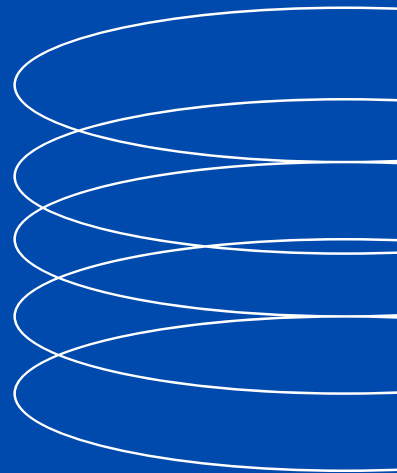
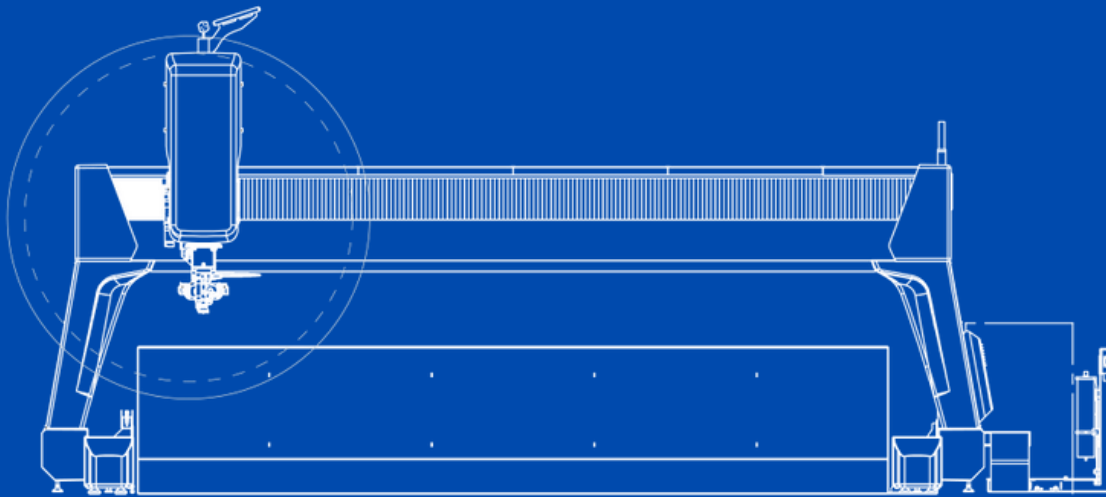


A CUT ABOVE THE REST: a comprehensive guide to waterjet cutting at ICS





Intelligent Cutting Solutions

ICS WAS FORMED TO FILL A GAP IN THE CUTTING SERVICE INDUSTRY

The founders of ICS recognized a need to enhance the waterjet cutting service experience by implementing technology and management strategies that allow for the most efficient process possible. The owners of ICS have worked in the aerospace industry for over a decade. During their career, they realized that the industry lacked a waterjet company that provides same-day quotes and had quick lead times. As a result, ICS opened our doors for business in July 2020 with two 5-axis waterjet cutting machines. Our team has continued to grow and ICS is now home to 5 state-of-the-art-machines.



INTELLIGENT CUTTING SOLUTIONS

ICS ADVANTAGE :

Quoting Process

ICS Advantage: Quoting Process

WE MAKE SUBMITTING RFQ'S EASY

ICS offers two ways to submit your RFQ's securely, upload your design on our websites easy-to-use rfq intake form or reach out to our sales team by emailingsales@icscuts.com

Our most common (and preferred) file format is a .DXF file, although we do accept AI, EPS, and DWG files. Most graphic design and CAD software does allow you to export your designs into one of these vector-based formats. These files are what makes collaboration on drawings and designs possible, this format is fully scalable and will retain its quality.

