

Service

Off-site and in-house training

- GRW modular system
- Designation system
- Principles of bearing design
- Handling of miniature bearings



Customized labels

- Private labeling using customer logos and/or part number
- Special packaging
- Customer unique part numbers



Lubrication service

- Wash and re-lube
- Changing lubricants
- Vacuum-impregnation
- Coatings



Laboratory Service

- Autopsy and Root Cause Analysis
- Lubricant analysis with contamination diagnosis
- Surface treatments
- Condensate and salt spray test (DIN ISO 9227)
- Chemical etching
- Microscopic analysis, spectroscopy etc.
- Passivation



For more information about our services please contact us!

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Aerospace and defense solutions

- Customized solutions
- Engineering expertise and innovation in high-tech materials
- Over 300 lubricants suitable for -70°C to +250°C
- Start up and running torque tests according to military standards
- High sensitivity noise-testing
- Low outgassing rates
- Solid lubricants and coatings
- Lubricants compliant with military standards
- Full documentation and traceability

Specifications

- Super precision bearings from 1 to 35 mm bore and 3 to 47 mm outer diameter, available in metric and inch sizes
- Precision Classes ISO up to P2 or AF-BMA up to ABEC9
- Angular contact and spindle ball bearings (separable and non-separable)
- Duplex bearings
- Hybrid and all ceramic ball bearings
- Accessories (spring washers, spacers, retaining rings)
- Specialties (super precision spacers, needle roller assemblies)
- Standard deep groove ball bearings (single or double row)
- Flanged bearings with extended inner rings
- Numerous options for shields and seals
- Different cage designs and materials
- Customized oils or grease, dry film lubricants or coatings
- Matched and preloaded bearings
- Bearing assemblies built with standard production components

Expertise

- Bearing assembly in a clean room class R 10,000 (ISO 14644-1), Class 7
- Fully automated manufacturing for high volume cost effective production
- Technical support and recommendations for proper bearing selection
- System solutions custom engineered for each customer
- Large selection of lubricants for all applications
- Corrosion-resistant steels

AVIATION & DEFENSE



Contact



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Our Company



The GRW Group headquartered in Rimpar near Würzburg is a global leader in the technological development and manufacturing of high-precision miniature ball bearings.

With more than 500 employees, a production site in Prachatice (Czech Republic), and a direct branch in the USA, GRW is positioned to take advantage of their innovative power and expertise.

Our standard product range comprises a wide variety of deep groove and angular contact ball bearings with 1 to 35 mm bore and 3 to 47 mm outside diameter in metric and inch dimensions.

With our state-of-the-art production processes, we manufacture not only precision and custom bearings, but also bearing assemblies and accessories using standard production components.

Customers trusting in GRW bearings



Defense



GRW's extensive product line easily adapts to the most demanding requirements. Thanks to our modular system, our bearing solutions withstand the most extreme operating environments from the conditions of a hot, dry and dusty desert to salt spray and strong ocean winds. Our engineers work closely with each customer to provide a workable solution for each challenge. You, the customer, are the most important component in any product development.

Customized GRW bearings can be found in:

- Missile equipment
- Vision systems
- Electrical drives
- Night vision devices
- Actuator units
- Optical equipment

Aerospace



Where high demands need to meet exceptional quality, GRW is in its element. Our bearings for aerospace applications are designed to perform reliably and run quietly under a variety of conditions.

We have successfully mastered the challenge of various aerospace applications such as:

- Navigation instruments
- Air-conditioning and fans
- Pressure regulation and –measurement
- Fuel supply control systems
- Supply stations on the ground
- Cargo management

Space



Extreme operating-conditions are GRW's specialty. Where traditional bearings reach their limits, GRW bearings overcome even the harshest environment. Our solid or fluid lubricants suited for outer space will guarantee maximum durability even in hard vacuum environments.

GRW bearings are currently being used in the following space applications:

- Antenna systems
- Sun covers
- Night vision devices
- Actuator units optical equipment
- Fuel supply control systems
- Supply stations
- Cargo management
- Satellite switches
- Drive and guidance systems on the Mars Rover 1997/2003

GRW - absolute reliability

Close cooperation with our customers enables us to offer custom designed solutions suitable for all kinds of applications, especially where conventional bearings reach their limits.

GRW bearings are capable of living up to every customer's expectations, especially in applications where extreme precision and durability are required. Our unique test facilities are equipped with highly sensitive measuring equipment which assures that our bearings comply with even the most demanding standards (e.g. MIL STD-206B).

GRW can also analyze and document the preload of duplexed bearings using data interpolation via the "broken-curve" method.



Extreme operating temperatures

To ensure absolute precision and durability in every possible environment, we use over 300 lubricants for temperature ranges from -70°C to +250°C. We also offer lubricants which comply with military specifications.

GRW also offers various solid lubricants and coatings. Impregnated cages are also an excellent option.



Customized solutions

Whatever your application challenges, GRW can offer a solution. We stand for progress, innovation and performance. In close cooperation with our customers we continually design and test the newest materials using the most reliable measurement methods.

We continually develop innovative bearing solutions where conventional bearings reach their limits.

