter Youngstown 1800 ton aluminum extrusion press
- 10 inch diameter Farrel 3500 ton aluminum extrusion press

Our Competition

There is one more thing you should know. Our competition pays close attention to what is happening at Alexandria Industries. This tells us two things:

1. We are leading the way for others to follow.
2. Our customers will be a step ahead of their competitors.

One Call

Give us a call today. Our goal is to be your full-service supplier, providing you with consistent, quality product that meets your manufacturing needs.



Precision Machining & Fabrication

Demand Innovation

Extensive Capabilities and Expertise

At Alexandria Industries, our multi-axis CNC machines, universal robotics, and vertical machining centers, combined with our expertise and skilled machinists, bring great value to customers whose products require precise details to complete their complex component design needs.

Material Types

We machine both ferrous and non-ferrous materials, including low/high carbon steels, alloy steels, stainless steels, aluminum, brass/bronzes, gray/ductile irons and plastics.

Material Forms

We machine aluminum extrusions, bar stock, sand cast, die cast, forgings, investment cast and permanent mold. Materials formed at Alexandria Industries include aluminum extrusions and some aluminum bar stock.

Machining Equipment

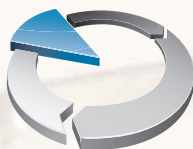
With our extensive knowledge and hands-on experience with CNC precision machining, the equipment selected for your components is the right one for the job. Our proprietary long-bed machining centers quickly machine lineal extrusions up to 255 inches long, while our multifunction manufacturing cells machine, deburr, tumble, wash, assemble, and package customer components. We also offer turning, honing, broaching, and complex punching equipment to provide complete solutions for your component needs.

Fabrication

We do more for our customers by providing notching, swedging, complex, multi-stage punching, miter sawing, deburring, laser etching, and other multifunction manufacturing processes.

One Call

With our more than 55 years of experience, expansive machining capabilities, and resourceful attitude, we provide solutions to fit your needs. With one call, we can help you determine if Alexandria Industries is the best manufacturing supplier for you.



Stretch Forming & Bending

Demand Innovation

Precisely Engineered Shapes

One of our many customized aluminum extrusion fabrication services at Alexandria Industries is stretch forming and bending. We manufacture precision-engineered radius-formed components with outstanding predictability, performance analysis and profile design.

Our different types of bending and stretch-forming equipment allow us to create diverse components. We help our customers understand the differences and provide valuable input on the best bending or forming solution for their product needs. We do this while adhering to some of the tightest tolerances in our industry.

Stretch Forming

Stretch forming your aluminum extrusions is common for many product applications.

- Marine industry: boat gunnels and curved structural components
- Medical industry: C arms for electro-medical imaging machines
- Automotive: structural and decorative components for today's advanced component technologies

Our fully programmable 32-ton stretch former is capable of forming curved aluminum components as long as 288 inches.

Bending

From simple tube bending to more complex custom extrusion bending, our ability to bend materials to provide the curved or bent aluminum precision shape you need, will set you apart from your competition.

Our programmable rotary, push, twin head and 3-roll benders make it possible for us to provide uniquely formed extrusions that allow you to create innovative products.

One Call

Our value-added aluminum fabrication services, and our precision-engineered extrusion capabilities, take supply chain efficiency to a new level that is untouchable by any other supplier. Give us a call today.



Finishing & Assembly

Demand Innovation

Metal Surface Finishes

We start with the finest materials and the best manufacturing practices in the industry. And we finish your quality components by maintaining tight chemical and electrical control. Metal finishing at Alexandria Industries allows for fewer issues with quality, relationship management, and freight damage, in addition to reduced shipping charges. From mechanical surface finishing to anodizing to our unique ExtremEtch™ finish, we are here to help select the best options for your metal finishing needs. Our customers understand they can count on us to provide superior consistency, high quality and color uniformity.

Anodizing – Anodizing, one of the most common and durable chemical finishes, is an electro-chemical process that forms a durable, porous oxide film on the surface of your aluminum-extruded products. We provide both Type II and Type III (hard-coat) finishes.

ExtremEtch™ – This process produces an evenly distributed finish coating without sacrificing the high tolerance features most engineers need for their aluminum extrusion product design requirements.

Chromate Conversion – We offer this low-cost option for corrosion and wear protection, as well as a bonding agent for paint and adhesives.

Painting – Choose between two types of painting for your products: liquid and powder coating. Your final product needs determine the best coating method.

Plating – This process is another finishing technique we use to help protect your components.