REGULAR STATUS UPDATES & CLEAR COMMUNICATION

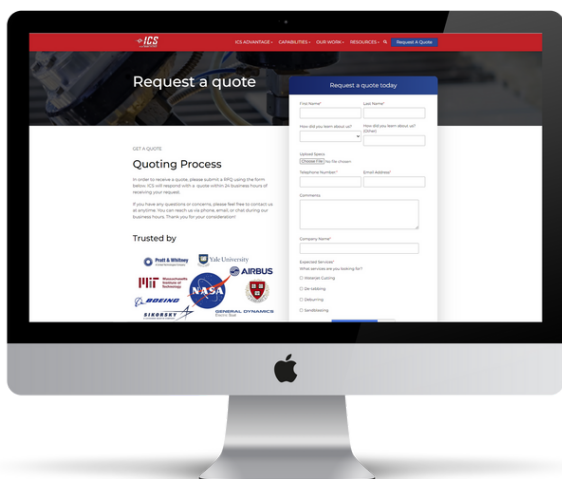
ICS' customer support & sales teams will notify you when they receive your quote. Long gone are the days of your quote never being acknowledged. Following a quick overview by our team you will be notified of an expected quote completion date. ICS processes most quotes within 24 hours however larger quotes with multiple components & detailed parts may exceed the standard 24 hours.

COMPETITIVE PRICING

the ICS sales team is trained to work with you to offer competitive pricing on all of our quotes. With ICS, you can rest assured you are getting a truly good price on cutting your components.

EXPERT GUIDANCE

ICS's team is here to help from start to finish. Our team of engineers are available to answer all your design questions and help calculate the exact amount of material you will need for your next project.



ICS Advantage: Quoting Process

COMPREHENSIVE SOLUTION; VALUE ADDED SERVICES

In order to offer a truly comprehensive solution for our customers needs ICS also offers deburring, sandblasting, and supply chain management as value added services. In addition, ICS works closely alongside our sister company Lynn welding to offer welding, machining, and fabrication services to create a seamless experience for those needing secondary services.

- ✦ Deburring: ICS's skilled deburring technicians understand the importance of breaking a sharp corner without overgrinding and adding an out-of-tolerance radius. ICS offers various types of deburring such as precision hand deburring, tumbling, blending, polishing, and de-tabbing.
- ✦ Sandblasting: Sandblasting is an affordable way to clean parts, and is perfect for prepping parts for painting or other coating processes. Thanks to our sister company, Lynn Welding we are able to utilize blasting cabinets large enough to accommodate 250 lbs worth of parts at one time.
- ✦ Supply-Chain Management: ICS strives to offer a convenient and efficient process for our customers. One of the ways we do this is by giving our customers the option to have ICS manage material sourcing, delivery logistics, and to opt into our stock & release program.
- ✦ Lynn Welding: ICS can manage production of your components from start to finish. With the capabilities of our sister company, we can see your parts through completion



INTELLIGENT CUTTING SOLUTIONS

ICS ADVANTAGE:

Order Intake & Contract Review Process

ICS Advantage: Order Intake & Contract Review Process

INTERNAL MATERIAL INTAKE & INSPECTION

Upon delivery of material ICS completes a thorough physical inspection to check for damage. The receiving personnel will perform a visual inspection of materials thickness, size, damage, and any other visible non-conformance. Our team then identifies and sorts incoming materials by customer and job number. ICS ensures that all material specifications match our customers request and enough has arrived to complete the job. This step in our quality management system is in place to avoid material mix-ups between customers and delays in production.

ICS CONTRACT REVIEW

upon receiving materials and a purchase order the ICS team begins their contract review process. All customer purchase orders or contracts are reviewed to ensure that product requirements are defined, and confirm that ICS has the ability to meet the defined requirements, including delivery and post-delivery activities. Members of our engineering and quality teams are responsible for reviewing the customer requirements and transferring them to the job router. This includes confirming drawing revisions, clarifying quality requirements and sending a sales order acknowledgement over to the customer with an expected completion date.

