



METAL PRODUCTS, LLC.

ISO 9001 Certified and ITAR Registered

www.triaxmetal.com

1880 SW Merlo Dr., Beaverton, OR 97003 503.649.9500

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Planning, Engineering, Prototyping Capabilities

Planning

- Totally integrated ERP computer system. We can track your product from initial planning through completion with accuracy, thereby assuring you of your delivery requirements.

Engineering

- Working with your engineering department, we can translate your CAD designs into our machine programming software. This reduces lead time and minimizes the possibility of errors. We can also assist with design for manufacturability that may reduce cost and improve functionality.
- **KeyCreator** as primary CAD software.
- **Amada programming software** for laser cutting and turret punching.
- **MasterCAM programming software** for machining.

Machining Capabilities

CNC Machining

- Mori Seike SH-403, 120 station super high speed **horizontal machining center** with indexing dual pedestal.
- Mori Seiki SH-400, 120 station, super high speed **horizontal machining center** with indexing dual pedestal.
- Mori Seiki NV-5000, 30 station advanced high speed **vertical machining center**. This machine utilizes Mori Seike high speed technology with advanced servo Mechanisms, direct drive spindles and fast tool changes.
- Mori Seiki SV-50, 30 station, **vertical machining center**.
- Mori Seiki MV-40M, 20 station, **vertical machining center**.
- CNC Partner **mill**, programmable with milltronics digital readout.

This selection of equipment allows us to machine parts of almost any configuration, holding very close tolerances in certain applications. We have experience machining many different materials including plastics, aluminum, steel, and exotic alloys.

CNC Engraving

- Multicam MT series **router / engraver**, 24" x 26" travel, with vacuum table.

Turning, Drilling, Tapping, & Cutting Equipment

- Hardinge 8 station Super-Precision **turret lathe**.
- (15) 3/4 HP precision **drill presses**.
- (3) Precision automatic **tapping machines**.
- MAX Ferrous precision **cutoff saw**.
- BEWO Non-Ferrous precision **cutoff saw**.
- Hydmech horizontal S-20 Series III **bandsaw**

Tooling Equipment

- Alliant **milling machine** with digital read out.
- Bridgeport series II **milling machine** with digital readout.
- Bridgeport 3 HP **milling machine**.
- Cincinnati **tool sharpener**.
- Lizenz precision **tool grinder**.
- Boyer-Schultz 3/4 HP precision **surface grinder**.
- Brown & Sharp 618 Micromaster **surface grinder**.
- Hardinge tool room **lathe**.
- DoAll vertical **bandsaw** with welder.

We have the capability to design and build the tooling needed to assure high quality parts at competitive prices.

Precision Sheet Metal Capabilities

Burning, Punching, Shearing, Die Stamping

- Amada "Gemini", FO-3015-NT **laser**, 4000 watt, Water Assisted Cutting System, 60" x 120" table size with auto pallet shuttle.
- Amada EMK 3510M2 NT, 33 ton, direct drive twin servo-electric **turret punch press**.
- Amada Vipros 358 King, 33 ton, 58 station CNC hydraulic **turret punch press**, 50" x 79" table size, (2) 1.250" indexable stations, (2) 4.500" indexable stations, brush style table.
- Amada Pega 357, 30 ton, 40 station CNC **turret punch press**, 50" x 72" table size, (2) 1.250" indexable stations.

Coupled with the capabilities of our CAD/CAM systems, the above machines turn your ideas into accurate parts for either a few pieces or higher volumes.

- Amada Togu III **surface grinder** (on site) for immediate turret press tool sharpening.
- Amada 8 Ft. **shear** with programmable backgauge, with sheet thickness capacity up to .187".
- Di-Acro **shear**, 24" close tolerance (for thin materials).
- Amada CS-220 hydraulic **notcher**.
- Roper Whitney 5-ton **kick press** and other misc. machines dedicated to prototype.
- 45 ton Bliss, OBI C-frame **punch press** with complimentary coil feed.

Forming, Welding and Assembly

- 120 ton Amada HFE, 10 foot hydraulic **press brake**, six axis CNC
 - 120 ton Amada Promecam HFB, 10 foot hydraulic **press brake**, six axis CNC.
 - 90 ton Amada Promecam HFB, 8 foot hydraulic **press brake**, six axis CNC.
 - 88 ton Darly, 10 foot hydraulic **press brake**, completely programmable, dual axis.
 - 40 ton Wysong, 6 foot hydraulic **press brake**, programmable backstop.
 - 35 ton Amada, 4 foot precision hydraulic **press brake**, three axis CNC.
 - 17 ton hydraulic Di-Acro **press brake**, 4 foot, with programmable backstop.
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- (2) Morgan Rushworth / Grizzly **slip rolls**, 50" and 36" width, for flattening or roll forming.
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- (3) Haeger hydraulic **hardware insertion presses**, (2) with automatic feed and window touch computer controlled, model 824 WT-3.
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- H & H 100 KVA programmable steel **spotwelder**.
 - H & H 150 KVA programmable aluminum **spotwelder**.
 - 25 KV mini **spotwelder**.
 - Nelson NCD + 1000 **stud welding system**.
 - Miller Dynasty 350 **arc welder**.
 - Aerowave 300 **arc welder**.
 - (2) Millermatic 130 XP wire feed **welders**.
 - Hypertherm Powermax 1000 **plazma cutter**.

We have the capacity to form, weld and assemble, on a production basis, to intricate and accurate configurations.

Finishing Capabilities

Deburring and Sanding

- (2) Timesavers, 36", wet deburring and **graining machine**.
- Max 9" vertical **graining machine**.
- Rankin Bros. 6" x 96" **stroke sander**
- Geoco dual arbor **buffing lathe**.
- Trinco glass **bead blasting** machine.
- Roto-Finish 50 cubic foot **vibratory deburring** machine.
- Gyromatic **vibratory deburring** machine.
- Sweco, **vibratory deburring** machine.
- Miscellaneous small **tumblers**.
- Holland **centrifugal dryer**.
- Miscellaneous pneumatic **finishing tools, belt sanders, and grinders**.

We have the equipment necessary to prepare your product for any type of professional finish.

Painting and Silkscreening

- Devilbiss **spray paint guns** and accessories.
- (2) **Paint booths** (for powder or liquid applications).
- Liquid and **powder paint**.
- Red Comet 500 degree **paint oven** (336 cu. ft.).
- Binks 500 degree “pass through” **paint oven** (672 cu. ft.)
- Air filtered, positive air pressure, enclosed **paint room**.
- Silkscreen facilities including a Cameo 18, auto press.

Our paint preparation facilities and painting equipment provide the means to add a professional finish to your product. We fill and seal, mask as necessary, and paint and texture to the most exacting specifications. The finish is then baked on according to the paint manufacturer's specifications providing a durable finish.

Quality Assurance

Inspection Equipment

- FARO Gage 3D **coordinate measuring machine**.
- Amada FabriVision laser inspection system with 3D intelligence technology.
- Mitutoyo **microscope** with X-Y micrometers on scope base.
- Optical **comparators**, up to 12".
- Granite **surface plates** with indicators.
- Quality Assurance room stocked with complete set of measuring instruments and gauges all certified and traceable to the National Institute of Standards and Technology (NIST).

Our business philosophy is such that we consider our manufacturing operation an extension of your business. This includes our quality assurance procedures. We have the capability to incorporate your quality requirements into our manufacturing processes. The measuring capabilities of our inspection department will confirm that all product specifications are achieved.

Visit our website at: www.triaxmetal.com