



# ABOUT US

MORE THAN 100 YEARS EXPERIENCES IN ENGINEERING AND BEARINGS PRODUCTION



# BRIEF INTRODUCTION RELIABLE PARTNER IN CREATION OF NEW MOTION SOLUTIONS

KINEX BEARINGS belongs with its portfolio among important global suppliers of standard and special rolling bearings as well as engineering components aimed for beddings in various industrial applications. The main task and goal is to ensure supplies of complete bearings assortment manufactured in individual plants, to develop cooperation with customers and to provide them services in accordance with their requirements.

In order to achieve maximum customer satisfaction and a flexible response to market requirements, **KINEX BEARINGS** integrates research and development, planning, production and comprehensive sales and after-sales service.

The required product properties are supported by our own R&D department,



testing and material laboratory. We are also experienced in non-destructive quality control of individual parts in the production process.

### FROM IDEAS, THROUGH INNOVATIONS, TO PERFECTION...

- > World's No.1 supplier of special bearings for textile industry
- > European leader in cylindrical roller bearings for railway vehicles
- > One of the world's suppliers of special bearings for water pumps for automotive
- > Stable partner for customers all around the world
- > Manufacturer of high precision engineering components for various industrial sectors



### HISTORICAL MILESTONES

- 1906 KINEX, a.s.
  - foundation of the plant in Bytca, beginning of the engineering production "Povazsky zelezopriemysel"
- 1948 **KINEX KLF, a.s.** 
  - foundation of the plant in Kysucke Nove Mesto
- 1950 Production of balls and ball bearings
  - the first produced bearing in Slovakia was 6204 type
- 1953 Production of rollers and cylindrical roller bearings
  - single-row cylindrical roller bearings
- 1959 Production of railway bearings
  - single-row cylindrical roller bearings for railway vehicles
- 1964 Production of aerospace bearings
  - for various aerospace industry applications
- 1968 Production of textile industry bearings
  - special double-row ball bearings
- 1978 Production of water pump bearings
  - special double-row bearings
- 1987 Production of bottom bracket bearings
  - special double-row bearings
- 2005 KINEX BEARINGS, a.s.
  - foundation of a trading company
- 2009 New aerospace bearings production area
  - realized in Bytca plant
- 2013 KINEX Trading (Shanghai) Co., Ltd
  - foundation of a subsidiary in China
- 2016 Merger of companies
  - KINEX BEARINGS, a.s., KINEX KLF, a.s. and KINEX, a.s. merge into KINEX BEARINGS, a.s.
- 2016 Production of engineering components
  - foundation of Machinery division
- 2020 CK Birla Group
  - KINEX BEARINGS enters international industrial group

### QUALITY OF BEARINGS

The focus on clients, with the aim of fulfilling their requirements and expectations, is one of the basic foundations of the company's strategy. The implementation of a certified quality management system in all the **KINEX BEARINGS** companies is an efficient tool for the correct identification of requirements and expectations from clients as well as for monitoring and increasing their satisfaction.



### RAILWAY BEARINGS

The beginning of production of single row cylindrical roller bearings for railway axleboxes dates back to 1959. Production of rolling bearings for railway vehicles is provided in acordance with requirements of European Standard EN 12080.

Single row cylindrical roller bearings and axle boxes used in railway industry have been tested according to European Standard EN 12080 or UIC 515-5.

**KINEX BEARINGS** belongs to leaders concerning deliveries of axle cylindrical roller bearings for railway industry in Europe.

Development and manufacturing of bearings has established and maintains a quality management system according international railway industry standard (ISO/TS 22163 - IRIS). The bearings have acquired several approvals for use to various markets.





#### **APPLICATION OF BEARINGS**

- > axle seatings of freight wagons, passenger coaches, electric and diesel locomotives, diesel and electric motor train sets
- transmissions
- > traction motors and generators
- > compressor's motors, fans motors
- > drive of blowers
- > exciters and charging dynamos of electric and diesel locomotives





KINEX BEARINGS specializes in the production of water pump bearings of combustion engines for the automotive industry.

The rolling bearings are assigned for OEM customers and reparation in passenger cars, trucks and tractors.

