



**INNOVATIVE
MACHINING, LLC**
An ISO 9001:2015 Registered Company

MACHINING | WELDING | FABRICATION | ASSEMBLY

**SERVICES
GUIDE**

2024



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ABOUT US

Innovative Machining, LLC was established in 1995 in Neenah, WI. Once a 3,000 square foot facility, Innovative Machining, LLC has grown to over 125,000 square feet today. Along with our ISO 9001:2015 Certification, we bill ourselves as “the place to go for exemplary service and quality products.”

We are a contract machining and fabricating shop positioned to meet our customers' evolving production needs and quality standards. Innovative Machining primarily serves a wide base of customers throughout the US, across a wide range of industries. We are capable of manufacturing an array of custom parts to exact specifications. Our production control traceability techniques aligned with our quality control documentation assure that you will receive the right part, on time, every time.

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2023



VISION STATEMENT

To be the partner of choice in the machining and fabrication industry.

To meet and exceed our customer's expectations.

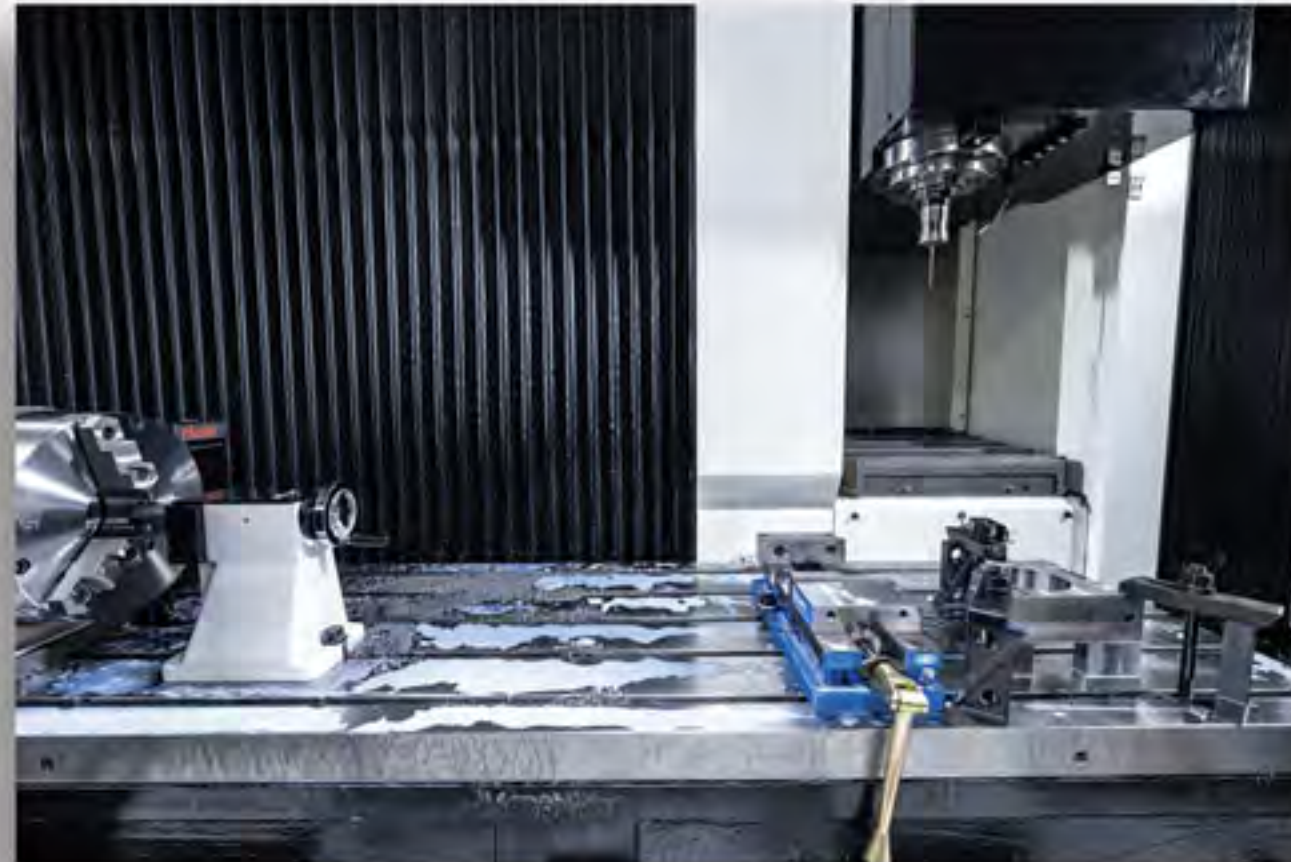
To continually improve our quality management process by using our quality objectives.

