

Gearbox Reliability Increases Savings by \$48K Over Eight Years

Food and Beverage Industry — Sugar Mill
Products: Chesterton 723 Sprasolvo™, 651 Detergent Lubricating Oil, and 615 HTG #1
Case Study 056 IL/MRO

Challenge

Background

The cold water discharge valve at a sugar mill failed due to lack of lubrication in the gearbox. Hardened grease seized the gears, resulting in significant downtime and labor costs. Conventional lithium grease oxidized and hardened. The valve could not be actuated since the drive motors "tripped out" due to overload caused by gearbox seizure.



Seized butterfly volute due to gearbox failure.

Solution

Product

Chesterton 723 Sprasolvo™ was applied into the gearbox. This fast-acting, penetrating oil has an excellent capillary action that quickly loosens seized, rusted parts.

The old grease was removed by scraping and a final cleaning with **Chesterton 651 Detergent Lubricating Oil**.

To prevent future seizures **Chesterton 615 HTG#1** was applied to provide adequate lubrication to the gearbox.



Chesterton 723 Sprasolvo™ softened old grease to free up the gear.

Results

Increase Reliability

615 HTG #1 did not thin out, separate, or form hardened deposits.

Actuator gearbox has remained trouble free for eight years.

This reliability amounts to a savings of **\$48,213** in labor and downtime cost over that time period.

\$=USD



Chesterton 615 HTG#1 is now used for manual and motor drive gearboxes.