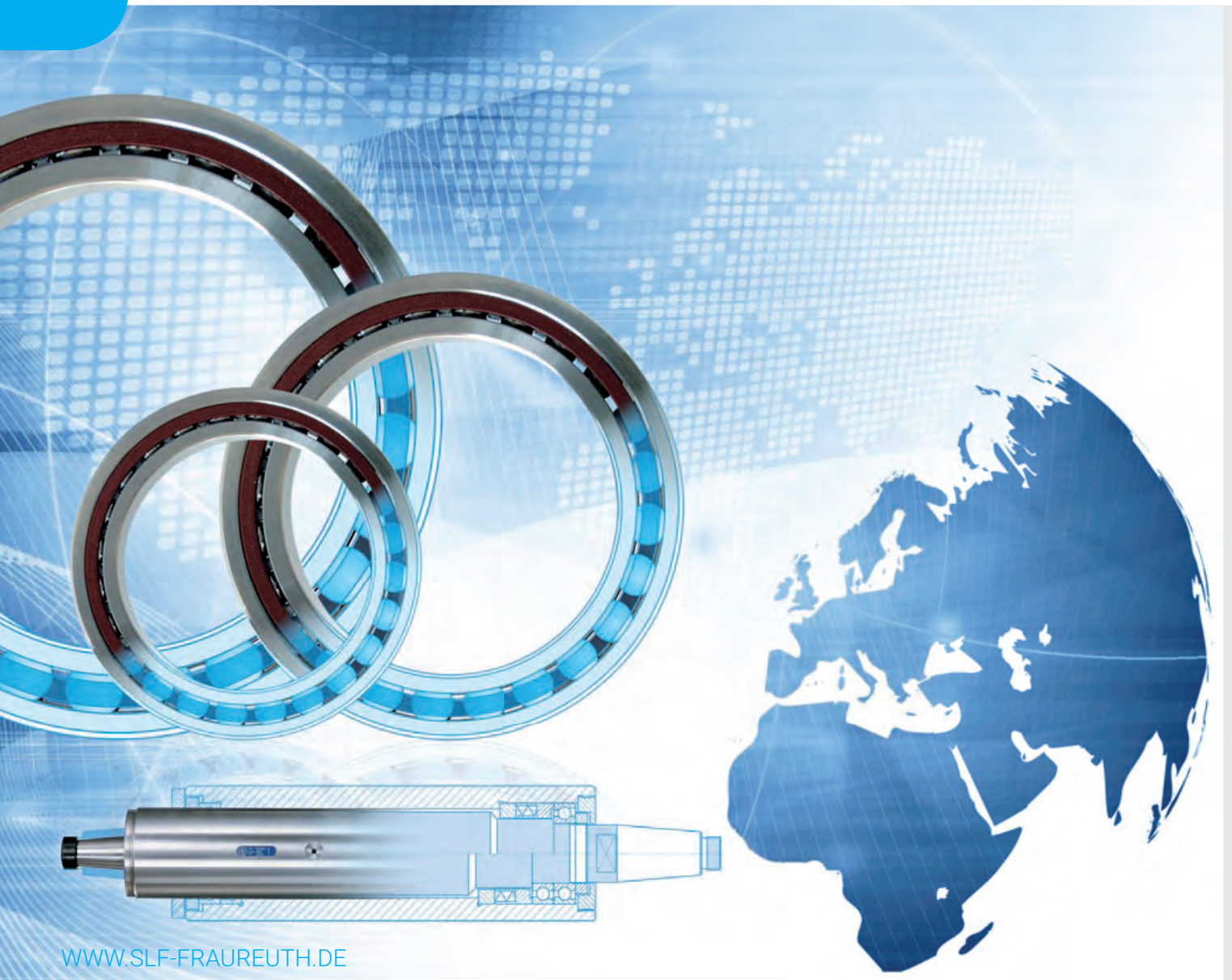


AT THE CENTER OF MOVEMENT



WWW.SLF-FRAUREUTH.DE

**SPINDEL- UND LAGERUNGSTECHNIK
FRAUREUTH GMBH**



In the heart of the central German mechanical engineering:
the Spindel- und Lagerungstechnik Fraureuth GmbH.
Something is stirring here!



