



# LASER CUTTING SERVICES

ACCELERATE PRODUCTION ENHANCE QUALITY OUTPACE THE COMPETITION

# YOUR VISION, PRECISELY CRAFTED

## Welcome to Aristotle Metal Works

At Aristotle Metal Works, precision is our passion. We're your partners in innovation, committed to transforming your vision into reality with unmatched accuracy and attention to detail.

From initial consultation to final delivery, we offer a comprehensive suite of laser cutting services designed to elevate your project. Our experts will guide you through material selection, prototyping, and meticulous quality control. We'll handle assembly, finishing, and shipping to ensure your product surpasses expectations.

Experience the difference of a laser cutting service that values craftsmanship as much as you do.

Contact Aristotle Metal Works today and let us tailor our expertise to the needs of your next project.



# WHY COLLABORATE WITH ARISTOTLE METAL WORKS?

Companies looking to outsource laser cutting services prioritize cost-effectiveness, flexibility, efficiency, quality, and access to specialized expertise. These factors enable them to enhance their product offerings, respond dynamically to market demands, and focus on their core competencies for overall business growth.

#### At Aristotle Metal Works, we have what it takes to elevate your business.

#### **Cost Savings**

The initial investment and maintenance of laser cutting equipment can be prohibitively expensive. Outsourcing with Aristotle allows companies to avoid these costs, benefiting from the economies of scale and operational efficiencies offered by specialized service providers.

#### **Access to Expertise**

Laser cutting requires specific knowledge and skills, including the ability to handle sophisticated equipment and software. Aristotle offers a pool of experienced professionals who can provide design and engineering assistance, material recommendations, and optimal cutting solutions. This expertise is invaluable for companies lacking in-house capabilities or looking to enhance product quality and design.



#### Scalability

Outsourcing provides the flexibility to scale production up or down based on demand without the need for capital investment in equipment or space. This flexibility is crucial for companies to respond quickly to market demands.

#### Assurance

Specialized laser cutting service providers like Aristotle have the expertise and equipment necessary to ensure high-quality outcomes. At Aristotle, we stay up-to-date with the latest technology and techniques, producing components to the highest standards.

#### **Demand Management**

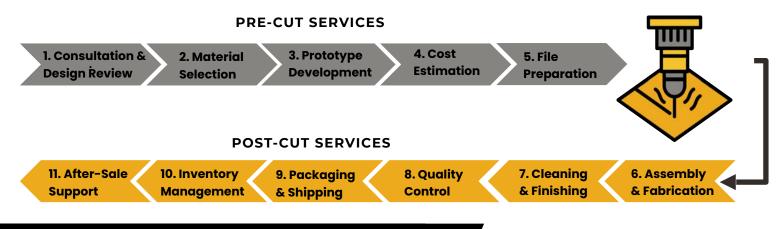
Aristotle Metal Works has the resources and operations to manage unexpected surges in demand. This means your supply chain won't be disrupted. This is crucial for businesses that want to stay competitive and meet customer needs without any downtime.

"WE ARE WHAT WE REPEATEDLY DO. EXCELLENCE, THEN, IS NOT AN ACT, BUT A HABIT." - ARISTOTLE

# WE OFFER PRE AND POST LASER CUTTING SERVICES

Laser Cutting Post and Pre-Services are designed to elevate your customer experience, ensuring the utmost accuracy and quality of the final product.

#### LASER CUTTING



## **AMW's Pre and Post Laser Cutting Services**

#### **1. Consultation & Design Review**

In our pre-services, we begin with a thorough Consultation and Design Evaluation, where our expert team collaborates with you to understand your needs, material specifications, desired thickness, and design complexity. We provide valuable advice on optimizing designs for laser cutting efficiency while ensuring structural integrity of your pieces.

We accept various file formats:

- 3D Models
- DXF Format
- PDF Format
- Other Formats

## **2. Material Selection**

Our laser cutting services are centered on a dedication to unmatched quality, beginning with a meticulous material selection process. Strategic partnerships with local suppliers grant access to an exclusive range of superior materials, enhancing the precision and aesthetics of projects. Prioritizing excellence over cost leadership, our approach ensures that your investment results in unparalleled quality and durability.

We also accommodate preferences for specific materials or suppliers, seamlessly integrating them into our production process. This flexibility highlights our commitment to meeting unique needs while upholding the highest quality standards that define our brand.

#### 3. Prototype Development

For complex or high-value projects, our Prototype Development service ensures that your design meets your expectations before proceeding with your project.

#### **4. Cost Estimation**

We provide a detailed cost estimation that encompasses all aspects of the project. You will receive a comprehensive Cost Analysis upfront—no surprises, just clear and honest pricing.

#### **5. File Preparation**

We convert your design into a format suitable for the laser cutting machine, often involving optimization for cutting efficiency and material conservation.



Choose us for a laser cutting partner who values quality as much as you do, ensuring your projects are not just completed, but masterfully executed.

## 6. Assembly & Fabrication

If your project involves multiple parts, our Assembly and Fabrication services seamlessly combine these elements into a cohesive final product. From forming to hardware installation (PEMs), our post-laser cutting services ensure your vision is realized in every detail.

