

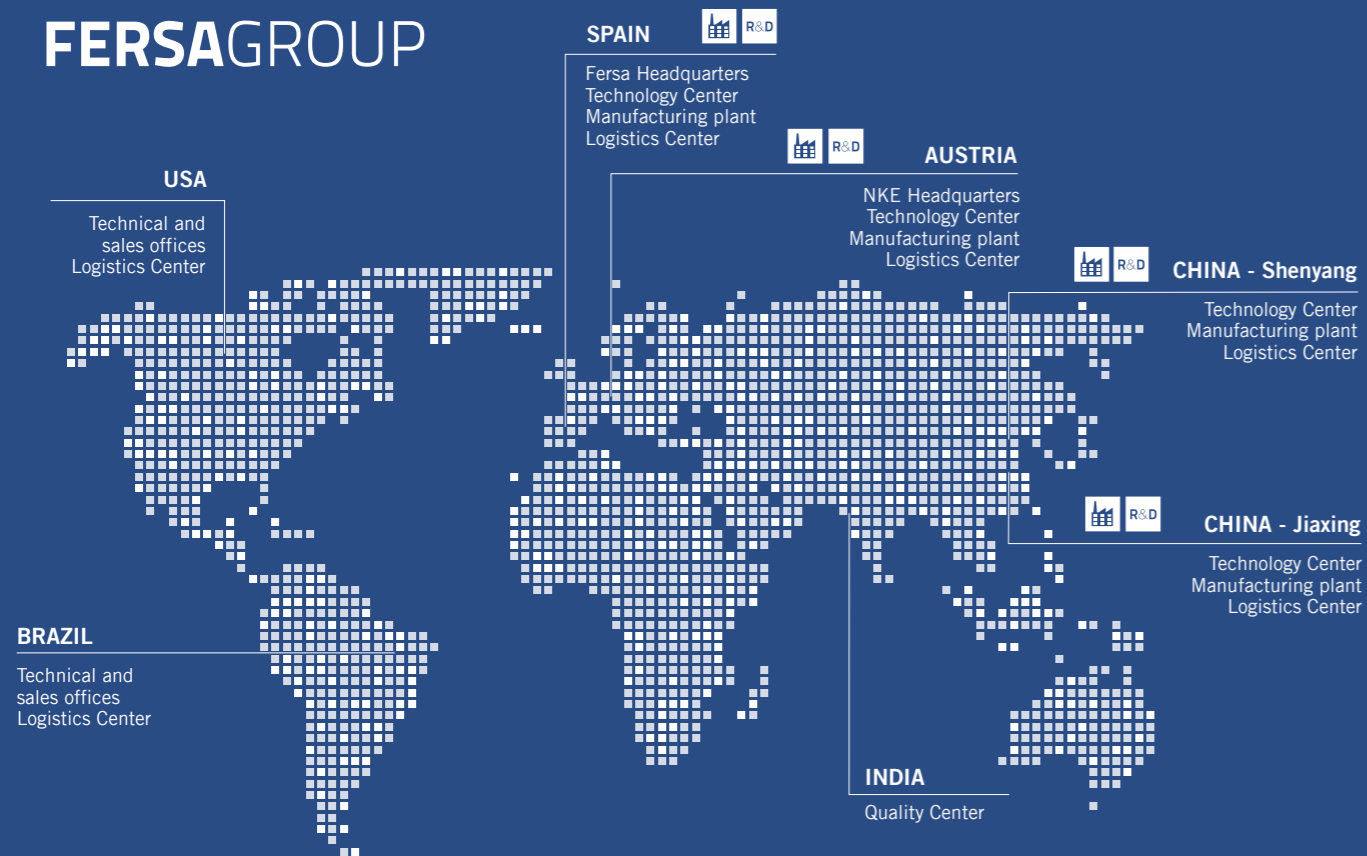
# WE ARE FERSA GROUP A SPANISH-AUSTRIAN COMPANY

Fersa Group was created through the merger of two European bearing manufacturers: Fersa Bearings in Spain and NKE in Austria. Both are globally active in the design, production and distribution of high quality bearings for the global automotive and industrial markets.

Over 50 years of manufacturing experience and the trust of leading OEMs, Tier 1 and their respective aftermarkets endorse our products and services.

Fersa Group has an extensive network of distribution centers that service globally. We count with local facilities in Austria, Brazil, China, Spain and USA and state-of-the-art manufacturing centers in Austria, China and Spain.

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**NKE**  
B E A R I N G S



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**NKE**  
B E A R I N G S



# HYBRID BEARINGS

Tough industrial applications  
require special bearings.

FERSAGROUP

# THE PERFECT SOLUTION TO INDUSTRIAL APPLICATIONS

NKE AUSTRIA GmbH is a premium bearing manufacturer with headquarters in Steyr, Austria. The company was founded in 1996 by a group of senior staff members of the former Steyr Wälzlager.

NKE manufactures both standard and special bearings for all industrial applications. Our core competences – engineering, product development, final processing of components, assembly, quality assurance, logistics, sales and marketing – are centralised in Steyr. The site is accredited with ISO 9001:2015 (design, development, manufacturing and distribution of bearings), ISO 14001:2015 and OHSAS 18001.

**NKE bearings are distributed through international representative offices and more than 240 distribution outlets in over 60 countries.**

## We offer

- / Standard bearings with a comprehensive stock range
- / Tailor-made bearings for special requirements
- / Technical service (e.g. consulting, documentation, training etc.)

