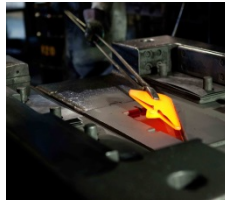




Precision Metal Products, Inc.



ENGINEERING, FORGING, MANUFACTURING, MACHINING AND PRE/POST SERVICES

ENGINEERING

- ▶ PMP's Engineering Department utilizes the latest 3D CAD/CAM software including Surfcam and Solidworks.
- ▶ Models are designed primarily using the latest CSD/CAM Systems. Solid and parametric designs are also made in-house.
- ▶ Drawings can be created for any design in compliance with the latest ANSI-ISO Specifications.
- ▶ PMP can utilize existing files when needed. Electronic transfer of CAD data is accomplished using the IGES, STEP, UG and other in file formats. PMP regularly translates files from most CAD Software for use in die design.
- ▶ Exchange of design files can be accomplished through our e-mail system and/or ftp site, allowing customers to conveniently and quickly transfer data to and from PMP. File compression in .ZIP format is recommended.

FORGING EQUIPMENT

Percussion Screw Presses

- 1 – Weingarten Screw Press – 7,000 Tons
- 3 – Vaccari Screw Presses – 2,100 Tons, 1,300 Tons and 500 Tons
- 1 – Hasenclever Screw Press – 2,000 Tons
- 1 – Ficep Screw Press – 1,300 Tons
- 1 – Weingarten Screw Press – 200 Tons

Mechanical Presses

- 1 – Verson Press – 1,500 Tons
- 2 – Galli Mechanical Presses – 800 Tons – 200 Tons
- 1 – Clearing Press – 1,500 Tons
- 1 – Hamilton Press – 1,000 Tons
- 3 – Mechanical Presses – 113 to 150 Tons
- 1 – Bliss Press – 75 Tons
- 1 – Toledo Punch Press – 450 Tons

Support Equipment

- 2 – Hasenclever Billet Upsetters – 1.25" Max Billet Diameter
- 8 – High Temp Billet Slugging Furnaces, Rotary – to 2,200 Degrees F
- 7 – Gas Fired Box Furnaces – to 2,200 Degrees F
- 1 – Cheston Resistance Billet Heater – 125KW Output
- 2 – Low Temp Aluminum Heating Ovens – to 1,600 Degrees F
- 1 – Blue M Annealing Oven, 6-Door, Blower Type
- 4 – Band Saws, Horizontal, Automatic – 19" and 36"
- 10 – Belt Sanders – 2" and 20"
- 1 – Pedestal Grinder – 14"
- 1 – Dry Blast Unit – 24" x 24"
- 1 – Dust Blast Cabinet
- 1 – V.L. Rampe High Energy Mass Media Finishing Unit
- 1 – Vibro Finisher
- 2 – Guyson Grit Blast
- 1 – Kelco Dual Nozzle Roto Blast

High Velocity Presses

- 1 – High Velocity Dynapak 1420 Forge Press – 300,000 Ft.-Lb. Max
- 4 – High Velocity Dynapak 1220 Forge Presses – 220,000 Ft.-Lb. Max
- 2 – High Velocity Dynapak 620 Forge Presses – 125,000 Ft.-Lb. Max

Hydraulic Press

- 1 – Clearing Hydraulic Press – 1,200 Tons
- 1 – Clearing Hydraulic Presses-300 Tons

Heat Treating Facilities

- 2 – Heat Treat Furnaces, Conveyorized
- 3 – Tempering Furnaces
- 2 – Gas Generators – Endothermic & Exothermic
- 1 – Pacific Scientific Parts Washer, Conveyorized



MACHINING

Machining Centers

- 1 – Haas VF4 5-Axis CNC Machining Center, Vertical – 50" x 20" x 25"
- 1 – Haas VF2 5-Axis CNC Machining Center, Vertical – 30" x 16" x 20"
- 1 – Haas VF3 4-Axis CNC Machining Center, Vertical – 40" x 20" x 25"
- 1 – Haas VF2 3-Axis CNC Machining Center, Vertical – 30" x 16" x 20"
- 1 – Haas VF1 5-Axis CNC Machining Center, Vertical – 20" x 16" x 20"
- 1 – Haas VF0 3-Axis CNC Machining Center, Vertical – 20" x 15" x 15"
- 2 – Matsuura Twin-Spindle 3-Axis CNC Mach. Centers, Vert. – 40" x 35" x 35"
- 1 – Fadal 15XT 3-Axis CNC Machining Center, Vertical – 21" x 15" x 30"
- 2 – Matsuura MC450H 3-Axis CNC Mach. Center, Horizontal – 18" x 16" x 16"
- 1 – Mazak PH5800 3-Axis CNC Mach. Ctr., +4 Axis Rotary, Palletized Horizontal, – 29" x 29" x 29"

Turning Centers & Lathes

- 1 – Haas TL15 2-Axis Twin-Spindle CNC Turn. Center, Horizontal – 8" x 8" x 17"
- 1 – Haas HL6 2-Axis CNC Turning Center, Horizontal – 16" x 20" x 35"
- 1 – Haas HL4 2-Axis CNC Turning Center, Horizontal – 10" x 20" x 20"
- 1 – Takisawa CNC Lathe – 14" x 10"
- 1 – Okuma Cadet CNC Lathe – 6" x 15"
- 1 – LeBlond Engine Lathe – 12" x 36"
- 1 – LeBlond Engine Lathe – 8" x 24"
- 1 – Acra-Turn Engine Lathe – 18" x 60"

Mills - CNC & Manual

- 1 – Rambaudi 3-axis Tracer Carbon Mill
- 1 – Cincinnati Vertical Mill
- 1 – Bridgeport Vertical Mill

High Speed Milling

- 2 – Mori Seiki 3-Axis CNC Mills, Vertical – 31" x 20" x 18"
- 1 – Makina 3_axis CNC Mills Vertical-20" x 20" x 16"

Support Equipment

- 1 – Ikeda Radial Drill Press
- 1 – Thompson Surface Grinder, 8 x 24 chuck
- 1 – Mattison Surface Grinder, 21 x 96 chuck
- 1 – Bullard Vertical Turning Center

Welding

Welding Units – TIG, Arc, Jet Arc, Gas

MANUFACTURING

- ▶ Forging: Precision closed dies from under 0.5 to 1,000 lbs. in net weight and up to 250 square inches in plan area
- ▶ Machining: Milling & turning using latest state-of-the-art CNC equipment, E.D.M. and supporting secondary operations pertaining to the manufacture of finished end items from PMP forgings
- ▶ Complete Tool and Die Building
- ▶ Polishing including high energy mass finishing
- ▶ Heat Treating
- ▶ Chemical Milling