

RENK

SLIDE BEARING TECHNOLOGY

**Slide bearings.
Your best choice for
outstanding results.**

Infinite endurance for profitable machines.



Extreme forces throughout the driveline need a strong guide: RENK slide bearings. They are the unrivalled experts in mastering high dynamics. With RENK, you will find exactly the standard or customized solution that perfectly complements your application. As the world's leader in slide bearing technology, RENK brings unique precision, performance and durability to your project. Every bearing and every detail benefits from our more than 140 years of experience and innovation, delivering the highest efficiency and reliability.

/ Maximum efficiency

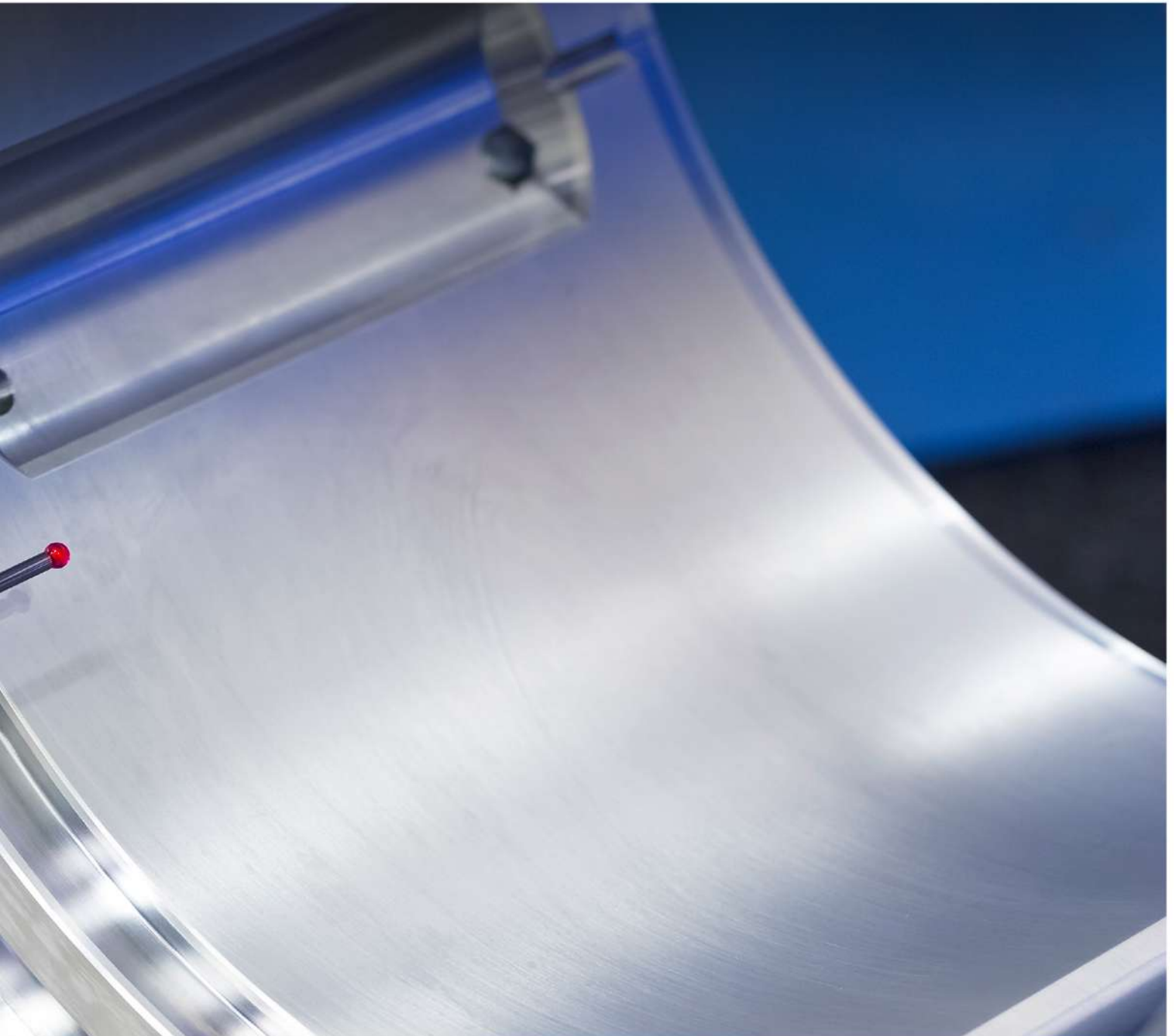
Unique cost-benefit ratio due to high durability and minimal maintenance requirements

/ Infinite efficiency

Zero wear for superior durability and reliability in all applications

/ Unrivalled precision

Engineered and produced for the highest quality and uncompromising performance



For your enduring success, RENK slide bearings provide everlasting quality.

The advantages of RENK slide bearing at a glance

- Highest availability
- Extremely robust and durable
- Wear- and maintenance-free
- Vibration-free and noiseless running
- Compact, space-saving size
- Systematic, modular design
- High reliability thanks to minimum number of parts
- Decades of expertise in slide bearing design

RENK slide bearing technology: precision engineering that defeats wear and tear.

Reduced costs, zero downtimes, less maintenance – RENK slide bearing technology provides so much more than just the flawless functioning of your application. Turn our quality advantage into your competitive edge. With globally unique slide bearing expertise from RENK, you can permanently master extreme forces in the drivetrain in every dimension. Because they are forged from our uncompromising commitment to quality. RENK keeps your things moving wherever maximum availability counts and cost-critical problems must be avoided: in industrial, power generation and demanding marine applications.

Comprehensively increase your application's availability through our expertise and our needs-based solution.

Not just our bearings run smoothly. The associated RENK services also keep business moving for you. Experience a dedicated partner who assists you with a broad lifecycle-services portfolio to ensure the safe and efficient operation of your installations. As your dedicated consulting partner, RENK also provides customized engineering, proprietary testing facilities and global maintenance support.



Raise your productivity and supply security to new levels.

Advantages for better results

- Rugged, simple design
- Compact, space-saving dimensions
- Split design allows efficient maintenance without disassembly of the shaft
- Unlimited service life
- Vibration-free and noiseless operation

Your RENK advantage: always the optimum slide bearing solution for your industry and application.

Make your new project a benchmark in reliability with RENK slide bearings. Or unleash new potential in your retrofit plants. Whatever your need, RENK experts will support you with unique expertise and high-quality technology.

Your decision for RENK is a decision for proven excellence. Around the world, our slide bearings prove their qualitative edge in electrical machines, rotors, turbines, shaft drives, test stands and many other applications. They enable smooth success in power generation, commodity production as well as in drives of the most powerful ships around our globe.

Slide bearings from RENK offer decisive advantages compared to roller bearings. With simple mounting, the excellent damping capacity and the vibration-free, noiseless running. The bearings can already be prepared ex works for seamless sensor monitoring, which can be realized economically via a simple evaluation of the operating parameters.

Technically optimally designed, RENK slide bearings provide an unlimited service life. A redesign or maintenance of the plant is possible without disassembly of the shaft. In almost all cases, systems equipped with RENK slide bearings run continuously for decades without any service requirements. This pays off – often sooner than you think.

