

Maintenance Cost Saving in Bearing Applications



Hannover Messe – Bearing Conference

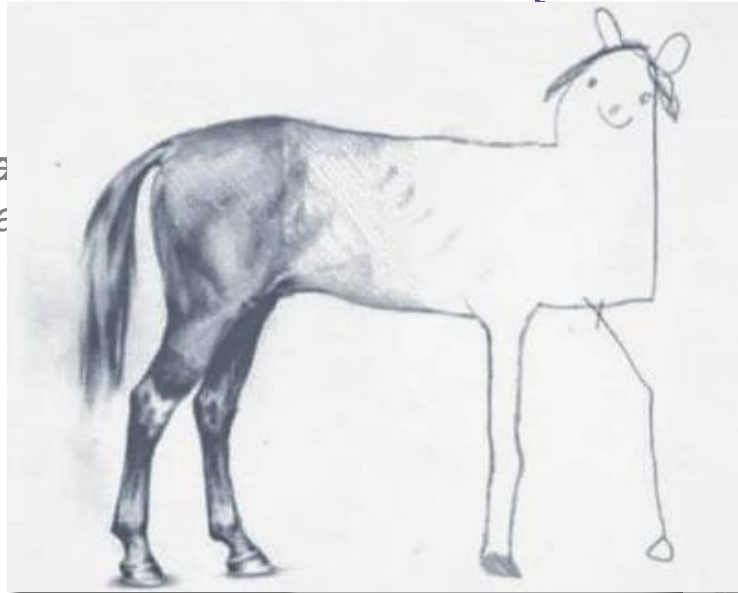
April 5, 2019

Steve Quintijn
Marketing Manager Bearings EMEA

Why would OEM's change a bearing supplier

- ✓ To solve a problem
- ✓ To make an improvement
- ? To get the lowest price

"These Sealmaster \$30.000 seals are savings. On this paper it is fair to say"



Applications
Bearing in Beverage Industry

SEALMASTER



Leaving your comfort zone



Regal Overview

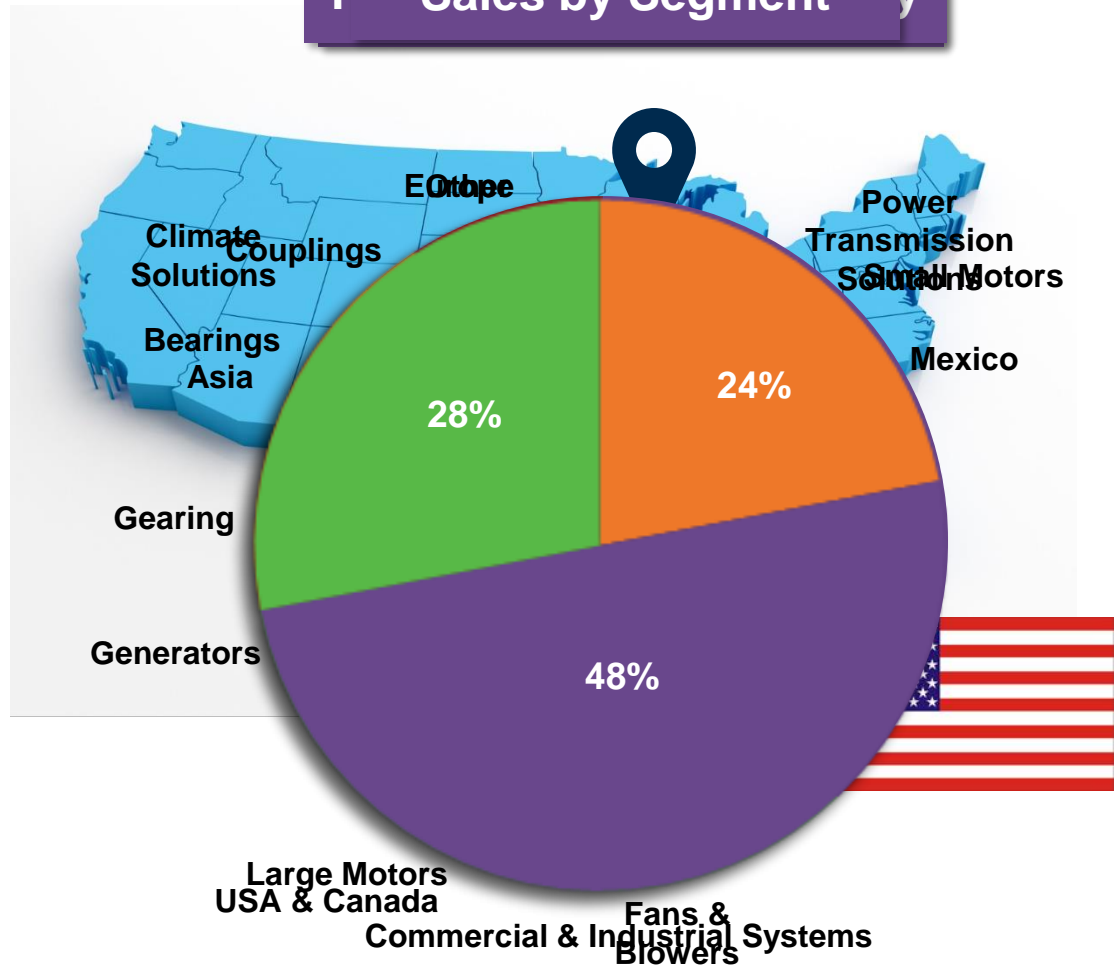
Founded in 1955 with
Headquarters in
Beloit, Wisconsin USA

