



**YOUR BEARING & POWER
TRANSMISSION SPECIALISTS
SERVING THE MID-ATLANTIC
SINCE 1979**

NORFOLK BEARINGS & SUPPLY CO., INC.
TELEPHONE 757-853-3691
FAX 757-855-5861
3512 E PRINCESS ANNE ROAD
NORFOLK, VA 23502
NORSALES@NORFOLKBEARINGS.COM

NORFOLK BEARINGS AND SUPPLY COMPANY, INC.

TELEPHONE 757-853-3691

FAX 757-855-5861

3512 E PRINCESS ANNE ROAD

NORFOLK, VA 23502

NORSALES@NORFOLKBEARINGS.COM



Norfolk Bearings was established in 1979 to service the industrial component needs of businesses throughout the Mid-Atlantic region. We now have a national presence, serving customers across America. Our company represents over 200 different manufacturers and stock over 10,000 items with many delivery options.

Norfolk Bearings' focus has always been on serving the customer, offering great service and competitive pricing. We also have an extremely knowledgeable sales staff ready to help you find the right component. Our experienced sales team has extensive knowledge on all types of industrial equipment including all power transmission products such as bearings, electric motors, couplings, seals, chains, and belts. You can view our full line of products on our website www.norfolkbearings.com.





BALL & ROLLER BEARINGS



DEEP GROOVE BALL BEARING

Deep groove ball bearings are used in a wide variety of applications. They are relatively simple in design, non-separable, capable of operating at high speeds. These bearings are suitable for radial loads, or a combination of thrust and radial loads. They require little attention or maintenance in service provided the customer selects the appropriate bearing specifications for his or her application. These characteristics coupled with a price advantage make deep groove ball bearings the most popular of all rolling bearings.



ANGULAR CONTACT

Angular contact bearings are available in a wide variety of designs and sizes with axial clearances, preloads and high precision options. Angular contacts are designed to accommodate axial loads in one or both directions. These bearings may be preloaded at the factory so that the correct preload will develop within the bearing. They are also assembled with a specified contact angle under load. The most standard contact angles available are 15°, 30° and 40°.

SELF-ALIGNING BALL



Self-aligning ball bearings have two rows of balls with a common sphered raceway in the outer ring. This feature gives the bearings their self-aligning property, permitting angular misalignment of the shaft relative to the housing. Therefore they are particularly suitable for applications where misalignment can arise from errors in mounting or from shaft deflection. For applications where the load carrying capacity of self-aligning ball bearings is insufficient, spherical roller bearings, which have the same self-aligning property, should be used instead.

THRUST



Thrust bearings are available in ball and roller types. The thrust ball bearings are manufactured in single direction and double direction designs and are specifically designed into applications in which there is no radial load. The spherical roller thrust bearings are capable of handling shaft misalignment, very heavy axial loads, small radial loads and relatively high speeds.

SPHERICAL ROLLER



Spherical roller bearings have two rows of rollers with a common sphered raceway in the outer ring. The two inner ring raceways are inclined at an angle to the bearing axis. The bearings are self-aligning and consequently insensitive to errors of alignment of the shaft relative to the housing, and to shaft bending. In addition to radial loads, the bearings can also accommodate axial loads acting in both directions. The spherical roller can also handle large thrust loads for heavy shock and impact loads, making them suitable for heavy industrial equipment.

CYLINDRICAL ROLLER



Cylindrical roller bearings are offered in a wide variety of types and sizes. The cylindrical roller bearing has rollers which are cylindrical in shape. This provides a modified line contact with the cylindrical inner and outer ring raceways, while the rollers are guided by ground ribs on either the inner or outer ring. This bearing is available in single or double rows and is also available in high precision tolerances typically used in machine tool spindles.

NEEDLE ROLLER

Needle roller bearings are roller bearings with cylindrical rollers, which are thin and long in relation to their diameter. In spite of their low cross section, the bearings have a high load carrying capacity and are thus eminently suitable for bearing arrangements where radial space is limited. There are many different types of needle roller bearings, including drawn cup needle roller bearings with open ends and with closed ends, and needle roller bearings with and without inner rings.



TAPER ROLLER

Taper roller bearings have tapered inner and outer ring raceways between which tapered rollers are arranged. Their design makes taper roller bearings particularly suitable for the accommodation of combined (radial and axial) loads. Taper roller bearings are generally of separable design ; for example, the inner ring with roller and cage assembly forms a unit which can be mounted separately from the outer ring. Taper roller bearing are offered in many arrangements from the most prevalent single row to more complex assemblies using double cups and spacers.



CAM FOLLOWERS

Cam follower bearings are available in needle and roller types. Cam followers are anti-friction bearings developed for use in cam or track roller applications. They were specifically designed and built to handle intermittent shock and heavy loads in a compact design. These bearings and normally provided with threaded studs but are also available without.



ROD ENDS

The rod end is also referred to as the Heim Joint named after its inventor Lewis Heim. While spherical plain bearings offer misalignment capability in a fixed housing option, rod ends offer ease in mounting and adjustment of position in installations such as mechanisms, linkage, and control rods. Rod ends also provide a compact, lightweight, economical design alternative to a conventional housing installation. These bearings are offered in many styles and sizes with features options such as liners, grease fittings, and materials.