- ✦ Identification & Traceability: Every incoming job receives a ticket, is issued a unique job number, and is entered into our ERP system to ensure traceability.



ICS Advantage: Order Intake & Contract Review Process

CERTIFICATIONS & APPROVALS

✦ AS9100 Approved supplier: The AS9100d certification is a quality management system for aviation, space and defense organizations. This ensures that ICS has a structure which allows our business to adapt to changes in the industry, address product and safety concerns.

✦ ISO9001 Certified: ISO9001 is another quality management standard that ICS implements. This certification presents specific standards that allow us to increase business efficiency and boost customer satisfaction. Some of the principles included in this approach are: good leadership, customer-centered focus, continual improvement, and team involvement.

✦ ITAR Compliant: The ITAR compliance program is a set of regulations that are required by the U.S. government for any company that is involved in the manufacturing or shipping of defense articles or services.



INTELLIGENT CUTTING SOLUTIONS

ICS ADVANTAGE:

Reliable Production Scheduling

ICS Advantage: Reliable Production Scheduling

ADVANCED SCHEDULING

ICS plans our production schedule at least one week in advance. Our scheduling processes takes into account machine capacity and available labor to create an optimal schedule that offers quick lead times to our customers while maintaining achievability. ICS implements an interactive and visual approach to scheduling to promote collaboration amongst our internal teams.

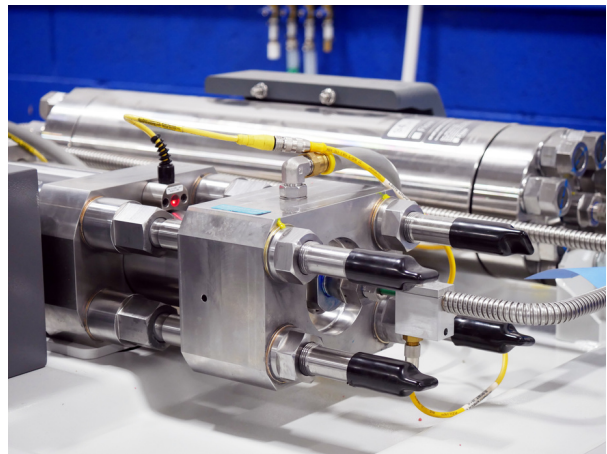
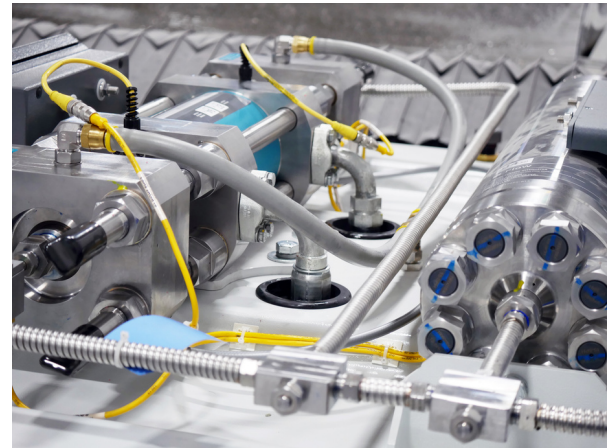
EXTENSIVE DISRUPTIONS PLANS

ICS has an extensive company-wide disruption plan in place to avoid delays in delivery commitments.

✦ Spare Part Inventory: ICS's production team keeps back-ups and replacements of parts that commonly fail due to the natural wear and tear from the abrasive process. Keeping an in-house stock of spare pumps, nozzles, and mixing tubes ensures consistent production.

✦ Machine Monitoring System: ICS also monitors all five of our Flow waterjet machines 24/7 through a performance portal. This portal can help us detect abnormalities in the performance of our waterjets early so we can prevent machine down-time.

✦ Preventative Maintenance: ICS Schedules regular preventive maintenance checks to ensure our waterjet systems are running at optimal performance. These preventative measures help to mitigate unexpected breakdowns.



