



A world of solutions to improve things moving

GB Bearings (Pty) Ltd

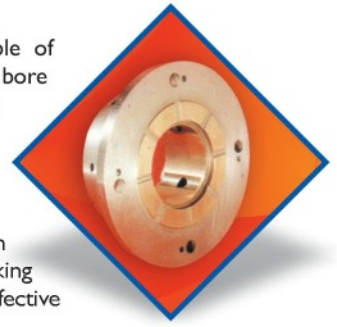
Manufacture of White Metal Bearings

Special bearings in small batch quantities can be made virtually to any customer requirement, either as original equipment or replacement parts. The highest standards of precision and workmanship are maintained using the most up to date machinery, equipment and processes.



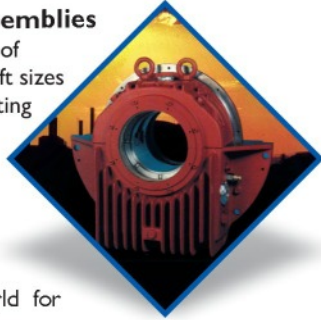
Profile Bore Bearings

We have exclusive machinery capable of manufacturing and repairing profile bore bearings. A multi-lobed bearing has more than one region of hydrodynamic pressure within the oil film to provide more controlled location of the shaft. In particular they have an important influence on vibration stiffness and damping, making profile bore bearings particularly effective in high speed applications.



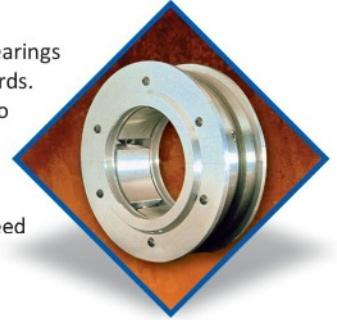
HSR Horizontal Bearing Assemblies

HSR bearing assemblies are a range of self-contained plain bearings, for shaft sizes from 60mm to 380mm, ready for fitting to electric motors, fans, blowers, pumps, and any other machinery where freestanding or flanged mounted bearings are required. The HSR range incorporates the latest technology for rotating plant and are known throughout the world for their reliability and superior performance.



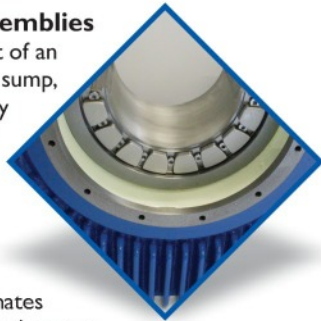
Tilting Pad Journal Bearings

A full range of tilting pad journal bearings is manufactured to exacting standards. These provide maximum stiffness to counteract oil whirl and instability over a wide range of operating conditions. This type of journal bearing is very popular for high-speed machinery.



HSS Horizontal Bearing Assemblies

The HSS range of assemblies consist of an oil disc which transfers oil from the sump, through an oil scoop/scrapper, directly into the bearing shell. This creates a positive oil feed system not only to the bearing sleeve but to the thrusting arrangement designed to accommodate high axial loads. The assembly units are usually water cooled. In addition, this design eliminates the need for an external lubricating oil station.



Tri-Metal & Copper-Lead Bearings

These bearings are utilised typically in dynamically loaded applications and where higher operating temperatures occur. They can incorporate various required design features and all possess high fatigue strength. GB Bearings provides product engineering assistance regarding the appropriate selection of materials and design.



Vertical Bearing Assemblies

This range of vertical self contained thrust and journal, and journal only assemblies, which incorporate the latest design features and facilities, have been proven by many years of successful service by OE manufacturers of pumps, electric motors and similar products.