OTHER PRODUCTS

MOUNTED BEARING UNITS

Mounted units usually consist of a ball or roller bearing installed within a housing. The housings are most commonly made of cast iron but may also be made of other metals or nonmetallic materials. The housing provides rigidity and secure positioning for the bearing within the application. It also simplifies the task of replacing the bearing as the housing and bearing can be replaced as a complete unit. There are numerous bearing and housing combinations to accommodate a diversity of mounting surfaces, load requirements, shaft sizes and dimensional requirements. Housing types include: pillow blocks, flange units, take-up units, flange units, rubber cartridges and split units.



LINEAR MOTION UNITS

A linear motion bearing or linear slide is a bearing designed to provide free motion in one dimension. There are many types of linear motion products that contribute to the size and weight reduction of machinery and equipment. One of the main advantages of linear systems is the dynamic friction of the ball or roller elements is substantially lower than that of full face surface sliding friction. Since the difference between dynamic and static frictional resistance is small, motion response is excellent in terms of positioning accuracy and in high speed applications with acceleration and deceleration. Linear motion bearings are also designed for the rolling elements to achieve extremely smooth motion. The raceway surface is finished by precision grinding for high precision movement with optimal clearance.



MATERIAL HANDLING / CONVEYING COMPONENTS

There are many types of material handling conveyors that we offer. The most popular are screw conveyors and belt conveyors. The screw conveyor is one of the most cost-effective methods for transporting bulk materials. Screw conveyors are used in thousands of applications in almost every industry. They can handle a great variety of materials from sluggish to free-flowing. The belt conveyor is also used throughout the world for conveying of bulk materials. The belt conveyor is capable of handling a wide range of bulk materials from very fine to large lump sizes. Belt conveyors are popular in ship, barge and rail loading as well as unloading applications for sugar, sulfur, sand, rock, coal and wood. We also offer several other conveyors such as drag, apron, bucket and vibrating.



GEAR DRIVES

Commonly referred to as gearboxes and reducers these are designed to provide speed and torque conversions from one source to another. There are many sizes and styles available in the industry from small fractional horse power drives to large drives that are designed for 20,000 H. P. and ratios from 1:1 to 60,000:1. We offer field service for installation assistance and for evaluation for replacements. We also offer a repair and rebuild service where we would have the drive remanufactured utilizing a reconditioned housing and all new revolving elements. We can offer most rebuilds with a 3 year “new unit” warranty.



ELECTRIC MOTORS AND DRIVES

We offer a wide variety of electric motors and drives from sub-fractional horsepower to over 500 horsepower for general-purpose use and specific duty applications. There are motors of all types such as brake-motors, explosion proof, food processing, jet pump, IEC metric, multi-speed, wash down-duty just to name a few. Our AC and DC drives are also available with a wide variety of features and enclosure options. We offer a range of accessories for our drives such as dynamic braking components, remote keypads, electronic programming unit and many more.



BELTS AND SHEAVES

The V-belt is the most common, cost effective and dependable belt drive for most industrial applications. However there are many types of belt styles available such as variable speed, timing, poly-v, synchronous and flat belts just to say a few. All of our belts are manufactured with carefully chosen raw materials utilizing continually updated manufacturing methods. This goes for our sheaves and pulleys that our belts are used with as well. We are constantly offering new belts and sheaves for a wide variety of industrial applications, such as the Optibelt Red Power and HVAC belts, which offer a number of advantages compared to the average belt in the industry.



CHAIN AND SPROCKETS



We offer a full range of roller and engineered class type of chains and sprockets. Standard and heavy series, single and multiple strand, custom conveyor chain with a variety of attachments, specialty chain, HV and inverted tooth and silent chain, plus many more specialized designs. Chain drives are inherently elastic and compared to belt drives you don't have to worry about slippage. Compared to gear drives, they soften shock and absorb vibration. They can be used in machines which are subject to great shock or which constantly move or vibrate.

OPEN GEARING



Norfolk Bearings provides a wide range of off-the-shelf gears that are factory stocked including spur, helical, miter and bevel, worm and change gears. These are available in 20° pressure angle from 20 to 4 DP, and 14 1/2° pressure angle from 48 to 3 DP. All are designed to increase output, reduce cost and avoid special made to order gearings. In case you need a custom gear such as odd tooth sizes, materials, hardening, or any other requirement we can have any gear made to your specifications.

COUPLINGS



We offer a variety of state-of-the-art couplings to meet virtually any requirement. Whether you need more flexibility, lower maintenance, high torque load protection, simple cost-effective performance or something else, we can specify a coupling to suit you. Varieties include standard jaw type couplings, shear type, flexible, gear, grid, spacer, disc, and torsional couplings.

