

# Steel Mill Reduced Bolt Seizures with Chesterton® 783 ACR

Steel Industry
783 ACR Corrosion-Resistant Anti-Seize Compound
IL/MRO Case Study

# **Challenge**

## **Background**

At a steel mill, caster segment bolts were seizing due to extreme pressure, high temperatures, moisture, and underperforming anti-seize. As a result, bolts could not be removed with a wrench.

During caster maintenance—typically after processing 1.5 million tons (approximately every 3 – 4 months)—2 – 3 out of the 4 segment bolts had to be cut off with a torch for removal. Together, there were 16 segments with 64 bolts. Each segment bolt cost \$1,000.

The facility wanted to extend the service life of the expensive bolts and reduce the downtime during the maintenance cycles.

Steel casting at a steel mill where caster segment bolts undergo extreme environment.

# **Solution**

#### **Product**

A Chesterton specialist diagnosed the issue and recommended Chesterton® 783 ACR Corrosion-Resistant Anti-Seize Compound for the segment bolts. This ceramic-based anti-seize, featuring Chesterton's QBT™ Quiet Bearing Technology, was chosen for its exceptional pressure resistance, water washout protection, and corrosion resistance. Its fine particle size helps ensure complete bolt coverage and protection. 783 ACR Anti-Seize effectively separates metal surfaces on nuts and bolts, preventing cold welding and galling.

\$ = USD

# 783 783 783

Chesterton 783 ACR Anti-Seize with high pressure, corrosion, and water resistance.

# **Results**

### Savings of Time, Labor, and Money

Since implementing **783 ACR Anti-Seize**, the steel mill has not needed to use a torch to remove caster bolts from the segments. This significantly reduced maintenance costs and downtime previously required during every shutdown.

#### Cost breakdown:

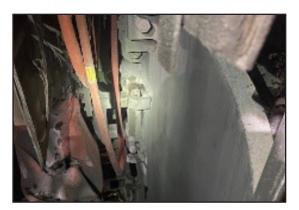
Cost of a segment bolt \$1,000.00 Cost of changing 2 bolts per segment for 16 segments \$32,000.00 Labor 2,000.00 per day x 2 \$4,000.00

Cost spent on bolts and labor

per year (4 times a year) \$144,000.00/year

Chesterton 783 ACR Anti-Seize \$1,224.00

Total estimated savings \$142,776.00/year



Nut bolts coated with Chesterton 783 ACR Anti-Seize.