

Elliptical Raceway Slewing Ring Bearing

This slewing ring bearing features an elliptical raceway, an innovation over traditional double circle-arc raceways. The elliptical design increases load capacity by over 30% and doubles service life while saving over 20% in raw material costs.



Product Overview

Innovative Elliptical Raceway Design

This slewing ring bearing features the world's first ball-based elliptical raceway technology, an evolution of the traditional double circle-arc design. By optimizing the contact geometry, this bearing delivers significantly higher load capacity and extended service life compared to standard models of the same diameter. It provides a cost-effective, high-performance alternative to traditional three-row roller bearings across various heavy machinery applications.

Performance Metrics

Load Capacity Improvement

30 %

Load Capacity Increase

Service Life Improvement

100 %

Service Life Increase

Economic Benefits

Cost Savings Breakdown

Metric	Efficiency Gain
Raw Material Usage	Over 20% Saved
Procurement Cost	Over 10% Saved
Total Purchase Cost (vs. 3-row roller)	Over 35% Reduction

Application

Compatible Machinery Types

Cranes, Construction Machinery, Agricultural Machinery

Technical Features

Design Advantages

- Elliptical raceway geometry
- Hardened raceways for enhanced durability
- Precision-engineered rolling elements
- Compact design for space efficiency
- Direct replacement for three-row roller bearings