The hydrodynamic design calculation for the various operating cases of the slide bearing is based on state-of-the-art calculation methods, such as COMBROS. In addition, RENK uses 3D CAD, FEM and CFD calculations for the optimum design and construction of the slide bearings for the specific applications.

/ Space-saving design

RENK slide bearings combine top performance with small physical footprint

/ Proximity to service

Experience comprehensive, hands-on support, anywhere, anytime

/ Proven superior performance

RENK slide bearings stand the test in countless applications worldwide

Beating the heat in thermal power generation

As global energy demand increases, so does the need for highly available power-generation plants with outstanding efficiency. The use of high-quality slide bearings is therefore essential in this sector. Your decision for maintenance-free slide bearings from RENK is a decision for the reliable, long-lasting fulfillment of mission-critical requirements without unpredictable downtime risks.



As robust as the oil, gas and petrochemical industry

Slide bearings in turbines, pumps or compressors of plants in the oil, gas or petrochemical industry have an extremely tough job. Only a few are strong enough to stand up to the toughest demands: slide bearings from RENK. That is why plant operators all over the world rely on RENK. Turn the technology leader's know-how to your advantage. Maximize plant availability and minimize operating costs, even under extreme requirements.

Indispensable in the steel and metal industry

Competition in the steel industry is as tough as its material. No company can afford to fall behind due to inferior bearing technology. Wear-resistant RENK slide bearings are therefore indispensable components in state-of-the-art process and production plants. As components in rolls, continuous casting, roller tables or reel drives, they provide reassuring safety even under high shock loads and in harsh environments.



Proven performance for mining and quarrying

RENK slide bearings are the elements that keep machinery running, whether as components of conveyors, crushers, mills or fans, above or below ground. Because under extreme conditions in mining and quarrying, smoothly functioning drive components are essential for your success. Give your application the highest durability and maximum safety with the quality of RENK, the technology leader.



The bearing solution in material handling

With RENK slide bearing technology, operators of conveyor and crane systems move large loads and can offer a high reliability of their plant. Our durable slide bearings effortlessly move heavy loads year after year. At RENK, you will find the right solution for the permanently efficient operation of your material-handling system, meeting all your requirements, providing increased reliability, load capacity and longevity.

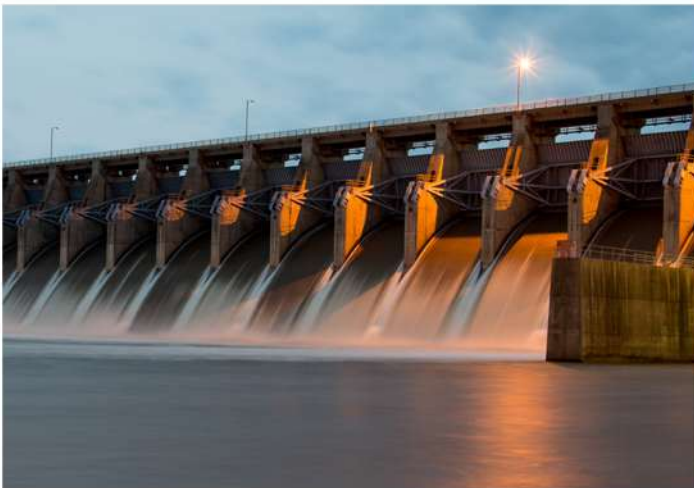


Unique endurance in the paper industry

The future of the paper industry is highly automated. Innovation, availability, output and flexibility are decisive success factors for competition. This transformation process must be protected from performance-critical weak points. Wear-resistant slide bearings from RENK help to sustainably optimize the economic parameters of your plant.

Market leader in marine applications

The drivetrain and energy supply of ships are subjected to the toughest challenges. They must be reliably operational at all times. That is why RENK slide bearings are the first choice in the marine sector. In main drives, thrusters and auxiliary drives, as thrust bearings or support bearings, in generators or on-deck applications, they operate extremely quietly and virtually vibration- and wear-free. Find the optimum slide bearing for every marine application at RENK. And monitor them seamlessly for operating changes via condition monitoring. In this way, you combine smooth running and maximum availability with improved cost efficiency in marine propulsion systems.



Reliability in hydropower

Energy production from hydropower has become more demanding than ever. It is all about maximum cost and operating efficiency. Give your power plant the ability to operate more reliably, with less wear and improved calculability. For all new or retrofit projects, RENK provides the optimal slide bearing solution for use in turbines and generators. Our high-precision products are your guarantee for best performance and sustainability.



Track record in wind energy

Power generation from wind energy is only profitable if the generating costs remain reliably low. Innovative and flexible drive technology is a decisive factor. Slide bearings from RENK help to permanently reduce the costs of power generation by providing maximum reliability and longest service life for high-performance applications up to the multi-megawatt range.

Your demands, your choice: the RENK slide bearing and component portfolio.

RENK e-bearings.
Versatile, modularly configurable horizontal bearings.



Type	ER	EG	EF	EM	ZM
Design	Slide bearing type ER foot mounted, finned housing DIN 31690 ISO 11687-1	Slide bearing type EG foot mounted, smooth housing DIN 31690 ISO 11687-1	Slide bearing type EF side flange-mounted, finned housing DIN 31693 ISO 11687-2	Slide bearing type EM centrally flange-mounted, finned housing DIN 31694 ISO 11687-3	Slide bearing type ZM centrally flange-mounted, finned housing
Size Shaft diameter (mm)	9...28 80...355 35...45 300...560	18... 28 160... 355 35...112 300...1250	9...28 80...355 35...45 300...560	9S 80...100 14XS 100...125 14S 125...180 9...28 80...355 35...45 300...560	7 55...75
Application	Electrical machinery (motors, generators), fans, hydro turbines and pumps	Electrical machinery (motors, generators), fans, hydro turbines and pumps	Electrical machinery motors, generators), fans, hydro turbines and pumps	Electrical machinery (motors, generators), fans, hydro turbines and pumps	Electrical machinery, fans, turbo compressors, hydro turbines, generators

**RENK special slide bearings.
Compact horizontal bearings for high axial and radial forces.**



Type	SC	SM	WG	HG	SN
Design	Slide bearing type SC light series pedestal bearing, smooth housing	Slide bearing type SM centrally flange-mounted, self-lubricated by fixed oil ring	Slide bearing type WG heavy duty pedestal thrust block, welded, smooth housing	Slide bearing type HG fully self-contained, combined thrust and journal bearing, smooth housing	Slide bearing type SN propeller shaft bearing foot mounted, smooth housing
Size Shaft diameter (mm)	36...140 200...1400	225 560 mm	600...9000 200...1400	28...45 250...560	16...100 140...1000
Application	Electrical machinery, diesel generators, rolling mill drives, hydro turbines and generators	Marine propulsion motors, hydro power, alternators	Large electric machines, rolling mill drives	Hydro turbines and generators, large electric machines	Shipbuilding (main propulsion), hydro turbines and generators

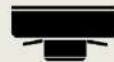
**RENK special slide bearings.
Compact horizontal bearings for high axial and radial forces.**



Type	RADILUS	DN/DG/DR	AXILUS	IL/IS	ROTRIX/SH
Design	Slide bearing type LR propeller shaft bearing foot mounted, smooth housing	Slide bearing type DN/DG/DR marine thrust block foot and centrally flange-mounted	Slide bearing type LAR marine thrust block	Slide bearing type I, light series type IS, heavy series foot mounted, smooth housing	Trunnion bearings; trunnion bearings with sliding shoes; trunnion bearings with bearing shells; ROTRIX and SH
Size Shaft diameter (mm)	13...85 110...850	16...80 180...850	125...850	10...22 100...200 10...52 100...520	On request
Application	Shipbuilding (main propulsion), hydro turbines and generators	Shipbuilding (main propulsion), hydro turbines and generators	Shipbuilding (main propulsion), hydro turbines and generators	Cement industry, tube mill drives, Crushers	Horizontal type cement and raw product mills

RENK vertical bearings for high force.