2018 Sales of \$3.6B

Global Manufacturing
Footprint

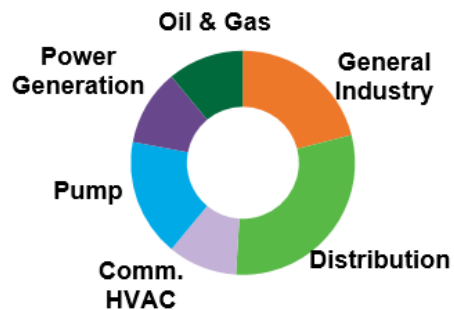
Leader in High Efficiency
Motors and Power
Transmission Systems

F Sales by Segment

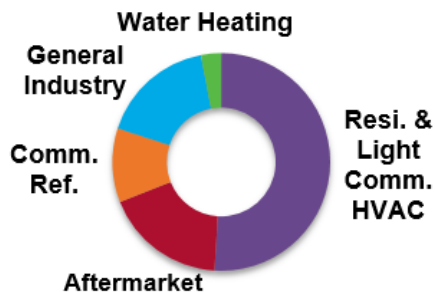


Segment End Markets, Products & Brands

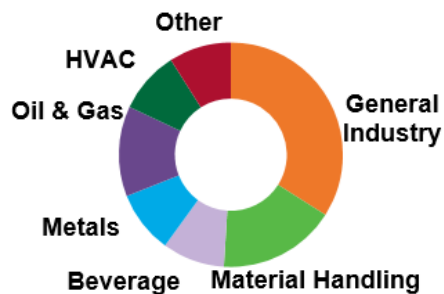
Commercial & Industrial Systems



Climate Solutions



Power Transmission Solutions



Bearing Overview

SYSTEM PLAST®



IT'S A TOUGH JOB.

Spend less time walking the job site.



REGAL®

Nickel Plated Bearing for exceptional wear and corrosion resistance.