AT THE CENTRE OF THE MOVEMENT

"Made in Germany"

We are proud to be in Fraureuth in Saxony. Here, we successfully continue a long-standing tradition which began in 1943 in the field of engineering and manufacture of roller bearings and spindle units.



We, the Spindel- und Lagerungstechnik Fraureuth GmbH, take up the long-standing tradition of central German metal work. While doing so, we combine highest quality standards for spindles and roller bearings with technological progress.

Our customers and partners value the flexibility of our company and the qualities of the products; in particular, the seal „Made in Germany“

One of our top products:
XCB71914E.DLR.T.P4S.K5.UL
For highest standards in mechanical engineering.

80% of the raw materials and the accessories for our products are supplied from Germany or countries of the European Union. We meet the high demands of our customers on quality and reliability through an optimal combination of the most modern production technology with the proficiency of our engineers and specialist workers.



With our products, we are helping the legendary reputation "MADE IN GERMANY" to shine with new splendour since 1993 and are establishing ourselves globally by fulfilling our customer's wishes at reasonable prices.

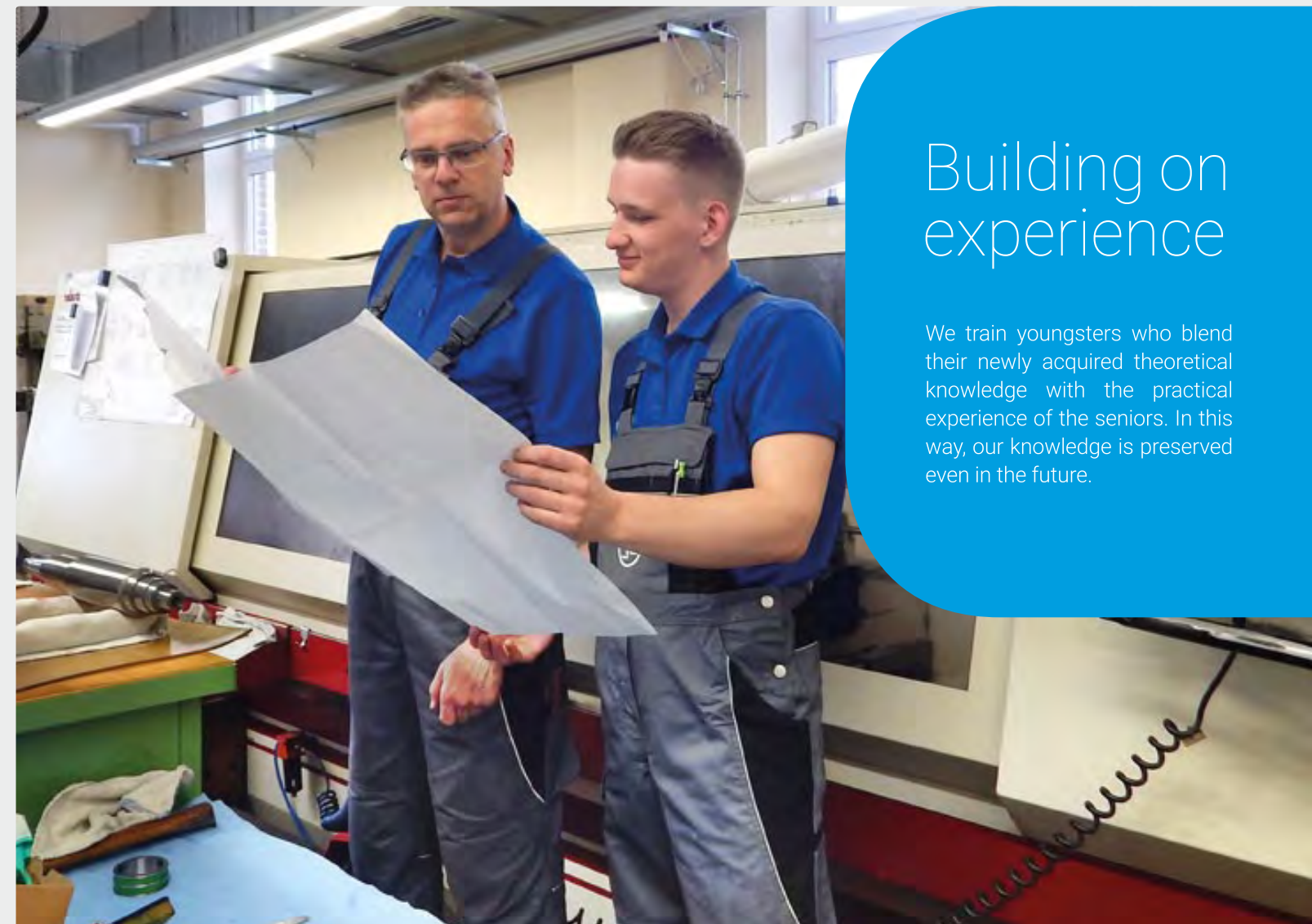


We make a conscious effort to ensure teamwork so that the knowledge and skills of the experienced employees acquired over many decades can be passed along to younger employees. Because, years of experience cannot be out weighed by textbook knowledge.

RELYING ON EXPERIENCE

Building on experience

We train youngsters who blend their newly acquired theoretical knowledge with the practical experience of the seniors. In this way, our knowledge is preserved even in the future.



ROLLING BEARINGS

PRECISION AS FOUNDATION

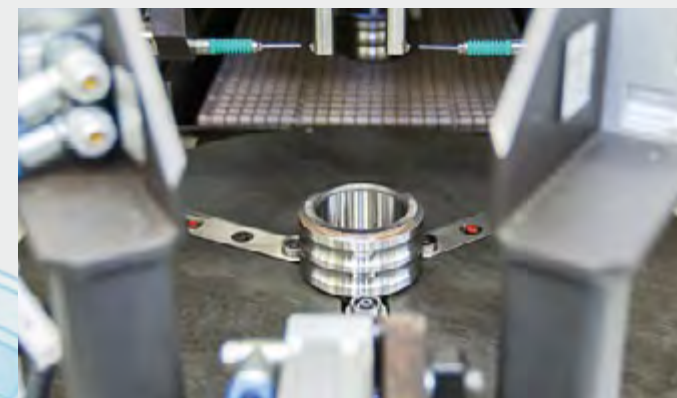
