Dynomax’s strong reputation has been built on providing our customers with integrated precision manufacturing solutions. Dynomax’s customers include some of the largest names in the aerospace, transportation, energy and biomedical industries.

Since 1986, Dynomax has committed to develop complete solutions that enable our customers to be leaders in their industry. Our portfolio of capabilities includes high precision machining, spindle design and manufacturing, custom tooling and fixtures, precision injection molding for complex components, robotics and automation, component assemblies, and machine design for specialized applications.

In addition, our customers receive the full benefit of our dedicated team which has extensive experience, and knowledge in the engineering sciences. This depth of information provides our customers with innovative solutions that translate into quantitative, measurable values, delivering high-quality, cost-effective results.

“At Dynomax, we deliver products that guarantee outstanding reliability, a team that focuses on operational excellence, and a company committed to performance leadership”

Dr. Richard Zic, CEO
From basic material selection to more complex sub and completed assemblies, Dynomax’s expertise is proven to be invaluable to our customers. Dynomax offers consultation services in the following areas:

**METALLURGY**
Our in-house Metallurgical and Material Science PhD’s perform routine failure analysis, material cross sections, surface condition examinations, structural analysis, and specialty analysis.

**ENGINEERING**
Our technically skilled engineering workforce ensures successful engagement of resources for projects and provides our customers with complete integrated engineering solutions. From conceptual design to operational equipment, we bring innovative solutions that deliver cost saving, practical, and code compliant designs.

**FEASIBILITY ANALYSIS**
In the conceptual phase of a new project, Dynomax’s engineering team carries out a feasibility analysis based on information obtained from a prospective customer. A quantitative evaluation of the project requirements is constructed using a knowledge acquisition process. This process is centered on the best, most efficient ways to optimize manufacturing. Information is collected, analyzed and translated into quantitative and measurable values, which subsequently play a vital role in the customer’s future expansion or equipment replacement plans.
DYNAMAX MANUFACTURES
Operational Excellence

PRECISION MACHINING SERVICES

CNC MILLING & TURNING
› Utilize high-speed vertical / horizontal CNC
› Mill, drill, grind precision components
› Produce parts in various materials; Aluminum, Stainless Steel, Titanium
› Use latest precision design software
› Super precision measurement equipment
› Tolerances of +/- 0.0001
› 5-Axis Capabilities
› Utilize Dynomax’s own design/engineered spindles

GRINDING
› CNC & conventional grinders working to tolerances (+/- 0.000050)
› Facilities are temperature stabilized year round
› O.D. Grinding: .080” to 20” Diameter 90° Max. Length
› I.D. Grinding: .060” to 20” Diameter
› Roundness to: +/- 0.000050
› Surface Grinding to 48” in length
› Regrind Spindle Tapers

BORING
› Tolerances (+/- 0.0001) maintained over long distances (24”)
› Dynomax utilizes high precision boring mills
› Machining envelopes of 48”L x 24”H x 24”W
› Table loads up to 6600 LBS

BROACHING
› Achieve desired metal forms with high accuracy and precision.
› Make specialty broaching tools used as stand alone operations or incorporated with other processes in a Dynocell machining center.

EDM
› CNC & Conventional EDM
› Cuts up to 17.8” thick
› 4 & 5-Axis Wire EDM
› 3 & 4-Axis Sinker EDM
› DFX/IGES Data Transfer
› Prototype to Production
› Complex Shapes
› Hardened Parts
› Exotic Materials
› 0.0002” Tolerances
› Short or Long Runs

THIN WALL MACHINING
› CNC high-tech spindles
› CNC high-speed tool holders
› Wall thickness to below 0.0100” (2.5 mm)
› CNC high-precision machines

DRILLING AND MICRO-DRILLING
› Top-of-the-line, ultra-precision, machines
› Speeds up to 50,000 rpm on CNC Models
› CNC Hole Sizes down to 0.002” diameter (0.0508mm)
› CNC Spindle run-out less than 0.00008” (2 micron)
› CNC Repeatability = 0.0002” (0.00508mm)
› CNC Rapid Traverse Rates up to 1575 ipm

Laser MARKING
› Precision Laser Micro-Machining
› Custom laser mark your parts
Dynomax produces flexible automated machine cells, which utilize the most sophisticated advances in manufacturing technology for robotic material removal. Dynomax develops true automation solutions that can transform raw material to finished product with no operator interaction.

