



**HANNA  
MACHINE**



**CONTRACT MACHINING  
& FABRICATION**

*Full Service Machining for  
One-off to High-volume  
Industrial Parts*

Est. 1901



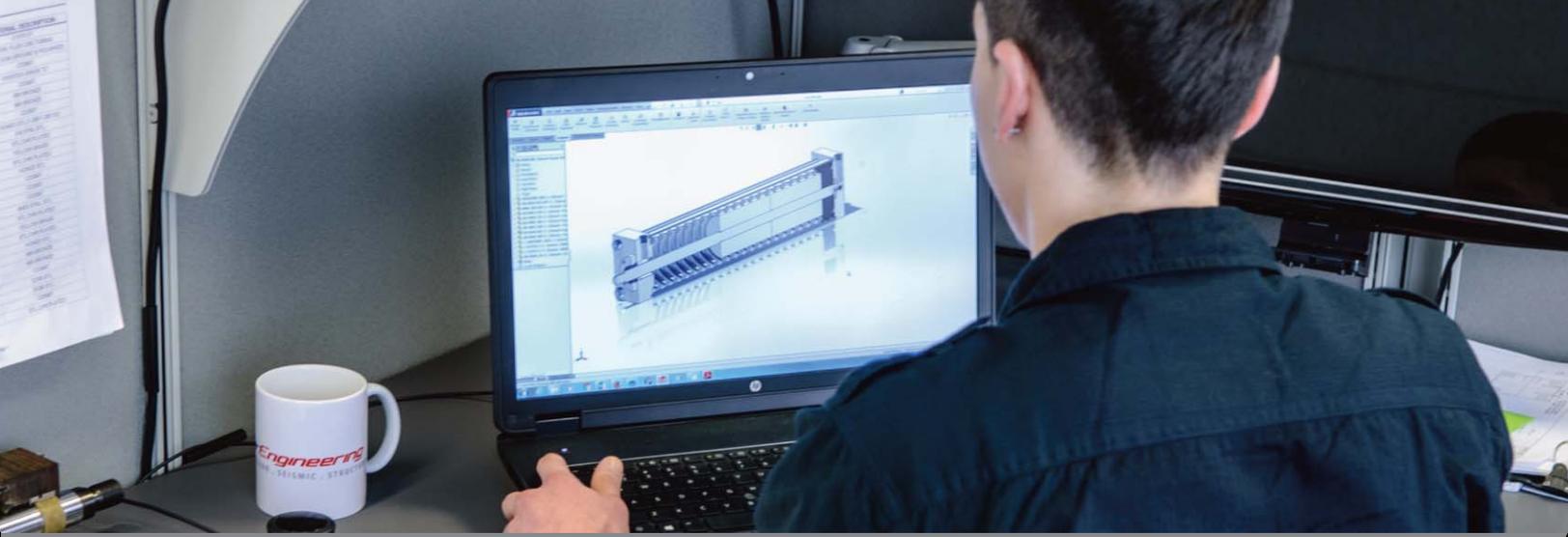
# YOUR PARTNER IN EFFICIENT AND EFFECTIVE MANUFACTURING.

**For over a century, Hanna has earned a reputation as an industry innovator.** In addition to our traditional offerings of high quality hydraulic and pneumatic cylinders, Hanna now delivers state of the art contract machining and fabrication services for one-off to high volume industrial parts.

- We can design, fabricate and assemble, weld, and paint your products — all under one roof. This allows us to keep our costs down while passing the saving onto you.
- Our team of engineers, cross-trained machinists, and welders are at the ready to take on any project — large or small, simple or complex.
- Our machinery is capable of machining any material from simple plastics to exotic steels up to 64.96" in diameter, 456.00" in length, and up to 11,000 pounds.
- Our QA/QC team will ensure your products meet your drawings and specifications, and industry standards like 10 CFR 50 Appendix B.



Our 108,000 ft<sup>2</sup> manufacturing facility located in Pleasant Prairie, WI.