Rolling bearings

in the most varied designs - we produce variety of designs in the outer diameter range of 32 to 1,600 mm.

At the same time, all our products meet the highest requirements of standards as per DIN and ISO.

Product groups of our product range

- Current-insulated bearings in hybrid design or with coated rings
- Cronidur bearings
- Precision angular contact ball bearings up to P2S (ABEC9) in the standard and high speed design, also sealed and in DLR design
- Single-row angular ball bearings
- Single row deep groove ball bearings, including wide rows
- Four point bearings in QJ and Q design
- Self-aligning ball bearings
- One, two, multi-row and full complement cylinder roller bearings
- Self-aligning roller bearings
- Axial cylinder roller bearings
- Axial ball bearings
- Cylinder and barrel rollers
- Tapered rollers upon request
- Radial insert ball bearings
- Special bearings



Cylinder roller bearings



are manufactured in single row, two row, multi-row and full complement design with high radial bearing strength.

→ Rolling elements of cylinder roller bearings are circular cylinders

Self-aligning ball and roller bearings



are two row bearings with two tracks on inner ring and a common concave track in the outer ring. They are specially manufactured for bearing applications where higher shaft deflections or shaft offsets are anticipated.

→ Designs with cylindrical and tapered bore

Spindle bearings



have a special application in machine tool industry, but also where the highest demands are made on the bearings with respect to the accuracy and/or permitted rotation speeds.

→ Contact angle of 15 ° or 25 ° is deliverable

Ceramic ball bearings



in rolling elements and rings are made of ceramics and are characterised by a special high pressure and temperature range of -250 °C to +1,000 °C. The bearings are current-insulated.

