

# NTN's Sentinel™ Series Churns Through Downtime on Dough Mixer

A producer of frozen, precooked, and dried pasta products was experiencing weekly bearing failures on its dough mixer due to the frequent washdowns required in the production area. The recurring failures were resulting in over \$5,500 in lost production each week.

NTN's engineering and sales support team performed a thorough evaluation of the mixer and determined the failures were being caused by grease washout that occurred during the regular equipment washdowns.

## The NTN Solution

NTN's team recommended that the bearings being used in the mixer be replaced with our Sentinel Series ball bearings. Our Sentinel Series features corrosion-resistant stainless steel ball bearings with seals and NSF H1 registered solid lubricant. The solid lubrication provides up to 21 times better washout resistance than standard grease and the seals provide improved protection over standard deep groove ball bearings, which is critical to extending the life of equipment exposed to moisture.

## The Result

The NTN solution lasted over six months, cutting yearly bearing failures by 2,300%. The increased uptime, reduced maintenance, and decrease in bearing spend resulted in \$320,000 in annualized savings for the customer.



## VALUE ADDED BREAKDOWN

### UPTIME IMPROVEMENT

**\$276,000**

### REDUCED ACQUISITION COST

**\$25,600**

### MAINTENANCE REDUCTION

**\$18,400**

### DOCUMENTED COST SAVINGS

**\$320,000**

CS-0570



**ANNUALIZED  
COST SAVINGS  
\$320,000**

# THE NTN ADVANTAGE: SOLID LUBRICATION

Solid lubrication is a maintenance-free solution that eliminates greasing requirements and significantly improves life in harsh wash-down applications.

- **NSF H1** compliant
- **21X** the grease washout resistance
- **Zero** grease leakage
- **Zero** re-lubrication



Nonfood Compounds  
(Category Code H1)



## SENTINEL SERIES FEATURES & BENEFITS



- Food-grade solid lubricant eliminates maintenance, resists wash-out
- Stainless steel housings with stainless steel inserts prevent corrosion from moisture and harsh cleaning agents
- All units come equipped with your choice of open or closed cover configurations



## Don't get mixed up with downtime.

We're here to help you achieve your productivity and performance goals. For more information, contact your NTN Sales Representative or call **1.800.323.2358**. For technical questions, email [eng@ntnamerica.com](mailto:eng@ntnamerica.com).

NTN BEARING CORPORATION OF AMERICA  
1600 E. Bishop Court • Mount Prospect, IL 60056-7604  
Tel: 847-298-7500 • Fax: 847-294-1205 • [www.ntnamerica.com](http://www.ntnamerica.com)

# Beyond Bearings

Training. Installation Support.  
Trouble-shooting. And more.

When you choose NTN, your team is equipped with all the necessary tools and resources to get the job done right. From installation to problem-solving, we'll be there with the hands-on support you need to take on your toughest challenges. This includes extra services such as:



### Technical Training Unit

On-site, mobile training unit offering specialized, hands-on instruction from NTN engineers



### Product Training School

Three days of in-depth instruction from NTN engineers at headquarters  
([go.ntnamerica.com/trainingschool](http://go.ntnamerica.com/trainingschool))



### eKnowledge

WEB-BASED TRAINING PROGRAM

Six online product training modules covering different bearing types and nomenclature  
([www.ntnamerica.com/eknowledge](http://www.ntnamerica.com/eknowledge))



### NTN Bearing Finder

Customizable search tool featuring exhaustive data sets, comprehensive part interchanges and interactive CAD drawings  
([bearingfinder.ntnamerica.com](http://bearingfinder.ntnamerica.com))

# NTN®