

ROX Reduces Maintenance and Increases Throughput in Cement Clinker Cooling Application

A cement production site was experiencing high maintenance demands on drag chain bearings within a clinker cooler operating under extreme conditions. Dust and material overflow during furnace pushes, combined with heavy contamination, high loads, and elevated temperatures, accelerated bearing wear. The difficult-to-access application utilized a large quantity of bearings and required approximately **15 days of maintenance downtime per year**, creating a strong need to extend preventive maintenance intervals and improve overall line availability.

The NTN Solution

NTN recommended ROX spherical roller bearings, designed to perform reliably in heavily polluted, high-temperature cement environments.

Key features of the ROX solution include:

- **100% interchangeability with standard open ISO solutions on the market**
- **Shields provide protection against dust**
- **Increased grease retention inside the bearing**

ROX bearings were validated directly in the clinker cooler drag chain application.

The Result

ROX remained fully operational after two years of continuous service, **doubling minimum service life** compared to premium open bearing solutions. This improvement reduced preventive maintenance operations by 50% and cut **annual maintenance downtime from 15 days to a maximum of 7.5 days**. For a production site with annual revenue of approximately \$172 million, the reduced downtime translated into an **estimated annual revenue increase \$5.75 million**.



VALUE ADDED BREAKDOWN

UPTIME IMPROVEMENT

\$5,750,000

DOCUMENTED COST SAVINGS

\$5,750,000



ROX

ROX

BORN FOR THE DUST.

- 100% interchangeable with standard open ISO solutions on the market
- Shields provide protection against dust
- Increased grease retention inside the bearing



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