FALK™ RAM® MIXER DRIVES
Mixer Drives Designed to Drive Mixers

RAM Mixer Drives are engineered and built specifically to handle the unique and demanding requirements of mixing applications.

RAM Mixer Drives can handle the rough mixing requirements in industries like food processing, waste and water treatment, chemical processing, pulp and paper, pharmaceutical, power generation, and mining.

With a wide range of sizes available, there’s a RAM Mixer Drive for virtually any mixing application. Best of all, every RAM is fully backed by Rexnord’s Falk Gear Group—one of the most trusted names in industry for over 100 years.

**What sets RAM apart is its unique design**
Ordinary commercial gear drives can’t stand up to typical mixing requirements—high bending and thrust loads on the output shaft, reliable round-the-clock operation, and absolutely no leakage of gear lubricant into the product being mixed.

RAM is no ordinary gear drive. It’s designed specifically for the rigorous requirements of mixing service. Falk mixer drives have been around for 50 years.

**Unique RAM Features:**
- Large-diameter, high-capacity output shafts to accommodate the high-bending moment loads common in mixing applications.
- Extended bearing life—minimum 30,000 hours L-10 at 1.25 service factor even at high thrust and moment loads.
- No-leak drywell design physically separates the oil sump from the output shaft to eliminate gear oil contaminations of your product.
- Rugged cast or fabricated housings designed to withstand the stresses of mixing while maintaining accurate gear alignment.
- Helical and spiral-bevel gearing for quiet operations and high drive efficiency.
- Product flexibility for handling almost any type of installation. RAM mixer drives are available with solid or hollow output shafts, and can be adapted to top, bottom or side entry mixing.

**RAM HMX Mixer Drives**

*For small-capacity mixing*
- Hollow output shaft
- Top or side entry
- Up to 22,000 lb-in output torque
- 5.06:1 to 31.30:1 ratios

Designed for small-capacity, tough-duty mixing applications, the RAM HMX is a hollow shaft drive for top or side entry applications. It incorporates many of the same construction and performance features found on our medium- and large-capacity mixer drives.

- **Rugged Cast-Iron Housing** – Accepts mixing stresses while maintaining accurate gear alignment and resisting corrosion.
- **Convenient C-Face Motor Adapter** – This fully registered adapter ensures fast, positive motor alignment, eliminates hassles with V-belts, sheaves and guards, and simplifies installation with a flexible coupling.
- **Mounting Flexibility** – Various mounting configurations, including vertical and horizontal shaft with ASA flange and solid drive shaft options, accommodate a wide range of applications. All configurations feature a male register for accurate alignment.
- **High-Strength Helical Gearing** – All-helical gearing is designed for high efficiency and maximum load carrying capacity with reserve strength rating.
- **No-Leak Drywell Construction** – Oil sump is isolated from output shaft to prevent gear lubricants from leaking and contaminating the product being mixed.
- **Optional Stub Shaft** – Available with high-strength, alloy-steel stub shaft and coupling hub to easy connect/disconnect to mixer shaft.
- **Severe-Duty Seals** – Shielded, grease-purgeable upper seals provide a grease barrier that traps water, dirt and abrasive contaminants before they can enter the drive and cause damage.
- **Low-Speed Tapered Bushing/Adapter** – Ensures a solid connection with the mixer shaft and allows for easy installation and positive removal of shafts for various diameters.
- **Unique Low Speed Bearing Arrangement** – High capacity, spherical-roller, mixer shaft bearing isolates impeller loads from gearing and provides a high moment capacity. Tapered roller bearings accept high thrust loads in either direction.
- **Re-greasable Low Speed Bearings** – Low speed bearings are grease lubricated, and are field re-greasable for easy maintenance and longer life.
Rugged Steel Housing – Fabricated steel housing effectively resist shock loads and stresses associated with mixing applications and maintains accurate gear alignment.

Large Oil Capacity – Lowers operating temperatures to help oil retain higher viscosity, extending gear, bearing and seal life. Auxiliary cooling systems are also available.

