

# GEM Manufacturing, Inc.

## MILLING

GEM Manufacturing, Inc. is a contract manufacturer specializing in high mix, low to mid volume CNC Turned and Milled products.

We manufacture over 2,000 different part numbers annually in volumes from 5 to 50,000. Our Commitment to servicing our customers through quality production, competitive pricing, and excellent customer service has been the bedrock of the company for 40 years.

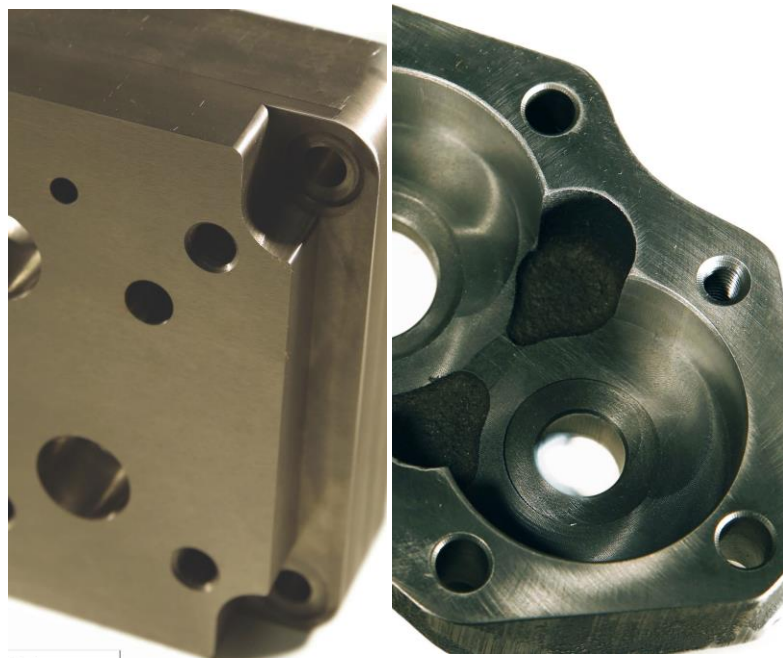
Single Source responsibility, Lean, Six Sigma, has latest technologies and the management team has over 100 years of combined machining industry experience.

ISO 9001:2008 registered, API Q1 Compliant

Fully Level 3 PPAP and APQP Support

### Industries Served –

- Agriculture
- Hydraulic
- Energy
- Additional Markets – Many other Industrial Applications



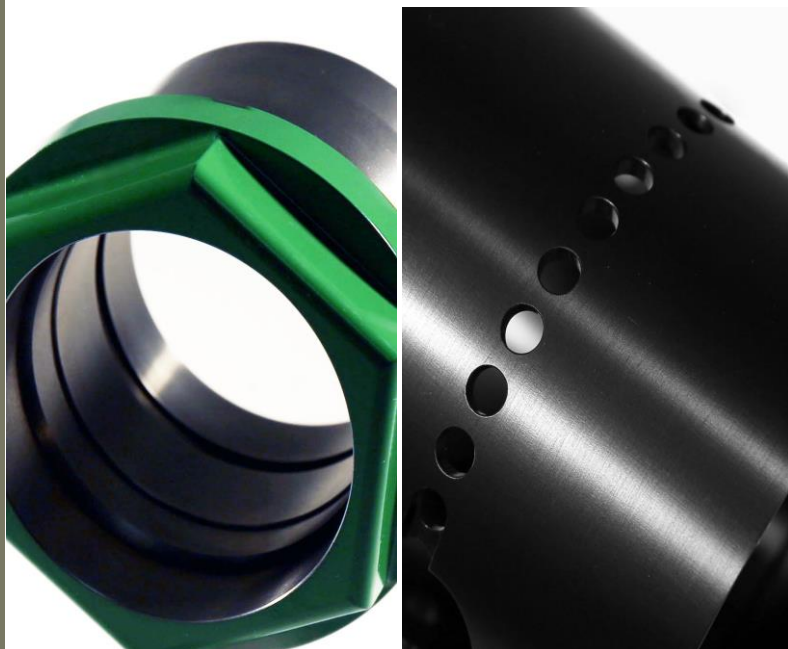
GEM MANUFACTURING, Inc  
6919 51<sup>st</sup> Street, Kenosha WI 53144

Phone: 262-857-7274

Fax: 262-857-2917

[sales@gem-mfg.com](mailto:sales@gem-mfg.com)

[gem-mfg.com](http://gem-mfg.com)





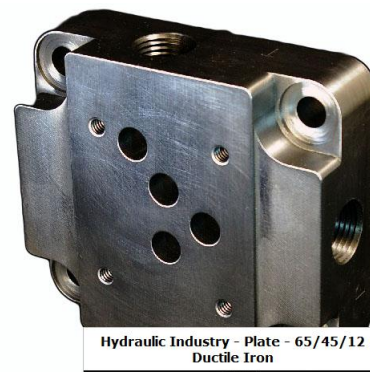
# MILLED PRODUCTION PARTS

## Hydraulic Castings

- Tight Tolerances <0.001
- Highly Cored Castings
- Lowered Piece Price 15%
- Great Finishes, burr free
- Provide Raw and Finished Goods Inventory Management

