

Success Story

Industry: Food and Beverage

Application: Baby Leaf Harvester

Cost Savings: € 63 300

Introduction

A processor of food products harvests baby leaf products for sale to leading supermarkets. Its leaf harvester machine had a variety of low cost mounted unit bearings to support shafts of various sizes. During the harvesting season, the machine was subject to frequent bearing failures due to ingress of dirt and water. When a failure occurred the harvesting machine was stopped whilst repair work was carried out, leading to production losses and in some cases to spoilt crops. NSK experts were invited to review the application and working conditions. To help combat the ingress issues, they recommended that the mounted unit bearings were replaced with Silver-Lube with improved flinger seal arrangement and Stainless Steel Bearings. During the season after the replacement, only two failures occurred, leading to productivity improvement and a significant reduction of costs caused by production losses.

Key Facts

- Baby Leaf Harvester
- Low cost bearings used
- Early bearing failure due to water and dirt ingress
- NSK Solution : Silver-Lube and flinger seal stainless steel bearings
- Vast reduction of bearing failure
- Cost savings for bearings and maintenance works leading to a productivity improvement



↑ Baby Leaf Harvester

Value Proposals

- NSK reviewed the bearing application and operating conditions and concluded ingress of water and dirt caused early failure
- NSK solution was to fit Silver-Lube housing and flinger seal stainless steel bearings
- The bearings were fitted for the new season
- After replacement, only two bearing related failures were reported for the whole of the season
- Major reduction of maintenance costs
- Significant improvement on productivity

Product Features

- High grade stainless steel bearing-rings, cage & balls, seal core & grub screws, grease nipple & holt hole liners
- Silicon rubber seals and stainless steel flingers
- Thermoplastic polyester resin housing; plastic end covers available
- Factory filled with a wide temperature USDA H1 food grade grease
- Silver-Lube® is available in four different geometries
- Resistant to cleaning agents and chemicals thus resistant to corrosion & peeling paint
- Long life / low cost of ownership
- Superior resistance to regular washdowns & chemical attack due to effective & efficient sealing arrangement
- Relubrication is possible for long trouble-free life, minimising maintenance, maximising productivity
- Approved to NSF, temperature scale from -20°C to +90°C



↑ Silver-Lube Bearing Units

Cost Saving Breakdown

Before	Cost p.a.	NSK Solution	Cost p.a.
 Lost production costs	€ 126.600	Lost production costs	€ 63.300
Total Costs	€ 126 600		€ 63 300