Proven High-Hardness Helical Gearing – Engineered to exceed AGMA standards with a reserve strength rating, the surface-hardened, precision-ground, long-life helical gears deliver a smooth, strong, efficient power flow. Large tooth profile provides extra strength to handle high-shock loads.

Precision Spiral Bevel Gearing – Surface hardening and finish lapping ensure smooth, quiet operation and greater gear efficiency.

Oversized Alloy Steel Shaft – Considerably larger in diameter than standard gear drive output shafts, the solid alloy steel shaft has adequate stiffness to withstand high mixer propeller loads.

No-Leak Drywell Low-Speed Construction – A drywell isolates the low-speed output shaft from the oil sump to prevent oil sump lubricants from leaking and contamination.

Comprehensive Leak Protection – Covers, shims, gaskets and blind-tapped end cover holes help retain lubricant, eliminate oil leakage and keep contaminants out to reduce maintenance and downtime.

Optional Hollow Output Shaft – Available with a hollow shaft output connection for mixer shaft insertion.

Comprehensive Leak Protection – Covers, shims, gaskets and blind-tapped end cover holes help retain lubricant, eliminate oil leakage and keep contaminants out to reduce maintenance and downtime. A standard magnetic oil drain plug is standard.

RAM MDX Mixer Drives

For medium-capacity mixing
- Solid or hollow output shaft
- Top, bottom or side entry
- Up to 166,000 lb-in output torque
- 5.06:1 to 1207:1 ratios

Ideal for medium-capacity mixing needs, the rugged RAM MDX has been performance-proven through years of operations in a diverse range of demanding installations.

As replacement drives RAM MDX has equal or higher ratings than Mixco “Lightnin” 70, 80, TE, and RE Series, and Chemineer HT series.

Larger, Long-Life, Grease-Lubricated Bearings – With a minimum L-10 life at least three times that of standard commercial drives - and in excess of industry standards for most applications - the upper and lower output shaft tapered roller bearings withstand high impeller loads and insure maximum life. A grease baffle on the upper bearing retains grease and prevents it from entering the drive.

Fast, Easy Ratio Changes – With helical gearing contained in the high-speed head, the RAM MDX gives you maximum ratio flexibility. To change ratios, simply replace the pinion and gear. For a reduction change, just replace the high-speed head with optional helical gears readily available from stock.

RAM LHX & LBX Mixer Drives

For large-capacity mixing
- Solid or hollow output shaft
- Top, bottom or side entry
- Up to 4,000,000 lb-in torque
- LHX Ratios: 5.60:1 to 437.9:1
- LBX Ratios: 13.95:1 to 357.5:1

Available in both right angle and parallel gear drive configurations, the RAM LHX and LBX Series Mixer Drives are heavy-duty mixer drives designed for the largest-capacity mixing applications.

External Forced-Lubrication System – An externally-mounted, electric-motor-driven oil pump with a filter delivers generous, positive lubrication to all gearing and bearing elements to help extend drive life.

Larger, Long-Life Bearings – With a minimum L-10 life three times that of commercial drives - and in excess of industry standards for most applications - the output shaft bearings withstand high mixer propeller loads and insure maximum life in continuous mixing applications.

Quick Oil Checks – Standard, automotive-type dipstick allows fast, easy checks of oil level.
World Class Customer Service

For more than 100 years, the dedicated people of Rexnord have delivered excellence in quality and service to our customers around the globe. Rexnord is a trusted name when it comes to providing skillfully engineered products that improve productivity and efficiency for industrial applications worldwide. We are committed to exceeding customer expectations in every area of our business: product design, application engineering, operations, and customer service.

Because of our customer focus, we are able to thoroughly understand the needs of your business and have the resources available to work closely with you to reduce maintenance costs, eliminate redundant inventories and prevent equipment down time.

Rexnord represents the most comprehensive portfolio of power transmission and conveying components in the world with the brands you know and trust.

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