VERTICAL MACHINING

Vertical machining centers easily accommodate longer parts, have open visibility for optimum productivity, and are best for quick milling jobs. Innovative has the ability to utilize our vertical CNC machining centers for prototype or production jobs. We have the skilled machinists required to bring your next project from concept to completion. With over 10 vertical CNC machining centers, we have the capacity to meet any project needs. With our largest travel window up to 144", this allows us to be cost effective with larger parts, eliminating the need to use a boring bar machine.

With Mazatrol, our machinists have the added ability to program at their vertical machining centers. Thus, allowing better control of lead times and best utilization of machinist's to get your projects finished. We are always investing in our facility and employees to give them the tools they need to get the job done right.





MAZAK VTC-250D

TRAVEL: X: 69.3" Y: 25" Z: 25.9"

TOOL CAPACITY: 24

MAX WEIGHT: 3,000 LBS

CONTROL: MAZATROL SMOOTHG

MAX SPEED: 6,000 RPM

SPINDLE TAPER: 50



MAZAK NEXUS 510C-II

TRAVEL: X: 41.3" Y: 20.9" Z: 20"

TOOL CAPACITY: 30

MAX WEIGHT: 2,640 LBS

CONTROL: MAZATROL MATRIX NEXUS

MAX SPEED: 12,000 RPM

SPINDLE TAPER: 40



MAZAK VTC-200G

TRAVEL: X: 144" Y: 20" Z: 26"

TOOL CAPACITY: 48

MAX WEIGHT: 4,600 LBS

CONTROL: MAZATROL 640M

MAX SPEED: 12,000 RPM

SPINDLE TAPER: 40

MAZAK VTC-300C

TRAVEL: X: 65.3" Y: 30" Z: 26"

TOOL CAPACITY: 24

MAX WEIGHT: 3,300 LBS

CONTROL: MAZATROL 640MN

MAX SPEED: 15,000 RPM

SPINDLE TAPER: 40



SIGMA SDV 3219

TRAVEL: X: 125" Y: 75" Z: 39"

TOOL CAPACITY: 40

MAX WEIGHT: 20,000 LBS

CONTROL: FANUC 18i CONTROL

MAX SPEED: 6,000 RPM

SPINDLE TAPER: 50

SMART SV2 VMC

TRAVEL: X: 31.4" Y: 19.6" Z: 19.6"

TOOL CAPACITY: 30

MAX WEIGHT: 1,320 LBS

CONTROL: FANUC CONTROL

MAX SPEED: 12,000 RPM

SPINDLE TAPER: 40



MAZAK VTC-805G

TRAVEL: X: 118.1" Y: 31.5" Z: 28.3"

TOOL CAPACITY: 40

MAX WEIGHT: 4,600 LBS

CONTROL: MAZATROL SMOOTHG

MAX SPEED: 10,000 RPM

SPINDLE TAPER: 50

HORIZONTAL MACHINING

Horizontal machining centers offer shorter processing time with multiple pallets. Horizontal machining centers have the potential for three working sides with parts on fixture and are best for more complex parts and chip evacuation.