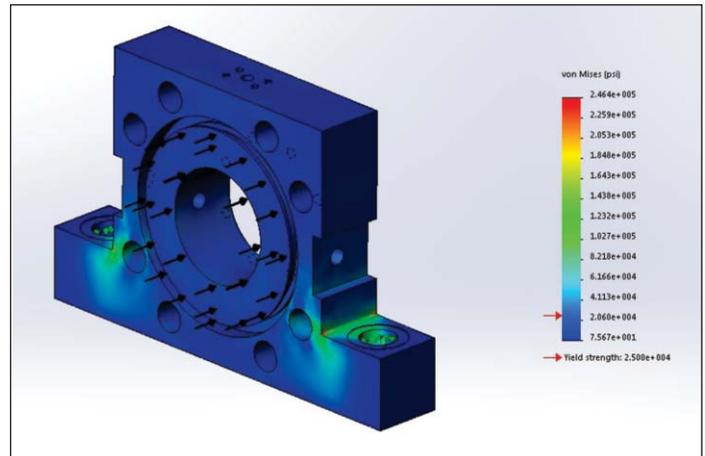
# ENGINEERING INSIGHT LEADS TO PRODUCT DESIGN ASSISTANCE YOU CAN TRUST.

Our motivated team consists of mechanical, manufacturing, industrial, aerospace, and nuclear engineers with over 100 combined years of experience engineering parts and products — from concept to finished product.

They are ready to take on any project or request in a short timeframe. Each customer project is completed by a strict engineering process that insures the finished product is within tolerance to the supplied print and meets its intended function.

With the combined experiences of our quality assurance/control and engineering teams, we have the capability to re-create or reverse engineer any part or product.

Upon request, we will 3D model and 2D sketch all of your components, and provide Solidworks, AutoCAD, .STEP, or .PDFs for final customer approval before any chips are cut.



# MANUFACTURING CAPABILITIES

## VERTICAL MACHINES

(Drilling / Milling / Turning)

- Spindle speeds 0 – 12,000 rpm
- 40 & 50 Taper Tooling
- Thru spindle coolant
- "X" axis up to 81"
- "Y" axis up to 61"
- "Z" axis up to 34"



- Spindle speeds 0 – 350
- (4) jaw independent chuck, 60" diameter
- Maximum swing 65"
- Maximum turning part height 35"
- 12 tool turret
- 60HP

## HORIZONTAL MACHINES

- Spindle speeds 0 – 12,000 rpm
- 40 & 50 Taper Tooling
- Maximum Part Dia. 31.5" / Height 35"
- "X" axis up to 28.74"
- "Y" axis up to 28.74"
- "Z" axis up to 31.50"



- Spindle speeds 0 – 5000 rpm
- SMW Quick Change Chuck
- Maximum turning 23"
- Maximum bar capacity 5"
- Maximum "Z" turning 42"
- 12 tool turret

# LATHES, HONES & SAWS

- Engine lathe max 35" dia and 400" long
- Hone max bore dia 24" & length of 160"
- Saws max cutting part size of 20"

**Additional conventional machines, Bridgeport Mills, Blanchard grinders, boring mills, etc.**

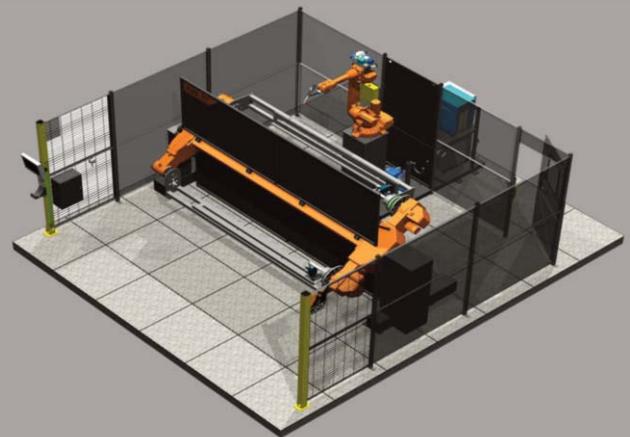


# ASSEMBLY & TESTING

- Cylinder assembly up to 40" bore, panel assembly, reverse engineering, and much more.
- Testing of hydraulic up to 10,000 psi and pneumatic up to 500 psi, nitrogen testing, electrical testing, and much more.



# NEW ADDITION!



## Robotic/Ferris Wheel Welder

- Diameters up to 24"
- Lengths up to 120"
- Exceptional quality/repeatability
- Numerous welding types