Dynomax specialty machine cells pick and place your company at the head of the pack. Best of all Dynomax machining cells utilize Dynospindles high quality spindle solutions so you know you are getting the very best. We build our machines from the back-end to the business-end in house so we can guarantee their quality.

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Dynomax is a rare domestic source for precision spindles unmatched in both quality and performance. Having shipped thousands of spindles to the biggest names in American manufacturing for the past 22 years, Dynomax has the experience required to get the job done right.

With an extensive engineering background, Dynomax is more than just a spindle supplier. Our in-depth technical knowledge of the complete spindle assembly allows us to provide our customers with spindles that perfectly match their unique applications. Our on-site engineering staff is always available to help answer any technical questions.

You can also try our innovative spindle creator online at www.dynospindles.com. You can custom spec your spindle to fit any application.

Dynomax manufactures and supplies several types of production tooling including molds, fixtures, and jigs. Our experienced personnel excel in the design and manufacture of custom tooling that helps industry make product components of consistent size, shape, and quality.

We utilize state of the art technology and equipment, such as CNC mills, automatic water grinders, surface grinders, and form grinding for specialty applications. All our design, tooling and mold building is done in-house to our customer’s specifications.

When it comes to precision injection molding of all grades of thermoplastic and thermosetting resins, compounds and silicones, Dynomax produces the highest quality molded parts in the industry. From experienced staff to state of the art horizontal and vertical molding equipment, Dynomax targets zero defects in all of our components.

The closer the tolerance and higher the complexity, the better! From the design stage thru prototyping, in-house mold construction to micro tolerance injection molding, Dynomax can service your needs. Some of our services include mold sampling, mold troubleshooting, first article inspection, in process inspection; insert molding, short runs, hot runner multi cavity production and multi component parts.

We have extensive experience with all thermoplastics, specializing in LCP, PPS, ABS, Nylos, and Silicones both common and exotic to the Aerospace, Defense, and Transportation industries. Our specialty is small to micro molding applications. All injection molding, automation, maintenance, repair, and mold building are done in-house by our staff of craftsmen. This allows Dynomax to provide a 24 hour response to your needs.

To be continued...
Dynomax is an ISO 9001:2000 certified company, and uses these standards to develop and evaluate quality system standards, procedures, and feedback mechanisms to continuously improve operations.

Internal and external process and documentation audits are performed under the ISO standards, to ensure production of high quality products and services. A thorough trial inspection process is employed using technologically advanced inspection equipment such as CMM, laser micrometers, comparators, and custom vision equipment.

Dynomax has also obtained the prestigious AS9100:2004 certification, mandated by the Aerospace industry, which incorporates the current version of ISO 9000, while adding additional requirements relating to quality and safety. Dynomax applies the disciplines required by AS9100:2004 across all product lines and activities, making us a preferred supplier to major aerospace, defense, and biomedical manufacturers.

Dynomax follows a continuous improvement methodology that ensures consistent, systematic delivery of results. This methodology is a set of processes that guide us through complex situations, reduce our propensity for risk, and help us identify areas that need improvement.

Dynomax uses several methods to determine activities to incorporate into our system; monitoring of customer related activities, supply chain management, and adopting industry best practices. Daily activities are monitored for quality related issues that affect our customer or product and are addressed by a multifunctional team including engineering, production, and quality. All customer orders or activities begin with a thorough product realization review which includes quality review, established processes, verification and validation of activities, and identification of resources to support operations.

Dynomax has invested heavily in the tools, talent and training necessary to provide our customers with high quality products and services. Our employees are empowered to take pride in their work and foster an environment based on teamwork, training and development, creativity, participation, loyalty, and belief in the values of the organization.

Dynomax’s quality policy is to produce products and services that meet or surpass our customer expectations. In order to achieve this goal, Dynomax is committed to providing quality products, cost-effective solutions, on time delivery, and continuous improvement.