SEALS



Norfolk Bearings provides a full line of oil, grease and mechanical seals for every type of industry. Oil and grease seals close the space between stationary and moving components in mechanical equipment and help prevent lubrication from escaping. Equipment components rely on oil, grease and mechanical seals to prevent abrasives, corrosive moisture and other harmful contaminants from entering the mechanics of the machine, particularly in severe environments. Oil, grease and mechanical seals feature precision sealing designs matched to many original equipment or aftermarket applications and help to ensure consistent and reliable performance.



BRONZE & METALS

We stock and offer a wide variety of bronze alloys and metals including a large inventory of 932 bearing bronze here in Norfolk. We also carry aluminum, manganese, tin, silicon, nickel, phosphor bronze and stainless steel materials. Our capabilities range from lathe cutting, chrome plating, welding, boring, heat treating and turning. So if you need raw material or finished parts we have the bronze or metal to do the job.



GREASE & LUBRICANTS

Our lubricants help bearings and related components operate effectively in demanding industrial conditions. High-temperature, anti-wear and water-resistant additives offer superior protection in challenging environments. We also offer a full line of lubrication feeders and accessories such as our refillable grease canister and oil single point lubricator, gravity fed feeders, and accessories such as battery-powered grease guns and remote grease feeding kits.



CLUTCHES & BRAKES

Norfolk Bearings offers clutches and brakes spanning many industries such as marine equipment, cranes, mining, agriculture and material handling. We are a proud distributor of the leading manufactures including Stearns, Warner, Formspragg, Ringspann, Dellner, and Stromag. This allows us to provide a multitude of clutch and brake solutions from solenoid actuated, armature actuated, disc, hydraulic, electric, sprag, overrunning, backstopping, freewheels, overload, torque limiters, electromagnetic, shaft mounted, etc.... If there is brake or clutch need for your application we have you covered.

CYLINDERS & ACTUATORS

Our cylinder and actuator designs offer innovative pneumatic and hydraulic cylinder design features for many industries. You can also trust our actuators to provide long life and reliable service. Our products meet the specifications of all major industrial markets and will provide you with the largest array of choices.



HYDRAULIC, PNEUMATIC AND ACTUATOR VALVES

Directional control pneumatic valves and manifolds feature low power consumption, high flow rates, quick response times and clean aesthetic designs. Solenoid valves are used extensively in the semi conductor, automotive, packaging, medical, specialty machine, and machine tool industries. Whatever your application is, we have a dependable solenoid valve series that will accommodate your most demanding application. Hydraulic valves are manufactured in a variety of styles to function in different applications. Valves are used to manipulate the flow of hydraulic fluid within a hydraulic circuit and are activated either mechanically or electronically. Directional control valves are the most commonly used valve in a hydraulic system. Control valves direct the flow of hydraulic fluid from the pump to the actuators or other sections of the hydraulic circuit. Control valves are returned to their neutral state with a spring or held in each position with a detent mechanism. These valves are generally used to control the direction of a hydraulic motor or cylinder but can also perform other functions in a circuit.



PRESSURE REGULATORS AND AIR FILTRATION

Airline equipment provides unsurpassed sensing, pressure regulators and air filtration performance for your pneumatic system. With our large range of pneumatic preparation products, we can provide the clean dry air necessary to achieve the peak performance required by your fluid power system. Our connectors simplify the plumbing of all your components. Innovative one-touch and uni-thread one touch fitting technology provides dramatic time savings during the installation of both air fittings and pneumatic flow controls. We offer many variations and sizes to suit any application. Tubing is made in several sizes and packaged in a variety of lengths.



SOLENOID VALVES

Standard design and dimensions make our valve series a simple replacement valve. Direct operated 2-port solenoid valves have improved durability and double their service life due to the unique construction. Built-in wave rectifier results in a quiet operating series of valves that is suitable for a wide variety of applications.





NBC

SERVICES

WALK-IN CUSTOMERS WELCOME

- Available 24 hours 7 days a week for your most urgent needs.

SAME DAY AIR SHIPPING AVAILABLE

- We are able to ship most orders placed by 4pm
- 24 hour courier service

Our experienced sales staff is ready to serve you with the quickest, most accurate quotes, where we strive to offer cost savings to you through very competitive pricing. Many items are available for immediate shipping from our large on-site inventory.

OUR GOAL IS TO OFFER SUPERIOR SERVICE WITH:

- On-site surveys
- Product training programs
- Technical support
 - a) Failure analysis
 - b) Drive design
 - c) Product upgrade
- Gearbox rebuilding and custom-made gears
- Special made to order parts
- Discontinued or obsolete items
- Bearing modification and repairs
 - a) Snap ring grooving
 - b) Oil holes
 - c) Lubrication
 - d) Seal upgrades, etc.

TELEPHONE 757-853-3691

FAX 757-855-5861

3512 E PRINCESS ANNE ROAD, NORFOLK, VA 23502

NORSALES@NORFOLKBEARINGS.COM



FAG



Stearns®

BALDOR
A MEMBER OF THE ABB GROUP



NSK



Garlock

NTN®
AUTOMATION



RBC®
BEARINGS

THK

COOPER®
SPLIT ROLLER BEARINGS



**RENOLD
JEFFREY**



**DURAMAX
MARINE® LLC**

