



Black Oxide Bearings

NBC has expanded its solution to the most challenging condition to meet application needs. The black oxide conversion treatment applied to the rings and rolling elements to improve lubricant adhesion on the raceway, which enhances the performance of bearings by reducing smearing wear and micropitting, especially during run-in periods.

Features

- ✓ Increased wear resistance during initial running-in period
- ✓ Improved adhesion properties of lubricant
- ✓ Repels chemical attack from aggressive oil additives
- ✓ Reduced hydrogen permeation

Benefits

- ✓ Increased performance under lubricant oil starvation condition
- ✓ Longer operating time
- ✓ Higher machine availability
- ✓ Increased wear resistance

Application

- ✓ Automotive alternator pulley bearings
- ✓ Wheel bearing
- ✓ Traction motors
- ✓ Wind mill application
- ✓ Industrial gearbox

Traction Motors Alternator Pulley

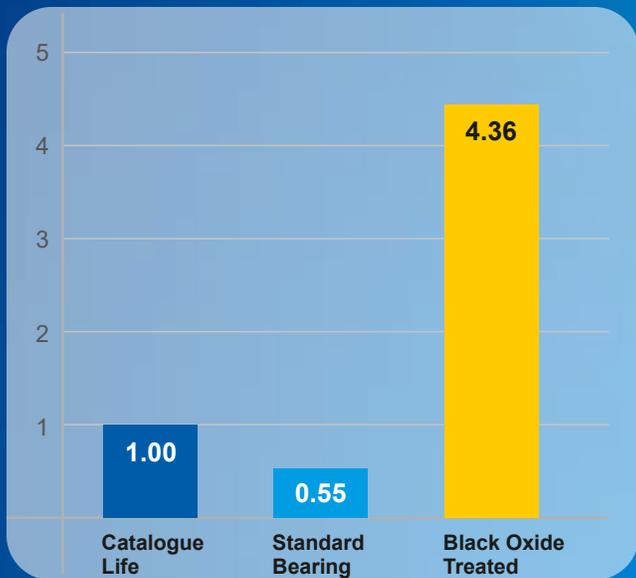


Specifications

- ✓ The oxide layer is approximately 1-2 μm in thickness.
- ✓ Conforming to standard DIN 50938
- ✓ NBC proprietary process ensures superior performance
- ✓ Multi-stage chemical process ensures better performance

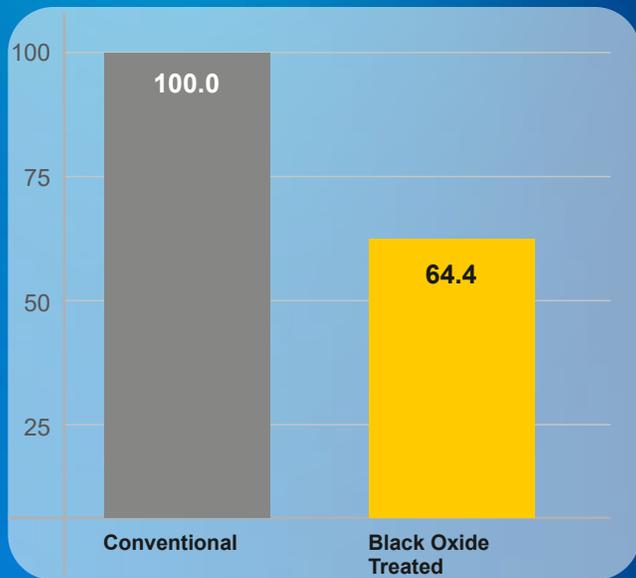
Technical Data

Comparison of service life under lubricant starvation :



Service life ratio:

Tested in one third lubricant flow condition



Material loss due to wear (%):

Load 0.3GPa, ISO VG 32 in 65% sliding to rolling ratio