Horizontal boring bars work well for large parts and weldments due to their open design. The rotary tables don't need to reset, and the machines are very durable, providing a long tool life. Innovative has small to large horizontal boring bars in-house to meet any size requirements for a project. With over 13 different machines, you can rest assured that our facility has the horizontal CNC machining centers you need to meet your project demands.





OKK HM800S HMC

TRAVEL: X: 41.3" Y: 35.5" Z: 38.6"

TOOL CAPACITY: 60

MAX WEIGHT: 2,645 LBS

CONTROL: FANUC 31i CONTROL

MAX SPEED: 12,000 RPM

SPINDLE TAPER: 50

PALLETS: (2) 800mm

TABLE: 31.5" x 31.5"

SMART NX 7000

TRAVEL: X: 39" Y: 37" Z: 33"

TOOL CAPACITY: 64

MAX WEIGHT: 2,640 LBS

CONTROL: FANUC 31i CONTROL

MAX SPEED: 12,000 RPM

SPINDLE TAPER: 50

PALLETS: (2) 630mm

TABLE: 24" x 24"



MAZAK HCN 5000

TRAVEL: X: 28.7" Y: 28.7" Z: 31.5"

TOOL CAPACITY: 160

MAX WEIGHT: 1,500 LBS

CONTROL: MAZATROL SMOOTHG

MAX SPEED: 14,000 RPM

SPINDLE TAPER: 40

PALLETS: (6) 500mm

MULTIPLE PALLET POOL

MAZAK HCN 6800 NEO

TRAVEL: X: 41.3" Y: 35.5" Z: 38.6"

TOOL CAPACITY: 240

MAX WEIGHT: 3,310 LBS

CONTROL: MAZATROL SMOOTHG

MAX SPEED: 10,000 RPM

SPINDLE TAPER: 50

PALLETS: (2) 630mm

TABLE: 24.5" x 24.5"



TOSHIBA BTD-200QF BORING BAR

TRAVEL: X: 59" Y: 47" Z: 28"

TOOL CAPACITY: 30

MAX WEIGHT: 6,600 LBS

CONTROL: TOSNUC 888

MAX SPEED: 3,000 RPM

SPINDLE TAPER: 50

TABLE: 39.5" x 39.5"

TOSHIBA BP-150 P45 BORING BAR

TRAVEL: X: 180" Y: 90" Z: 71" W: 32"

TOOL CAPACITY: 38

MAX WEIGHT: 55,000 LBS

CONTROL: TOSNUC 888

MAX SPEED: 2,500 RPM

SPINDLE TAPER: 50

TABLE: 70" x 180"



NIIGATA HN130-B BORING BAR

TRAVEL: X: 78.8" Y: 61.8" Z: 15.8"

TOOL CAPACITY: 120

MAX WEIGHT: 5,500 LBS

CONTROL: FANUC 15i

MAX SPEED: 2,500 RPM

SPINDLE TAPER: 50

PALLETS: (2) 1360mm | (2) AUX

TABLE: 70" x 180"

