Success Story

Industry: Food and Beverage
Application: Belt Tensioner
Cost Savings: € 15 360

Introduction

Key Facts

- Frequent bearing failures occuring every 4 weeks
- Water ingress from frequent wash down resulting in lubricant degradation, seal damage and corrosion of the rolling elements and raceways
- NSK Solution: Stainless Steel Bearings with Molded-Oil lubrication
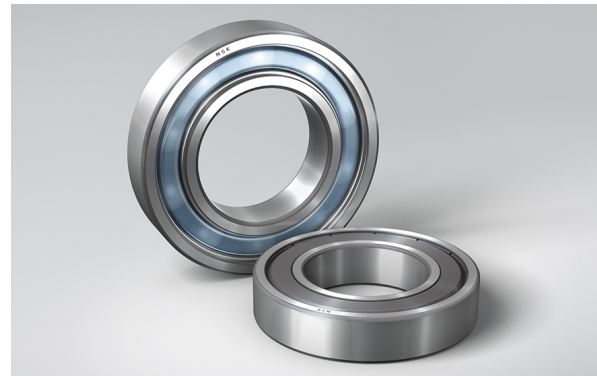- Significiant life time increase

↑ Production line of frozen pizza

Value Proposals

- NSK Application Review determined the bearing failure was due to degradation of the lubricant and ingress of water
- NSK recommended the use of Stainless Steel Bearings with Molded-Oil lubrication
- Molded-Oil bearings use an oil impregnated polymer as the lubricant instead of grease

- The polymer matrix slowly releases oil to lubricate the bearing, while at the same acting as a barrier to protect the bearing from contamination. The lubricant cannot be washed out as with standard greases and therefore the life of bearings in wet environments can be increased significantly
- A trial resulted in a substantial increase in bearing life and a reduction of the machine down time

Product Features

- Molded-Oil provides continuous supply of lubricant

- Grease-free property with no oil refilling keeps operating environments clear

- 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 through constant supply of lubricant; availble for high speed applications

- Available in ball bearings, spherical and tapered rolling bearings

- Stainless steel for corrosive environments

↑ Molded-Oil bearings

Cost Saving Breakdown

Before		Cost p.a.	NSK Solution	Cost p.a.
	Bearing replacement every 4 weeks	€ 2.160	Bearing cost	€ 1.800
	Relubrication of bearings	€ 600	No relubrication	€ 0
	Maintenance costs	€ 14.400	No maintenance costs	€ 0
Total Costs		**€ 17 160**		**€ 1 800**