



HIGH PERFORMANCE BEARINGS FOR PRIMARY METALS

PRIMARY METALS

Operating environments in the primary metals industry are harsh and extreme, often subject to dirty, abrasive conditions where maintenance is difficult. High temperature thermal or chemical transformations are very energy-intensive and therefore costly. Asset failure can be extremely costly and lead to considerable delays. GGB bearing solutions can help extend service life and offer:

- excellent wear resistance
- high shock load capacity
- low friction properties that help reduce power loss
- self-lubricating whilst providing smooth operation
- environmentally friendly

By partnering with you early in the design process, we can review your assemblies and make sure both the bearing and surrounding components are optimized for performance and cost-effectiveness. Partnering early in the design phase also increases your customers' satisfaction with reliable, proven solutions.

Applications in which they are used include:

- milling tools
- ladle cover manipulator
- slide plates for quench machines
- locking device casting cylinder
- cool-bed transfer
- ladle hanger
- conveyor rollers
- pinch roll unit polisher
- lifting devices
- coiler/uncoiler
- forging manipulator
- bloom caster guides

PUSHING BOUNDARIES TO CO-CREATE A HIGHER QUALITY OF LIFE

With our extensive global presence and deep expertise in various applications, our capabilities are pushing the boundaries. We strive to expand the horizons of what's achievable, encouraging customers from all industries to collaborate with us and foster innovation together.

Today, our products can be found everywhere – from scientific vessels at the bottom of the ocean to racecars speeding down the tarmac to the Curiosity rover exploring the surface of the Mars.

The GGB Advantage



LOWER SYSTEM COST

GGB bearings can help to reduce shaft costs by eliminating the need for hardening and machining grease paths. Their compact, one-piece construction provides space and weight savings and simplifies assembly.



LOW FRICTION, HIGH WEAR RESISTANCE

Low coefficients of friction eliminate the need for lubrication, while providing smooth operation, reducing wear and extending service life. Low friction also supports the elimination of the effects of stick-slip or "stiction" during startup.



MAINTENANCE-FREE

GGB bearings are self-lubricating, making them ideal for applications requiring long bearing life without continuous maintenance, as well as operating conditions with inadequate or no lubrication.



ENVIRONMENTAL

Greaseless, lead-free GGB bearings comply with increasingly stringent environmental regulations such as the EU RoHS directive, restricting the use of hazardous substances in electrical and electronic equipment.



CUSTOMER SUPPORT

GGB's flexible production platform and extensive supply network assure quick turnaround and timely deliveries. In addition, we offer local applications engineering and technical support.



GLOBAL FOOTPRINT

GGB has manufacturing, sales, service and support locations around the globe. This vast network of resources and expertise enables us to respond promptly to your bearing needs wherever you do business.

GGB PRODUCTS

The following tribological bearings are particularly well suited for dirty, abrasive working conditions*. Contact your local Timken sales representative for bearing product selection and design assistance.



GGB-CSM® thick wall monometal bearings:

- machinable, available in special shaped dimensions
- resistant to abrasive environments
- corrosion resistant and temperature ranges up to 600 °C depending on alloy are available



GGB-CBM® high load bimetal bearings:

- excellent performance under high loads
- suited for a wide temperature range from -150 °C up to 280 °C
- resistant to abrasive environments



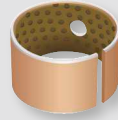
GGB-DB® cast bronze bearings with solid lubricant inserts:

- excellent performance under high loads and intermittent operation
- available with PTFE or graphite inserts for temperatures above 250 °C
- negligible stick-slip effect



HSG high-load bearings:

- offer high static load capacity
- provide excellent shock and misalignment resistance
- ensure excellent contamination resistance



DX®10 heavy duty bearings:

- provide good fatigue strength
- offer excellent wear performance
- perfect for heavy duty and harsh environments



Hi-EX® hydrodynamic composite bearings:

- rated for high temperature use up to 250°C
- suitable for use with low viscosity fluids
- offer good wear resistance under thin film conditions



DP4® self-lubricating bearings:

- suitable for dry operation, which eliminates the need for greases and oils
- resistant to high loads for extended operating life
- suitable for linear, oscillating, and rotating movements



*Performance depends on different operating conditions.



www.ggbearings.com



Order-No. 11564

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