

SEALMASTER® RPB BEARING SOLUTION SAVES AGGREGATE PLANT OVER \$35,000!

RPB 207-C2 CR

APPLICATION

Counterweight Pulley on Material Conveyor.

SOLUTION TYPE

Maintenance Cost Savings. Increase in Production Uptime.

DESCRIPTION OF PROBLEM

Frequently bearing failures on a competitor's mounted Type E style tapered roller bearing was causing unplanned downtime. During inspection of failed bearings it was found that there was evidence of water ingress, contamination, and misalignment. While in operation the bearings are exposed to gritty water run-off, and misalignment caused by the deflection of the belt loading. The misalignment distorted the housing-mounted seals on the existing bearings, allowing water ingress into the bearing, and the Type E bearing is not designed for misalignment so risk of downtime was likely without the water ingress and contamination.

SEALMASTER® BEARING SOLUTION

Regal proposed the Sealmaster RPB-CR mounted tapered roller bearing which is a self-aligning bearing with race-mounted contact seals, was selected. The bearing assembly is design to accommodate +/-3 degrees of static shaft misalignment. The seals are integral to the bearing cartridge insert, they remain in positive contact with the inner ring when the bearing operates within the allowable range of misalignment. And

CR version with fluoropolymer housing and collar was selected to provide extra protection vs the environment. These features result in superior performance when exposed to wet, dirty conditions.

PRODUCT/PART DESCRIPTION

RPB 207-C2 CR

KEY CUSTOMER NEED(S) AND BENEFITS FROM SEALMASTER PRODUCTS

The robust design of the Sealmaster RPB has increased production uptime, while reducing maintenance and replacement part costs by delivering three times the life of the competitor's bearings, saving the plant over \$35,000!



SEALMASTER® RPB BEARING

RPB 207-C2 CR

FEATURES AND BENEFITS

- Sealmaster RPB series heavy duty tapered roller bearings designed for radial, thrust and combination loading are available with a wide variety of features:
 - Inch and metric bore size from 1 3/16" to 5" bore and 35 to 125 mm
 - Multiple housing styles (RPB- 2 and 4 bolt pillow block / RFB - 4 bolt flange, RFP - Piloted flange)
 - Multiple locking styles (Double lock collar as standard, Single lock collar specify a -A style)
 - Multiple sealing options
 - Non-expansion and expansion
- Unitized, replaceable cartridge insert allowing +/- 3 degrees static misalignment capability has factory controlled clearances and is factory lubricated.
- Durable fluoropolymer coated, cast iron, split housings allow quick insert replacement when change-out is needed while the housing base remains fixed and aligned with the shaft, reducing downtime and maintenance costs.
- Housing equipped with fluoropolymer coated bolts, and stainless steel washers and grease fitting.
- Black oxide standard on outer rings and seal components inhibits corrosion.
- Anti-rotation pin helps prevent the bearing OD from creep/rotation due to vibration over time.
- Direct lube and venting system:
 - Provides a direct lubrication path into the bearing
 - Secondary internal relief port helps prevent seal damage by venting pressure from over greasing
 - Grease fitting position at 30° resulting in less chance of being broken off.
- Race mounted seals are not subject to misalignment distortion and direct contaminant away from the sealing surface:
- Contact seal for wet, moist conditions (-C).
- Lock collars with two, diamond faceted point setscrews at 120 degrees for balanced, three point contact.
- Expansion roller bearing pillow blocks available for use when significant temperature differentials are expected between shafts and mounting structures or when shaft is unusually long - specify ERPB.
- Permanent metal nameplate allows for easy identification after years of operation.

SEALMASTER®

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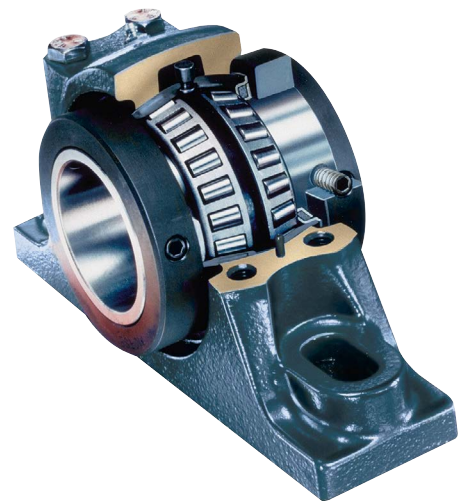
APPLICATION CONSIDERATIONS

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