

OEM Solutions for Automotive Powertrain Applications



KILIAN PROVIDES POWERTRAIN SOLUTIONS FOR AUTOMOTIVE APPLICATIONS

Kilian is the world leader in designing, developing, and manufacturing machined race bearings and custom engineered powertrain components. Kilian's powertrain products serve OEM requirements for demanding automotive applications.

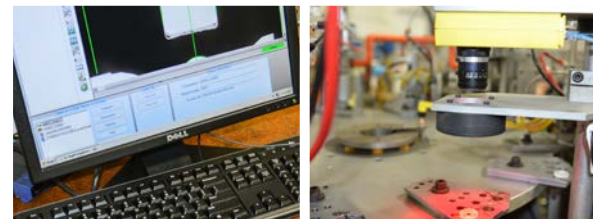


With expert mechanical engineers on staff and thousands of innovative designs, Kilian works as an extension of your own, in-house engineering team to create cost-effective solutions and deliver the support you need to speed new product development and dramatically cut time to market. Our engineers leverage years of experience in design to build a custom solution that perfectly meets your application needs.

With a reputation built on rapid, professional response that spans over 80 years in business, Kilian produces the finest precision-machined bearings and components available today.

KILIAN PRODUCTS DESIGNED SPECIFICALLY FOR AUTOMOTIVE POWERTRAIN APPLICATIONS

Kilian designs a wide range of products to meet a broad spectrum of automotive powertrain application needs. Our major application areas are: **Transmission, Transfer Case, Shift Actuation, & Variable Cam Timing.**



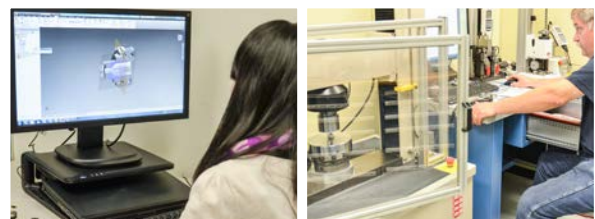
Allow Kilian to be your Automotive Powertrain Component Supplier

- Design and manufacturing engineering
- Quantities up to 8,000,000 pieces annually
- CNC precision machining
- Automated assembly
- Heat treating
- Plating
- Injection molding

LEVERAGE THE STRENGTH OF KILIAN'S DESIGN ENGINEERING TEAM

We develop our products to meet the customer's design needs.

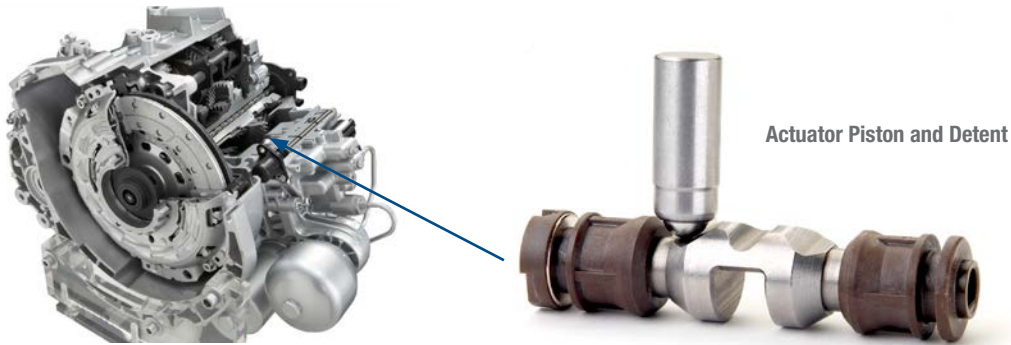
Our engineers will work closely with your engineering team to develop a custom solution, making on site visits whenever necessary.



Tools used for rapid and robust design engineering:

- Solid modeling
- FEA
- On-site test lab for design verification
- Rapid prototyping capability

DUAL CLUTCH TRANSMISSION ACTUATION PISTON IN APPLICATION



MANUFACTURING CAPABILITIES

DCT Piston



- Precision machined
- Broached and milled slot
- Carburized for wear resistance
- Engineered polymer overmold
- Neodymium magnet



DCT Detent



- Injection molded polymer insert
- High fatigue limit spring
- Precision bored I.D.
- Through hardened housing for durability
- Assembly pre-form and staking operation
- Plated for corrosion protection
- Machine and precision ground O.D.

Shift Fork



- Heat treated casting
- CNC machined finishing operation
- Staked actuation bearing
- Assembled to mating components
- Low friction engineered polymer pads

Kilian Facilities

North America

USA

1728 Burnet Avenue
Syracuse, NY 13206 - USA
315-432-0700

*Engineered Bearing
Assemblies*

The Brands of Altra Motion

Couplings

Ameridrives
www.ameridrives.com

Bibby Turboflex
www.bibbyturboflex.com

Guardian Couplings
www.guardiancouplings.com

Huco
www.huco.com

Lamiflex Couplings
www.lamiflexcouplings.com

Stromag
www.stromag.com

TB Wood's
www.tbwoods.com

Linear Systems

Thomson
www.thomsonlinear.com

Geared Cam Limit Switches

Stromag
www.stromag.com

Engineered Bearing Assemblies

Kilian
www.kilianbearings.com

Electric Clutches & Brakes

Matrix
www.matrix-international.com

Stromag
www.stromag.com

Warner Electric
www.warnerelectric.com

Deltran
www.thomsonlinear.com

Belted Drives

TB Wood's
www.tbwoods.com

Heavy Duty Clutches & Brakes

Twiflex
www.twiflex.com

Stromag
www.stromag.com

Svendborg Brakes
www.svendborg-brakes.com

Wichita Clutch
www.wichitaclutch.com

Gearing & Specialty Components

Bauer Gear Motor
www.bauergears.com

Boston Gear
www.bostongear.com

Delevan
www.delevan.com

Delroyd Worm Gear
www.delroyd.com

Nuttall Gear
www.nuttallgear.com

Engine Braking Systems

Jacobs Vehicle Systems
www.jacobsvehiclesystems.com

Precision Motors & Automation

Kollmorgen
www.kollmorgen.com

Miniature Motors

Portescap
www.portescap.com

Overrunning Clutches

Formsprag Clutch
www.formsprag.com

Marland Clutch
www.marland.com

Stieber
www.stieberclutch.com

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