Heat Treating – We provide specific heat treatment characteristics to your component materials.

Mechanical Finishing – If your products do not need the protective coating provided by anodizing or other chemical finishing options, you may want to consider a mechanical finish for your products. We can buff, brush, bead blast, and tumble your components for a finished look and feel.

Assembly

Sometimes it makes sense for someone else to put together the pieces of the puzzle. We offer a broad range of assembly services, and have the efficiency and know-how to do product assembly right. Maybe your components need plastic end caps added before shipment. Or, your components need to be packaged and ready for final sale. We can do it. No matter what you need, we are here to help. From the smallest label to a complex multi-piece final component assembly, consider the value Alexandria Industries can bring to your product assembly needs.

One Call

At Alexandria Industries, we make your job easy so you can spend your day doing other things. Give us a call today.



Plastic Injection Molding

Demand Innovation

Alexandria Industries manufactures thermoplastic injection-molded products, using engineered-resin. Our molding capabilities range in size and weight, from one gram, up to seven pounds. With specialized services and a range of equipment, we are here to meet your finished product needs.

Services

We focus on understanding and meeting your requirements. From early project involvement through final delivery, Alexandria Industries will work with you every step of the way in your product development process.

Capabilities

Our advanced engineering services, design assistance and component supply capabilities, offer the highest degree of quality and tightest tolerances afforded through the diverse molding processes. Our new plastic injection-molding presses with embedded smart technology, allow us to reduce lead times by up to 50 percent, while adding capacity.

We are committed to providing you with the freedom to design. By working closely with our customers and our mold builders in the design phase, we can make improvements or changes quickly and cost effectively. We also offer the capability to produce 3D printed parts to evaluate your design's intent. During the manufacturing phase, we closely evaluate the finished product to ensure it is consistent with your design specifications.

Equipment

- 50 ton, 1 and 2 oz. shot size
- 60 ton, 3.5 oz. shot size
- 90 ton, 5.5 oz. shot size
- 150 ton, 11 oz. shot size
- 300 ton, 32 oz. shot size
- 350 ton, 57 oz. shot size

One Call

Give us a call today. You will be happy you did. We are a supplier like no other. You have our word on it.



Foam Molding

Demand Innovation

A Unique Benefit

When you create your next new product, consider how foam molding might be the material you need to make your product or application resistant to vibration and noise.

Molding polyurethane brings the flexibility to design in properties that are nearly impossible to capture with other materials and substrates. It also improves cost performance and expands the opportunities for advanced engineering properties. While polyurethane molded components offer many unique benefits of widely used materials such as plastics, metals and durable ceramics, it also allows the flexibility to form rubber-like materials.

Low Tooling Costs

The polyurethane molding process provides affordable tooling costs and quicker lead times compared to other competitive processes. Tools can be as simple as a prefabricated plywood shape to more sturdy materials such as a 6000 series aluminum plate.

Polyurethane molded products can be designed to have a hardness of 10-15A, similar to a pencil eraser, or as hard as 90D, like a golf ball. Whatever you need, we can develop a specific formula to meet your components' functional and aesthetic requirements.

Polyurethane Benefits

- Aids in product noise reduction
- Resists a range of corrosive substances such as oil, grease and other chemicals
- Bonds to a wide variety of other materials, including over-molding of different substrates
- Offers a range of durability and resiliency
- Ideal for extreme flex applications and resists cracking or splitting
- Durable in low temperature environments and resistant to thermal shock
- Resistant to impact. Polyurethane molding was created to replace other materials which could not stand up to high impact situations.

Equipment

Dekker Foam Molding Machine – 10-12 lb./cubic foot foam densities

One Call

Give us a call today if you have a component that can benefit from expansion foam molding.



Heat Dissipation Components

Demand Innovation

Since 1974, we have been manufacturing custom and standard heat sink solutions. We continue to specialize in providing engineering support for thermal application designs, short run orders, and timely deliveries.

Engineering Assistance

Our expertise in designing extrusions for custom heat sinks is cutting-edge. We will save you time and money. When designing or looking for any type of heat transfer product, Alexandria Industries is the smart choice. Besides manufacturing a product that meets your needs, our experts will guide you in heat dissipation designs.

Fast Turnaround

We know it is important to get your products fast. You can be sure that we can ship any of our 225+ in-stock heat sinks quickly. We also provide unbelievable lead times on custom heat dissipation solutions. Machined prototypes can be completed upon request. Our goal is to see you succeed and we do everything we can to help you beat your competitors to market!

