

Challenge

Background

A maintenance unit at a refinery was facing numerous dismantling issues, particularly with threaded rods on bolted flange assemblies of pressure and piping equipment operating at high temperatures. Disassembling the equipment for maintenance purposes was time-consuming because the bolted rods frequently needed to be cut, often requiring the use of torches, as the bolts were stuck on the nuts.

The customer needed an anti-seize product to facilitate the disassembly of these strategic equipment parts.



Time-consuming disassembly of flanges on pipes and other equipment.

Solution

Product

The customer invited a Chesterton team to devise a solution. **Chesterton® 785 Parting Lubricant**, with anti-seize qualities, was applied on one-third of the bolts of a heat exchanger flange (16 units). The other bolts were coated with competitors' products.

785 Parting Lubricant is a ceramic-based anti-seize that can help separate the metal surfaces of nuts and bolts and stop cold welding and galling.



Chesterton 785 Parting Lubricant helps separate metal surfaces to reduce galling and cold welding.

Results

Quicker Disassembly

After one year, the results were evident. The 16 bolts coated with **785 Parting Lubricant** came off within a few minutes without any issues. However, the bolts coated with the competitors' products needed to be cut off with a torch. The **785 Parting Lubricant** improved safety by eliminating the need for a torch, which reduces accident risks, and by preventing damage to nearby installations. This paste is now their standard for all high-temperature and torque-tightened assemblies at the plant.

The ROI is clear: Difficult dismantling leads to wasted time, increased manpower, replacement of installations, risk of damage, and the purchase of replacement parts.



All nut bolts coated with Chesterton 785 Parting Lubricant.