Garlock
an EnPro Industries family of companies

# Case Study: Split GUARDIAN™ Primary Metals

## INDUSTRY
Primary Metals

## CUSTOMER
A large overhead crane OEM for a primary metals manufacturer of hot and cold band carbon steel products.

## BACKGROUND
A primary metals manufacturer was using split seal technology that required frequent maintenance due to leaks within several gearboxes on overhead cranes. The decision was made to evaluate alternate sealing technologies to reduce downtime and improve safety.

## CHALLENGES FACED
The primary metals manufacturer has approximately 100 overhead crane gearboxes throughout the facility. Many of these cranes are critical to the operation of the mill and will paralyze the mill if they go offline. Most of the gearbox shafts have grooving from prior lip seal technology which is very costly to repair/replace. When a gearbox fails prematurely, an outside contractor must be brought in with a crane to remove the gearbox. This costs a minimum of $20,000 per occurrence, not including downtime.

## OPERATING CONDITIONS
Size: 10.000" - 20.000" shaft
Temperature: up to 250°F (up to 121°C)
Application: Gearbox
Media: Oil
Pressure: NA
Speed: 50 RPM

## SOLUTION AND BENEFITS
Garlock proposed a split GUARDIAN™ bearing isolator as a solution. The GUARDIAN™ bearing isolator has been in service for approximately 2 years with no leakage to date. The mill has made the decision to transition to split GUARDIAN™ bearing isolators on all overhead crane gearboxes and will install as outages are scheduled. The estimated annual savings for each assembly is $100,000. This also affords the customer the luxury of a predictable and proactive preventative maintenance program to minimize downtime.

For more information, please visit:
http://www.garlock.com

GARLOCK
an *EnPro* Industries family of companies
Tel: 1-877-GARLOCK / 315.597.4811
Fax: 800.543.0598 / 315.597.3216
www.garlock.com