RENK slide bearing components.



Type	EVE/EVF	VT/ VG	RD	RD pads	RS pads	G
Design	Vertical bearing/ vertical bearing inserts type EVE/EVF thrust and guide bearing inserts	Vertical bearing type VT/VG thrust and guide bearings with oil tank	Thrust bearing inserts with RD-pads	Thrust bearing pads type RD circular tilting thrust pads, cub spring supported, for both directions of rotation	Thrust bearing pads type RS circular tilting thrust pads, rigidly supported, for both directions of rotation	Bearing shells type G and type TS
Size Shaft diameter (mm)	01...018 70...560 Other sizes and project-related special solutions on request	7...40 70...400 7...56 70...560	06020...20160 20...930	16...250	Ø 20...630 mm	50...750
Application	Electrical machinery (generators and motors), pumps hydro turbines (Francis, Kaplan, Pelton)	Electrical machinery (generators and motors), pumps hydro turbines (Francis, Kaplan, Pelton)	Slide bearing type EV und V, gear units, turbines, blowers	Slide bearing type E, EV, V, WG, DN, gear units, turbines, pumps, blowers	Slide bearing type E, EV, V, WG, DN, gear units, turbines, pumps, blowers	Turbines, pumps, blowers

RENK e-bearings. Horizontal bearings as unique as your specification.



RENK e-bearings are benchmarks. Because they outperform all other solutions in design, function and quality, they have been elevated to ISO standard status. That makes it easy for you to make a smart decision. Find a wide selection of e-bearings with various housing shapes, lubrication and cooling variants as well as sealing systems. The variable, modular system adapts with high precision to almost any specification. Experience superior performance in your electric machine, turbine, pump, turbo compressor, fan or test stand.

/ Sure to perform

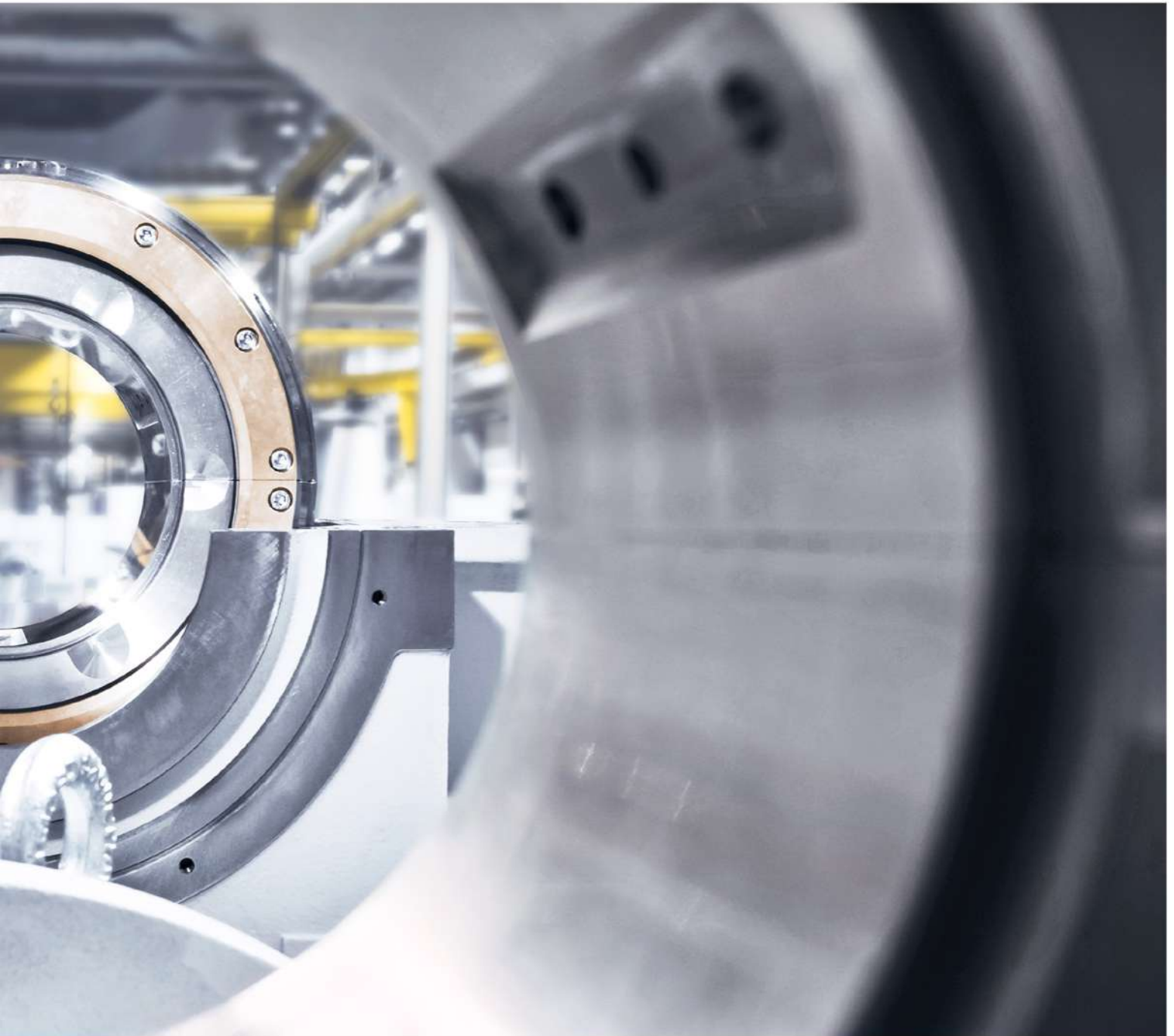
Master high loads with tried-and-tested technology

/ Comprehensive choice

Always find your best solution in our slide bearing portfolio

/ Improved economy

Reduce post-installation maintenance effort and cost



RENK e-bearings. Make best quality and performance your advantage.

Expect more from RENK

- Flexibly adaptable to any requirement thanks to a modular design principle
- Quieter and smoother running than rolling bearings and less expensive for large dimensions
- Easy to mount
- Wear-free
- Low maintenance
- Resistant to dust penetration
- Resistant to vibrations
- Suitable for very high speeds

RENK e-bearing technology has made electric machines, turbines, pumps, turbo compressors, fans and test facilities efficient over decades.

For your best solution, we work with uncompromising precision, meeting every required standard and special demand. Our flexible, modular system enables you to adapt every bearing exactly to your specific application.

