



## Your Complete Bearing Solutions Provider

GGB offers a comprehensive selection of plain bearing solutions to meet the world's most demanding bearing needs. We manufacture Metal-Polymer Bearings, Engineered Plastics Bearings, Fiber Reinforced Composite Bearings, Metal and Bimetal Bearings, in addition to a range of supporting assemblies, bushing blocks and thrust plates. Industries served include:

- Aerospace
- Automotive
- Energy
- Fluid Power
- Industrial
- Primary Metals
- Construction/Agriculture
- Recreation

### 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-SHB™ Bearings

Case hardened steel bearings deliver greater wear resistance while the interior remains ductile and resistant to cracking.

### THE CASE HARDENING ADVANTAGE

The case hardening process involves heat treating a special vanadium- and manganese-enhanced steel alloy (20MnV6) through prolonged heating and rapid cooling process to produce a 0.8 – 1.0mm outer layer that is up to 50 percent harder and much smoother than the core material.

This process removes all residual austenite and allows the bearing to reduce friction and withstand wear better than the core material while improving its overall fatigue resistance and maintaining the mechanical toughness of the core.

### GGB North America

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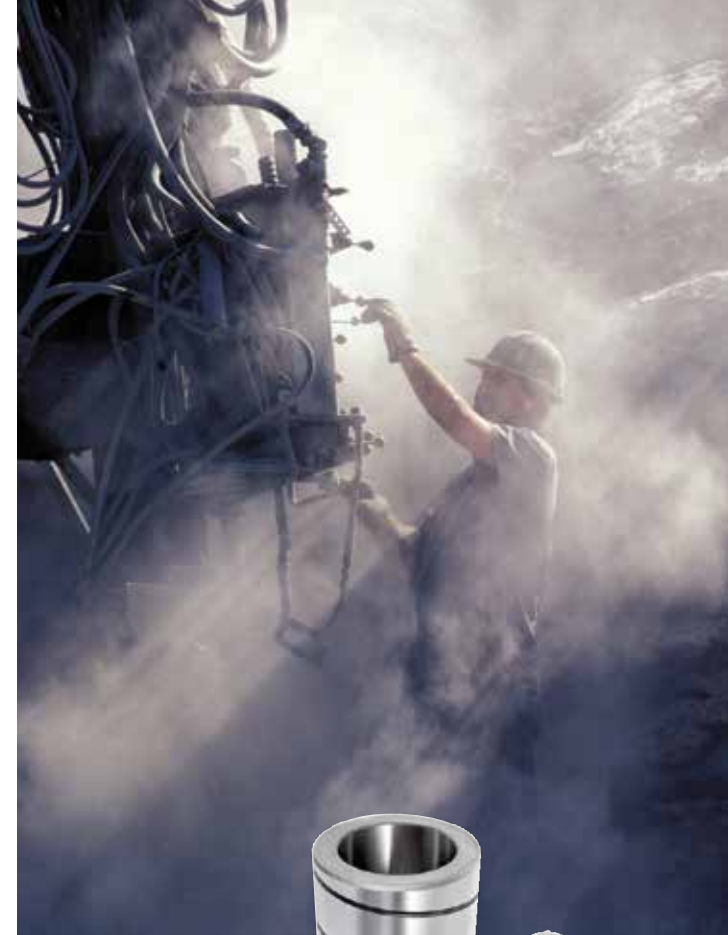


an EnPro Industries company

The Global Leader in High Performance Bearing Solutions



FL606ENG04-16USA



## GGB-SHB™ Case Hardened Steel Bearings

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## GGB-SHB™ Bearing Material

### STRUCTURE

Case Hardened Steel Bearings

### CHARACTERISTICS

- Steel 20MnV6, ASTM A381, DIN 1.5217
- Standard tolerances, outer diameter u6 / inner diameter C8, special tolerances on request
- Case hardening depth: 0.8 – 1.0 mm
- Surface hardness: HRC 58 – 62
- Uniform heat treatment ensures consistent performance
- Available as cylindrical and flanged bearings and special designs
- Available in custom materials by request
- Traceability of the chemical and mechanical properties of each production batch for high product quality
- Grease lubrication preferred; oil and some process fluid also possible
- Grooved or plain inner surface available
- Lubrication intervals up to 550 hours (after initial greasing cycle)



### APPLICATIONS

GGB-SHB™ bearings are suitable for a wide range of grease-, oil- and process-lubricated applications that involve high loads and low rotational speeds, including:

- Construction and earth moving machinery
- Excavators, loaders, grabs, buckets, grippers
- Drilling machinery
- Farm implements
- Power harrows, ploughs, rear excavators
- Hydraulic cylinders
- Industrial presses and washing machines
- Suction pumps

GGB-SHB™  
Case Hardened  
Steel Bearings



*Learn more about GGB-SHB™ bearings at:*  
[ggbearings.com/en/products/metals-and-bimetals/ggb-shb](http://ggbearings.com/en/products/metals-and-bimetals/ggb-shb)

### AVAILABILITY

Cylindrical and flanged bearings, other materials, special designs and configurations available on request.

For additional market / product offerings, go to  
[ggbearings.com](http://ggbearings.com)