*GB Bearings warrants that products described in this document are free from defects in workmanship and material but, unless expressly agreed in writing, GB Bearings gives no warranty that these products are suitable for any other purpose or for other use under any specific conditions notwithstanding that such purpose would appear to be covered by this publication. GB Bearings accepts no liability for any loss, damage or expense whatsoever arising directly or indirectly from the use of their products. All business undertaken by GB Bearings is subject to their standard Conditions of Sale, copies of which are available on request. GB Bearings products are subject to continual development and GB Bearings reserves the rights to make changes in the specification and design of their products without prior notice.

*Throughout this document, the term "GB Bearings" refers to GB Bearings (Pty) Ltd.
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Traction Motor Bearings

Traction motor bearings of all sizes have been manufactured by our company since 1974. Our experience in the field of bearing technology embraces a comprehensive knowledge of the operating requirements in the rail traction applications, enabling us to produce bearings to the standards of quality and durability demanded by our customers.



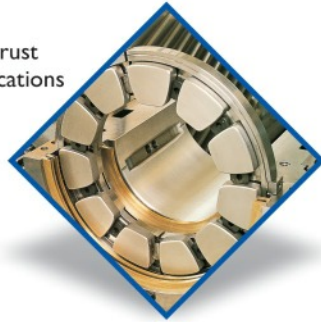
GLYCO Glycodur® F and A Bearings

Glycodur® F bearings are self-lubricating bearings with a PTFE mixture, completely lead free, which results in excellent dimensional stability and thermal conductivity. Glycodur® A bearings have a relatively thick top layer of polyoxymethylene (POM), featuring indented pockets for grease lubrication and, to some extent, are unaffected by mis-alignment. Both bearing types have a copper plated steel base with a sintered tin bronze layer to which the PTFE and POM are solidly joined.



Tilting Pad Thrust Bearings

Our standard range of tilting pad thrust bearings are manufactured for applications in pumps, electric motors, fans, blowers, gearboxes etc. We supply original equipment to many well-known OE manufactures of this machinery. Our tilting pad thrust bearings are bi-directional and have high load carrying capacity.



DEVA™ Metal Bearings

DEVA Metal is a range of high performance, self-lubricating bearing materials. The Deva Metal systems are based on three metal alloy types; bronze, iron and nickel, using powder technology and each containing dry solid lubricant, most commonly graphite. The percentage, type and form of solid lubricant is determined by the bearing application and operating requirements. These bearings are capable of operating at highly elevated temperatures and in aggressive environments.



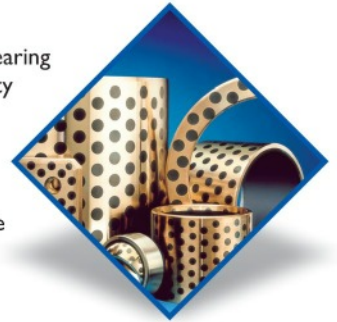
Repair of white metal bearings

Our factories specialise in the repair of white metal lined bearings and are capable of repairing bearings of all sizes and designs. By using developed techniques we ensure that the quality of repaired bearings is, as far as practical, as high as that of new parts. We also offer the facility for emergency repair work of white metal bearings.



DEVAGLIDE™ Bearings

DEVAGLIDE™ is a self-lubricating bearing material that consists of a high-quality bearing bronze with pockets filled with solid lubricant. A thin film of solid lubricant over the bearing surface aids the running-in process. These bearings are maintenance free and do not require oil or grease for lubrication.



DEVA™ BM Bearings

DEVA™ BM is a thinwall self-lubricating multi-layer material consisting of steel backings with a DEVA™ Metal sliding layer. DEVA™ BM does not normally require lubrication, allows maintenance free operation, has a high static and dynamic loading capacity and is capable of operating at elevated temperatures.



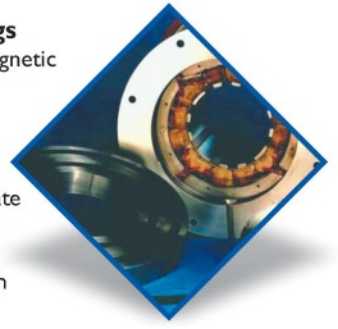
ZVL Ball Bearings

A wide range of ball bearings are on offer, including the most common type of rolling bearings. The range includes single row deep groove ball bearings, single row angular contact ball bearings, double row angular contact ball bearings, double row self-aligning ball bearings, single direction and double direction thrust ball bearings.