Quantities

We understand that manufacturers do not always need to order large quantities of heat sinks. Not everyone needs thousands of the same heat sink. But some people do. This is why we offer low quantity orders of our stock heatsinks, along with higher volume orders for your custom heat sink designs.

Material/Process

Aluminum is the most cost-effective solution for cooling a majority of electronic devices. The most common alloy for extruded heat sinks is 6063-T5, which is easy to extrude and has excellent thermal and mechanical properties. Materials available are not limited to aluminum only. Our manufacturing processes include aluminum extrusions, bonded fin, and others. We provide heat sinks from .25-inch to 12-inches wide.

One Call

Give us a call today to get your heat sink solutions underway. You will be pleased with your experience partnering with Alexandria Industries as your heat sink manufacturer.



Welding

Demand Innovation

Services

For OEMs who struggle to find welding services, or want to simplify their supply chain, our welders can meet quick-turn, overruns and small to high-volume production orders.

At Alexandria Industries, we offer tungsten inert gas (TIG) and metal inert gas (MIG) welding services for a range of applications, including but not limited to medical components, and service trucks, truck bodies and trailers, as well as the marine and recreation products. Our welding services complement our extrusion, finishing, and machining capabilities, bringing more value to customer products that require permanent welds to join component assemblies.

Depending on your product needs, including adding strength to your metal fabrications, we are sure to have a welding solution that fits your needs.

TIG Welding

Our gas tungsten arc welding (GTAW), also known as TIG welding, uses a non-consumable tungsten electrode to produce the weld. Most commonly used to weld thin sections of stainless steel and non-ferrous metals such as aluminum, magnesium, and copper alloys, TIG welding allows our certified welders greater control to produce stronger, higher quality welds, versus competing processes, such as shielded metal arc welding and gas metal arc welding.

TIG welding is comparatively more complex and difficult to master, making it significantly slower than most other welding techniques.

MIG Welding

We also offer gas metal arc welding (GMAW), also known as MIG welding. MIG is the most common industrial welding process, preferred for its versatility, speed and the relative ease of adapting the process to robotic automation. MIG welding uses four primary methods of metal transfer – globular, short-circuiting, spray, and pulsed-spray.

Welding Capabilities

- American Welding Society (AES) D1.2/D1.2M-2003

One Call

If you are looking for a supplier who offers a range of complementary manufacturing capabilities and services that you can find value in, give us a call today.



Education

Demand Innovation

"The thought of pulling key employees to attend a two-hour seminar during our busy season seemed unrealistic. After attending your seminar, we realized this short investment in time has paid for itself 100-fold by the valuable information we learned." Engineering Director, Fortune 500 Company.

Education Services

Demanding innovation is integral to everything we do at Alexandria Industries. Our unconventional thinking and inventive design ideas can help you create innovative products that will stand out in the crowded marketplace. Another unique thing about Alexandria Industries is that we are always excited to share our knowledge through educational services and content tailored to meet your needs. We invite you to join us at these events created to help you be more successful.

Events

Customized Education Seminars – Geared for engineering and purchasing, we offer education seminars at your facility or a convenient nearby venue. We provide insights into designing for manufacturability, while reducing costs and improving product quality. Attendees from our more than 100 seminars agree this is a valuable and informative resource. Topics include:

- Aluminum Extrusion
- Assembly
- Bending and Stretch Forming
- Cost Reduction Strategies
- Custom Packaging
- Finishing
- Heat Transfer Products
- New Product Development
- Plastic Injection and Foam Molding
- Precision Machining
- Printing (Ink Jet, Ink Stamp, Laser Etch, Label, Silk Screen, Engraving)
- Quick Response Manufacturing (QRM)
- Welding

Customer Leadership Conference – At our Customer Leadership Conference, we share educational information on varied topics, including the value of Quick Response Manufacturing, leadership training, and RoHS & REACH standards, as well as trends in the aluminum metal market and the economy. Industry leaders, along with our own experts, present information that can improve product manufacturability and streamline purchasing. Our customers have found significant value in the information provided and find it hard to believe we offer all of it at no cost. The conference is ideal for manufacturing business owners, CEOs, operations, management, engineering and purchasing staff.

Resources

White Papers and News Articles – Technical and how-to guides that offer relevant information to assist you in your product design, while guiding your supply needs in today's manufacturing economic climate.

E-Newsletters – Short articles about industry issues and today's manufacturing challenges, along with information on our services, news/announcements and what's happening at Alexandria Industries.