INTELLIGENT CUTTING SOLUTIONS

ICS ADVANTAGE:

Quality Driven Production Process

ICS Advantage: Reliable Production Scheduling

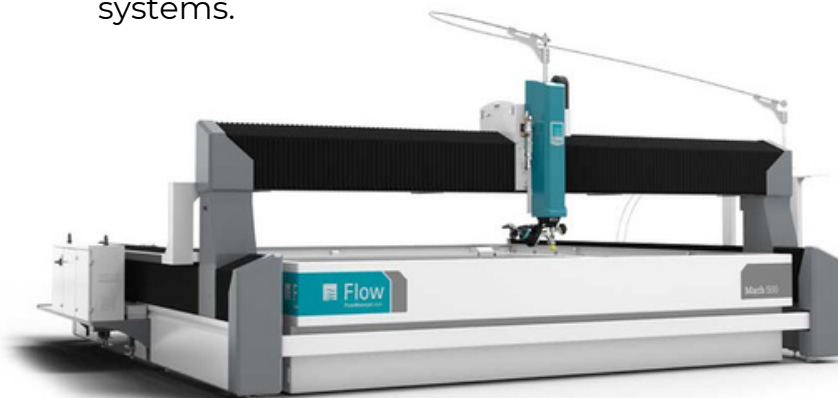
FIXTURE BUILDING & DESIGN SERVICES

ICS's engineering and production teams work together to develop and build any custom tooling that is needed to ensure the highest quality cuts can be made. Proper fixturing is crucial to maintaining the accuracy of waterjet cutting. The ICS engineering team takes vertical force, lateral force, and collisions into consideration during fixture design and development.

UTILIZING STATE-OF-ART EQUIPMENT

ICS uses state-of-the-art Flow waterjet machines that have the fastest cutting speeds and highest accuracy in the industry. All of the machines used at ICS have the following cutting edge technology.

- ✦ Taper Compensation: Features automatic taper compensation. This consists of an articulating wrist that eliminates stream lag and kerf taper errors. This results in the most accurate cuts while maintaining higher speeds.
- ✦ 5-Axis and Bevel Cuts: Three of ICS machines feature Dynamic XD™ cutting head technology that can cut bevels up to 60°. This allows us to cut complex 3D shapes. The cutting head wrist articulation has a motion capability of up to 89°.
- ✦ FlowCut® Software: Instantly translates most design files into a waterjet pathing software. This allows us to create the program for most parts within a few minutes, saving you time and money. The software also has a fully integrated 3D modeling module, which allows for programming 3D (5-Axis) and beveled cutting.
- ✦ HyperJet® 94i-S Intensifier Pump: Delivers 94,000 PSI which almost doubles the cutting speed from most conventional waterjet pump systems.



ICS Advantage: Reliable Production Scheduling

NESTING & MATERIAL OPTIMIZATION EXPERTS

ICS's state-of-the-art machines and highly skilled staff make nesting parts easy. Our team is trained to nest parts in a way that minimizes scrap and maximizes material usage.

FULL VISUAL & DIMENSIONAL INSPECTIONS

ICS conducts a 100% visual inspection and sample dimensional inspection for all jobs following the full production run. Dimensional inspection reports are available to all customers upon request.

FIRST PIECE INSPECTION FOR EVERY JOB

Every job that comes into ICS receives a first piece inspection to ensure the part is dimensionally accurate before the remaining quantities go through production. When any first article inspections are performed, the ICS team follows the AS9100 format and the resulting records are documented and retained as necessary.



ICS Advantage: Advanced Shipping Procedures



SHIPPING LISTS & CERTS

Upon project completion our shipping department goes through an extensive shipping list to ensure the correct quantities are packaged, all parts have been properly cleaned, required certs are included, and inspections were performed. ICS's shipping department then properly packages up the completed parts to prevent damage in transit.