

RKB TECHNICAL DOCUMENTS

TECHNICAL FICHES

GENERAL AND PARTS DRAWINGS

GENERAL CATALOGUE

TECHNICAL TABLES

TRACEABILITY REPORTS

CO-ENGINEERING PROJECTS

QUALITY CONFORMITY DATA SHEETS

INSPECTION CERTIFICATE DATA SHEETS

MAIN TECHNICAL DATA SHEETS

RATING LIFE CALCULATIONS

LABORATORY ANALYSES

TECHNICAL REPORTS

With a solid knowledge and extensive expertise in rolling bearings, **RKB** can provide you with a comprehensive engineering support for the reliability and suitability of your applications. Do not hesitate to contact our Technical Department through the worldwide network of **RKB** official partners and distributors.



RKB
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The Alternative Power

RKB
BEARING INDUSTRIES

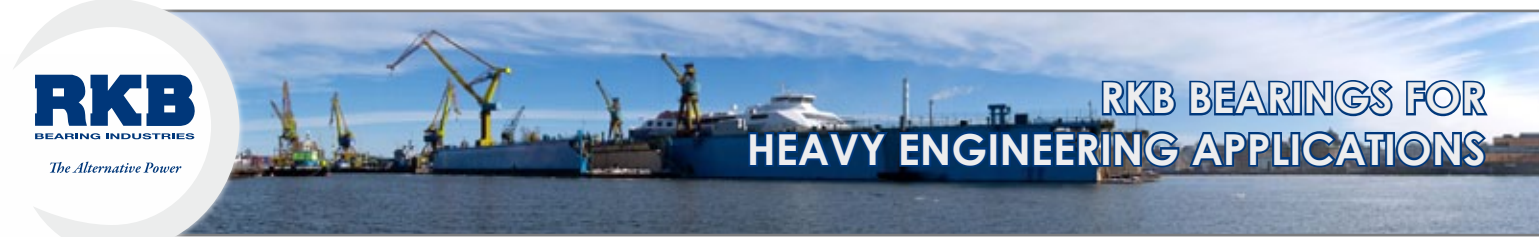
HEAVY ENGINEERING
APPLICATIONS

ENGINEERED IN SWITZERLAND
TECHNOLOGICAL BEARINGS



Printed in Switzerland on environmentally friendly paper

REU-HEA-YSS-A



VERTICAL LIFTING SYSTEMS FOR BRIDGE

- Radial load on main bearing > 8000 kN
- Safety factor (S_o) as per bridge design and safety specifications
- Rolling evaluated to the limits of elastohydrodynamic contacts

BRIDGE AND DAM LIFTING SYSTEMS

- Big size spherical and cylindrical roller bearings
- Up to 560 mm inner diameter
- Safety factor (S_o) > 7 considering material stress in long term

The Swiss Bearing Manufacturer

The **RKB** Bearing Industries Group is the Swiss manufacturing organization operating in the bearing industry for over 70 years, with an area of 90.000 sqm, 135 million euros of tangible assets, and a monthly production capacity exceeding 350 tons of machined steel. The experience gained over the years provides **RKB** with the know-how and expertise necessary for the development and production of technological valued-added bearings up to 1925 mm outer diameter, particularly for the heavy industry. Thanks to its pioneer business model, based on a vertically integrated system, **RKB** offers reliable cost-effective solutions, with extreme operational flexibility, leading-edge service, huge stock availability (more than 35 million euros of standard and special rolling bearings), short delivery time and the top quality typical of a consistent premium-class bearing source. With a worldwide distribution network and exports to more than 50 countries, **RKB** is globally recognized as “*The Alternative Power*” in the bearing industry.

MAIN DRIVE UNIT OF TUNNEL BORING MACHINES

- Spherical roller bearings for tunnel boring machine main drive unit
- Bearings engineered to withstand heavy radial loads, moderate/high torque and variable thrust forces
- Up to 420 mm outer diameter
- Design life (L_{10h}) ≥ 15000 h

BOILER FOR POWER GENERATION

- Technological spherical roller thrust bearings and spherical roller bearings for vertical rotor of bi-drum boiler regenerative air preheater
- Up to 950 mm inner diameter and bearing unit mass exceeding 2950 kg
- Optimized execution for heavy loads at low rotational speeds (3-5 rpm)

RESEARCH AND DEVELOPMENT

ADVANCED MANUFACTURING TECHNOLOGY

CONVEYOR SYSTEM FOR TUNNEL BORING MACHINES

- Taper roller bearings for screw conveyor hydraulic drive
- Up to 360 mm inner diameter and 680 mm outer diameter
- Bearings engineered to withstand heavy loads at low rotational speeds (max 22 rpm)
- Tough Roller Technology for higher safety factor ($S_o > 4,0$)

HEAVY LIFT DOCKSIDE CRANE WINCHES

- TDONASW series special execution for heavy lift crane winches
- Hoist axis pull up to 400 tons
- Up to 200 mm inner diameter
- $C_{or} > 1000$ kN

MULTILEVEL QUALITY CONTROLS

PREMIUM QUALITY ROLLING BEARINGS

PULP AND PAPER CALENDER MILL

- RKB Victory Line premium class bearings for extended service life
- Big size spherical and cylindrical roller bearings
- Up to 710 mm inner diameter

TUNNEL DRILLING MACHINES

- Thin section big size single-row taper roller bearings (design and execution for heavy load applications)
- Up to 458 mm inner diameter
- B_{10} life > 100000 h as per mining specifications

SPECIAL PROJECTS

SERVICE AND ASSISTANCE