## 100% Made in Austria

All NKE bearings are manufactured with state-of-the-art equipment. They undergo stringent and documented quality inspection. By using advanced testing and measuring equipment and applying a rigorous quality policy, we can guarantee that every single batch of bearings delivered is of the highest quality standards.



NKE hybrid bearings consist of steel rings and bearing silicon nitride  $\text{Si}_3\text{N}_4$  rolling elements.

## NKE HYBRID Bearings: Advantages and benefits

- / **Insulation:** highest protection against passage of electric currents
- / **Higher speed suitability:** centrifugal force reduction due to the light rolling elements
- / **Lightweight:** Silicon nitride is 60% lighter than conventional rolling element steel
- / **Extended service life:** longer bearing life and longer re-lubrication intervals
- / **Reduced friction:** less frictional heat, especially at high speeds
- / **High wear resistance**
- / **Higher rigidity:** less deformation in rolling contact areas
- / **Reduced risk of poor lubrication at high speeds** and fast accelerations, or in the case of insufficient lubricating film
- / **Low running noise operational bearings**
- / Significantly less susceptible to standstill marks known as “false brinelling”
- / Reduced thermal expansion
- / More precise control of preload and bearing clearance
- / Dimensionally interchangeable
- / No additional tools required

## Properties of ceramic rolling elements

- / Electrically isolating
- / Low friction coefficient
- / Corrosion resistant
- / Higher modulus of elasticity

# AUSTRIAN QUALITY COMBINED WITH ADVANCED TECHNOLOGY

## NKE manufactures bearings with ceramic rolling elements

Technologies are advancing rapidly and bearings have to meet more sophisticated and varied requirements under increasingly demanding operating conditions. In response to these special requirements, NKE Austria and FERSA have committed themselves to the development and manufacturing **hybrid bearings**.

Hybrid bearings can be used in new applications where conventional steel bearings have not been practical. For example, bearings using ceramic rolling elements are especially designed for applications where high grade electrical insulation is necessary and/or high speeds occur.

Furthermore NKE premium hybrid bearings come up with many excellent performance characteristics, like extended service life or reduced friction.

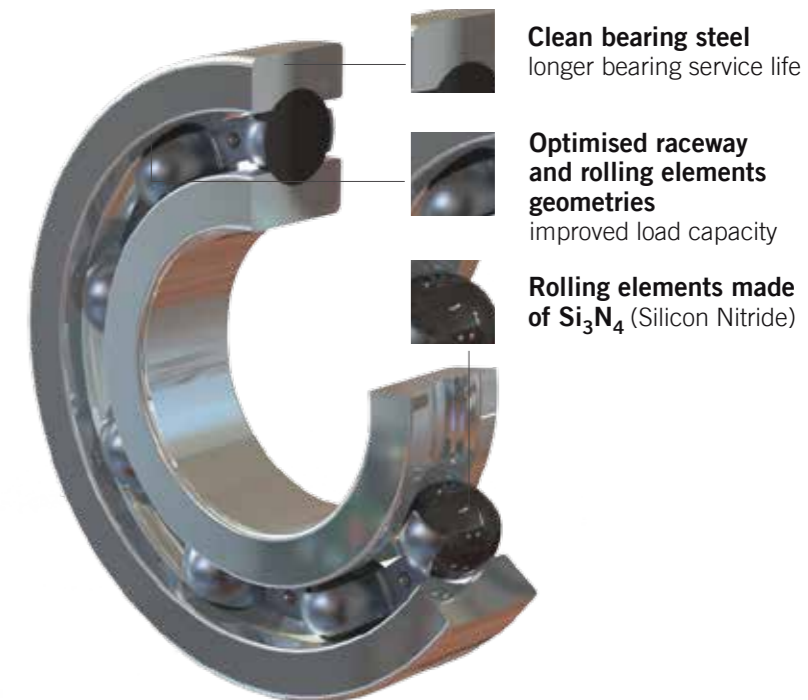
NKE provides bearings with ceramic rolling elements. Frequently used Deep Groove Ball Hybrid bearings are available on stock or with short lead times. Other bearing types, special bearing designs etc. upon demand.

NKE hybrid bearings are identified by the suffix **-HYB** and can replace standard bearings without any modification required.

Example:

BEARING DESIGNATION	6330 _* C3 - HYB
basic bearing designation: TYPE & SIZE	
cage: no suffix, PRESSED STEEL cage	
radial clearance: LARGER THAN NORMAL (C3 clearance)	
rolling element material: SILICON NITRIDE $\text{Si}_3\text{N}_4$	

NKE hybrid bearings are especially suitable for applications required to operate with low noise.



**Other bearing types or special bearing designs can be manufactured on demand.**

Typical applications:

- / Electric motors (AC/DC)
- / Generators (e.g. in wind turbine generators)
- / High speed applications
- / Traction motors of railway vehicles



THE PERFECT  
SOLUTION  
TO INDUSTRIAL  
APPLICATIONS

AUSTRIAN QUALITY  
COMBINED WITH  
ADVANCED  
TECHNOLOGY

NKE Hybrid bearings -HYB suitable for a wide range of extreme industrial applications.



NKE steel sheet cage



NKE brass cage



NKE polyamide cage



Customized special bearing

**NKE**  
BEARINGS

FERSAGROUP

100% manufactured in Austria