

Bolting Heat Exchanger

Chesterton Lubricants/MRO Chemicals

Refinery
Product: Chesterton 785 Parting Lubricant
Case Study 010 LMRO

Challenge

Background

A major oil refinery performed overall repair and preventative maintenance on two heat exchangers every 24 months.

Each time, the refinery was forced to cut off bolts with a torch. As a result, disassembly required 3 days.

This time-consuming and expensive maintenance was regarded as the "normal" procedure.

Solution

Product

- The refinery tested Chesterton 785[™] Parting Lubricant against two major competing lubricants. Several versions were used including nickel, copper and ceramic-based thread pastes.
- Two years later, the refinery had a chance to evaluate its test results during another scheduled outage on the exchangers.

Results

- Customer was able to disassemble the heat exchanger protected with Chesterton 785
 Parting Lubricant in three hours.
- The heat exchangers where the competitive lubricants had been applied took three full days (3 shifts) for the refinery to disassemble.
- Customer has extended the use of Chesterton 785 Parting Lubricant throughout the plant. It is now a standard storeroom item.



Scheduled PM outages every 24 months on heat exchangers requires complete disassembly.



Re-assembly with Chesterton 785 Parting Lubricant stops corrosion and seizure.



Chesterton 785 Parting Lubricant is now a "stock Item" and used at each outage.