

## Success Story

Industry: Print

Application: Ink Pad Roller

**Cost Savings: 32,569 euros**

### Introduction

A magazine printing company was using open Deep Groove Ball Bearings in an ink pad roller application. Bearings were lubricated by the ink in which they were submerged. The OEM manufacturer recommended changing to C4 clearance, which increased bearing life but not by much, with the bearings onsite failing at a rate of 100 per month. NSK conducted a Bearing Failure Analysis and concluded that the bearings were failing as a result of the lubricating ink solidifying on the raceways, causing bearing failure. NSK recommended Deep Groove Ball Bearings with DDU seals, resulting in no bearing failures reported within a month.

### Key Facts

- Ink Pad Roller Application at a magazine printing company
- Using submerged open bearings lubricated by ink
- Unplanned regular failures of bearings
- 100 bearing failures per month on site in same application
- NSK solution: DDU type seals
- No bearing failures in a month



↑ Printing Machine

### Value Proposals

- Failed Bearing Analysis showed ink build up on raceway, resulting in failure
- DDU sealed Deep Groove Ball Bearings proposed
- Sealed bearing require no modification to housing or shaft
- No bearing failures within a month
- Cost saving was achieved

## Product Features

- Deep Groove Ball Bearings with double seal DDU
- Contact seal designed for maximum protection against all contaminants
- Patented triple lip mechanism for excellent dust and water protection
- For lower speed and temperature limits where maximum sealing is usually critical
- Constant friction torque
- Good grease retention



↑ Deep Groove Ball Bearings with DDU Seals

## Cost Saving Breakdown

<b>Before</b>		<b>Cost p.a.</b>	<b>NSK Solution</b>		<b>Cost p.a.</b>
	Bearing costs for 1.200 bearings per year	€ 31.800		Bearing costs for 180 bearings per year	€ 763
	Maintenance and labour costs	€ 1.532		No maintenance costs	€ 0
<b>Total Costs</b>		<b>€ 33.332</b>			<b>€ 763</b>