HNK HB-150 BORING BAR

TRAVEL: X: 118" Y: 98" Z: 63" W: 27.6" MAX SPEED: 2000 RPM

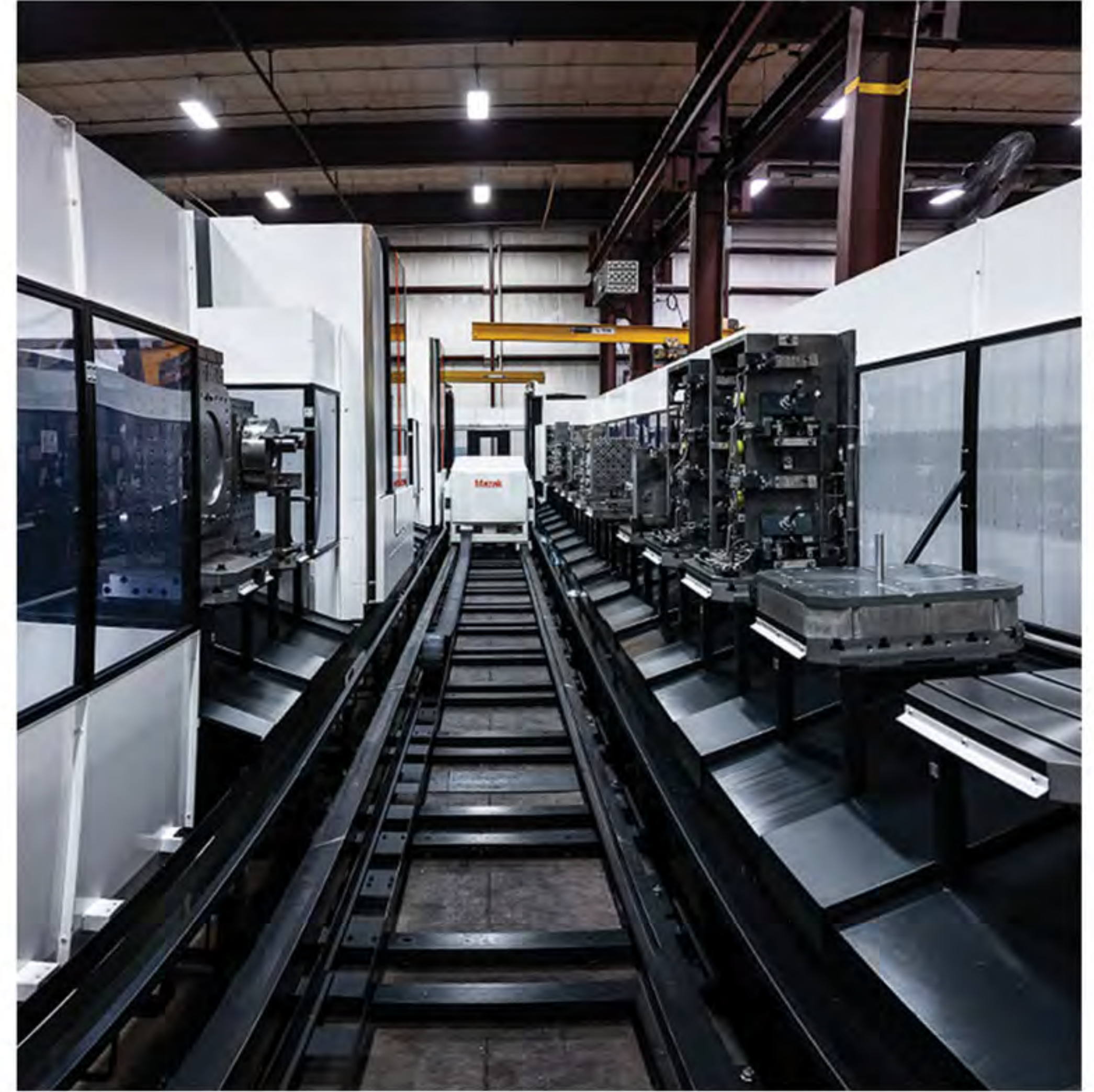
TOOL CAPACITY: 60

MAX WEIGHT: 44,000 LBS

CONTROL: FANUC 31i

SPINDLE TAPER: 50

TABLE: 78.7" x 86.6"



MAZAK PALLETECH SYSTEM

PALLETS: [20] 600mm

STATIONS: [3] MAZAK HCN-6800 HORIZONTAL MACHINING CENTERS

TRAVEL: X: 41.3" Y: 35.5" Z: 38.6"

CNC LATHES

CNC, or computerized numerical control, lathes are highly versatile in comparison to non-CNC lathes. They're extremely accurate machines that are capable of turning up to 22.8" in diameter. Innovative has invested in new machines in recent years to increase our throughput and accuracy. We offer Doosan and Mazak CNC lathe options. Our Doosan Puma 2600 has semi-automation with a bar feeder and live tooling. This works best for production runs due to the autonomous features of the lathe, thus providing less down and setup time and more throughput.