RENK e-bearings can be supplemented with a wide variety of accessories and be used universally throughout the mechanical engineering sector. Power and work machines can often be equipped with identical slide bearings, which simplifies the stocking of spare parts. The e-bearing series has been continually optimized for decades, which makes it particularly efficient. Many references prove that they are the right choice for the most demanding applications and environments, such as explosion-proof areas.

Type EF e-bearings are perfectly suited for electric machines. You can save on special bearing foundations and the associated alignment work. Compared to pedestal slide bearings, they allow significantly shorter bearing distances and thus stiffer rotor designs.

Type EG/ER e-bearings are used in numerous mechanical engineering applications. These pedestal slide bearing housings were developed for placement on foundation structures.

Type EM/ZM e-bearing

Improved accessibility to components facilitates assembly and service work. The housing shape of the e-bearing is ideally suited for a wide range of expansion stages. It can therefore be used to realize particularly sophisticated drive concepts.



Type EF e-bearing



Type EG/ER e-bearing



Type EM e-bearing



Type ZM e-bearing

Making wind turbines into engines of your success.



The need for renewable energy is constantly growing. High availability and product performance of your plants are the decisive factors for success. RENK slide bearings for wind turbines are your decisive technological advantage, successfully perfected for demanding products and services in the mega- and multi-megawatt range, for both onshore and offshore applications. Our unique degree of innovation and our 30 years of experience in the wind-energy sector enable us to provide you with state-of-the-art solutions.

/ Efficiency-driven

Innovative technology ensures an optimal cost-benefit ratio

/ Permanently high load resistant

Withstands extreme load without wear and tear

/ Sustainable design

Professional engineering enables outstanding durability



Propelling excellent results: RENK slide bearings for wind turbines.

What makes RENK a first choice

- Maintenance-free
- Space-saving format
- Modular design
- Extremely resilience
- High reliability thanks to small number of parts
- Highest availability
- No service-life restrictions thanks to optimal design
- Decades of experience

In sync with your economic goals: highly available bearings, always reliable and economical.

Ready to achieve outstanding results even when the power density is high: Nothing should slow down your value creation. RENK's innovative and wear-free designed slide bearing systems with unlimited service life support you to become more productive than ever.

At the same time, they deliver the greatest possible operational reliability. For exceptional overall performance, RENK combines its unique expertise as a gear and slide bearing manufacturer into a perfectly matched comprehensive solution. For their best performance, we tailor them specifically for the operation of your individual plant.

Slide bearing technology permanently optimizes your leveled cost of energy.

Our slide bearings for windpower technology are considered the epitome of sustainability. They are designed and used as wear-free main rotor bearings and slide bearing systems for main gearboxes. They support increasingly compact wind turbines with maximum power density. The design of slide bearings is simple and safe in hydrodynamic operation.

The impact on your plant and your profitability is groundbreaking. Highest availability and ideal efficiency ensure you maximum energy feed-in. All RENK wind turbines are successful, sustainable customer solutions, which are characterized by an optimal leveled cost of energy.

/ Assured availability

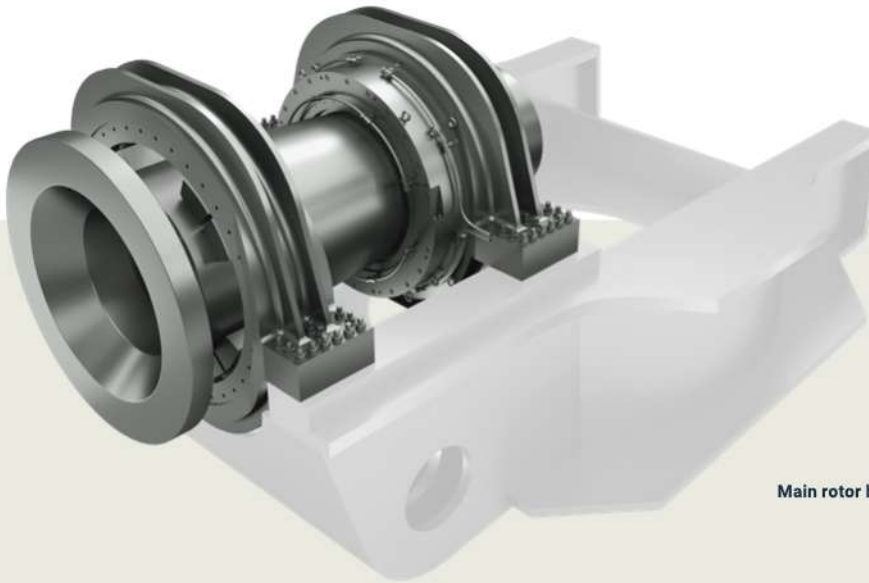
Through highest quality standards and proven design

/ Maximized lifetime

Due to minimal complexity and wear-free design

/ Outstanding performance

Allows significant downsizing and total cost-reduction



Main rotor bearing



Planetary stage slide bearing pin

RENK special slide bearings: the masters of radial and/or axial forces come in an extremely compact format.



Are you looking for the optimum solution for the toughest applications, e. g. bearings for performance ranges beyond the capacity of conventional types? RENK's special slide bearing portfolio covers your most demanding applications so that they constantly work effectively and wear-free, for the maximum availability of your plant.

RENK special slide bearings for horizontal shaft arrangements are designed as thrust bearings, support bearings or as combined thrust-and support-bearings. They are modified on the basis of proven RENK designs and the specific customer specifications.

