

thyssenkrupp rothe erde

rothe erde[®] slewing bearing service

Maximum flexibility for
continuous operation



thyssenkrupp



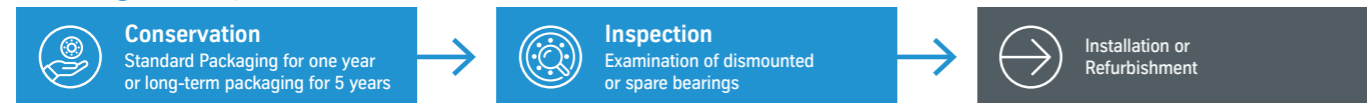
We support you wherever you need us.

We want to make sure that our customers do not have to worry about their bearings. That is why thyssenkrupp rothe erde provides you with a worldwide end-to-end service.

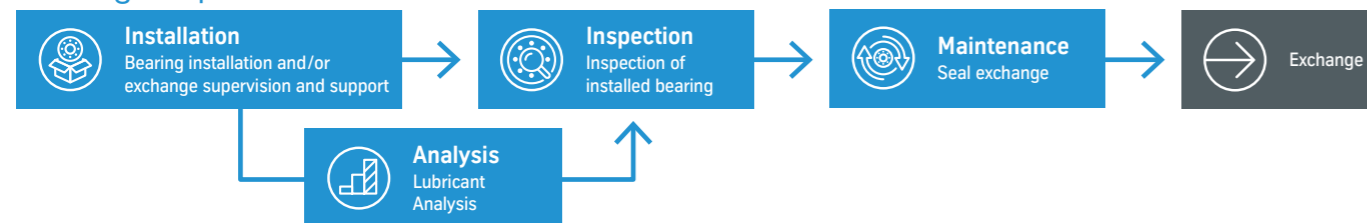
As one of the leading manufacturers of slewing bearings, thyssenkrupp rothe erde is your number one contact for services relating to these sophisticated products. After all, only regular maintenance and professional servicing can ensure that slewing bearings have a long service life and work smoothly, so that there's nothing limiting the availability of your systems – and nothing in

the way of your success. Know-how, experience, a global presence and the problem-solving skills of a highly trained team of specialists provide the building blocks for our first-class service – and ensure the satisfaction of our demanding customers. If you need a partner for the complete range of slewing bearing services, look no further than thyssenkrupp rothe erde!

Bearing as a spare



Bearing in operation



Dismounted Bearing



Additional Services



End-to-end service for maximum safety

From installation, inspection, maintenance and refurbishment, to training courses, our service concept covers the entire spectrum. It is divided into three areas:

➞ In-house service

We take care of inspection and refurbishment work on your bearings in our factories, independent of the manufacturer. With additional services such as in the preparation of installation, lubrication and maintenance instructions, as well as lubricant analyses, we enable you to handle the bearings professionally and safely.

➞ Proactive service

In addition to the actual work on slewing bearings, we develop service concepts for you, analyze the condition of the bearings in your application, and provide you with detailed reports. Our customized service concept can include elements such as training and service reminders.

➞ On-site service

We can also carry out all of the specified work on your premises. On request, we can provide supervision during the installation or exchange of the bearings in your system.



Flexibility

As we see it, being flexible means consistently implementing our customer's wishes and requirements. We tackle every task that you set us professionally, cost-effectively and on time. Our service team not only takes care of slewing bearings manufactured in-house, but also inspects, maintains and repairs all your bearings, regardless of the manufacturer. We can also optimize previously installed bearings on request.

International profile

We're there for you wherever you need us. We currently have seven service locations in Europe, the USA, Brazil, China, India and Japan, and are continuously expanding our network. You benefit from a fast response time, usually within 24 hours.

Experience

We have decades of experience not only in bearing design and manufacture, but also in inspections, maintenance and refurbishment. Our service team experts work for our customers worldwide. We also have qualified personnel who can handle special tasks, such as work on offshore systems, wind energy and special technology.





To put your bearings into operation as quickly and smoothly as possible we provide supervision and support during installation in compliance with the specified parameters.

Our service package “Bearing installation and/or exchange supervision and support” contains:

- Evenness measurement in accordance with DIN EN ISO 1101
- Bearing positioning
- Bolting
- Alignment of the gear teeth
- Connection of the lubrication system
- Initial measurement of tilting clearance and reduction
- Commissioning (not in every case)

The added value for you:

- ➔ Long service life
- ➔ High availability of production assets
- ➔ Safety



You want to know exactly the condition of your bearing without dismounting it? After our precise inspection, you will get all the answers and recommendations in our report.