MAZAK QUICK TURN NEXUS 400-II

MAX CHUCK DIAMETER: 18"

MAX TURNING DIAMETER: 22.8"

MAX TURNING LENGTH: 80"

MAX THROUGH BORE: 3.6"

MAX SWING: 33.2"

MAX SPEED: 2500 RPM

TOOL CAPACITY: 12

DOOSAN PUMA 4100LB

MAX CHUCK DIAMETER: 19"

MAX TURNING DIAMETER: 21.7"

MAX TURNING LENGTH: 82.4"

MAX THROUGH BORE: 5.2"

MAX SWING: 31.1"

MAX SPEED: 2000 RPM

TOOL CAPACITY: 12

TWO AXIS



MAZAK QUICK TURN NEXUS 350-II

MAX CHUCK DIAMETER: 12"

MAX TURNING DIAMETER: 16.5"

MAX TURNING LENGTH: 23.8"

MAX THROUGH BORE: 4"

MAX SWING: 26.7"

MAX SPEED: 3,300 RPM

TOOL CAPACITY: 12

DOOSAN PUMA 2600-II Y

MAX CHUCK DIAMETER: 10" & 8"

MAX TURNING DIAMETER: 14.8"

MAX TURNING LENGTH: 29.9"

MAX THROUGH BORE: 3.2"

MAX SPEED: UP TO 6000 RPM

TOOL CAPACITY: 12

LIVE TOOLING

AUTOMATED BAR FEEDER

WELDING & FABRICATION

Our in-house welding & fabrication department takes your job from concept to completed manufactured part, limiting our need for outsourcing operations. Our talented, AWS certified welders are experienced in welding multiple materials for large and small weldments. Having this ability under the same roof allows us to weld and potentially machine any product. This sets us apart from the competition by having various manufacturing resources in one controlled setting.

Our fabrication shop is also equipped with 2 Flow Waterjets that can cut up to 8" thick material. We have experience in cutting some of the most exotic materials such as titanium. From one time orders to production orders, our fabrication staff has what it takes to complete project requirements.



FLOW I-6024 DUAL ZONE WATERJET (2)

- 5 Axis with Dynamic Cutter Head
- 87,000 PSI
- Twin 6' x 12' Work Envelope
- 8" Cutting Thickness
- Flow Master PC Controller

DADSON K1375-1 FAGOR GUNDRILL (1)

- Knee Type
- 3 Axis
- 13.75" diameter x 31' Blind Depth
- 62" Through Depth

MITSUBISHI FA10 CNC WIRE EDM (1)

- Max workpiece dimensions: 31.4" x 23.36" x 8.4"
- Max Weight: 1,100 LBS

PRESSES

- 55 Ton Hydraulic Press (1)
- 6 Ton Arbor Press (1)
- 12 Ton Press Master - Broach Press (1)
- SPX Power 100 Ton H-Frame Press

MARVEL CUT-OFF SAW 380X-PC60 (1)

- 15" x 20" Capacity
- Touch Screen Programmable Control
- Programmable Miter Cutting & Bar Feed

MARVEL SAW SPARTAN PA13/3EPL (1)

- 13' x 14" Capacity
- Programmable Bar Feed with Bundle

OKAMOTO PRECISION SURFACE GRINDER (1)

- 14" x 6" Table

WELDERS

- AWS Certified Welders | D1.1, D14.8, 15.1
- Miller 350P Pulsed MIG Welder (350 Amp)
- Miller 351 TIG Welder (350 Amp)
- Lincoln 255 Deltaweld 451 MIG Welder (450 Amp)
- Lincoln CV-300 MIG Welder (300 Amp)
- Lincoln DV-400 MIG Welder (400 Amp)
- Miller Millermatic 185 MIG Welder (200 Amp)

WELD EQUIPMENT

- Weld Platen Tables (8)
 - 5' x 5' (6)
 - 5' x 8' (2)
- Welding Tables (3)
 - 60" x 96" (1)
 - 48" x 144" (2)
- Weld Positioner
 - Table Diameter: 24
 - Horizontal Weight 1,750 lbs.
 - Vertical Weight: 1,000 lbs.