KINEX BEARINGS success is based on the superior quality of the products and production process, great innovative force and its ability to react quickly to customers special requirements.

The innovative force is based on employees experiences, knowledge and cooperation with universities. Method such as virtual simulation, production prototypes for functional test and own testing capacities reduce development times and ensure the highest possible quality products.



- > in passenger cars, trucks and tractors
- > arrangement of the shaft gearboxes
- > gearboxes
- > water pumps
- > transmissions
- > final drives
- **>** engines
- **>** accesories

## **TEXTILE BEARINGS**

The development of special bearings for textile industry hangs together with a solutions of arrangements of the most important parts in the textile machines but also for measuring instruments.

Special double row ball bearing for textile machines from **KINEX BEARINGS** production are designed for high rotational speed and relatively light load. They are known for their high dimensional accuracy and smoothe run warranting their high effectiveness.

These bearings are supplied according to demand of the customers complemented with some other component, e.g. resilient mounting serials. In some cases there are complete integrated bearing units which make from the technological and economical point of view possible the more effective production of textile machines.

# BEARINGS FOR OTHERS INDUSTRIAL **APPLICATIONS**

KINEX BEARINGS suplies rolling bearings, necessary accessories and services to original equipment customers in machinery and plant constructions as well as to customers in the distribution and spare parts business.

In addition to the standardized types of rolling bearings in the basic and modified version, KINEX BEARINGS offers series of special rolling bearings, which are designed for arrangements of machines, instruments and equipments of the various industrial fields.

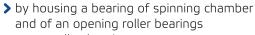
#### **APPLICATION OF BEARINGS**

- > engineering industry
- > agriculture industry
- > mining industry
- > paper industry
- > power industry
- > food processing industry



#### **APPLICATION OF BEARINGS**

> in non spindle spinning machines













#### **TECHNOLOGY**

- grinding
- > turning
- **>** boring
- > milling
- > shielded arc welding > heat treatment
- pressing
- > spark machining
- > spark cutting
- > blacking (chemical)

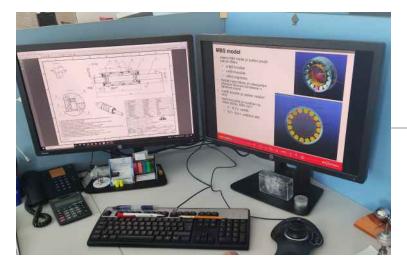
# THE ENGINEERING **TECHNOLOGIES**

The Engineering Technologies division of the KINEX BEARING portfolio deals with the production of components for machines and technological units, as well as the manufacture of tools and machines.

On top of classic air furnaces for Heat Treatment we also have at our disposal technologies for Heat Treatment in protective atmosphere, in which we realize the heat treatment of special materials used mainly in the aerospace industry.

We offer complete in-house services in the area of special processes certified by NADCAP.

The portfolio of Machinery division also includes service and repair of machinery as well as repair/refurbishment and sharpening of special tools.



#### Testing Laboratory

- > Durability testing according to FORD methodology
- > Testing according to customer methodology requirements
- > Salt chamber

#### Metallurgical and Metrology Laboratory

- > Microstructure
- > Microhardness
- > Hardness
- > Chemical Composition
- > ZEISS length gauge
- > TAILOR HOBSON Circular Gauges
- > TAILOR HOBSON Profilometers
- > Measuring Microscopes KEYENCE, ZEISS
- > 3D CMM ZEISS, HEXAGON
- > Calibration Laboratory

# N-HOUSE **PRODUCTION** SUPPORT CAPABILITIES

The required product properties are supported by our own R&D department, testing and material laboratory. We are also experienced in non-destructive quality control of individual parts in the production process.

#### R&D

- > Concept
- > Lifetime Calculations
- > Simulations /ANSYS, MESYS/
- > Final Design

#### Quality inspection

- > Dimensional checking
- > MPI Magnetic Particle Inspection
- > TE Temper Etch
- > UT Ultrasonic testing
- > ET Eddy Current Inspection





### YOUR PARTNER FOR INDUSTRY





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