THE PTM ADVANTAGE

PTM has been producing metal stampings since 1972. Our expertise and experience is wide ranging, to include detail part design, prototype, tool build and high volume production. PTM has literally produced billions of metal stampings for our clients. From small clips and fasteners to car roofs and mower decks, we’ve done it all.

PTM metal stampings are found on an estimated 70-75% of all cars and light trucks on the road today. You may wonder why our clients trust us enough to put our metal stampings on such a huge percentage of their products. The answer is quite simple; we are really good at what we do!

We understand any metal stamper can bang out parts for you. By allowing PTM to design, prototype, build and then produce your parts in production, we eliminate multiple vendors, cut unnecessary steps in your supply chain, and most importantly cheat time. Bundling services also allows us to maximize our internal cross functional relationships, and provide you with a one stop source for cost saving solutions. And, we do it all in-house! Here’s the bottom line; taking advantage of our bundled services can save you up to 20% versus individually purchased solutions! Need proof? Let us quote your next project! Whether you purchase our services ala’carte or as a turnkey bundled program, we’re confident we can earn your business.

One stop, One point of contact, One total solution provider... PTM Corp

Our services include:
• 186,000 square feet of manufacturing space
• Product design and development support
• Tool Design
• Prototype
• Kirksite rapid part prototyping
• Tool and die build
• Low and High volume metal stampings
• Value added services
  - CNC machining
  - Welding (Laser, MIG, TIG, Adaptive)
  - Assembly
  - Laser cutting
  - Riveting, tapping, countersink, etc.

Industries served:
• Agriculture
• Automotive
• Building and Construction
• Medical
• Military
• Non Automotive
DESIGN

At PTM Corporation, your idea or design may start as something very simple; an idea sketched on a beverage napkin for example. Our experienced design staff will analyze the need and provide the solid engineering experience needed to insure that all aspects of the manufacturing process are reviewed for feasibility and cost vs spend benefit. Our systematic approach will consider the application, the material required, the number of pieces required, and several other key considerations. Once completed, we will make our design recommendations, for both the product and the tooling to manufacture it. Our goal is to maximize the ROI of your spend dollars both in the design, and while the part is in production.

We are fourslide die design specialists! Fourslide dies are generally about 1/3 the cost of a comparable progressive die making the same part. In addition, fourslide dies are also easier to repair than progressive dies, again reducing down time costs. Less material waste, less costly to build, less down time - what’s not to love? If we can design your part to run on one of our 16 fourslide machines, we will definitely alert you to this cost saving alternative.

• CAD Capabilites: Catia V5, KeyCreator, Solidworks, STEP, NX, Master Cam, Work NC, Rhino 4.0 and more
• Full time in-house design staff: Eight
• Die Design: Progressive, compound, line, fourslide (1/3 the cost of traditional progressive dies), and two, three and four piece kirksite dies
• Products Designed: Unlimited
• Virtual design simulation
• FDM 3-D printer to create functional part models
• Design to complete production parts

Products, Tools, Dies, Collaborative Solution Providers
When it comes to prototype work, PTM wrote the book. We specialize in complex small to medium sized parts such as brackets, fasteners, clips and wrap clamps. If your project is not quite ready for prime time, let us prototype the design so your engineering team can test and prove the part. Or better yet, let our team do the testing for you! Once a final design has been prototyped, we’ll review the design with you and discuss next steps. If you need larger parts, our kirkite rapid prototype and low volume production may be just the answer! See page 5 for details.

Whether your prototype is a new hose clamp, a deep draw manifold water jacket or a full blown car body, we have the team and the equipment to get your parts designed and prototyped quickly. PTM processes and delivers over 2000 separate prototype jobs annually. We have the experience and the know how to get your next job done quickly, efficiently and on budget.

- Three 5 axis lasers - brazing, cutting, welding
- Four 3 axis lasers
- Weld Guns: 6 overhead, 3 pedestal, 4 mig stations, DC adaptive
- Laser welding
- CNC machining
- Extensive forming equipment
- Industry leading weld / laser / assembly fixtures
- Full equipment list at [www.ptmcorporation.com](http://www.ptmcorporation.com)

Secondary prototype operations include:
- Bending
- Forming
- Welding
- Tapping
- Countersink
- Assembly
Fourslide, Progressive, Line, Compound, and Kirksite Dies, Jigs, Fixtures and Miscellaneous Tooling

Before the first metal chips begin to fly, we test the new tool design in a virtual environment. Our goal is to eliminate forming issues at the design level rather than at press level where the costs escalate dramatically. Once the design is completed we marry state of the art software to our CNC machining centers, throw in “lights out” wire EDM machines with Erowa pallet systems, and add automated grinding to get your tool built quickly and accurately. At this stage of the game time really is money! After completion, every die we build is thoroughly tested in a production level press to verify run rates and part dimensions before delivery to our customer. First off parts, PPAP, visual inspection of tool run, etc. available upon request.

