



## Industry: Steel & Metals

## Application: Rolling Mills

**Cost Savings: EUR 160,896**

### Introduction

At a large German steelworks, the back-up rolls in a cold rolling mill continually failed after a short time. The purchasing department requested the use of competitor bearings for cost reasons. NSK checked the application and found out that the competitor bearings were running uneven after only a short period of use. NSK recommended to use back-up rollers, which can be reground several times. It is common that within this application bearings are turned and reground. The NSK bearings are now running for up to 1.5 years without any unplanned failures. Unplanned stoppages and maintenance cost have been reduced.



↑ Cold Rolling Mill

### Key Facts

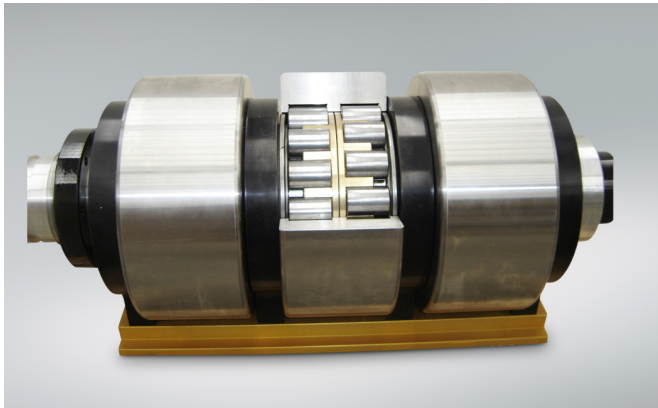
- In a cold rolling mill of a German steelworks competitor bearings failed after a very short time of running
- The purchasing department requested the use of these bearings for cost reasons
- NSK reviewed the application recommended to use NSK back-up rollers which can be reground several times
- Within this application it is common to turn the bearings after 4-6 weeks and re-grind them up to 10 times
- The NSK bearings were running for around 1.5 years without any failures
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### Value Proposals

- NSK engineering inspected the application and the bearings to find the root cause of failure
- Suggested to use NSK back-up rolls with a high running accuracy
- As a result the bearing life was increased to more than 1.5 years
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**Product Features**

- Cylindrical Roller Bearings, 2- or 3-rows
- Special designed shields
- Enhanced running accuracy
- Paired on axes
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↑ Back-up rolls - cylindrical roller bearing

**Cost Saving Breakdown**

Previous Solution	Costs p.a.	NSK Solution	Costs p.a.
 Bearing costs	€ 244,592	Bearing costs	€ 134,296
 Engineering costs	€ 7,200	Engineering costs	€ 600
 Cost of lost production	€ 48,000	Cost of lost production	€ 4,000
<b>Total Costs</b>	<b>€ 299,792</b>		<b>€ 138,896</b>