**/ Tailored to
measure**

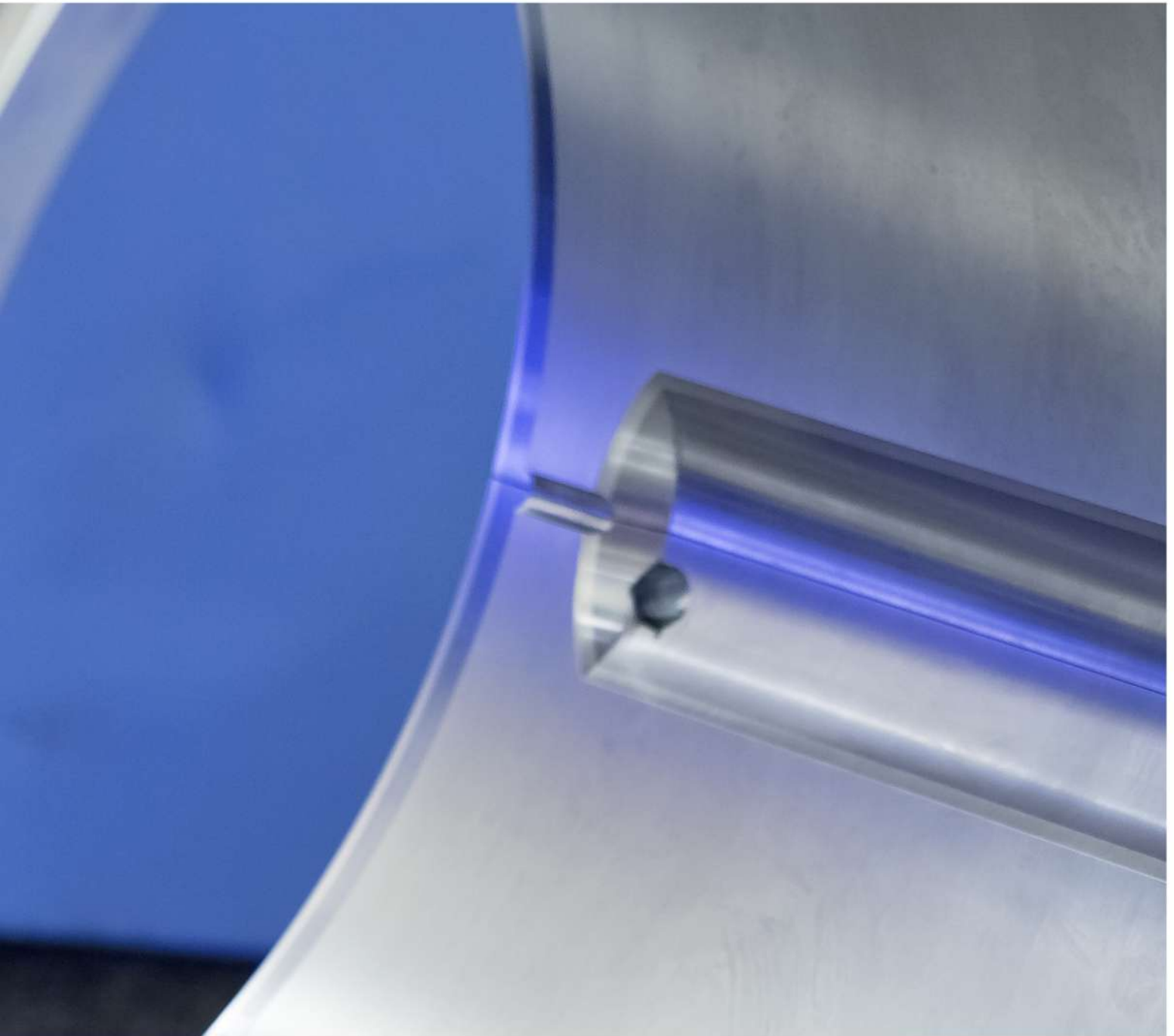
Intelligent integration of
your customer-specific
requirements

/ At load level

Choose from various
solutions for moderate
to high loads

/ Built to last

Count on safe
functionality through
all-round proven design



RENK thrust bearings for high axial and radial loads: horizontal slide bearings you can rely on.

The advantages of RENK thrust bearings at a glance

- Customized solutions
- Basically low-noise and low-vibration operation
- Inspection and maintenance are possible with shaft mounted
- Efficient condition monitoring through simple evaluation of bearing temperature
- Available as a package with numerous option combinations

Regardless of the direction of rotation and load, special thrust bearings from RENK permanently withstand extremely high, even shock-like axial and radial forces.

To ensure that your plant has a long service life, the bearings must be virtually immortal. Introducing RENK thrust bearings: the optimum, high-quality solution for extreme service life requirements. They are insensitive to rough operating conditions and, compared to roller bearings, are noiseless, low-vibration and more durable. Thanks to a split design, inspection is also possible with the shaft mounted.

Type DG/DN/DR and LA thrust bearing

The housings of this type can be designed as pillow-block or saddle bearings with or without lubricant sumps. Available in almost any required design variant and specification, as a pure thrust bearing or as a combined thrust-support bearing. It is suitable, for example, for the bearing of propeller shafts in ships and the bearing of turbines and pumps in hydroelectric power plants.

Type HG thrust bearing

The housings of this type are designed as pillow-block bearings with self-lubricated sliding bearings. The bearings are optimized for high radial and axial loads at high speeds independent of the load direction. With specific features, such as the tiltable round RENK RD circle segments, they are the optimum choice for the bearing arrangements of hydro-generators, turbines and electrical machines with axial loads, Francis and Kaplan turbines in stationary land-based applications.

Type WG thrust bearing

Slide bearings of this type have a welded plummer-block housing and are equipped with RENK RD circular segments, radial shells and forced lubrication. They have been specially developed as bearings for large electric motors in which high axial loads occur at low speeds, for example, in heavy rolling-mill drives. With their high ball-load capacity, these bearings ensure maximum safety even in the event of an accident under massive shock loads.

There are certain optional combinations for each bearing type. Please contact us for more information.



Type DG/DR bearings



Type LA thrust bearings



Type HG thrust bearings



Type WG thrust bearings

RENK support bearings for high radial forces. Horizontal slide bearings for unlimited productivity.

The advantages of RENK support bearings at a glance

- Customer-specific adaptations
- Principally low-noise and low-vibration operation
- Revision and maintenance

Experience productivity without an expiration date: RENK's special support bearings are engineered to permanently withstand the highest radial forces.

Maximizing your plant's availability was our benchmark when developing the innovative RENK support bearings. Depending on the type, the bearing housings are available as pedestal, center flange (type SM) or saddle bearings. Operate them either with self-lubrication or with external lubricant supply. RENK support bearings are in their element even under rough operating conditions. Any frictional heat generated is dissipated directly via the housing by convection and radiation. If necessary, seawater-resistant coolers can be installed in the lubricant sump or an external lubricant supply system can be connected. They are comparable in efficiency to roller bearings, yet are significantly quieter and more economical.

Type SN and LRL support bearings

Your classic choice for conventional marine drives with shaft line. Both bearing types are self-lubricated. Thanks to a ball-moving seat in the housing, the bearing shell automatically adapts to the shaft position during mounting. This considerably simplifies mounting and alignment of the shaft train and eliminates harmful edge pressures.

Type SC support bearing

The housings of this bearing type are designed as pedestal bearings and can support moderate axial forces in addition to high radial forces. As radial bearings, they are perfected both for stationary land-based applications and for use as engine and generator bearings on the high seas. Originally designed for large electrical installations, bearings of this type are now often used in mechanical drives and even as bearings for Pelton hydro-electric turbines.

Type SM center flange bearing

RENK flanged bearings of the SM series are specially designed for use as engine bearings in marine applications or as generator bearings in hydro applications. Because the design was adapted to very inclined positions, it allows self-lubricated and thus an extremely low-noise operation without an external oil-supply unit. Thanks to the ball-moving seat in the housing, the bearing shell automatically adjusts to the shaft position during mounting. The advantage of this solution is obvious: mounting and alignment of the shaft train are considerably simplified, while harmful edge pressures are eliminated.

Specific optional combinations are available for each bearing type. We will be pleased to advise you.



Type SN/LRL support bearing




Type SC support bearing



Type SM center flange bearing

Easy to integrate, yet hard to surpass: vertical bearings for high axial and radial forces.



RENK vertical bearings of the EV and VT/VG series cover the entire range of applications for slow- to high-speed vertical machines. Based on proven RENK designs, they can be perfectly matched to the specific performance and speed range of vertically installed pumps, blowers, turbines or electric machines. As a pure guide bearing or as a combined thrust-and-guide bearing, they offer the highest quality and unlimited service life.

