

## Success Story

Industry: Food and Beverage

Application: Carrot Washer

**Cost Savings: € 12 139**

### Introduction

A premium vegetable processing company was experiencing frequent bearing failure on a vegetable 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 recommended NSK Life-Lube with Molded-Oil inserts. A trial was conducted demonstrating improved bearing life which reduced downtime, maintenance costs and increased productivity generating a significant cost saving to the customer.

### Key Facts

- High volume vegetable cleaning line
- Frequent bearing failure causing significant production down time and high costs
- Water and hard particle ingress
- NSK Solution: Life-Lube with Molded-Oil inserts
- Bearing life increased from 1 1/2 months to over 12 months
- Productivity improvement
- Cost saving generated



↑ Carrot wascher

### Value Proposals

- NSK engineering conducted a Bearing Failure Analysis showing ingress of contamination into the bearing causing washout of lubricant from the bearing and subsequent failure
- NSK engineering conducted a Process Mapping exercise of the application identifying problematic bearing areas
- NSK engineering conducted an Application Analysis of the washer application and proposed NSK Life-Lube units with Molded-Oil inserts
- A trial was agreed which resulted in an increase of bearing life from 1 1/2 months to over 12 months
- The customer benefited from increased productivity and reduced maintenance costs


## Product Features

- PBT thermoplastic resin housing
- Molded-Oil inserts (with solid lubricant)
- Martensitic stainless steel
- Nitrile rubber seals
- Available in Pillow Block, 2 and 4 bolt flanges and take-up unit housings
- Bore size 20mm - 40mm
- Corrosion resistance
- Paint free housings, preventing chipping & flaking
- Resistant to contamination increasing operating life
- Ideal for operations where fluid process is unavoidable
- No need for re-lubrication



↑ NSK Molded-Oil insert

## Cost Saving Breakdown

Before	Cost p.a.	NSK Solution	Cost p.a.
 Loss of production due to unplanned stoppages	€11.491	Continuous operation without failure. No down time costs in 12 months	€0
 Cost of maintenance: 2 persons €18/hr for 2 hrs x 9 stoppages per year	€648	No breakdowns and no maintenance costs €0	€0
<b>Total Costs</b>	<b>€ 12 139</b>		<b>€ 0</b>