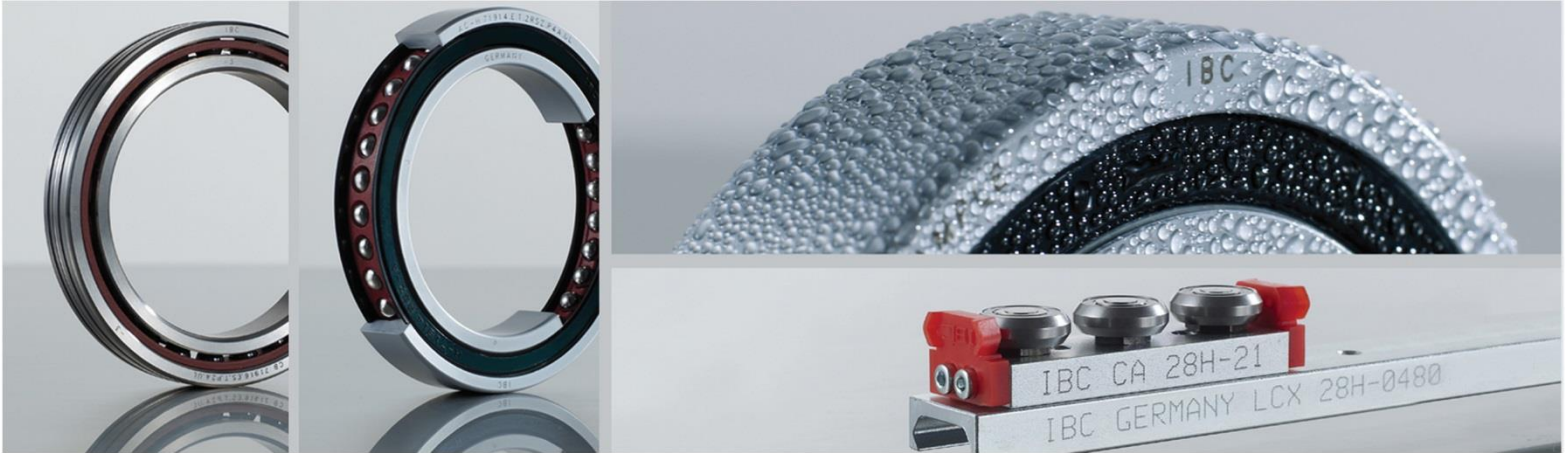


IBC



Bearings Limited
is an Authorized
Distributor of the
IBC Bearing and
Linear Motion
Product Range





IBC Wälzlager GmbH, Industrial Bearings and Components, has more than 40 years' experience in the field of bearing technology. IBC successfully continues the tradition of the 1918 founded Robert Kling Wetzlar GmbH.

Continuously developed and optimized products show the technical competence, high productivity and performance of the production plants in Solms-Oberbiel (Germany), Asslar (Germany) and Grenchen (Switzerland). IBC is a reliable partner for customized system solutions and unique solutions for precision bearings, not only in propulsion technology and in machine tool manufacturing, but also in the whole industry and trade, with distribution subsidiaries and representative offices worldwide. Permanent increase in demands on quality bearing systems is leading on to new developments of various technologies and new materials, to meet the high and very specific technical and economical fields of application.

We are taking responsibility for this fact by continuous increase in performance of products and technical processes, as well as extension of product range. The strategic importance of quality and the consequent following up of our corporate policy has decisively supported the success of our company in all important market sections worldwide.

As our customer's reliable partner, it is our intention to

- Take care of special requests in special market segments.
- Provide market conform, cost and energy saving solutions with high product quality.
- Take over a leading position in these markets worldwide.
- Satisfy our customers through flexibility, dependability and technical application support



Bearings Limited,

Since 1947, Bearings Limited has been dedicated to providing bearing and power transmission distributors with high quality products, competitive pricing and a level of service unmatched in the industry.

Over the past 70 years, we have evolved from a small business selling bearings in the NYC area, to one of the industry's leading wholesale distributors and manufacturers of quality bearings and power transmission products. Today, our extensive inventory consists of over 30,000 different bearing, chain, sprocket and bushing sizes and configurations. Products are conveniently stocked in seven strategic locations throughout the US, satisfying the demands of distributors throughout North America.

We make it easy for distributors by providing a one-stop JIT (Just-in-Time) supply solution that gives users needed parts the same day, next day, or second day; and reducing friction by decreasing acquisition time, lowering transaction costs and increasing gross profits with HFR orders (Hold-for-Release), expert staff, system-to-system and ecommerce platforms.

With one click, and one purchase order, distributors easily and economically supply their users from the widest variety of bearing and power transmission products in the industry.

Trust Bearings Limited to lead the way in product and service excellence.



IBC High Precision

Angular Contact Ball Bearings



- Best possible combination of technology and economic efficiency
- Different preload levels, more than most competitors
- Special matching on customer request

Developed for all applications with high requirements for

- reliability
- stiffness
- suitability of rotational speed
- running accuracy
- **Optimum spindle designs possible**

Contact angle

- 15° (C)
- 25° (E)
- 30° (A)
- 18° (H and CBH) – high speed range
- 20° (HM and CBHM)

Designs

- Steel or ceramic balls
- open or sealed
- universally ground, allows for the use as single bearing or various bearing sets
- **The many size variations available allows manufacturers to optimize spindle designs in line with the most important requirements**



Single row 60° - Angular Contact Bearings Series: BS



Main application

- in the machine tool industry for supporting of ball screw spindle drives
- **60° - contact angle**
- **Radial load should not exceed 90% of the pre-load value**

