

# NTN's Sentinel™ Series Improves Filling & Capping Operations at Major Beverage Plant

A major beverage bottling and distribution plant in Florida was having repetitive failures on their bottling line. These failures were causing a loss of production valued at \$10,000 per month.

NTN's engineering and sales support team performed a thorough evaluation of the plants' 120-head filling machine. They identified that *20 heads (17%)* on the machine were failing per month, causing 1-1.5 hours of lost production due to bearing lubrication issues.

## The NTN Solution

NTN's team recommended that the plant replace the standard ball bearings utilized in the bottling heads to a Sentinel Series ball bearing. Our Sentinel Series ball bearings are stainless steel ball bearings with two seals and NSF H1 registered solid lubricant. The solid lubrication provides up to 21 times better wash-out resistance than standard grease and the seals improve the protection even further, which is critical to extending the life of this equipment.

## The Result

The NTN solution reduced the bottling head failures by over *95%* to less than *1 per month* compared to 20 failures per month previously.

This increased uptime and reduced maintenance has resulted in over \$183,000 in savings in the first year. The plant was ecstatic about the dramatic increase in uptime and even more impressed that the solution also eliminated lubrication requirements and minimized opportunities for grease contamination. The plant has since converted all its problem applications to NTN Sentinel Series.



## VALUE ADDED BREAKDOWN

### UPTIME IMPROVEMENT

**\$120,000**

### MAINTENANCE REDUCTION

**\$48,000**

### BEARING USAGE REDUCTION

**\$15,780**

### DOCUMENTED COST SAVINGS

**\$183,780**

Cost001320



# 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 or thermoplastic 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



## Let us help you keep production flowing.

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  
([www.go.ntnamerica.com/trainingschool](http://www.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  
([www.bearingfinder.ntnamerica.com](http://www.bearingfinder.ntnamerica.com))

# NTN®