**/ Decades of
experience**

Benefit from our vast
development and innovation
expertise in vertical machines

**/ Continual
improvement**

We continuously optimize the design,
construction and material of our
vertical bearings

**/ Customized
design**

Always find the best solution,
up to combined thrust-and-
support bearings



All speed ranges, one solution: easily integrated thrust-and-guide bearings from RENK.

Why RENK thrust and guide bearings stand out

- Individual solutions for every need
- Bearing design specially tailored to vertical applications
- Complete bearing that can be used without design measures
- Direct influence on the rotor-dynamic behavior of the machine
- Decades of experience in use in vertical machines
- Continuous optimization in the design, construction and materials used

RENK thrust-and-guide bearings improve the quality, operational reliability and service life of your plant. While meeting your exact specifications, they make condition monitoring easy.

RENK VT/VG series vertical bearings are your choice for slow- to medium-speed vertical machinery such as pumps, blowers, turbines or electric machines. VT bearings are supplied as combined thrust-and-guide bearings with radial and axial part; VG bearings as pure radial guide bearings.

RENK type VT/VG vertical bearings

A special feature of the type VT vertical bearings are the tiltable round RENK RD circular segments. These are supported by disc springs and thus ensure uniform axial load distribution. The radial section has the function of a guide bearing. If necessary, a four-wedge shell can be used instead of the circular cylindrical shell. This shell has a stabilizing effect on the radially lightly loaded or unloaded shaft. Type VG vertical bearings can be used as pure guide bearings with a radial shell (circular cylindrical shell or four-wedge shell).

Your application determines which technology is used and how.

Type VT/VG vertical bearings can be combined with lubricant reservoirs of different sizes. Depending on the operating conditions, VT/VG bearings are operated with external lubricant supply or integrated water coolers.

The housing is designed to support large axial loads, including possible shock loads, with the help of detailed FEM calculations.

RENK vertical bearings of the EVE/EVF series are the experts when it comes to making fast-running machines of vertical design (such as pumps, blowers, turbines or electric machines) permanently efficient. The easy-to-fit bearing inserts have individually adjustable radial tilting pads.

RENK type EVE/EVF bearing inserts

The outstanding feature of the EV bearing inserts are the tiltable round RENK RD circular segments. These are supported by disc springs and thus ensure uniform axial load distribution. The radial section consists of individually adjustable radial tilting segments. The adjustability of the radial tilting segments allows adjustments in the spring's stiffness and the damping characteristics of the bearing.

On request, EV bearing inserts can be supplied with a lubricant reservoir. The power loss of the bearing can be dissipated by means of an integrated water cooler or by external cooling of the lubricant.



Type V vertical bearing



Type EV vertical bearing

Discover your possibilities with RENK: our range of slide bearings and accessories.

A close-up, macro photograph of a slide bearing surface. The image shows a curved, metallic surface with a fine, parallel texture. The lighting is dramatic, coming from the side, which creates a bright, glowing edge and deep shadows, highlighting the precision and finish of the component.

With RENK there is always a solution – even those that have yet to be calculated, designed and produced. That is why we offer both slide bearing components for our own bearing designs as well as developments specifically for customer requirements.

Depending on the specification, a wide variety of materials are used for the supporting body or the sliding bearing layer. For short-term availability, we keep certain designs in stock depending on their frequency of use, e.g. RS/RD circle segments. You want complete system solutions consisting of slide bearings and relevant accessory components? RENK also supplies these from a single source.

/ Seamless service

Ensure the smooth operation of your equipment with our full-lifecycle support

/ Complete solutions

Get better overall performance thanks to our end-to-end system expertise

/ Digital competence

Work more efficiently with our online design and calculation preselection option



RENK slide bearing and accessory components.

Designs of slide bearing components

- Axial slide bearing segments
- RS/RD circular segments
- Gear bearing shells
- Special parts

RENK makes system quality very simple. On request, we can provide you with complete solutions from a single source, including calculation and design, all the way through to a perfect, fast service.

Slide bearing components

RENK calculates, designs and produces slide bearing components, for all your needs. In addition to our own slide bearing types, we also realize special customer solutions. Depending on the task, we use a wide variety of materials and alloys for the supporting body and slide bearing layer. They are processed with the highest precision and according to the strict standards of RENK quality assurance.

We verify the quality of all special components through tests and procedures that reflect the actual load in practice. That is why you can rely on the full functionality and durability of the bearing components. Standard components such as RS/RD circle segments are available from stock at short notice.

RENK SBCALC-online

The SBCALC (Standard Bearing CALCulation) program enables you to quickly pre-select, design and calculate RENK standard housing slide bearings of the E, SC, ZM, SN, WG series. The calculation program is based on calculation methods similar to DIN 31652 (ISO 7902), DIN 31653 (ISO 12131), DIN 31654 (ISO 12130) and DIN 31657-1. Similarity parameters for hydrodynamic slide bearings determined on the basis of flow differential equations ensure precise results.



Accessory components

You want to purchase complete slide bearing systems? You get them from RENK. Because our portfolio of accessory components is comprehensive and optimally matched to our axial or radial bearings. Therefore, you are guaranteed to receive perfectly matched complete systems from a single source. On request, your special customer specifications can be individually designed and manufactured to measure. Depending on the bearing design or machine arrangement, the accessories are either free-standing or mounted on the bearings themselves.



Choose from a wide range of accessory components

- Braking devices
- Turning devices
- Locking devices
- Control cabinets
- Lubricating oil units (low pressure/high pressure)
- Accessories for bearing or travel drive

All your needs, well covered: RENK services.



RENK can be much more to you than a provider of impressive products and solutions across the entire lifecycle. We are your best partner for global, outstanding service quality. As an innovation driver and strong partner with broad industry experience, we meet all the requirements of a one-solution provider.

Are you looking for comprehensive solutions? RENK offers them, delivered with customer proximity and state-of-the-art technology. With the support of RENK, you shape the future of your success, characterized by outstanding process intelligence, project competence and the highest demands on the quality of production and materials.