One Call

Demanding innovation is integral to everything we do at Alexandria Industries. Our unconventional thinking and inventive design ideas can help you create innovative products that will stand out in the crowded marketplace.



Capabilities and Certifications

Demand Innovation

Core	Aluminum Extrusions - Up to 11" Diameter
	Anodizing - Many Color Options
	Anodizing - Type II
	Anodizing - Type III (Hardcoat/Hard Anodize)
Core	Assembly
Core	Bending - 3 Roll
Core	Bending - Push
Core	Bending - Rotary
	Bending - Sheet Metal
Core	Broaching
Core	Chromate Conversion Coating (RoHS)
Core	CNC Lathe or Turning
Core	CNC Machining - 4th Axis
Core	CNC Machining - 5th Axis
Core	CNC Machining - Horizontal
Core	CNC Machining - Long Bed (Up to 21.3 feet)
Core	CNC Machining - Vertical
Core	Deburring
	Die Casting
Core	Dry Film Lubricant Coating
	EDM Tool Texturing
	Electroless Nickel - Low Phos
	Electroless Nickel - High Phos
Core	Engraving
	ExtremEtch™ - Acid Etching
	Forging
	Grinding
Core	Heat Sinks - Aluminum Extruded
Core	Heat Sinks - Bonded Fin
Core	Honing
	Impact Extrusions
Core	Injection Molding - Industry Tolerance
Core	Injection Molding Press Shot Size - Up to 57 oz.
Core	Injection Molding Press Tonnage - Up to 350 Tons
Core	Insert Molding (Injection)
	Investment Casting
Core	Laser Etch/Laser Engraving
Core	Linear Advance/Multi-stage Fabrication Cells

Core	Machined Plastics
Core	Micro Molding
Core	Mitre Cutting
Core	Mitre Cutting - Double Head
Core	Notching
Core	Overmolding
	Paint - Liquid
	Paint - Powder Coat
	Permanent Mold
Core	Polyurethane Foam Molding
Core	Precision Cutting
Core	Printing - Ink Jet
Core	Printing - Pad
Core	Process Validation
Core	Production - Design and Tooling In-house
Core	Prototype - Design and Tooling In-house
Core	Punching - Intricate
Core	Punching - Simple
	Sand Cast
Core	Slotting
	Swiss Screw Machine
Core	Stretch Forming/Stretch Bending
Core	Swedging
Core	Welding - MIG Metal Inert Gas
Core	Welding - TIG Tungsten Inert Gas
Core	Welding - Ultrasonic
Core	Weldment Grinding
Core	Wire EDM
	Zinc Plating - Clear (RoHS)
	Zinc Plating - Yellow

Core Capability
Secondary Capability or Outsourced





















Materials	
	Aluminum - 6005A*
	Aluminum - 6060*
	Aluminum - 6061*
	Aluminum - 6063*
	Aluminum - 6082*
	Aluminum - 7075**
	Bar Stock**
	Brass**
	Bronze**
	Copper**
	Iron - Ductile**
	Iron - Gray**
	Polyurethane Foam***
	Sheetmetal - Ferrous**
	Sheetmetal - Non Ferrous**
	Steels - Alloy**
	Steels - High Carbon**
	Steels - Low Carbon**
	Steels - Stainless**
	Thermoplastics****



*Extrude and Machine

**Machine Only

***Molded

****Molded and Machine

Resources	
	24-7 Production
	Calibration
	Capability Studies
	Customer Leadership Conference
	Customer Newsletter
	Design for Manufacturability Assistance
	Dimensional Metrology
	Disaster Recovery Plan
	First Article Inspection
	Fixture Building
	On-site Education and Seminars
	Production Part Approval Process (PPAP)
	Preventative Maintenance
	R & D Support
	Rapid Prototyping via Urethane Casting
	Raw Material Traceability
	SPC Data Collection
	Supplier Controls
	Tool Building
	Virtual Tour

Certification, Licenses, Compliances	
	Federal Firearms Licensed
	ITAR Compliance
	REACH
	RoHS

Exhausting List

Some people think it's impossible to be really good at everything when you offer so many services. We want you to know that it truly isn't the case at Alexandria Industries. Our expert service providers are sought after in their industries to speak at manufacturing events around the country and even internationally. This expertise guarantees you that your products will be in great hands at Alexandria Industries.

One Call

Give us a call today if your company can benefit from the services provided by Alexandria Industries. We are here to support your success.