## Conversion of Low EAU castings to Bar Stock

- Volume dropped off, Pattern in Poor Shape – High Fallout after Machining
- Long Lead Times and High Min Quantity from Foundry
- Family to Bar Stock with No Change in Price
- Shortened Lead Times from 15 to 4 weeks
- Part of a Multi-Plant LTA



Hydraulic Industry - Plate - 65/45/12  
Ductile Iron



## WHY GEM?

- 40 years in Business
- 30+ years as Trusted Supplier to a number of Fortune 500 OEMs
- Latest Technology
- LEAN Manufacturing
- Six Sigma
- Highly Skilled Staff
- State of the Art Facilities

## SPECIALISTS IN THE MACHINING:

- Carbon/Alloy Steels
- Stainless Steels
- Aluminum & Brass
- Cast Iron
- Forgings
- Housings
- Casting Bodies
- Shafts
- Pins
- Bolts
- Special Fittings
- Spindles
- Flanges
- Pulleys
- Bushings
- Gear Blanks
- Spools
- Cable Fittings
- Custom Fasteners
- Stainless Fittings
- Adapters
- Light Assemblies
- Valve Bodies
- Pistons
- Spacers
- Receivers

## CERTIFICATIONS:

- ISO 9001:2008 Certified
- VERISYS Registered
- ANSI-ANAB Accredited
- API Q1 Compliant



# + MILLED SERVICE PARTS

Provide service parts for numerous major agriculture equipment manufactures, energy, fluid handling, etc.

More than 3000 'active' part #s. 1500-2000 P/Ns might run in a given year.

Manage raw and finished goods inventory – might carry product for three years. Kanban systems and min/max.

## 1. Plate for Hydraulic Industry

- 65/45/12 Ductile Bar
- 2 Machining Operations
- Lowered Cost 15% converting from casting to bar
- EAU Family 500
- Kanban Inventory to smooth out demand spikes

## 2. Oil Pump Body for Agriculture Ind.

- Grey Iron Casting
- 1 Machining Operation
- Critical/Significant Tolerances <0.001 with Cpk 1.67
- Bulk Packed with Rust Inhibitors and VCI
- Work holdings made to minimize impact to finish

## 3. End Cover for Hydraulic Industry

- 65/45/12 Ductile Bar
- 1 operation
- Reduce costs 20% by converting from high scrap worn out pattern to bar stock
- Raw stocked @ Supplier
- Kanban of Finished parts to smooth demand spikes

## 4. Valve Body (cutout) for Hydraulic Ind

- Ductile Iron Casting
- 1 operation x 2 work holdings
- 0.0003 Significant/ Critical on Spool Bore with Cpk 1.67
- Bulk Packed in returnable baskets
- 150+ Features with 14 Critical/ Significant Features

1.



2.



3.



4.



Agriculture Industry - Oil Pump Body - Grey Iron Casting

Hydraulic Industry - End Cover - 65/45/12 Ductile Iron



# EQUIPMENT LIST

## CNC Turn/Mill Centers

- 3- Mazak SQTN CNC Turning Centers w/ Y Axis
- 2- Mazak SQTN CNC Turning Centers w/Milling
- 1- Mazak DUAL TURN Turning Center with Robot

## CNC Milling Centers

- 3- Makino A51 Horizontal Milling Centers
- 1- Haas VF2 Super Speed Vertical Milling Center
- 1- Mazak VCN510 Vertical Milling Center

## Plus Other Equipment

Parts Washers, CNC Horizontal Saws, Dot Matrix Marking Machines, Surface Grinders, Sunnen Hone, Numerous Shop Lathes and Mills

## Fully Equipped Quality Lab Equipment

Manual and Programmable CMMs, Fixtures, Air Gaging, Flatness Testing, Laser Micrometers, etc.

# CAPABILITIES

Single Source Responsibility in:

- Heat Treat
- Plating and Coatings
- Grinding
- Broaching
- Gun Drilling
- Welding
- Light Assembly
- Special Packaging

Lever, Ram Head, Orientating Plate, Alignment Fingers – SS440C. Annealed 4140. 1215



Welder, Tool Processing Equipment, Material Handling Industries - Lever, Ram Head, Orientating Plate, Alignment Fingers - SS440C, Annealed 4140, 1215

Transmission Housing Cover, Starter Housing, Lever – Grey, and Ductile Iron



Pump, Oil and Gas, and Material Handling Industries - Transmission Housing Cover, Starter Housing, Lever - Grey and Ductile Iron



Call or visit our website for more information! [gem-mfg.com](http://gem-mfg.com)