Rest assured, even with all the focus on faster turnaround times, your job will get the attention PTM is known for. From the simplest hand fed die, all the way up to 4 piece kirksite monsters, our team of professional craftsmen will build, test, and deliver as promised.

- Two, three and four piece kirksite draw dies
- Progressive, compound, line dies
- Cost saving fourslide dies
- Assembly fixtures, check aids, gauges
- In house die shoe manufacture
- 7 Fanuc wire EDM machines
- 11 CNC machining centers
- Lathes, grinders, radial drills, etc.
- Dedicated production level try-out presses
- Average die builder experience: 20 years

Progressive dies built and tested to 144”. Larger dies can be built with try-out at customer facility.
Kirksite is an alloy comprised primarily of zinc, with aluminum and copper alloy additives. The key advantages of using kirksite for stamping dies is the low relative melting point of 750 degrees. The low melting point allows for precision castings which greatly reduces the machining time needed to finish the die. The material’s high tensile strength of 35,000 psi. make it ideal for shaping sheet metal. Because your design is literally carved into the face of the die, we are able to go from CAD data to finished parts in as little as 6 weeks! Oil pans, vehicle doors, trunk lids, mower decks, entire car bodies in white can all be created with this process.

Your design will first be created as a wood and foam model. This model will then be used to cast the design into the kirksite. From there the speed of the project hits high gear. Our CNC department machines the kirksite to final dimensions and then forwards the die on to our finish area for detailing. Once die tryout is complete, we produce your parts. Our 5 axis lasers trim, place holes and even weld as necessary complete to your specs on our precision industry leading fixtures. Detailed quality inspections prior to delivery insure your parts are made exactly to print.

Popular secondary operations include welding assemblies, riveting, tapping, coating.
- Exotic materials
- Deep draw parts
- Full assembly service
- Rapid prototype process is perfect for low volume production requirements!
- See www.ptmcorporation.com for full equipment list
Fourslide, Progressive, Line, and Compound Dies

The PTM high volume metal stamping production area is capable of running fourslide, line, compound and progressive dies up to 144”. By allowing us to design, prototype, tool and produce your part, we know with 100% certainty that you are buying the most cost effective package available. If you just need our production services using your own tooling, our cost structure, value added services and cultural efficiencies will add to your bottom line margins.

Once your part goes into production, our ongoing QC programs are put into effect. At the machine inspections, coupled with detailed CMM inspections, enable our team and our clients access to controlled, accurate inspection processes. From the first part produced to the last part of a production run, your design tolerances are assured. Some examples:

- Wrap clamps
- Air bag components
- Intricate brackets
- Complex, high precision fuel line connectors
- Tight tolerance fasteners
- Many others (contact us for your specific application)

Examples of the types of materials we work with:

- Aluminum
- Copper
- Galvanized
- Galvanized
- High-strength
- HR/CR
- Stainless Steel

PTM Corporation also offers cost saving fourslide manufacturing, with 16 machine work cell! Some benefits of utilizing this type of manufacturing process include:

- Lower tooling cost (up to 1/3 of traditional progressive die tooling)
- Shorter lead time for tool build
- Reduced material waste

In addition, we offer compound die manufacturing which reduces design, build and try-out costs. Compound dies are best utilized for washer type parts, or parts simple enough to form and cut off in one hit.
Value Added Services, Exceptional Support

Value added, cost saving solutions are provided on site by PTM. Automated welding, assembly, tapping, riveting, coating, or even the addition and assembly of third party components.

Exceptional support

You simply do not earn the kind of customer retention PTM has by being slackers in the customer support areas. Empowered employees will do whatever is necessary to get the job done. But don’t just take our word for it…

“I wanted to send thanks for all your help and support yesterday and today with plating. I really appreciate the level of support provided to go above and beyond the call of duty to help us and assist with plated couplings while our supplier was down. Your team has always provided exceptional support to our engineering – in this case, you truly went above and beyond to help me and my team out of a difficult situation.”

Senior Application Engineer, Tier one company

Visit our website at www.ptmcorporation.com to read additional testimonials.