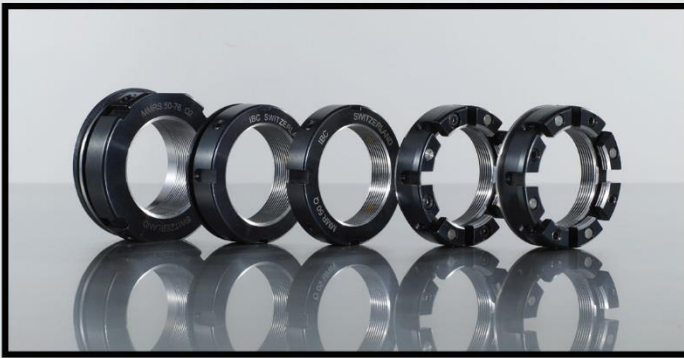
Standard cage

- ball guided one piece glass fiber, reinforced polyamide
- **With ceramic or steel balls**
- **Standard design is open but also available with integrated double sided non-contact seals**

Double row 60° - Angular Contact Bearings Series: BS



IBC Precision Locknuts



- **The many design options meet all application requirements**
- **Used in precise applications**
 - such as main spindle bearings and ball screw spindle drives in the machine tool industry
 - depending on the design there are axial or radial locking devices
- **Support**
 - the preloading of angular contact ball bearings or tapered roller bearings
 - the adjustment of the radial play of cylindrical roller bearings with tapered bore

IBC Industrial Products

40° - Angular Contact Ball Bearings

- **Bearing series (single row: 70.., 72.., 73..)**
 - Application: general engineering
 - Contact angle 40°
 - Axial load carrying capacity increases
 - with the higher contact angle
 - Non separable
 - Allow for relatively high rotational speed
 - Radial and single direction axial load capacity
 - Open and sealed version
 - As single bearing without face control or in universal version for pairs for mounting in X, O or tandem arrangements as well as in special matched sets



IBC Cylindrical Roller Bearings

- **Characteristics**
 - safe function of a floating bearing for high rotational speed
 - minimum loss in friction
 - high radial load
- **Capable of both high loads and high rotational speeds**
- **Full complement cylindrical roller bearings**
 - designed for low rotational speeds and oscillating movements
 - suitable for applications with slow rotational speeds and extreme loads

IBC Radial Ball Bearings

- **Characteristics**
 - suitable for a wide variety of applications
 - relatively insensitive to abuse
 - easy to assemble
 - suitable for high-speed applications
 - very high speeds with ceramic balls and simultaneous current insulation
- **Details**
 - able to carry radial as well as axial loads
 - can be filled with different kinds and quantities of grease, depending on the requirements
 - Low friction, high precision and silent running ability
 - can be supplied as matched pairs
- **Application**
 - often used in electric motors



IBC Linear Bearings



- **Two systems:**
 - Telescopic linear bearings (cage-guided)
 - Linear bearings carrier system (with rollers)
- **Main features**
 - compact, space-saving design
 - precise running behavior
 - easy assembly
 - high load bearing capacity
 - long life time
- **The core of the system is created by the induction hardened profile rails made of high-grade heat-treated steel 58CrMoV4**
- **Areas of application**
 - Machine tool industry
 - Medical technology
 - Railway industry
 - Aeronautics
 - Automotive outfitters
 - Handling- and automation systems

IBC ATCoat Coating



ATCoat is a thin dense chromium coating and therefore represents an alternative to bearings made of corrosion resistant steel

- **Advantages**
 - Protects surfaces against outside environmental conditions
 - Allows for an increased service life and extended period between shutdown times
- **Characteristics**
 - Very good wear- and corrosion protection
 - Coating layer 2-4 μm
 - Substantially improved emergency run properties
 - Significant increase of rotational speed (especially in combination with ceramic rolling elements)
 - Used in unfavorable lubrication conditions
- **Alternative to bearings made of corrosion resistant steel**
- **Areas of application**
 - Aeronautics
 - Pumps with deficient lubrication
 - Gas turbines and bearings for ship engines
 - Racecar engineering
 - Food- and chemical industry
 - Machine tools and ball screws



● Representations

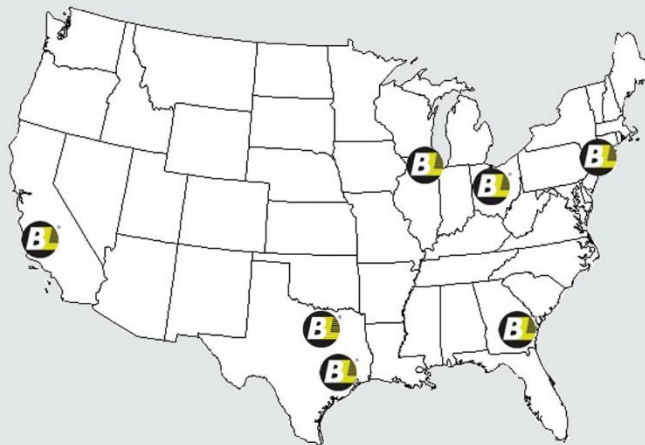
⊗ Production Locations



Global presence with production at:

- Solms-Oberbiel (Germany)
- Asslar (Germany)
- Grenchen (Switzerland)
- Taichung (Taiwan)
- Aurangabad (India)

Bearings Limited offices



New York
Houston & Dallas
Los Angeles

Northeast Region
Southwest Region
Western Region

Chicago
Atlanta
Columbus

Midwest Region
Southeast Region
Western PA/ Michigan/Ohio/
Indiana/Kentucky/West Virginia

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