

**SCHAEFFLER**

**X-life –  
Premium Quality**



# What Does X-life Stand For?

X-life is the seal of quality for ultra-high performance products from the INA and FAG brands. They are characterized by higher dynamic load ratings compared to conventional products, resulting in a longer rating life and operating life.



## X times longer service life

If the load and design envelope are unchanged, X-life bearings have a longer rating and operating life. In this case, longer intervals are possible between maintenance operations.



## X times greater load-carrying capacity

Conversely, an X-life bearing with the same design envelope and the same rating life can support higher loads.



## X times more efficient use of space

Where both the rating life and the load are unchanged, the use of X-life bearings results in greater power density, optimization of the design envelope, and a reduction in weight.

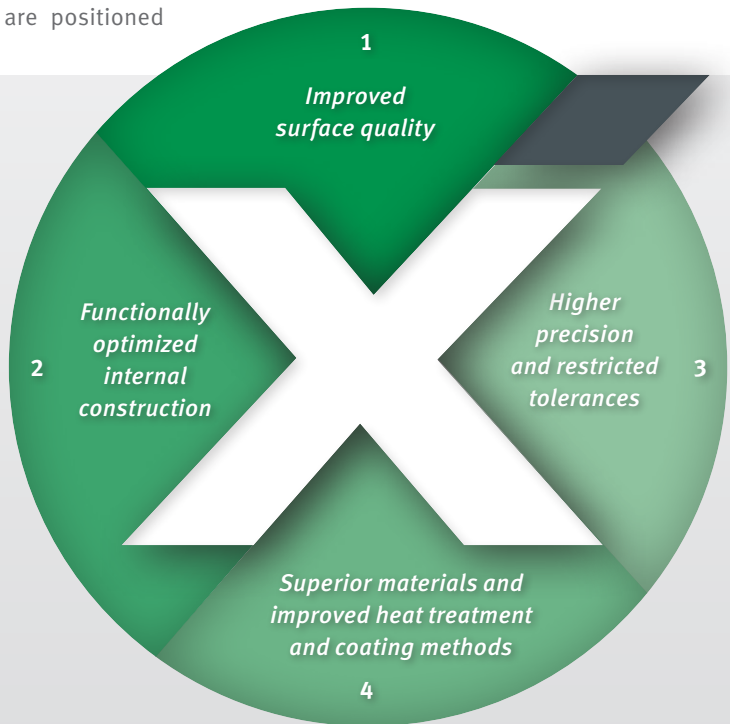
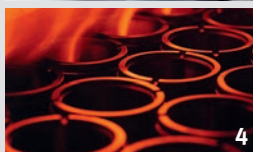
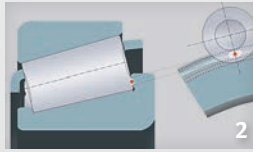
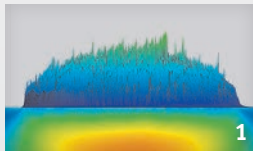
# Standard Bearings with Top Performance Values ...

... but what characterizes X-life quality?

The positioning of the X-life bearings in the overall product portfolio is of decisive importance. X-life is not an additional premium series but the standard in each case; from Schaeffler's perspective, "standard" means that the respective bearing series with their performance and rating life values are positioned