Waukesha Magnetic Bearings

A magnetic bearing is an electro magnetic device which maintains the relative position of a rotating assembly with respect to a stationary part and features a unique rotor delevitation system (RDS). This design can operate in high pressure and corrosive environments, avoiding the need for seals and lubrication systems in both thrust and journal designs.



ZVL Spherical Bearings

Spherical bearings are intended for demanding applications for heavy machinery, agriculture, steel, power, paper and other industries. The range includes a wide range of sizes with brass or steel cages.



Waukesha Equalising Thrust Pad Bearings

Where accurate shaft alignment cannot be assured, self-equalising thrust pad assemblies should be selected. For carrying even higher loads, Waukesha have developed the "Hyfilm" thrust bearing, which uses a unique leveling system. This distributes the load amongst the pads through smoother, more efficient mechanism, both radially and circumferentially.



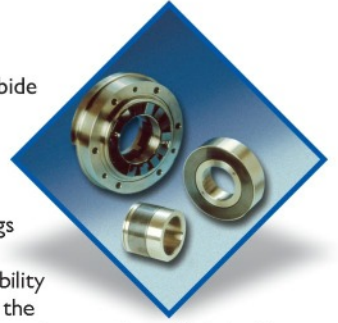
Self-Aligning Plummer Blocks

Self-aligning plain bearing housing and plummer blocks are available in standard catalogued sizes, which can be used with or without lubricant. These are also available for extremely hostile environments. They are fitted with either Glycodur® F or A bearings, or, DEVA™ BM bearings.



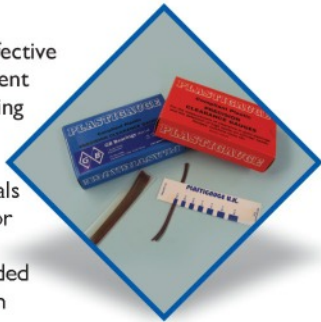
Waukesha Silicon Carbide and Ceramic Bearings

These bearings comprise silicon carbide or ceramic materials. The range comprises plain bearings, tilting thrust pads and tilting journal pads for hostile operating conditions. The main advantage of these bearings is the increased resistance to wear from impurities and the combined ability to operate with the process fluid as the lubricant, saving weight, space, sealing and expensive oil lubrication systems.