→ no greasing required



The high precision of our ball and roller bearings is equivalent to the features of comparable brands. Naturally, the supply of rolling bearings from other product series is feasible upon request. Special greasing, special heat treatment, special radial clearance and higher accuracy are implemented by us upon the customer's wish.

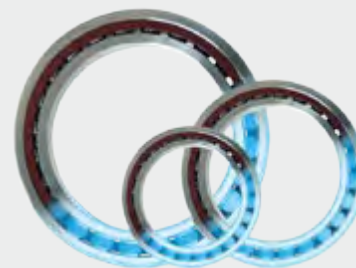


RECONDITIONING OF ROLLING BEARINGS



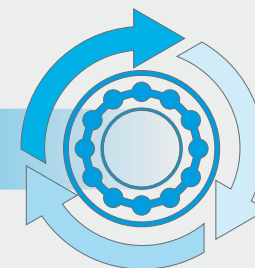
Rolling bearings are components that decisively influence on the production process and considerably contribute to its quality. In addition, they are exposed to heavy duty use as a rule. A high quality and availability of installations can be attained by a preventive and predictive maintenance and repairs.

The possibility of reconditioning (treatment of rolling bearings) can make this process additionally cheaper than purchasing new bearings.



At the highest level

Reconditioning of rolling bearings



→ The professional treatment of rolling bearings and rolling bearing units can be economically advantageous even beyond an outer diameter of 180 mm, because the costs of a treatment amount to only about 50 to 85% of the original price.



Spindle units

from our standard program
and upon customer's special
request

Spindle units

- Drilling, milling and turning spindles
- Belt-driven grinding spindles up to 1,800 mm length and 32 mm to 600 mm outside diameter
- High frequency grinding spindles with integrated motor
- Spindle units with flange mounted motor
- Spindles for multi-spindle drilling heads with the widest variety of clamping systems
- Spindles for special applications such as woodworking and decorative glass cutting works
- Large spindle dimensions upon request



SPINDLE UNITS

We calculate, engineer and manufacture spindle units according to individual requirements of our customers. The basis of customer relationship in this process forms an intensive supervision of the user by our competent employees. This way, you get a product that exactly matches your requirements. Naturally, the spindle units are equipped with roller bearings from our assortment.

Grinding spindles	Drilling, milling and turning spindle	Quills	Truing spindle and balancing spindle
			
<ul style="list-style-type: none"> • applicable for the outer and inner machining of work pieces • Covering a large rotational speed range <p>→ belt driven or with integrated/flange mounted motor</p>	<ul style="list-style-type: none"> • intended for various tool interfaces – e.g. HSK, SK, collet chuck and short tapers • equipped with manual or automatic clamping system <p>→ Permanent grease lubrication or oil-air-lubrication</p>	<ul style="list-style-type: none"> • also as eccentric quill • Offsetting the working height using interlocking on outside diameter • can carry high axial/radial loads <p>→ drilled work spindle for performance of axial movements</p>	<ul style="list-style-type: none"> • equipped with sensor for incision detection • for taking especially high radial loads • Stability of the balance <p>→ reliably meets the highest precision requirements</p>

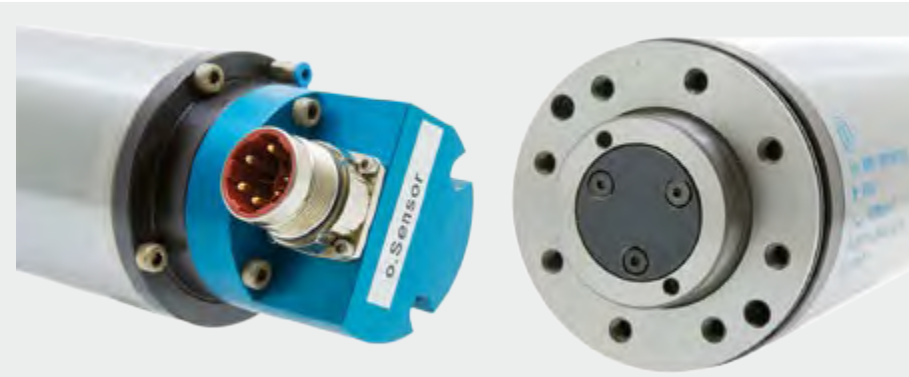
A TOP PRODUCT

Our service portfolio also includes the short term restoration of grinding spindles, independent of their manufacturer.



