

MACHINING TECHNOLOGIES



High Volume Hydromat

CNC Milling



CNC Swiss Machining

CNC Turning



Engraving

Secondary Operations



Advanced solutions for 5 pieces or 5,000,000 pieces and everything in between.

INVESTING IN VALUE

Machining Technologies is a full service machining facility with 25 years' experience encompassing several specialties; high volume **Hydromat** production, precision **CNC Swiss screw machining**, and production **CNC milling and turning**. Each specialty is supported by our engineering, processing and assembly services as well as our laser engraving group. We invest in the people, equipment, and automated technologies that defy business as usual.

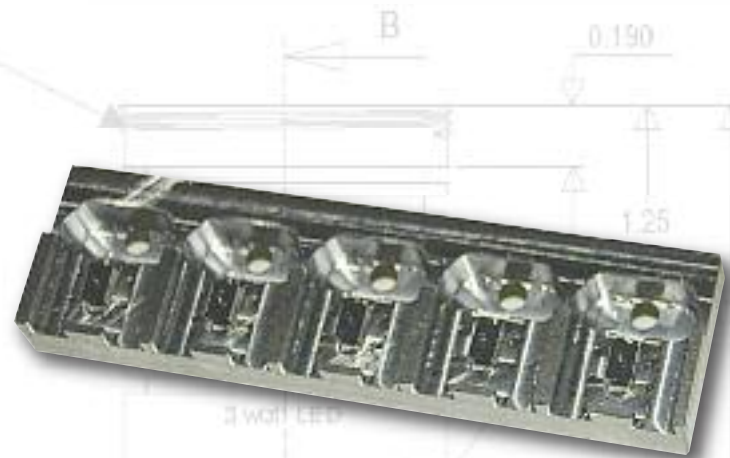
At Machining Technologies, it's not about keeping pace. It's about setting it.

WE'RE READY FOR YOUR CHALLENGE!

QUALITY

MT utilizes the latest statistical techniques, advanced data interface, and checking methods available to the industry. Adherence to customer specifications and dimensional requirements is top priority during all phases of the process. Our in-house design and build capabilities allow us to go from concept to implementation of functional gauging, automated inspection, and error proofing in a short period of time. Real time inspection and data collection provides immediate process capability feedback to our operators.

At MT, producing quality parts is everyone's responsibility, from the newest machine operator to our most skilled machinist. We continually invest in our people at all levels, whether it is training a new operator to read prints or sending an experienced employee to advanced quality training.



*[Advanced solutions for 5 pieces or 5,000,000 pieces
and everything in between.]*

HYDROMAT MACHINING

With extremely fast cycle times, our Hydromats are capable of producing millions of low cost parts each year that can be shipped in large quantities or distributed in a "Just in Time" format.



- Capacity to bar feed round, square, hex, and other shapes
- In-house Process Engineering means faster turnaround time for new parts and greater flexibility when your parts change
- State-of-the-art statistical inspection sampling ensures you receive the highest quality parts with the most reliability



- Customer managed inventories allow you to take delivery of parts when you need them
- Logistical support for plating, heat treating and other secondary operations assures you of quality finished parts

Ask us about final assembly and packaging that can save you time and money.

CNC SWISS MACHINING

These are excellent machines for a wide variety of parts, especially those that have tight tolerances or long turns. The efficiency of these machines allows MT to offer short lead times on new orders.

With its ability to use a variety of cross milling and drilling attachments, along with the sub-spindle capabilities, the Swiss style CNC machine has eliminated the need for secondary operations on most parts.



- Machining capacity from 3 mm diameter to 35 mm diameter
- Capability to machine stainless steel, aluminum, brass, steel, aircraft and high temperature alloys, and plastics



- State-of-the-art CAD/CAM programming software to handle even the most complex geometries
- Large tooling inventory to eliminate machine down time and provide multiple machining strategies
- 24 hour operation for 168 hours per week to maximize productivity

Ask us about Kanban purchasing and WebView.

CNC TURNING

For larger diameter components, Machining Technologies relies on a variety of CNC turning centers. These state-of-the-art workhorses have the size and tooling capacity to tackle your most demanding projects. Quick setups and efficient changeover ensure timely production of your prototypes and low volume runs.



- Capacity to bar feed up to 3 1/2" diameter material
- Experience machining stainless steel, aluminum, brass, steel, aircraft and high temperature alloys, and plastics



- Large tooling capacity to machine complex parts in a single setup
- Prototype production as well as small and medium quantity production runs available

Ask about our Design for Manufacture assistance.

CNC MILLING

Our milling facility exemplifies the same commitment to precision and accuracy that is the hallmark of all Machining Technologies' specialties. Our experienced craftsmen produce intricate prototypes of the highest quality, while our CNC equipment is capable of handling all of your production quantities.