# MATERIALS

## Aluminum Alloys

- 6061
- 2024
- 2011
- 7075

## Copper Alloys

- 660 Bronze
- Aluminum Bronze
- 360 Brass

## Composites

- Phenolic
- G-10
- Graphite
- Nylon
- Fiberglass

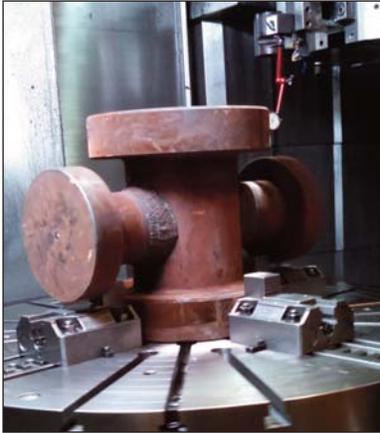
## Iron Alloys

- 60-45-12 Ductile Iron
- 80-55-06 Ductile Iron
- Grey Iron

## Steel Alloys

- 1045
- A36
- 4140
- 303
- 316
- 17-4

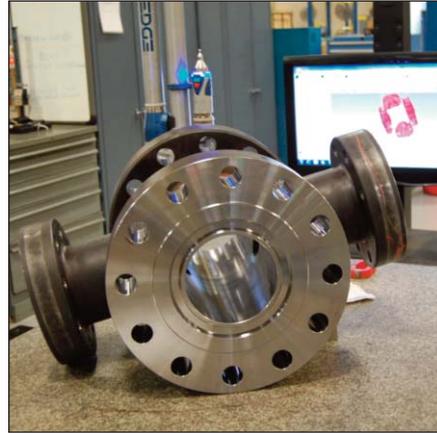
Before



During



Finished Product



This series of photos show the making of a drill spool made of 4140 heat-treated steel for DG Energy.

# CERTIFICATION

All of your parts are built to exacting standards to maximize longevity and reliability. Some of these standards include the following.

- US NRC 10 CFR 50 Appendix B\*
- ASME Section 9 (Coming Soon)
- ASME N Stamp (Coming Soon)
- ASME U Stamp
- AWS D1.1
- CAGE Code 7D4J9
- IEEE Qualification
- MIL-I-45208
- MIL-Q-9858



American Welding Society

\*US NRC 10 CFR 50 Appendix B quality control management is a derivative of ISO 9001 with greater emphasis on part traceability.



## WHAT SETS US APART.

### World-class Quality

Hanna takes pride in providing our customers with the highest quality machined products possible.

We start by applying our **“The First 10%”** project management and product quality philosophy to each and every project that you bring to us. Then we use the finest materials, hire experienced operators and technicians who can maintain and measure any dimensional or geometric tolerance required, and check quality at each step of the manufacturing process to ensure they meet AS9100, ASME, Mil Spec, or NRC 10 CFR 50 Appendix B standards — and of course your specifications.

Upon request we can provide material certification and testing, certificates of conformance, and full dimensional inspection reports.

### Exceptional Delivery

Hanna provides customers with industry-leading speed of delivery while designing and machining products tailored to your exact specifications.

**Call or email us, or visit our website, to learn more about our capabilities and start a contract manufacturing partnership with Hanna.**

We’re able to do this by having our 108,000 ft<sup>2</sup> facility full of 40 machining centers, welding machines, assembly stations, paint booths, and testing benches all under one roof — and having a 10 CFR 50 quality assurance program optimized for speed and efficiency. This allows us to control all of the manufacturing processes and throughput resulting in reduced lead time.

Through a dedicated partnership with courier services, we can speed up the process for producing quality products by picking up and delivering of all rough and final components to ensure the project is completed on-time.

### End-to-end Technical Support

Machining high-quality parts — and building best-in-class products — requires an array of knowledge from concept to design to machining to fabrication to finished product. With over 100 years of manufacturing experience and our engineering, machinists, and manufacturing operations personnel expertise, Hanna can provide you the trusted insight required to create the right product for your application.

# OUR CUSTOMERS COME FIRST!

Since 1901, Hanna has been striving to have the highest quality product on the market that can be delivered as quickly as possible with the right personnel on staff to assist our customers in any means necessary for technical support and assistance on any past and current jobs, or future inquiries. It's our belief, if we can provide those three things — **quality, delivery and technical support** — everything else will fall into place.

We've instituted a quality management system that seeks continuous improvement in our machinery, equipment, software, procedures and employee skills to provide products that satisfy — **and exceed** — customer and regulatory requirements.

Our Live Design platform allows customers to draw, model and obtain a quote on basic actuators in about 10 minutes. For your more complex applications our sales and design team are available via phone, fax, email or web-based conferencing — and we turnaround quotes within 24 hours and approval drawings and models within 1 – 3 business days.

When it comes to quality, delivery and technical support, **Hanna strives to be 2nd to no one!**

## Major Industries Served



CON-AG



INDUSTRIAL



MILITARY



NUCLEAR



OIL + GAS

Proud members of:



**HANNA**  
MACHINE

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**Hanna**