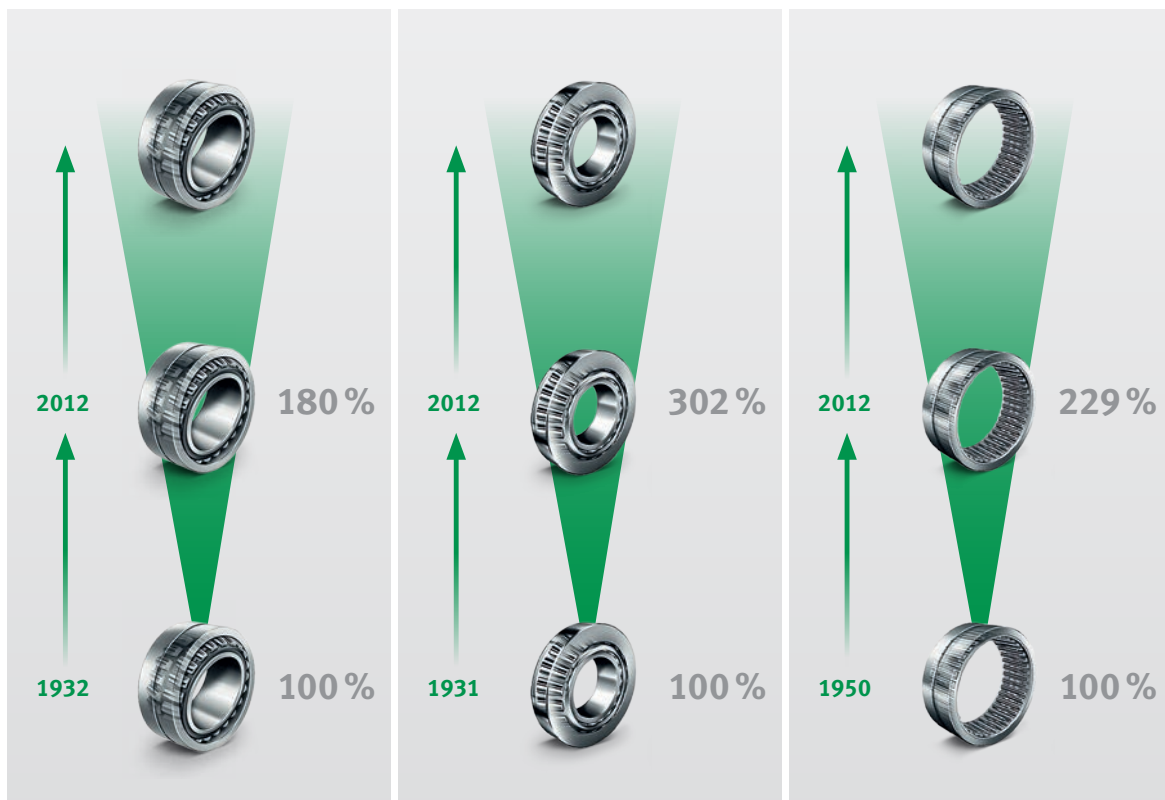
at the top of the premium segment compared to the competition.

**The premium quality of X-life is generally based on four essential technical improvements:**



# Development of Basic Load Rating

If the load rating of a spherical roller bearing from back in 1932 is assumed to be 100%, the value achieved by a Schaeffler spherical roller bearing manufactured in 2012 is 80% higher. The load rating of tapered roller bearings has tripled since 1931, and that of needle roller bearings has more than doubled since 1950.



# 10 Years of X-life

The X-life variants are consistently and permanently replacing the catalog products.



INA offers a wide range of needle roller bearings and radial insert ball bearings, housing units, full complement cylindrical roller bearings, axial angular contact ball bearings for screw drives, yoke and stud type track rollers, and multi row linear recirculating ball and roller bearing and guideway assemblies in X-life quality. In 2015 the track rollers LR52 and LR53 were added to the X-life portfolio.



Cylindrical, tapered, and spherical roller bearings, axial spherical roller bearings, single and double row angular contact ball bearings, four-point contact ball bearings, high precision cylindrical roller bearings, and TORB toroidal roller bearings are available under the FAG brand name. Recent additions to the range include spherical and cylindrical roller bearings with outside diameters of up to 1,600 mm.



## X-life market launches since 2003

2003/2004

- FAG SRB
- INA CRB
- INA KUVE
- INA RUE
- INA needle roller bearings (including PWKR and PWTR)
- FAG CRB
- FAG single row ACBB
- ELGES spherical plain bearings

2007

- FAG axial SRB
- FAG TRB T7FC
- INA CRB with opt. rib contact

2008

- FAG SRB > 320 mm OD

2011

- INA needle roller bearings w/ TWIN cage
- INA needle roller bearings -D-XL
- FAG double row ACBB
- FAG four-point contact ball bearings

2012

- INA radial insert ball bearings
- FAG TRB

2013

- FAG CRB > 320 mm OD
- INA hydrostatic compact guide (HLE)
- INA four row HS linear recirculating ball bearing and guideway assemblies (KUVE-B-HS)

2014

- INA axial ACBB for screw drives (ZKLN & ZKLF)

2015

- FAG high precision CRB (N10, NN30)
- INA ball type track rollers LR52, LR53
- FAG toroidal roller bearings TORB

Decades of experience with a comprehensive product portfolio – proven on the market

# X-life Product Portfolio

Schaeffler offers the most comprehensive range of premium products.



