

## Success Story

Industry: Food and Beverage

Application: Milk Processing Plant

**Cost Savings: 13,304 euros**

### Introduction

The customer was experiencing regular bearing failure on their conveyor at a Milk Processing Plant. The bearings were in an inaccessible area and were difficult to lubricate. The customer had to change the bearings every 10 weeks, resulting in down-time of 3 hours at least twice a year. NSK reviewed the bearing application and suggested that Stainless steel bearing inserts fitted with Molded-Oil would give a better service life. They combined these with the additional benefits of Silver-Lube® polymer housings to provide the Life-Lube® combination. Trials showed that bearing life was extended from 10 weeks to over 1 year.

### Key Facts

- Milk processing plant
- Customer had to change the bearings every 10 weeks
- NSK solution: Life-Lube® Housings with Molded-Oil Bearing insert
- Reduced downtime
- Productivity improvement
- Cost saving and zero maintenance



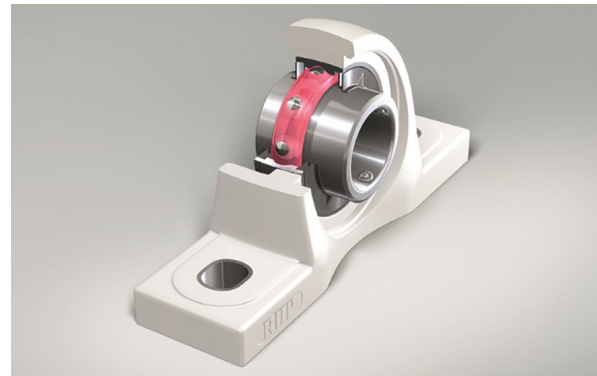
↑ Milk processing

### Value Proposals

- NSK application review highlighted poor bearing life and difficult maintenance
- NSK recommended Molded-Oil inserts and Silver-Lube® plastic housings
- Increased corrosion resistance and Molded-Oil Lubrication resulted in over 12 months lifetime
- Additional benefit gained due to not having to replace shaft after bearing failure
- Technical support provided for fitting new Life-Lube® units

## 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 process fluid is unavoidable
- No need for re-lubrication



↑ Life-Lube® housing with Molded-Oil bearing insert

## Cost Saving Breakdown

Before	Cost p.a.	NSK Solution	Cost p.a.
 Old bearing design:	€140	New bearing design:	€136
 Labour: 2 fitters × 3 hours@ €25/h, 5 × year	€750	No maintenance	€0
 Downtime: 3 hours @ €2.055, 2 × year	€12.330	No downtime	€0
 2 x shafts replaced @ €110 each	€220	No replacement shafts	€0
<b>Total Costs</b>	<b>€13.440</b>		<b>€136</b>