## 7. Cleaning & Finishing

Our Cleaning and Finishing services ensure a perfect end result. Our offerings include:

- Polishing
- Deburring
- Grinding
- Sanding
- Painting
- Contract powder coating
- Contract plating & anodizing service.

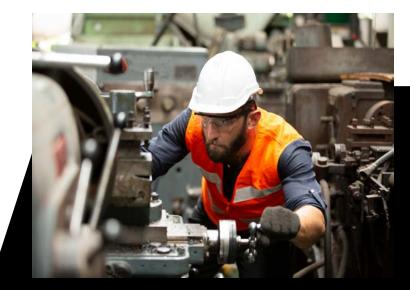
## 8. Quality control & Inspection

Our Quality Control and Inspection processes adhere to the ISO 9001 standard, ensuring meticulous checks at every stage. This includes a First Article Inspection (FAI) and a Final Inspection using Acceptable Quality Limit Sampling (AQL) methods, balancing producer and consumer risk effectively.

## 9. Packaging & Shipping

Packaging and Shipping, where we offer options for custom protective packaging solutions tailored to the specific dimensions and fragility of the laser-cut pieces. We also offer drop shipping services, directly shipping finished products to a third party or destination on your behalf.





# At AMW, attention to each detail is paramount.

#### **10. Inventory Management**

Inventory Management services at AMW are designed to optimize your production schedules. Whether its stock holding for regularly ordered items or just-in-time delivery to reduce inventory costs and ensure timely part delivery, we tailor our services to your needs.

#### 11. After – Sale Support

Even after delivery, our commitment continues with After-Sale Support. We provide comprehensive instructions for care or installation, warranty information, and address any concerns or questions you may have about the final product.

# THE ARISTOTLE ADVANTAGE

We harness the exceptional capabilities of the ENSIS 3015 AJ fiber laser cutter to deliver unparalleled results.

#### Quick Processing of Thin Materials

Significantly reduce waiting times for detailed designs and complex shapes.

#### **Strong Capability for Heavy Materials**

ENSIS 3015 technology handles weighty parts swiftly and with precision.

#### **Seamless Transitions with ENSIS Technology**

Effortless Shifts with ENSIS 3015 Technology remove need for setup time between different materials, - boosting productivity.

#### Aristotle's Pledge to Excellence

Our thorough approach and commitment to accuracy guarantee that your products will exceed your expectations.

# EXTENSIVE INDUSTRY SPECTRUM

Our precision laser technology ensures high-quality finishes, with the flexibility to handle complex designs and a variety of materials. With a strong commitment to customer satisfaction, we tailor our services to meet the unique needs and specifications of each client.

- Medical Devices
- Aerospace & Aviation
- Marine
- Construction
- **Electrical & Electronics**
- **Energy Sector**
- Metal Furniture & Fixture
- Industrial Equipment & Tools
- Defense & Military

- Pipe Fitting
- Environmental Remediation
- Security
- Academia & Research
- Motors & Drives
- Robotics
- Oil & Gas
- Automotive



# MATERIAL CAPABILITIES

The ENSIS 3015 AJ Fiber Laser Cutter excels at cutting a wide range of metals.

Here's a breakdown of the most common materials and their typical thickness ranges.

## **Common Metals**



## **Mild Steel**

Grades A36

- Δ572
- **Dimensional Limitations**

**Stainless Steel** 

- Area: 5-10 feet (~1.5 m x 3 m)
- Thickness: up to 1.00 inches (25.4 mm) thick



## Grades 303

- 304/L
- 316/L

## **Dimensional Limitations**

- Area: 5-10 feet (~1.5 m x 3 m)
- Thickness: up to 1.00 inches (25.4 mm) thick



## Aluminum

## Grades

 5052 6061

## **Dimensional Limitations**

- Area: 5-10 feet (~1.5 m x 3 m)
- Thickness: up to 1.00 inches (25.4 mm) thick

# LET US EARN YOUR TRUST

With over 25 years of expertise in the metal fabrication industry, we are excited to spotlight our laser cutting services, combining unmatched precision, steadfast dedication, and deep-seated knowledge. Our commitment to excellence shines through in every project, as we employ meticulous care, stringent quality control, and a laser-focused approach to meet your specific needs. We guarantee efficiency and precision in delivering your projects, minimizing delays by adhering to deadlines and exact specifications. Trust in us to transform your vision into reality with the precision and attention it merits.



## Titanium

- **Properties**
- High strength-to-density ratio Ability to withstand high temperature
- **Excellent Corrosion resistance**

**Special Metals** (upon request)

#### Copper **Properties**









# Brass

**Properties** 

• Excellent machinability

Thermal conductivity

Excellent electrical conductivity

- Good strength
- Corrosion resistance



# Accountability

We hold each other accountable

## Excellence

We strive for continual improvement Service

We deliver the best service possible

## Quality

We create top-quality products

# Integrity

We act with integrity, seen or unseen

# MISSION STATEMENT

OUR

CORE

VALUES

**To lead** our industry by striving for excellence in quality and the customer experience.

We are certified We are partnered We are associated





METAL WORKS

# CONTACT US



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