

Domestic Injection Molding

From Prototype to Production //

Precision Prototypes and Production Injection Molds

Fathom McHenry utilizes state-of-the-art mold making technologies to provide high-quality plastic injection mold design, precision mold making and closetolerance injection molding services for small-to-medium prototype injection molds projects. **We work closely with our customers to find the perfect solution.**



Logistics

Skip all the logistical challenges associated with off-shore production. If you're short on time, you can worry about one less thing.



US-Based & Certified

Complete molding facility, including 35 ton to 600 ton press, three bi-injected presses, and ISO 9001:2015 certification.



On-Site Trialing

Fathom domestic injection molding gives you the experience of real-time on-site trials to ensure your project specifications are up to your expectations.

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Advanced Mold Making Technologies

Innovate outside the box with technology like 3D printed injection molding tools (including design, simulation, and production) and automated EDM cells.

FathomMfg.com

*To view our most up to date certifications, please visit fathommfg.com/fathom-manufacturing-certifications

Prototype Tooling

The focus in today's prototype world has been to create prototypes which mimic the production component, in the areas of precision, part weight, cycle times, and tooling costs. Our goal is to ensure that we meet and exceed our customers' expectations with prototypes that are delivered quickly, accurately.

Our process begins with meeting and discussing the goals of the customer prototype component and deciding as to the type of prototype tooling that fits their needs.

- We offer low volume tooling aluminum molds, hand molds, MUD molds, and unit molds.
- Advanced tooling technologies with zero design complexity limits

Production Tooling

Production cycle times are one of the most critical factors when considering piece part costs as it relates to the type of production tooling features. Production tools need to process, cool, and eject parts quickly. There are many factors to consider when trying to achieve optimum cycles and we offer many techniques and have succeeded with over our many years of experience and knowledge of doing prototype components. In addition, our speed and cost efficiencies through machining and EDM cell automation allows our lead times and cost to be significantly lower than competitors.

- Up to 1x32 cavity tools
- Following SPI mold classifications
- Injection Molding machines up to 600 tons
- Highly trained workmanship for preventative maintenance

Advanced Tooling

We offer 3D printing inserts for conformal cooling enablement for enhanced dimensional accuracy and speed (case study available upon request).

Additional advanced tooling includes:

- Bi-injected tooling (significant cost and cycle time savings)
- Multi-shot tooling and insert over molding
- Different types of colorant delivery systems from granular to liquid colorants
- Additional services include pad printing, hot stamping, ultrasonic welding, secondary operations, and light assembly

Hybrid Reshoring

Export Tooling and Domestic Production

Get the best of both worlds! Hybrid reshoring offers all the benefits of overseas tooling lead times and the logistical ease of domestic production.

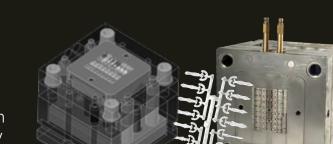
Project Examples

Example // 16 Cavity Class 102 Production Tool

This tool is used for medium to high production in upwards of one million parts. Typical delivery time on this type of tool is 7-8 weeks.

Example // 8 Cavity Class 101 Hot Runner Production Tool

This tool utilizes optimum cooling, hot runner, and runs extremely fast cycles. Typical delivery time on this type of tool is 7-8 weeks.









Industry Knowledge

Fathom works with clients in the medical, packaging, consumer technology, automotive and electrical industries that require optimized productivity and overall lowest manufacturing cost.

With over 100 years of tool building experience, Fathom stands above the rest for your customer experience. Gain access to:

- Expert Support during all steps, including Project Management to DFM Overviews
- Online Quoting and Project Management
- Latest State-of-the-Art tool building technology
- Complete in-house tool builds, from Start to Finish (No Outsourcing)
- First-Class in-House Engineering, Part/Tool Designs. 2D/3D (SolidWorks)
- Night Runs capabilities to hit On-Time Delivery with Second-to-None Quality

Real Customers. Real Results.

"They are on the leading edge of technology in reducing lead time and cost by utilizing not only the latest technology of equipment available to them, but also in constantly reviewing their internal procedures to reduce time, reduce manufacturing costs and improve the quality of the tools being delivered to the customer."

Dieter Lay, Arrow Development Group, LLC

Talk to an **Expert**

Working with Fathom means easy access to Additive and Advanced manufacturing experts.

Contact us today, and let's transform the future of manufacturing together!

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