Plastigauge

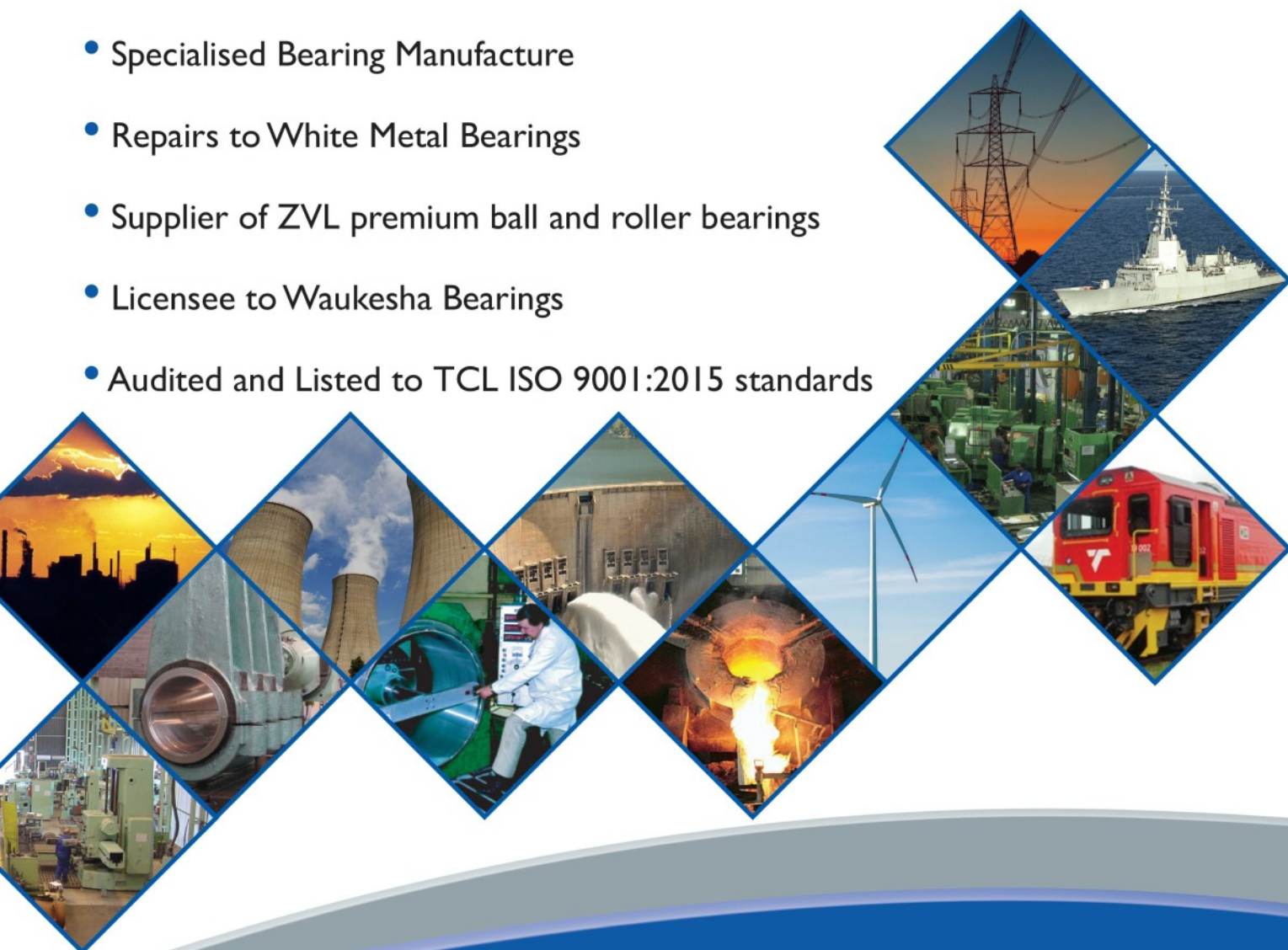
Plastigauge provides a simple but effective method for the accurate measurement of the clearance in a plain split bearing and especially useful in whitmetal bearings as it will not damage the alloy surfaces. Ovality in shaft journals can also be determined. The need for expensive instruments to measure bearing clearances is no longer needed as a card gauge is supplied with each individual packet of Plastigauge.



world of solutions to improve things moving



- Technical and Design Support
- Quality Plans and Standards
- Research, Development and Test Facilities
- Materials for all Duties
- Sales and Support Worldwide
- Special Studies and Analysis Available
- Rotor Dynamics Analysis
- Specialised Bearing Manufacture
- Repairs to White Metal Bearings
- Supplier of ZVL premium ball and roller bearings
- Licensee to Waukesha Bearings
- Audited and Listed to TCL ISO 9001:2015 standards



GB Bearings operates from a network of facilities situated in Durban, Johannesburg and Cape Town, South Africa. We have always been in the forefront of technological advancement in the design and manufacture of plain bearings and bearing materials for a wide variety of industrial applications. Our facilities are equipped to manufacture and repair bearings ranging in size up to bore diameters of 5500mm.

GB Bearings is a supplier and stockist of the ZVL range of Ball and Roller bearings, manufactured to exacting standards in Slovakia.

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