

Success Story

Industry: Food and Beverage

Application: Potato Washer

Cost Savings: 22,250 euros

Introduction

A premium snack processing company was experiencing frequent bearing failures on a potato wash application causing significant downtime and reduced production. NSK carried out a bearing failure analysis revealing ingress of contamination leading to significant reduction in life time. NSK was asked to find a solution to this problem in order to improve service life. A trial was agreed which resulted in an increase of bearing life by 2 times.

Key Facts

- High volume potato cleaning line
- Frequent bearing failure causing significant production downtime and high costs
- Water and soil particle ingress
- Application indoor and outdoor (climatic influences)
- NSK's solution: replacing standard ball bearing with NSK's Molded-Oil ball bearing
- No bearing failures for more than 8 months
- Productivity improvement
- Cost saving generated



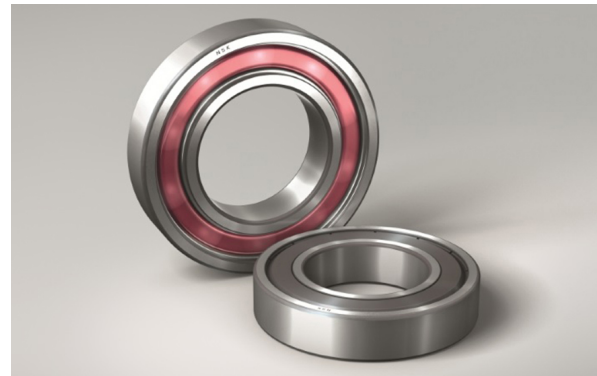
↑ Potato washing application

Value Proposals

- NSK engineering conducted a Bearing Failure Analysis showing ingress of contamination into the bearing (Water / Soil)
- Replacing the standard ball bearings with Molded-Oil ball bearings
- A trial was agreed which resulted in an increase of bearing life from 4 months to over 8 months
- The customer benefited from increased productivity and reduced maintenance costs
- No need for re-lubrication

Product Features

- Molded-Oil provides continuous supply of lubrication oil
- Stainless steel for corrosive environments
- Grease-free property with no oil refilling keeps operating environments clean
- Operating life more than twice as long as grease lubrication, in water or dust-contaminated environments
- Contact-seal type available in standard inventory for ball bearings
- Achieves extended maintenance-free performance as Molded-Oil provides a continuous supply of lubricant
- Available for high speed applications
- Available in ball bearing, spherical roller bearing and tapered roller bearings types



↑ Molded Oil Bearing

Cost Saving Breakdown

Before	Cost p.a.	NSK Solution	Cost p.a.
 Engineering costs	€ 2.500	Engineering costs	€ 250
 Lost of production	€ 20.000	No modification necessary	€ 0
Total Costs	€ 22.500		€ 250