APPLIED Industrial Technologies

SCHAEFFLER

We pioneer motion

FAG Special Spherical Roller Bearings with Durotect CK Coating in the Bore

for vibratory machinery

FAG spherical roller bearings for vibratory stresses

Operating conditions for FAG spherical roller bearings in vibratory machinery

Vibratory screens used for grading materials and other vibratory machinery are among the machines subjected to the most severe stresses.

The solution: FAG spherical roller bearings with Durotect CK-coated bore

Only high-quality, high-performance rolling bearings can withstand the extreme loads in the exciter units of vibratory machinery. This is why we recommend:

Spherical roller bearings in X-life premium quality. This ensures a reliable service life that is up to 70% longer than a “normal” bearing in the same installation situation.

In order to prevent fretting corrosion between the bearing bore and the shaft, FAG supplies spherical roller bearings with a Durotect CK coating in the bore.

This ensures that the possibility of displacement (non-locating bearing function) between the bearing bore and shaft in response to thermal influences is maintained over and beyond a long period of operation.

The dimensions and tolerances of bearings with a Durotect CK coating in the bore correspond to DIN/ISO dimensions and are interchangeable.

Bearings 22317-E1-XL-T41D to 22330-E1-XL-T41D come with a Durotect CK coating in the bore as standard.

Designation	Dimensions in mm		
	d	D	B
22317-E1-XL-T41D	85	180	60
22318-E1-XL-T41D	90	190	64
22319-E1-XL-T41D	95	200	67
22320-E1-XL-T41D	100	215	73
22322-E1-XL-T41D	110	240	80
22324-E1-XL-T41D	120	260	86
22326-E1-XL-T41D	130	280	93
22328-E1-XL-T41D	140	300	102
22330-E1-XL-T41D	150	320	108

d = bore diameter / D = outside diameter / b = width

The Durotect CK coating

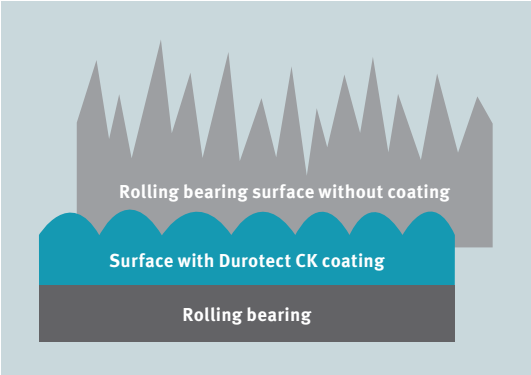
FAG spherical roller bearings with a Durotect CK coating in the bore provide effective support of severe vibrations

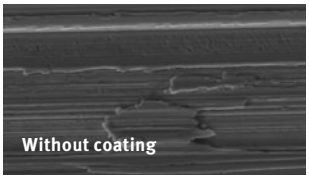
What exactly is Durotect CK?

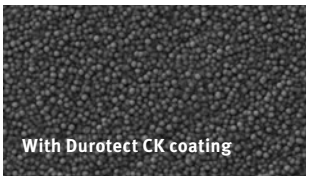
Durotect CK coatings are hard chromium coatings.
The special surface structure means that this hard chromium variant has special characteristics that contribute to reducing friction and reducing wear.

Durotect CK

- Layer thickness 1.5 – 3 µm
- Hardness 950 – 1300 HV
- Corrosion protection to DIN 50021 SS of 120 hours
- Chemical resistance







A question of structure: Surfaces coated with Durotect CK are more wear-resistant and have a friction-reducing effect

The benefits to you:

- Higher operational reliability, a very high load carrying capacity, and no fretting corrosion
- Longer operating life due to coated bore
- Heavy shock loads and radial acceleration are supported
- Coated inner ring bore allows for unencumbered thermal expansion of the shaft

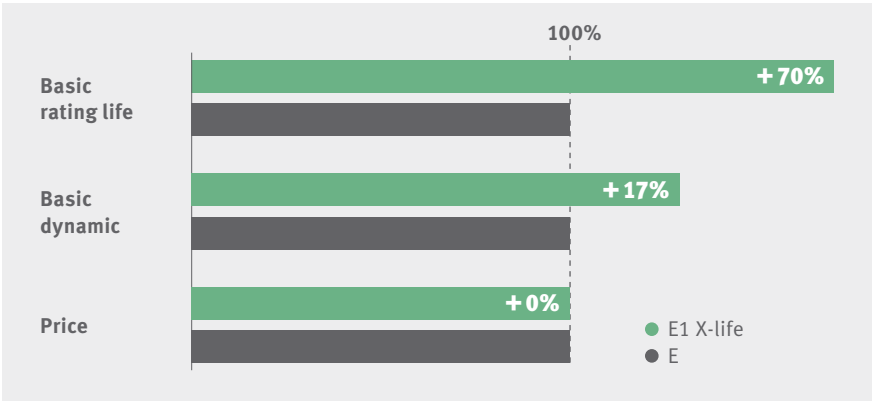
X-life premium quality

X-life is the seal of quality for ultra-high performance products, which are characterized by a longer rating and operating life – due to higher basic dynamic load ratings – than the previous standard.

What are the advantages of X-life quality over standard bearings?

- Design with increased performance capacity
- Improved raceway surface quality
- Reduced friction
- Increased basic dynamic load ratings
- Extended bearing life

For the operator, this means high equipment efficiency and reduced operating costs. Also, with downsizing, more cost-effective bearing arrangements are possible.



Above all, E1 X-life means an increase in the basic rating life

Spherical roller bearing with Durotect CK-coated bore

The cage solution for our vibratory screen bearings

Sheet steel cages

- Free space for lubricant
- Good grease/oil compatibility
- Suitable for extreme operating temperatures
- The cage is retained on the outer ring by a guiding ring
- High stability
- Low mass

Find out more about our vibratory screen bearings.

medias – Cement production, hard crushing, and grading

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