

## Superior Solution for Shaft Connections in Large Bore Applications

*Traditional large cast iron couplings, used to connect shafts in large bore applications found in lumber, steel, rail, recycling, and paper industries, are manufactured from iron and are extremely heavy.*

**H2CC-Series Large Bore  
Clamp Couplings**



Traditional large cast iron couplings have a bulky design that requires extra room in order to accommodate the oversized outside diameter of the unit. The sheer size of these antiquated couplings puts unnecessary stress on the shaft, and poses risk to damaging the shaft and associated components. In order to attain necessary torque for these applications, cast iron couplings encompass the use of a keyway leading to issues such as wallowing, backlash, fretting corrosion, and fatigue failure, commonly associated with keyways.

Climax provides two solutions for large bore applications. The first solution, H2CC series two-piece clamping couplings, are available with an internal diameter up to 4 15/16". This all steel rigid two-piece clamping design not only is a lighter weight product with a tighter envelope for clearance issues, but also provides a higher torque capacity over die cast couplings. The clamping design of this steel coupling transmits torque by using keyways. H2CCs are about half the weight of their die cast counterparts and can be installed without major disassembly.

**C600-Series Keyless Rigid  
Couplings**



A Climax C600 series keyless rigid coupling is an innovative product that substantially reduces the weight of the coupling, and eliminates risks associated with keyed connections. Incorporating a Climax C600 series in the application design saves maintenance costs and decreases downtime. A C600 keyless rigid coupling is easy to install using simple hand tools and can be mounted on a round shaft with our without a keyway. Lighter than both traditional die cast couplings and H2CC series rigid coupling, a C600 has a torque capacity 2-3X higher and is self-releasing.

Climax carries an extensive inventory of rigid couplings and keyless rigid couplings with the capability to engineer custom designs to fit any application challenge.



RBC has been producing bearings in the USA since 1919. In addition to unique custom bearings, RBC offers a full line of standard industrial and aerospace bearings, including:



### Tapered Roller Thrust Bearings

Case-hardened tapered roller thrust bearings for oilfield top drives and swivels. Available in full complement, maximum capacity versions.



### Cylindrical Roller Bearings

Cylindrical roller bearings designed for mud pump pinion and eccentric positions. Fully interchangeable to industry standards.



### Spherical Plain Bearings

Radial, angular contact, extended inner ring, high misalignment. **QuadLube**®, **ImpactTuff**®, **SpreadLock**® Seal, **CrossLube**®, **DuraLube**™, and self-lubricating bearings. Available in inch and metric sizes.



### Keyless Locking Devices

Mechanical bushings used to connect power transmission components onto rotating shafts. Without the use of keyways, KLDs eliminate the problems associated with backlash including fretting, corroding, and wallowing.



### Self-Lubricating Bearings

Radial, thrust, rod ends, spherical bearings, high temperature, high loads. Available in inch and metric sizes. **Fiberglide**® self-lubricating bearings.



### Ball Bearings

Precision ground, semiground, unground. High loads, long life, smooth operation. **Nice**® branded products are offered in caged and full complement configurations.



### Thin Section Ball Bearings

Standard cross sections to one inch. Bore sizes to 40 inches. Stainless steel and other materials are available. Seals are available on all sizes and standard cross sections. Super duplex configurations.



### Needle Roller Bearings

**Pitchline**® caged heavy duty needle roller bearings ideal for cross head bearings applications. These double row bearings are available in single row and **Tandem Roller**® versions.



### Tapered Roller Bearings

Single, double, & multi row versions available for main bearing positions in mud pumps, gear boxes, etc. Bearings are constructed of case hardened steel washers and rollers with bore size of 11" or greater.



### Lubron® Bearings

**Lubron**® self-lubricating bearings designed and custom manufactured in most any size, material and bearing configuration. Applications include hydro power and water control, nuclear power generation, infrastructure, architecture, offshore marine, industrial, machinery and heavy equipment.



### Rigid Couplings

Shaft couplings serve as components to time, join, or align shafts at lower speeds and torque, especially when zero backlash is desired. Made from mild steel with a black oxide finish, type 303 stainless steel, or aluminum. Available in inch and metric sizes.



### Cam Followers

Standard stud, heavy stud, yoke type, caged roller followers. Patented **RBC Roller**® cylindrical roller cam followers, **HexLube**® universal cam followers, airframe track rollers.



### Commercial Rod Ends

Commercial and industrial, precision, Mil-Spec series, self-lubricating, and aircraft. Sold under the **Heim**®, **Unibal**®, and **Spherco**® names. Available in inch and metric sizes.



### TP Series Bearings

RBC's TP Series cylindrical roller thrust bearings ideal for crane hooks, oil well swivels, winch systems, and gear boxes. Fully interchangeable with industry standard offering.



### Shaft Collars

Used to position or locate a component on a shaft. Made from mild steel, type 303 or 316 stainless steel, aluminum, or acetal. Available in inch and metric sizes.



### Specials

RBC manufactures many specialty bearings for the aerospace, oil and energy, semiconductor equipment, packaging, transportation, and other industries.



### PIC Design

Complete line of precision gears, precision hardware, timing belts, pulleys, and linear motion systems. Industries served include industrial, aerospace, defense, medical, robotics and automation, material handling, and assembly. Custom design support for unique applications.