/ Upgrade your inventory

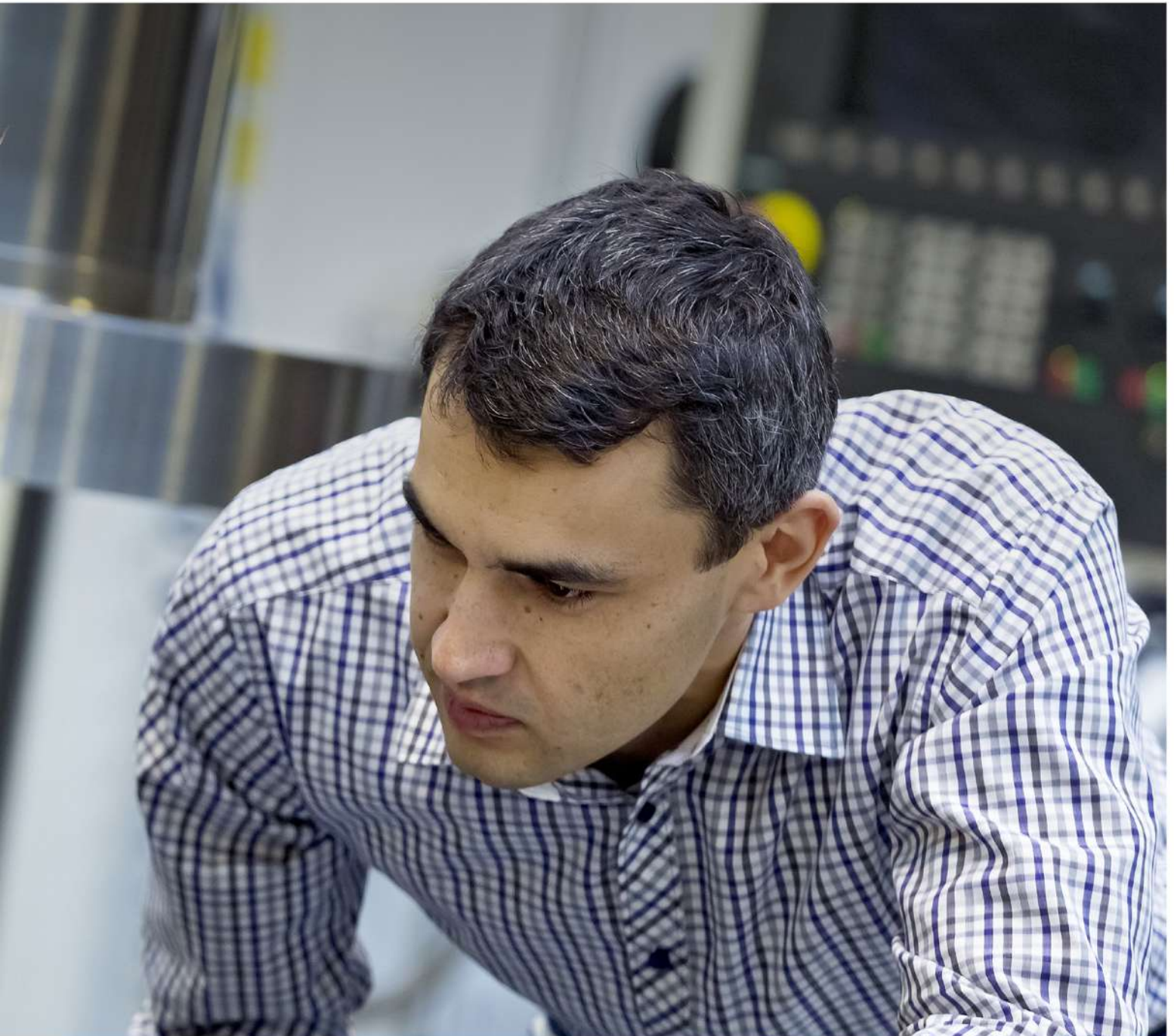
RENK assists you in making your equipment more efficient and powerful

/ Maximize uptimes

Ensure continuous high performance of your equipment with our worldwide service

/ Always stay supplied

Rely on the long-term availability of RENK spare parts and standard components



We put technology to the ultimate test. Because downtimes are not an option.

What the RENK test facility provides

- Realistic testing of the systems
- 100% reproducibility of the test runs
- Flexible test scenarios thanks to modular design
- Highest thrust and drive torques can be mapped
- Stress tests close to limits are possible

RENK test plants provide reliable facts. For every application.

Whatever you want to test, our 600-sqm test center at RENK in Hannover provides you a special test facility for almost any application. Highly specialized, experienced test-field personnel and efficient on-site storage logistics for plant components create perfect conditions for efficiently putting your plant or components through their paces.

Only the best slide bearings are approved by RENK's slide bearing test center.

To ensure best performance in every load situation, they must be realistically simulated. At RENK's slide bearing test center we perform conclusive tests under real operating conditions, even for highly specific customer solutions. This lets us better observe the influence of complex operating processes on components, materials and lubricants.

RENK test facilities pave the way for new, pioneering solutions in the development of horizontal and vertical slide bearings. They ensure tested slide bearings of unique quality.

Find comprehensive answers to any aspect of your bearing solution.

RENK's slide bearing test center in Hannover features laboratories, test rigs and test facilities for all relevant types of tests and test procedures. Perform functional tests via performance tests, efficiency tests or endurance tests. Determine exact measurement results of process parameters and bearing-specific response variables. There is almost nothing that cannot be done, up to and including performing near-boundary stress tests to determine the maximum life of each component. For uncompromising quality and maximum functionality in your application, we go the extra mile.

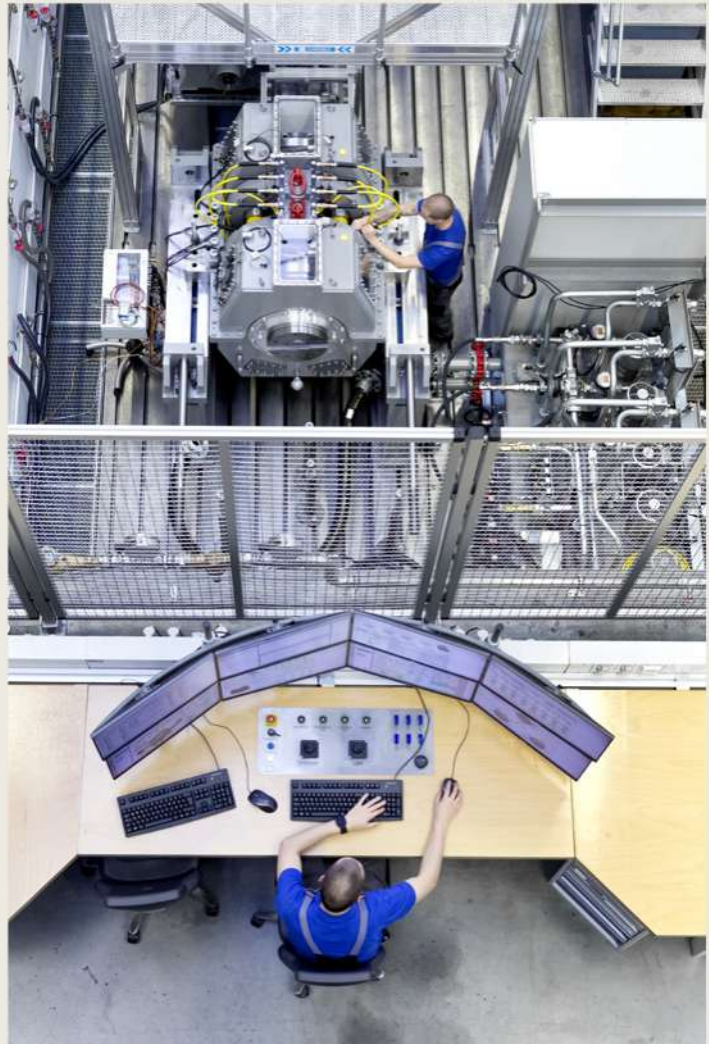


Unique testing possibilities at the RENK test center.

A test facility with a plate field of 6 x 8 meters for performing special tests and acceptances for maritime bearing applications. Simulation possibility of thrusts of up to 300 tons on the propeller shaft, made possible by a loading unit developed by RENK.

An innovation booster for research and development: the RENK test facility.