- Experience machining Hastelloy, Inconel, titanium and other exotic alloys
- High pressure coolant for higher cutting speeds and better chip control



- CAT 40 tool holders and large tool magazines
- Mastercam software for complex tool paths
- 4th axis milling capability

ENGINEERING

The engineering staff at MT is ready to turn your ideas into reality. Include us in the earliest stages of your design to optimize the manufacturability of your components. Consult with our assembly specialists for help with fits and tolerances. Use our documentation specialists to transform your rough sketches into professional CAD drawings and solid models.



- Full staff of degreed engineers from multiple disciplines
- State-of-the-art CAD/CAM software
- Solid Modeling capabilities
- Design for Manufacture and Design for Assembly services

PROCESSING

MT maintains relationships with secondary vendors throughout the country. From plating and painting to polishing and grinding to heat treating and material testing, Machining Technologies can manage the best solution for you.

ASSEMBLY

Our assembly capabilities helps make MT a true one-stop manufacturing solution. Machined components are assembled together to your specifications on our 10,000 square foot, climate controlled assembly floor. We can ship completed assemblies directly to your customers, saving you time and money. Our expansion plans for 2012 include constructing a clean-room facility and increasing the number of final packaging solutions available.

LASER ENGRAVING

More and more today's marketplace requires traceability and identification of your product. Laser engraving is an excellent technique for producing crisp, long-lasting images without compromising your component. MT full-service laser shop uses 75 watt Nd:YAG lasers to add serial numbers, bar codes or 2-D data matrices to parts made from a variety of materials. We can also engrave custom artwork to help uniquely brand your product in the marketplace.



- Capacities to engrave variable sizes and materials
- Large and small quantities
- State-of-the-art laser equipment
- Graphic design capabilities
- Reproduce customer logos and artwork

FACILITIES

Machining Technologies' manufacturing facilities are located in Oxford, Massachusetts, 20 miles south of Worcester and convenient to Boston, Hartford, Providence and Nashua. MT currently occupies three buildings in the Oxford Industrial Park, with 50,000 total square feet of manufacturing space. MT also owns an additional 15 acres of property to accommodate future expansion.



32 pitch thread
0.020 from bottom
x 0.150 length





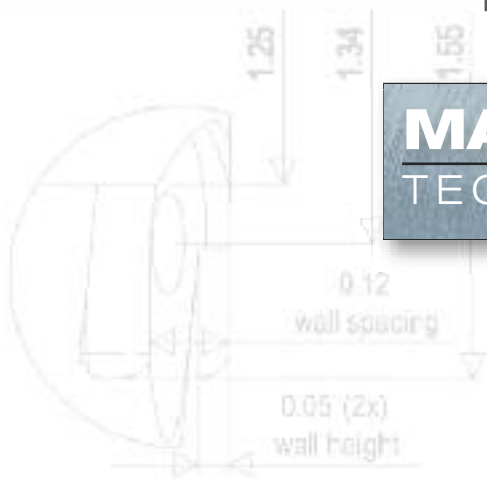
MACHINING
TECHNOLOGIES

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DETAIL C
SCALE 2.6 : 1



High Volume Machines

'97 Hydromat HW-25-12 rotary transfer machine, 1" max diameter, 12 stations
'07 Hydromat HW-25-12 rotary transfer machine, 1" max diameter, 12 stations
Micron Multi-step 5-axis machine

CNC Swiss Screw Machines

2 Citizens M20 machines – 3/4" max diameter capacity
4 Hanwha XD20 machines – 3/4" max diameter capacity
2 Hanwha XD26 machine – 1" max diameter capacity
1 Hanwha XD32 machine – 1 3/8" max diameter capacity

CNC Turning Machines

Mori Seiki NLX-2500 SY / CNC Turning Center – 3.5" max diameter bar capacity
Mori Seiki NL-2500 SY / CNC Turning Center – 3.5" max diameter bar capacity
Mori Seiki SL-250 MC / CNC Turning Center – 3.5" max diameter bar capacity
Mori Seiki SL-200 MC / CNC Turning Center – 2.5" max diameter bar capacity
Mori Seiki SL-253 MC / CNC Turning Center – 10" chuck
Mori Seiki SL-203 MC / CNC Turning Center – 8" chuck

CNC Milling Machines

Mori Seiki Dura Vertical 5100 – 22" x 45" with 30 tool magazine
Bridgeport ProtoTrak SMX – 3 axis, programmable spindle
CNC 2-axis miller

Support Equipment

1 Hardinge toolroom lathe
1 CNC Hardinge lathe
2 Hardinge chuckers
2 Hardinge hand screw machines
1 Engine lathe
1 Bridgeport miller
1 Bridgeport Model 153098 - Digital readout with .XXX accuracy
2 Surface grinders
2 Excel 75 Watt Nd:YAG lasers for engraving

*Got a machining challenge?
Call Machining Technologies for a total solution.*

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