



Collaborating for Optimal
Compressor Designs



Stay resilient under high demands

The pressure is on to design heating and cooling compressors that are increasingly higher speed and higher load to meet customer needs. When these challenges are met, new ones are bound to arise—from performance stability through product lifespan.

Engineers may spend excessive time and resources simply building their knowledge base and find the cost of flawed compressor designs adding up quickly. With thousands of dollars at risk—along with the possibility of a delayed product launch, diminishing the likelihood that your product will be the first to market—it's safest to partner with tribological experts early on.



A lack of tribological expertise may increase design costs

COMPRESSOR CASE STUDY: THE MANY COSTS OF A FLAWED DESIGN*

Small parts can make a big difference, particularly when it comes to efficiency and motion. Studies show that as much as 40% of system downtime can be attributed to bearing damage. Even before incorporating such integral parts into a full system, the many costs associated with design flaws can add up quickly.

As an example:



Costs due to design time and vendor selection in the initial project stages can add up quickly.



Design flaws can cause substantial delays in the project timeline and create unplanned expenses to correct the mistake.



Retesting is required, adding even more time to the project.



If the product fails again, it can create an additional 200% loss in cost and time.



Delays can cause extensive damage to a company's reputation—an outcome with a cost that can't be estimated.

*Based on GGB in-house projection

Collaboration you can count on

GGB's surface engineering solutions are ideally suited to meet the specific application requirements of compressors. The low friction properties of our wide range of customizable, tribological solutions can significantly improve a compressor's Coefficient of Performance (COP), while providing superior wear and fatigue resistance to extend compressor life.

By partnering with GGB early in the design process, we are able to review your assembly and make sure both the bearing and surrounding components meet the demands of your application and remain cost-effective. To learn how collaborating with GGB can improve your compressor design, cut costs and make the process more efficient, visit ggbearings.com or talk to one of our Application Engineers today.

Compressor application experts

Global footprint

Fast turnaround for prototypes

Improved overall system efficiency

Increased cost effectiveness

The advantage of GGB products

- Low friction coefficient
- Extended service life in dry conditions
- Reduced noise emission
- Low heat generation
- Lower system costs
- Environmentally-friendly

SOLUTIONS IDEAL FOR:

- Hermetic and semi-hermetic reciprocating compressors
- Air-conditioning systems
- Refrigeration systems
- Heat pumps
- Scroll compressors
- Rotary compressors
- Piston compressors



ORBITAL SCROLL BEARING

- DP31, DTS10®, DP10

THRUST WASHER

- DP4®, DP10, DTS10®

SHAFT SUPPORT BEARING

- DP31, DTS10®, DP10

CRANKSHAFT SUPPORT BEARING

- SY, GGB-SZ, DP4®, DP31



THE TRIBOLOGICAL SOLUTION PROVIDER FOR INDUSTRIAL
PROGRESS, REGARDLESS OF SHAPE OR MATERIAL



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