A Distinguished History of Design Expertise and Engineering Excellence

With more than 50 years of experience designing custom motor solutions, Kollmorgen provides the latest technological advancements and application expertise to deliver the broadest capabilities in the industry.

Global Facilities and Supply Chain

We have been improving the efficiency and productivity of businesses worldwide for decades.

Our breakthrough innovations are based on application experience around the globe and across many industries. We have design and application engineering centers, ISO9001:2000 high volume manufacturing facilities, sales offices and distribution partners around the world, giving us the unique advantage and flexibility to produce where you need.

Industry-Leading Prototyping Capability

From design to production-ready prototype, our team of electromagnetic and mechanical designers gets involved early in the process and works side-by-side with our manufacturing group, thereby shortening the standard design cycle, to achieve:

- high product quality and on-time delivery
- an optimized package design
- faster implementation

We have a long history of delivering an initial product that’s built and ready to operate in your environment with minimal to no design turnbacks.

Wide-Ranging Product Scope, Greatest Number of Solutions

Our product breadth is unmatched in the industry. With solutions for practically every application, the opportunities for optimizing package, performance, and features are endless.

When the solution demands it, we integrate higher level assemblies with ball screws, drives, gearboxes, cables, controls, feedback devices, and can also provide you with a custom package to meet your unique motion control requirements.
Dedicated Project Management

We follow a structured development process from initial concept to volume production. This enables us to provide a complete solution from design to implementation.

Our skilled engineering team is assigned to each project and ensures a high-quality product designed and delivered on time, successfully taking the prototype to full production.

- Dedicated Resources & Equipment
- Real Time Customer Collaboration
- Rapid Concept-to-Hardware
- Validation of Performance, Cost & Manufacturability Before Volume Production

Customer Visibility Throughout the Entire Process

A communicative and proactive approach keeps you updated and aware of what is required throughout, what it will cost, and what to expect for design testing.

This not only puts you in charge of approving any modifications before installation, but ensures the product is up and running quickly, with minimal development time and maximum value.

Engineering Excellence

What really sets us apart is our engineering expertise. With over 50 years of successfully designing custom motors, we are able to quickly assess, design and implement a solution that meets your needs.

Our engineers have an average tenure of 20 years, which means they have designed solutions for almost every unique and challenging situation. Their insightfulness and expertise will guide you through the development and implementation of an optimized motor solution.

We rely on the most advanced simulation tools to deliver the best products, designed to withstand the most unique and challenging environments:

- 3-D Modeling – ProE
- Finite Element Analysis
  - Electromagnetics
  - Structural (stress, vibration, fatigue)
  - Thermal
- SPEEDE
- Infolytica
- Ansys
- Magneto
Proven Custom Design Capability

We have a long history of success in a wide range of markets and applications, including Aerospace & Defense, Medical Equipment, Implantable Devices, Semiconductor, Petrochemical, Machine Tool, Industrial Automation, Packaging and Film Processing.

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<thead>
<tr>
<th>PERFORMANCE</th>
<th>APPLICATION</th>
<th>RANGE</th>
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<tbody>
<tr>
<td>Torque</td>
<td>Antenna positioning, hybrid vehicles, industrial machines, rapid indexing</td>
<td>Greatest torque to size ratio, up to 10K+ Lb-Ft</td>
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<td>Speed</td>
<td>Earth rate telescopes, precision grinder spindles, film processing roller drives</td>
<td>Speeds from 1 rev. per day to 30K RPM. Designs with &lt;0.1% velocity ripple</td>
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<td>Voltage</td>
<td>Golf carts, lift trucks, semiconductor manufacturing equipment</td>
<td>12-72 VDC, 1-300 Amps to 155 - 600 VDC, 1-300 Amps</td>
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<tr>
<td>Size Range</td>
<td>Aircraft instruments, implantable heart pumps, telescopes, MRI and CT scanners</td>
<td>As small as 1-inch outside diameter, as large as 10+ feet outside diameter</td>
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<td>Harsh Environments</td>
<td>Naval ships, orbiting satellites, deep sea drilling, missiles</td>
<td>Sealed, corrosion resistant, active pressure compensation, 20K g's gunfire shock, &gt;200C sustained operating temperature</td>
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<tr>
<td>High Reliability</td>
<td>Artificial heart pumps and ventricular assist pumps, military gyroscopes, high volume manufacturing machines</td>
<td>Up to 30 year life, continuous operation or intermittent use</td>
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<td>Smooth Operation</td>
<td>Medical respirators, silicon wafer handling robots, index tables, textile machines</td>
<td>Zero cogging slotless motors, &lt;5% ultra low cogging slotted brushless motors, &lt;5% torque ripple</td>
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<td>Higher Level Assemblies</td>
<td>X-Y tables, pick and place robots, linear actuators, rotary actuators</td>
<td>Motors with integral ball screws, brakes, feedback devices; motors with gearboxes, custom splines, custom pulleys, flex couplings</td>
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<td>Specialty Performance</td>
<td>Hybrid electric vehicles</td>
<td>Custom electromagnetic and mechanical designs for propulsion, controls, power generation, regenerative braking</td>
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<td>Redundant systems</td>
<td>Custom multiple motor designs in a single package or redundant windings in a single motor</td>
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<td>High power dissipation</td>
<td>Special liquid cooled housings or air cooled enclosures</td>
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<td>Unusual fit constraints</td>
<td>Large inner bore, short axial length, thin cross-section, specialty feedback, custom mechanical and electrical interfaces</td>
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Why Custom?

Optimize the Package, Performance and Features
- We provide solutions that meet your needs, including the ability to get optimum performance for the smallest package size.
- Our products deliver superior quality, throughput, efficiency, and performance.

Reduce Waste and Costs
- We have thousands of proven designs upon which to build new solutions. Our application experience expedites the design cycle, which enables you to be fully operational sooner.
- Greater value delivered in the final product.

Meet the Most Challenging Requirements
- Designs are developed for manufacturability.
- Designing and manufacturing unique products are our core competency.
- We have the broadest capabilities in the industry.

Compete and Win
Kollmorgen can translate your needs, from design to installation, into a custom motor solution that makes your end product more competitive—driving market share and profitability for your company.

For flexible production runs, from high volume to one piece, Kollmorgen provides an optimized solution that fits your needs—perfectly.
About Kollmorgen

Kollmorgen is a leading provider of motion systems and components for machine builders. Through world-class knowledge in motion, industry-leading quality and deep expertise in linking and integrating standard and custom products, Kollmorgen delivers breakthrough solutions that are unmatched in performance, reliability and ease-of-use, giving machine builders an irrefutable marketplace advantage.

For assistance with your application needs, contact us at: 540-633-3545, support@kollmorgen.com or visit www.kollmorgen.com for a global contact list.