We have long-standing experience in the fields of spindle manufacturing. Over 100 spindles are in use all the time on our premises and are maintained by our spindle service.

REPAIRS OF SPINDLE UNITS

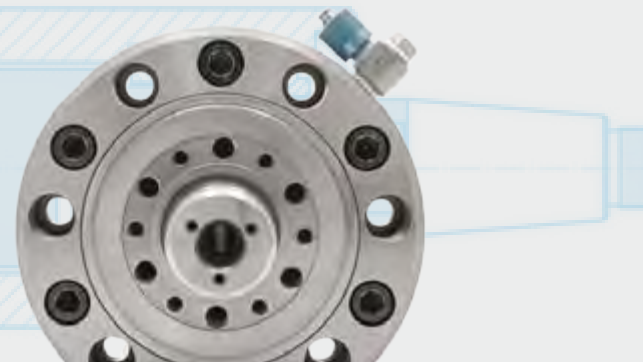


Analysis & Calculation & Treatment

- Delivering the defective spindles, irrespective of manufacturer
- Dismantling and assessment
- a detailed documentation and damage Analysis is made upon request
- Preparation of a cost estimate
- Treatment of the spindles (damaged parts are replaced by products from in-house manufacturing if needed)
- "chrome plating", painting, coating the damaged parts in cooperation with partner enterprises
- New bearings
- Assembly
- Balancing
- Trial run
- Final acceptance
- Delivery

With the
highest
precision

Highly smooth-running and long life span with low maintenance and servicing efforts are the quality attributes of spindle units from our establishment. In doing so, they meet the highest quality standards. Naturally, they are equipped with roller bearings from our assortment. In this way, we can quickly, reliably and flexibly respond to the many customer requirements for roller bearings without intermediaries. Downtimes and repair costs are thus kept as low as possible.



→ We can act cost effectively and quickly due to our own rolling bearing manufacturing. As a rule, the conventional spindle bearing types are in stock and can be installed at short notice. There is an option of manufacturing of new ones if the repairs are uneconomical. A quotation (including overview drawing) will be prepared by our own design department accordingly. Modifications and customisation (bearing design, conversion to hybrid bearings etc.) are also possible upon customer's request.



Our ball bearings and spindle units are used on land, water and in the air.

USE OVER MANY BOUNDARIES

We deliver our products on almost all continents of the earth. The possibilities of their use are likewise boundless. Thus, they are in application in many areas of industry among others.



Mechanical engineering

Our rolling bearings and spindle units meet the ever increasing demands and fulfil the highest quality requirements. While doing so, we count on user-oriented special solutions and focus on the energy efficiency and maintenance free attributes for an economical effectiveness of the machine systems.



Drive technology

On the basis of years of experience in the development and manufacturing, the certifications, as per national and international quality standards, guarantee extremely efficient and robust products and assure consistently excellent attributes. The equipment options for the standardised series offer an optimum solution for almost all areas of application.



Electric motors

Extremely smooth running, a long life span, a high loading capacity, efficient seals and a good price-performance ratio characterises our product portfolio in this area. Due to their low friction operation, our bearings offer optimum improvements in efficiency and with it a lowering of operational and maintenance costs for the end user.



Aerospace

High precision, the bearings must do their work with guaranteed accuracy and be absolutely reliable. We develop special variants for highest performance values and challenging operational conditions such as extreme temperatures in minus and plus range. These factors distinguish our products and make them optimum for use in this area.



For the leading companies of the world:
besides many Germany companies, we
deliver in the international market also.



OUTSTANDING

QUALITY CONSCIOUSNESS

Precise

Consultation, assistance, flexibility and quality assurance are our maxims. Our strength lies in fulfilling requirements specially tailored to the customers.