*Tapered roller bearings*



*TAROL axlebox bearings*



*Spherical roller bearings*



*TORB toroidal roller bearings*



*Axial spherical roller bearings*



*Cylindrical roller bearings*



*High precision cylindrical roller bearings*



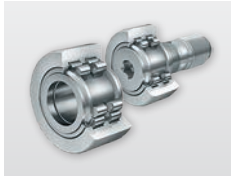
*Machined needle roller bearings*



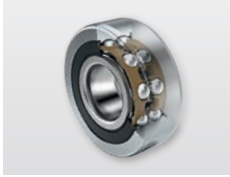
*Machined needle roller bearings -D-XL*



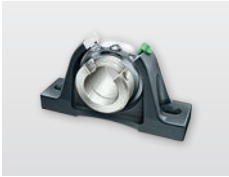
*Needle roller bearings with TWin cage*



*Yoke and stud type track rollers PWTR and PWKR*



*Ball type track rollers LR52, LR53*



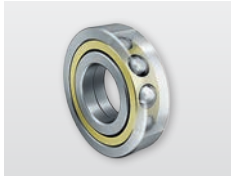
*Radial insert ball bearings and housing units*



*Single row angular contact ball bearings*



*Double row angular contact ball bearings*



*Four-point contact ball bearings*



*Axial angular contact ball bearings for screw drives*



*HS linear recirculating ball bearing and guideway assembly*



*Hydrostatic compact guide*



*ELGES large spherical plain bearings*

# Application Examples

X-life products are successfully used in a wide range of applications and in every industrial sector worldwide.

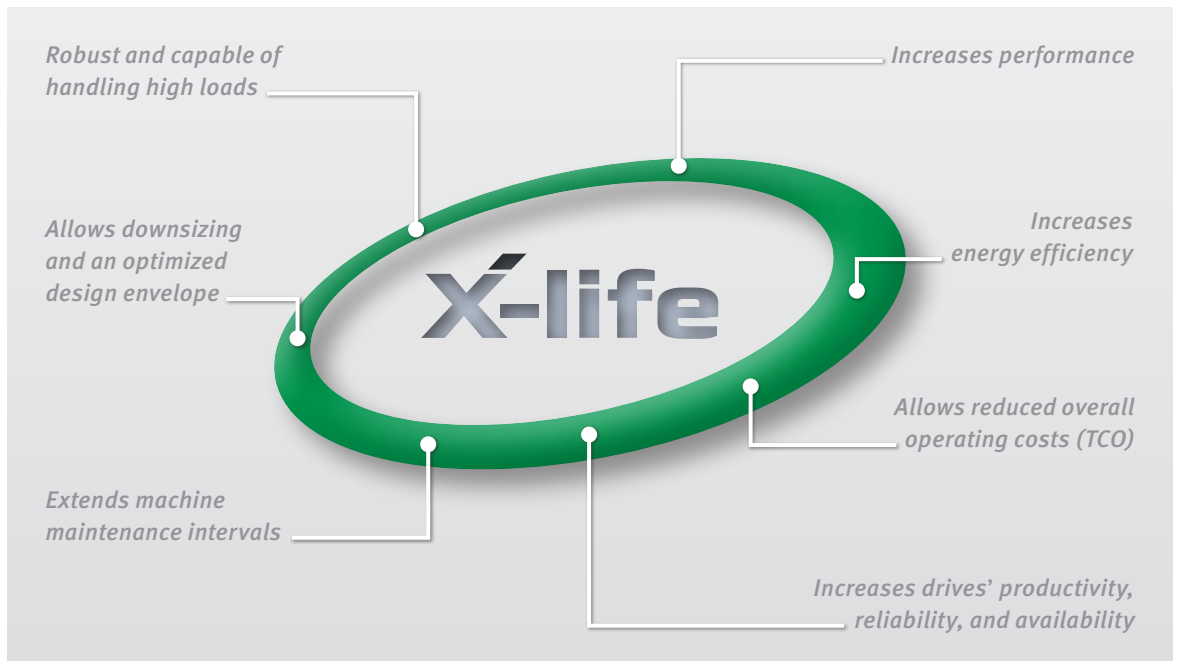


# Customer Benefits

**X-life provides solutions for central trends in drive technology.**

When an existing standard bearing is replaced with an X-life rolling bearing, the drive operator firstly benefits from an increased bearing rating life and extended maintenance intervals. This improves the “total cost of ownership” and provides increased protection against failure for the drive or machine in question. However, the increased load rating also means that the bearings

can support higher loads while maintaining the same rating life, or the customer can use a smaller rolling bearing but maintain the same rating life and load carrying capacity and thus achieve a more compact design while saving weight. Their reduced friction and noise generation are also important arguments in favor of using X-life products.





**X-life**

The infographic features a central grey circle with the text 'X-life' and 'Higher load ratings'. This central circle is surrounded by three green circles, each containing an icon and a benefit. The top green circle has an infinity symbol and the text 'X times longer service life'. The bottom-left green circle has a circular arrow icon and the text 'X times more efficient use of space'. The bottom-right green circle has a weight icon and the text 'X times greater load-carrying capacity'. A large, light grey circular line encircles the three green circles.

**Higher  
load ratings**



**X times longer  
service life**



**X times more  
efficient use of  
space**



**X times greater  
load-carrying  
capacity**

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