Our service package “Inspection of installed bearing” contains:

- Visual inspection of bearing (incl. lubrication condition)
- Wear measurements (Tilting clearance or reduction measurement)
- Lubricant sampling and analysis
- Gearing inspection
- Bolt control (visual bolt check and supervision of tightening process)
- Detailed inspection report including photo documentation
- Optional (not for all bearings depending on size/type of bearing): endoscopy

The added value for you:

- ➔ Safety
- ➔ Optimal availability
- ➔ Avoiding accidents / consequential damages
- ➔ Longer lifetime
- ➔ Reduced unplanned downtimes
- ➔ Optimized spare parts management
- ➔ Optimized planning of maintenance downtimes





Proper relubrication is essential for the performance and longevity of your bearings. We analyze the used lubricant from the bearings to determine the current condition, and optimize if necessary.

Our service package
“Lubricant analysis” contains:

- Grease/oil analysis
- Report including analysis results and recommendations for further operation

The added value for you:

- ➔ Safety
- ➔ Optimal availability
- ➔ Avoiding accidents / consequential damages
- ➔ Longer lifetime
- ➔ Reduced unplanned downtimes
- ➔ Optimized spare parts management
- ➔ Optimized planning of maintenance downtimes



To avoid the contamination of the raceway system and uncontrolled leakage, we exchange the seals of your bearing.

Our service package
“Seal exchange” contains:

- Remove old sealing
- Cleaning and degreasing of sealing groove
- Insertion and joining of new sealing

The added value for you:

- ➔ Increased bearing lifetime
- ➔ Availability of production assets
- ➔ Protection of investment
- ➔ Avoid pollution of environment





The dismantled or spare bearing is disassembled into its individual parts and checked in detail. The current condition and possibilities for further steps, such as repair, are described in our inspection report.

Our service package “Examination of dismantled bearings” contains:

- Visual inspection of outer contours and seals
- Initial evaluation of function values
- Disassembly
- Visual check of lubrication, raceways, and rolling elements condition
- Optional: Lubricant analysis
- Cleaning
- Detailed examination and evaluation of lubrication, raceways, and rolling elements condition
- Gearing inspection
- Detailed inspection report
- After examination: Decision for refurbishment (RE-Fresh, RE-Pair RE-Build) or scrapping

The added value for you:

- ➔ All the information you need about your bearing in one inspection
- ➔ Cost savings: Transparency concerning best option from technical and economic perspective
- ➔ Reduced investment (in case bearing is not scrapped)



If our inspection of your used bearing shows that it is in good condition, but has marginal damage on outer contours, we will carry out extended maintenance to ensure that performance does not degrade.

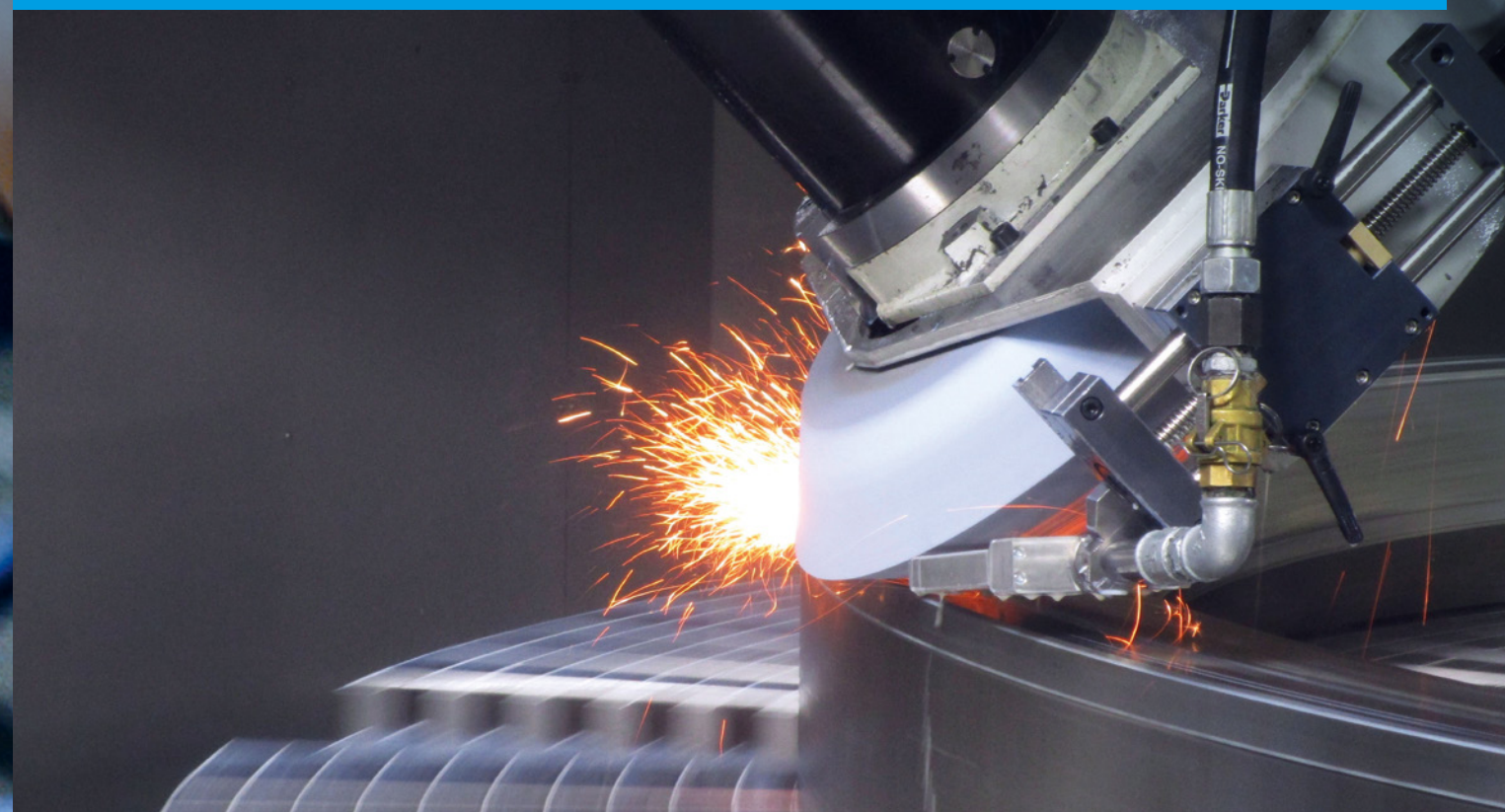
Our service package “RE-Fresh” contains:

- Bearing examination from technical and economical point of view
- Extended maintenance work at customer’s site or in-house at a thyssenkrupp rothe erde group factory
- Soft hand polishing of outer contour
- Assembly with new seals and lubricant
- Test: function values
- Conservation and packaging if needed (standard packaging in this service package, for long-term packaging see our service package “Long-term packaging”)
- Transport to thyssenkrupp rothe erde can be organized by us if needed
- Warranty: 12 months for workmanship and replaced components

The added value for you:

- ➔ Lower investment and capital costs compared to new bearings
- ➔ Sustainable solution
- ➔ Reduced downtime (when used as spare)





We examine your used bearing. If it is damaged, we determine whether repair is possible and economically viable, repair it, replace components, and test it for you.

Our service package “RE-**Pair**” contains:

- Bearing examination from technical and economical point of view
- Repair at customer’s site or in-house at a thyssenkrupp rothe erde group factory
- Manual rework/hand polishing of outer contours including raceways
- Replacement of rolling elements, spacers and cages if required
- Assembly with new seals and lubricant
- Test: function values
- Conservation and packaging if needed (standard packaging in this service package, for long-term packaging see our service package “Long-term packaging”)
- Transport to thyssenkrupp rothe erde can be organized by us if needed
- Warranty: 12 months for workmanship and replaced components

The added value for you:

- ⌚ Lower investment and capital costs compared to new bearings
- ⌚ Sustainable solution
- ⌚ Reduced downtime (when used as spare)



Our examination of the used bearing might show that it is damaged in a way that a normal repair is not enough. In this case, we check whether a general overhaul is possible and economically reasonable, and overhaul the bearing.

Our service package “RE-**Build**” contains:

- Detailed bearing examination from technical and economical point of view
- General overhaul at customer’s site or in-house
- Mechanical rework: turning/grinding of outer contours incl. raceways
- Replacement of rolling elements, spacers and cages if required
- Assembly with new seals and lubricant
- Test: function values
- Conservation and packaging if needed (standard packaging, see also our service package “Long-term packaging”)
- Transport to thyssenkrupp rothe erde can be organized by us if needed
- Warranty: 12 months for workmanship and replaced components
- If needed: calculation of remaining lifetime

The added value for you:

- ⌚ Extended Lifetime
- ⌚ Lower investment and capital costs compared to new bearings
- ⌚ Sustainable solution
- ⌚ Reduced downtime (when used as spare)



Long-term packaging



Our long-term packaging allows storage for up to 5 years. During this storage period, you can install the bearing into your application without previous inspection.

Our service package "Long-term packaging" contains:

- Conservation of bearing
- Packaging of bearing (airless and sealed packaging including desiccant)
- Humidity indicator
- If humidity is too high, bearing inspection needs to be performed

The added value for you:

- ➔ Protected investment
- ➔ Higher availability of production assets due to instant bearing replacement



Training courses



Through our training sessions, you can improve the knowledge and awareness of your employees while handling your bearings.

Our service package "Training courses" contains:

- Theoretical and practical trainings
- Courses at customer's site or at thyssenkrupp rothe erde group factory
- In case of training at thyssenkrupp rothe erde: plant tour
- Documentation/hand out: on request
- Training certificate

The added value for you:

- ➔ Maximization of the service life of the bearings, and thus also the availability of systems.



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