Our integrated quality assurance system guarantees the necessary tests in every single production stage. It starts with the design already, applies to the single-item production and reaches up to assembly.

Every product is subjected to an exhaustive inspection. The consistent quality management is attested by the certification of Spindel- und Lagerungstechnik Fraureuth GmbH by DIN EN ISO 9001:2008.



We fulfil all the requirements of energy management and are therefore certified by DIN EN ISO 50001:2011.



What's more, we have been honoured by the East German Savings Banks Association as the Company of the Year 2008

Our company was honoured four times at the Bundesball of the "Grand Prize for Mid-sized Enterprises" in Berlin, Germany.



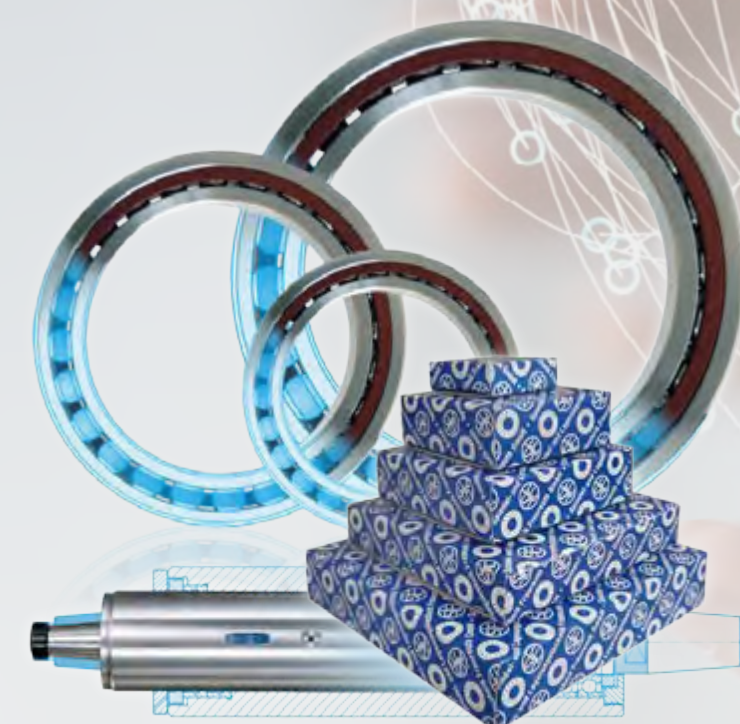
A long-term customer relationship results **only from a good assistance**. Therefore, we set great store by a comprehensive service. For us, it begins with the technical assistance and is supported by CAD-supported design services and life-cycle calculations. Thus, we can deliver custom-made products also in the shortest time.



The Most Modern Standards

Our shop floors for both the product groups meet the newest standards. Due to the worldwide increase in demand for SLF products, investment was made, according to the need, in a new shop floor and in machinery and equipment in the past years.

TRANSPORT AND LOGISTICS



With our stock list,

we guarantee that the customer can have our standard assortment at his disposal worldwide, quickly and uncomplicatedly. It is updated daily and is located on our Homepage. We guarantee the delivery in Germany within 24 hours, in Europe within two days, upon demand.

www.slf-fraureuth.de



Main	
Telephone:	0049 (0) 3761 8010
Fax:	0049 (0) 3761 801150
E-mail:	slf@slf-fraureuth.de
Sales	
Fax:	0049 (0) 3761 801250
E-mail:	verkauf@slf-fraureuth.de
Export	
Fax:	0049 (0) 3761 801250
E-mail:	sales@slf-fraureuth.de
Bearings Production	
Fax:	0049 (0) 3761 801232
E-mail:	waelzlager@slf-fraureuth.de
Spindle construction	
Fax:	0049 (0) 3761 801249
E-mail:	spindel@slf-fraureuth.de

Spindel- und Lagerungstechnik
Fraureuth GmbH

Fabrikgelände 5
D-08427 Fraureuth/Saxony

Phone: +49 (0) 37 61 / 80 10

Fax: +49 (0) 37 61 / 80 11 50

E-Mail: slf@slf-fraureuth.de

www.slf-fraureuth.de