

## COST SAVINGS: \$ 35,000

Application: PM #8 Drive Side Dryer Cans  
#23 and #29

Solution: Proper Lubrication

### INTRODUCTION

A competitor's dryer bearings were failing causing heat discoloration and spalling on the inner ring. No signs of water or a static event that was leading to the failures. It was determined that the failures may be caused by ineffective lubrication film. The mill reliability group indicated that there were going through 4 pints per minute of oil and unsure of the oil temp or steam pressure going to the dryer side.

### THE KEY FACTS

- › Application: PM #8 Drive Side Dryer Cans #23 and #29
- › End-product: Paper
- › Number of machines: 1
- › Status: Still running
- › Problem: Improper lubrication leading to bearing failures
- › Objective: Increase bearing life

### VALUE PROPOSALS

- › NSK recommended specific flow rates for spherical dryer bearing taking into account the application steam pressure.
- › NSK also suggested verifying oil temperatures and recommended continuous lubrication testing for water content.
- › To date no other failures have been reported.

Pictured: NSK TL  
Spherical Roller Bearing



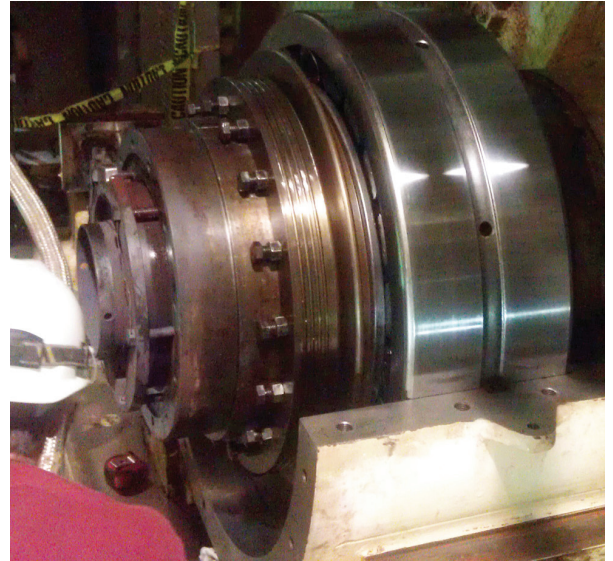
## INDUSTRY SPECIALIST SUPPORT

Industry Specialist's experience and knowledge help optimize bearing performance and increase reliability by:

- › Improving productivity
- › Reducing maintenance
- › Improving efficiency
- › Optimizing design
- › Reducing total cost

Services include:

- › Maintenance training
- › Machine and bearing failure analysis
- › Bearing storage solutions
- › Troubleshooting
- › Tilt and deflection testing
- › Installation and removal
- › Maintenance Best Practices



## COST SAVINGS BREAKDOWN

	BEFORE	COST	NSK SOLUTION	COST
› Bearing Cost	TL spherical roller bearing replacement cost	\$35,000.00	0 bearings	\$0
	<b>Total</b>	<b>\$35,000.00</b>	<b>Total</b>	<b>\$0</b>
			<b>Total Cost Saving</b>	<b>\$35,000.00</b>