The RENK test facility consists of a test system with a 6- by 8-meter plate field, decoupled from the hall floor by self-leveling and vibration-damping air springs, creating ideal conditions for exact measurement results without external vibrations. There is simply no better place to optimize high-precision slide bearings and components. A two-stage reduction gearbox can reduce the engine speed to a maximum ratio of 1:100. The achievable specific axial or radial loads of the test assemblies can reach over 40 MPa. A powerful oil unit supplies up to 300 l/min at a maximum temperature of 80° C.



Flexibly adaptable to your task:

For configuration tests, units are integrate on modular plate arrays. Test systems and test benches can be moved into the test field via overhead cranes with a load capacity of up to 50 tons.

RENK maintenance: eliminating friction throughout plant operation.

RENK Maintenance and Services

Maintenance Support is available worldwide and offers precise, seamless support. Our experts stand for competence and reliability wherever you are.

- On-site service
- Inspection and repair
- Retrofits
- Original parts

With RENK, you get more: on-site service, retrofit and original parts.

Experience service without compromise. Maintenance from RENK supports you anywhere, at any time. We take over the planning and execution of all work for new installations, commissioning, inspection and maintenance. Our qualified personnel for installations and commissioning also carry out standard inspections and overhauls. In this way, RENK guarantees the operational reliability of all your systems. Intelligent planning integrates all service activities into your best possible workflow. This includes the reliable availability of qualified personnel and the required parts and tools as well as the smooth execution of all work. What you expect from a good slide bearing also applies to RENK Maintenance: competence, performance and cost transparency. The faster and more efficient the service, the more available and profitable your system will be. Our mission is to serve this advantage.

A complete service concept, guaranteeing maximum availability of your system.

On-site service: If necessary, we carry out repairs directly at the plant. Our competent service technicians have all the necessary certificates to work there.

Examination & repair: If on-site repair is not an option, we analyze and optimize the system in our factory. After repair, your system will be in near mint condition.

Retrofit: Retrofitting your system can significantly increase its efficiency and value. Our experts often perform this work on site. This saves you money and optimizes your processes.

Original parts: Original parts give you decisive advantages in terms of efficiency and success and are unmatched in terms of performance, functionality and quality.

/ Extended lifetime

Increase the productivity and durability of your equipment through expert maintenance

/ Accelerated processes

Minimize spare-parts logistics through intelligent inventory management

/ Increased asset value

Transform systems into more efficient, higher performing, more valuable assets through retrofit



Keeping your systems rolling throughout: RENK lifecycle.

Partner with the innovation driver. The unique RENK Lifecycle makes us your most powerful one-solution provider for integrated and reliable solutions from a single source.

RENK lets you operate profitably at every stage: during consultation, in production, in operation.

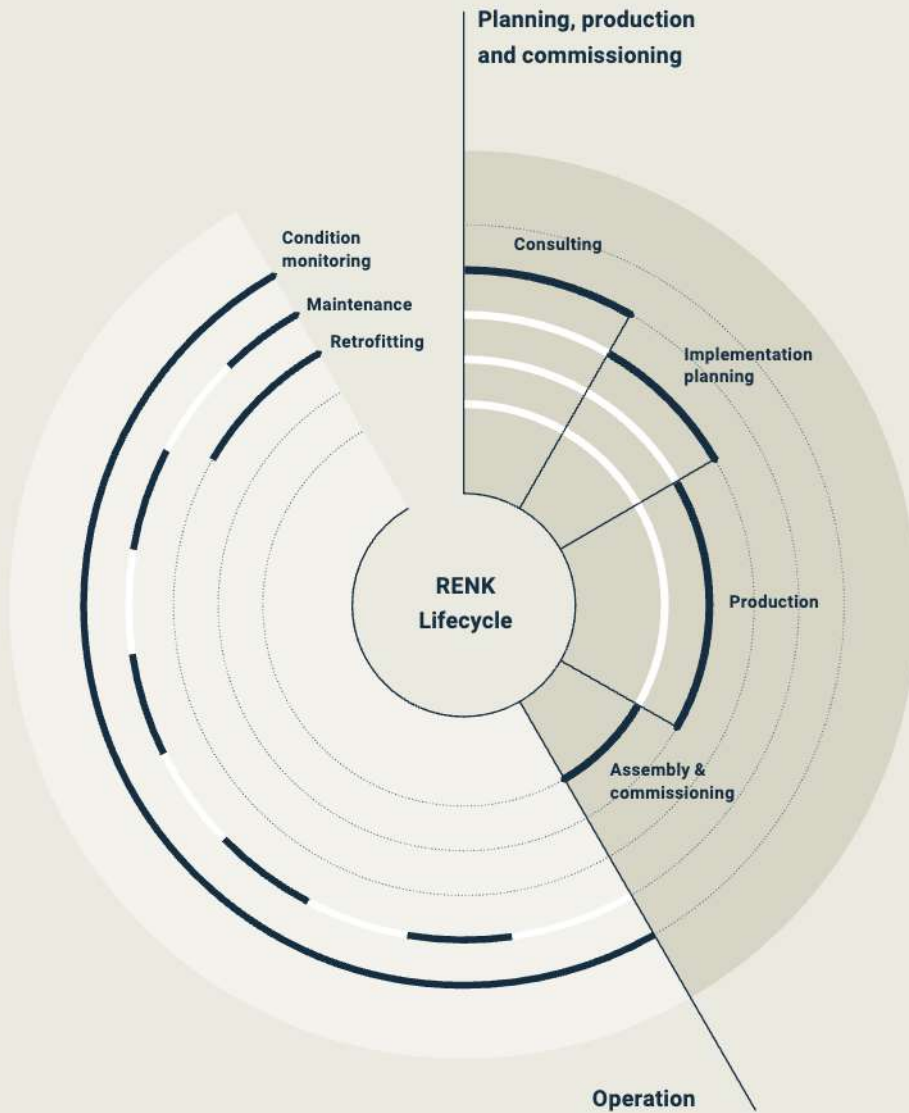
Plants with RENK technology run longer. And to ensure that they continue to do so reliably and profitably at all times, we support you with competence and experience. RENK Lifecycle ensures success and efficiency for every plant throughout its entire service life and beyond. As an operator, you benefit from the cutting edge of the experience leader in the field of slide bearings. Experts accompany each of your projects step by step. They advise, plan, produce and optimize with modern test systems. With RENK, you know that you will always receive a superior, future-proof system solution.

More profitable plants, from commissioning to condition monitoring and maintenance.

Realize valuable saving potentials and increased efficiency by deploying our intelligent maintenance strategies. Your equipment must always be available, 24/7 and at any location. With RENK Lifecycle, you lay the right foundation even before the first operation. We analyze and optimize your plant continuously during operation in real time. The effect: longer component life and longer maintenance intervals. Your advantage: maximum utilization of your plant performance.



Innovative RENK plain bearing technology is developed, precisely manufactured and intensively tested according to the highest quality standards.





Trusted Partner.

RENK GmbH

Weltausstellungsallee 21

30539 Hannover

Germany

P +49 511 8601-0

E slidebearings@renk.com

www.renk.com

Details provided about the properties and usability of the products are purely for information purposes and do not constitute a guarantee of these characteristics. The extent of goods delivered is determined by the subject matter of the specific contract. No liability accepted for errors or omissions. Subject to technical alterations. © RENK 2023