• Less dust than with acetal chains

System Plast S.r.l. : Tel: (+39) 035.83.51.301 | www.systemplastsmartguide.com

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REGAL®

Browning®

McGILL®

ROLLWAY®

SEALMASTER®

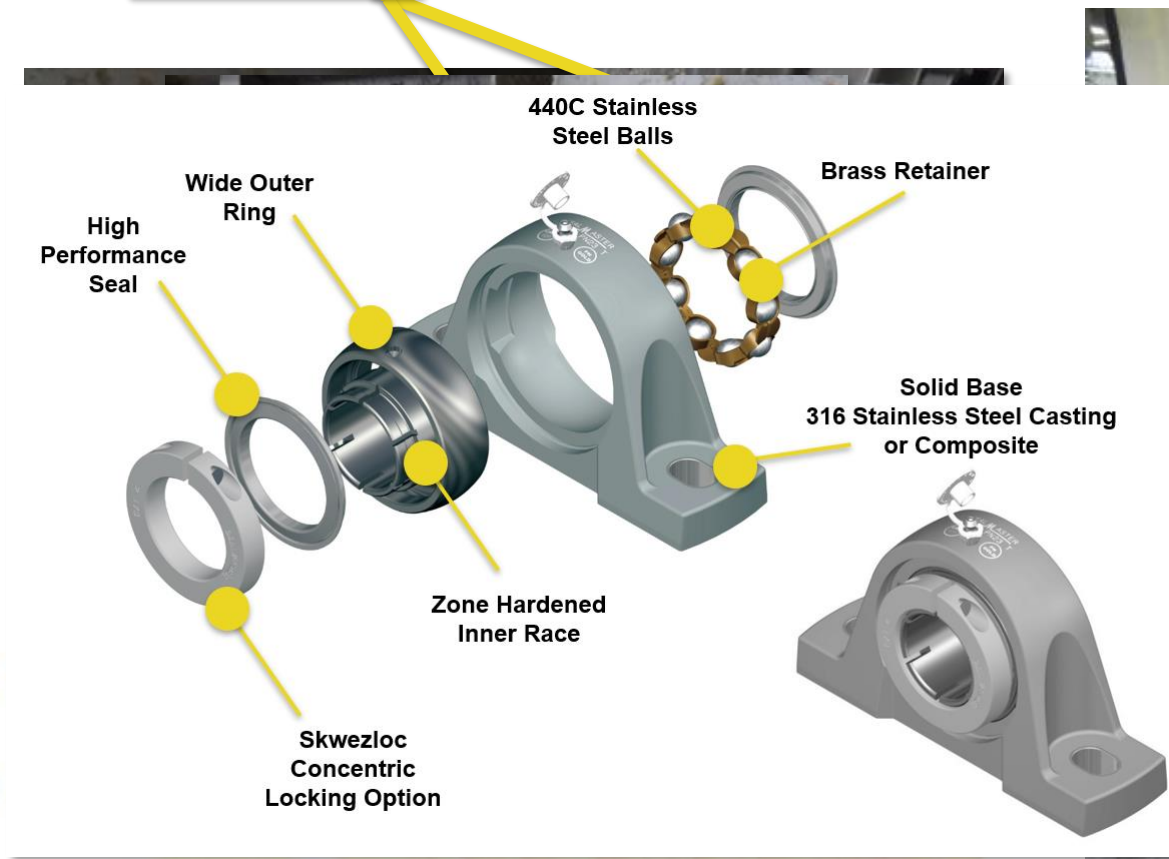


SYSTEM PLAST®

Optical potato sorter in Food Industry

PN Gold Pillow Block in potato chips plant

Type: CRPC-PN208T composite pillow block with SKWEZLOC locking collar



Bottle Conveyers in Beverage Industry

PN Gold RMW flange bearing in filling / crowning area
Type: CRBFRS-PN208T RMW



Engineered success factors

Widest insert in industry

SEALMASTER®

SEALMASTER®

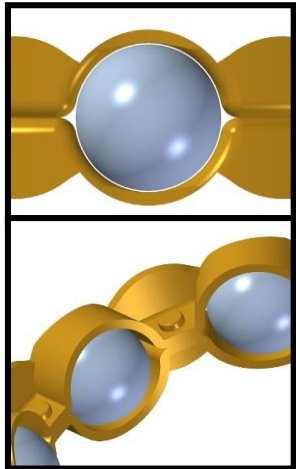
Standard bearing insert any brand.



SealMaster Gold Line Insert is Over 20% Wider than Industry Standard Ones. This feature provides Increased Grease Capacity, and Better Sealing Options.

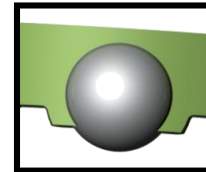
Optimized cage design

SEALMASTER®



Cage Design

- Superior pocket clearance
- Lubrication between rolling elements
- Patented design allows lubricant recirculation



Standard Cage Design

- Constant contact with rolling elements
- No lubrication can be built between rolling elements

High performance triple lip seal (HPS)



HPS Benefits

- Excellent Multi-directional Sealing, Favorable Wear Properties, Excellent Chemical Resistance and Good Speed and Drag Characteristics
- High Surface Finish and Non Corrosive to Prevent Seal Lip Wear. Flinger Directs Contamination Away From Sealing Surfaces
- Additional Barrier Against Contamination and Moisture