QUALITY CONTROL

Providing quality parts to our customers has always been the top priority of Innovative Machining. In 2018, Innovative established a new state-of-the-art quality lab, giving our quality control team even more tools to meet project requirements. We currently have 3 CMM's in-house with the newest machine added in 2021.

Our team also has a Romer arm to help measure larger parts that do not fit on our CMM's. The measuring range of the Romer arm is up to 13 feet giving us more capability and flexibility for larger parts. All of our measuring tools are calibrated on a quarterly basis to ensure accurate measurements. In addition, our staff has the tools and knowledge necessary to meet your PPAP requirements.



BROWN AND SHARPE CMM GLOBAL S (1)

- Travel: 47.24" x 59.06" x 39.37"

MISC QUALITY EQUIPMENT

- Granite Surface Plates (2)
 - 48" x 72"
- Mitutoyo Digimatic Height Gages (2)
 - 24"
 - 40"
- Starrett Inside Micrometers
 - Up to 40"
- Federal Portable Surface Roughness Gage
- Mitutoyo Gage Blocks
- Mitutoyo Micrometers
 - 0" to 24"
- Mitutoyo Dial Bore Gages
- Brown and Sharpe Tri-Micrometers
 - 0.200" to 6"
- Mitutoyo Vernier Caliper
- Regal Beloit Thread Gages

BROWN AND SHARPE CMM (1)

- Travel: 27.6" x 39.4" x 25.6"

BROWN AND SHARPE CMM GLOBAL S (1)

- Travel: 47" x 118" x 39.4"

ROMER 7540 PORTABLE CMM ARM (1)

- 6 Axis arm for Tactile Measurements
- Measuring Range: 13.1 Feet (4.0m)
- Point Repeatability: +/- 0.0022" (0.055mm)
- Volumetric Accuracy: +/- 0.0027" (0.069mm)



PAINT & POWDER COAT

Innovative Machining also has the ability to paint and powder coat. Equipped with both a wet paint & powder coat booth to accommodate small to large parts, our facility has room to store, prep, and paint parts that need a paint or powder coat application. Being able to control painting in-house allows us to offer a superior product to our customer, at a lower cost.

