



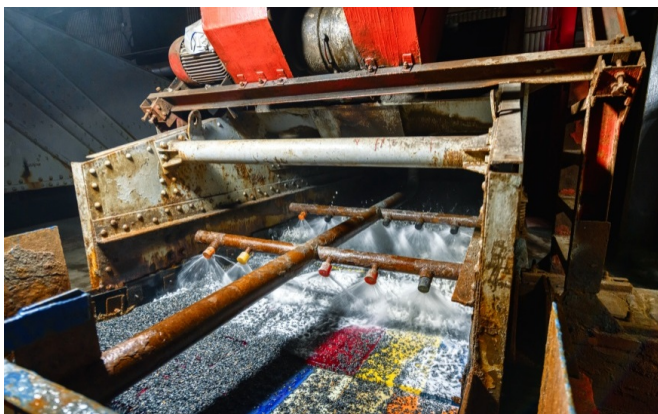
Industry: Quarry, Mining & Construction

Application: Conveyors

Cost Savings: EUR 74,733

Introduction

A customer in the QM industry was experiencing premature failure of cylindrical roller bearings used on vibration units for a block vibrator machine every 2-3 Months. The bearings run in a very harsh environment exposed to contaminants, heavy vibration and shock loads. The impact was increased maintenance and costly downtime. NSK proposed Spherical Roller Bearings VS series and supervised the fitting of the bearings – which outperformed over 12 months, reducing maintenance and associated downtime.



↑ Vibrating Screen

Key Facts

- Block vibrator machine
- Frequent bearing failure due to vibration
- NSK recommend vibratory specification spherical roller bearings
- Bearing life vastly improved
- Significant reduction in maintenance and lost production costs

Value Proposals

- The customer experienced failures on the vibrator machine every 2-3 months
- NSK performed an on-site Application Review as part of the AIP process
- NSK recommend the installation Spherical Roller Bearings - VS series
- Significant improvement demonstrated

Product Features

- Spherical Roller Bearings - VS series are manufactured from ultra clean steel for optimal fatigue resistance and long life
- Precision machined tough one piece brass cage, contoured roller pockets
- Improved surface roughness on rollers & inner & outer ring
- Special heat treatment rollers, prevent cracks from vibrations & shock loads
- Internal radial clearance set at 2/3 ISO standard bearings
- Outer dimensions set at 1/2 of ISO standard bearings



↑ Spherical Roller Bearing - Vibrating Screen Series

Cost Saving Breakdown

Previous Solution	Costs p.a.	NSK Solution	Costs p.a.
 Bearing costs	€ 9,239	Bearing costs	€ 2,310
 Engineering costs	€ 1,065	Engineering costs	€ 118
 Cost of lost production	€ 56,798	Cost of lost production	€ 0
 Other Costs: Shaft Inspection	€ 10,236	Other Costs: Shaft Inspection	€ 177
Total Costs	€ 77,338		€ 2,606