**Typical Stainless
1C Design**



**Typical
1C Design**



**PN Gold
HPS Design**

Skwezloc® Concentric Locking

- Initial Design and Patent: 1966 (for Sealmaster PN Gold™ Bearings)
- Maintains Ball Path Roundness
 - Minimal Vibration
 - Smoother, Quieter Operation
- Near-Perfect Shaft Concentricity
- Reduced Fretting Corrosion
- No Set Screw Burr Marring Shaft
- Higher Speed Capability
- Locks to Stainless Shafting
- Easy Installation
- Fluoropolymer Coated Collar
- Corrosion Resistant Coated Screw



Skwezloc® Concentric Locking Collar

Improved

SEALMASTER



Frozen Vegetable Processing

- bearings support conveyor rolls
- designed to transport a variety of materials through industrial furnaces
- superior strength through stainless steel housing



Ambient temperature lubrication

Reduced maintenance

version to eliminate the cost of relubrication

SEALMASTER®

**Sealmaster PN Gold
mounted ball bearing lasted
three seasons**

PRODUCT/PART DESCRIPTION:
RPB 215-C2

KEY FEATURES:

- Increased uptime
- Reduced maintenance
- Improved safety
- Increased productivity
- Reduced fuel consumption
- Increased operator comfort
- Increased machine life
- Increased resale value
- Increased operator safety
- Increased machine reliability
- Increased machine efficiency
- Increased machine performance
- Increased machine durability
- Increased machine flexibility
- Increased machine adaptability
- Increased machine versatility
- Increased machine range
- Increased machine capacity
- Increased machine speed
- Increased machine torque
- Increased machine power
- Increased machine efficiency
- Increased machine performance
- Increased machine durability
- Increased machine flexibility
- Increased machine adaptability
- Increased machine versatility
- Increased machine range
- Increased machine capacity
- Increased machine speed
- Increased machine torque
- Increased machine power

Sand conveyor

The contact seal that is de

conditions kept contamin

increasing uptime through

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APPLICATION
Frozen Vegetable Processing


SOLUTION TYPE
Maintenance Cost Savings

DESCRIPTION OF PROBLEM
A competitor's mounted ball bearings were failing during the production season resulting in costly unplanned downtime. The customer was using a nickel-plated cast iron housing with thin dense chrome plated insert bearings. The dumping action from the hopper caused a high shock load and some housings would crack under the loads. Then, the nickel would flake or peel off the cast iron and get into the processed food. Additionally, some bearings would seize or lock up.

SEALMASTER® BEARING SOLUTION
After review of the application, we selected a

After testing, the mounted ball bearing

KEY CUSTOMER FROM SEALMA!
The Sealmaster's competitive application by seasons and This resulted maintaini



APPLICATION
Recycling and waste conveyor

SOLUTION TYPE
Sealmaster gold line bearings

DESCRIPTION OF PROBLEM
A waste and recycling company had 1 imported mounted ball bearings on 11 lines every 1-2 months. The bearings dry, and gritty environment, resulting and unplanned downtime. After eval determined that the bearing seal are not standing up to the environment needed to obtain more impervious to order to reduce downtime, increase increase overall efficiency.

SEALMASTER® SOLUTION

<p>APPLICATION Sand Conveyor</p>	<p>PRODUCT/PART DESCRIPTION RFB 215-CZ</p>
<p>SOLUTION TYPE Cost savings through increased uptime, maintenance labor and replacement part reduction.</p>	<p>KEY CUSTOMER NEEDS/BENEFITS FROM SEALMASTERS The Sealmaster RFB type 215-CZ have greatly increased bearing maintenance, replacement according to customer requirements.</p>
<p>DESCRIPTION OF PROBLEM The compressor's type E, 2-15/16 shaft size bearings, at the tail end of the conveyor, were exposed to wet sand. Additionally, the screw pumps on the tail pulser caused bearing misalignment. This led to compromised bearing life and intrusion of wet sand into the bearing cavity.</p> <p>THE SOLUTION The RFB 215-CZ tapered roller bearings from Sealmaster's type E bearings. The RFB design maintains an effective seal with a static design range of 100°. The contact seal prevented wet sand and dirt conditions kept sand from entering the bearing, increasing the life of the plant!</p>	

KEY CUSTOMER NEED(S) AND BENEFITS FROM SEALMASTER®
The Sealmaster RPB tapered roller bearings have greatly increased bearing life, maintenance, replacement and cost according to customer feedback.