WET PAINT

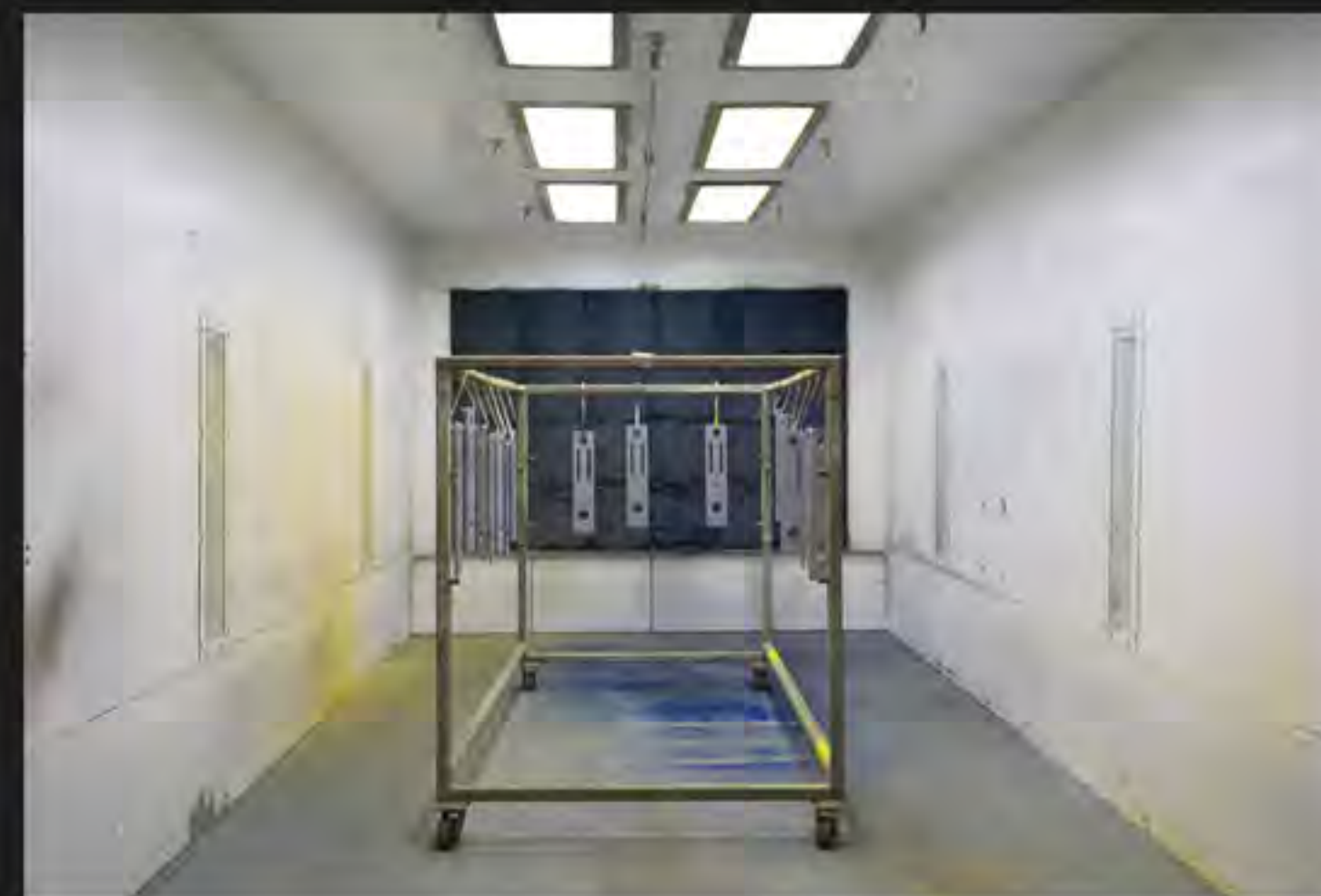
- Paint Booth: 8' H x 12' W x 20' L (1)

POWDER COAT

- Paint Booth: 9' H x 11.5' W x 16' L (1)
- Prep: Sand blast booth. 1-1.5 mil blast profile

PREP EQUIPMENT

- Pressure Blast Cabinet: 48" x 48"
- Abrasive Finishing Vibratory Tumbler (2)
 - Burr Bench Model 2016
- Vibratory Bowl Finishing Machine
 - Model AB-14
- Alliance Aquamate RF-3648 Parts Washer
 - Rotary Table
 - Basket: 36" Diameter x 48" Height
 - Weight: 1,250 LBS
- Sand Blast Booth
 - 9' H x 13' W x 18' L
- Paint Oven
 - 8.5' H x 8' W x 15.5' L
- Bead Blast Booth
 - 23" H x 36" W x 24" L
 - Application: Stainless Steel Parts



VALUE-ADDED ASSEMBLY

Innovative Machining is much more than just machining, as our name suggests. We have roughly 60,000 square feet of assembly space and can manage projects from start to finish. By having CNC machining, fabrication, and paint all in one setting, we are able to bring your assembly project to life.

With enough space to accomplish your assembly needs, we encourage you to contact to our team today to learn how we can fully manage your next project.





**INNOVATIVE
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