

Sealing Pneumatic System Leaks

Chesterton Lubricants/MRO Chemicals

Power Generation
Products: Chesterton 800 GoldEnd® Tape
Case Study 023 LMRO

Challenge

Background

- Pneumatic fittings were failing repeatedly due to low-cost, low-quality PTFE thread sealing tape.
- Compressed air leaks were leading to poor control of pneumatic operated valve and positioners for the Boiler Feed Water System.
- Leaks in the compressed air system resulted in significant repair costs. Compressed air is one of the most costly systems in this plant.

Solution

Product

- The maintenance department evaluated the performance of Chesterton 800 GoldEnd®
 Tape on a series of threaded connections in their shop. The product did not tear or fray at assembly.
- The customer commented that Chesterton 800 GoldEnd® Tape was much thicker than previous tape, and required only 1 to 1-1/2 wraps on the threads (versus 4-5 times with original).

Results

Savings in compressed air are a substantial but often overlooked production cost.

By reducing air leaks on fittings, this plant:

- Saved thousands of dollars in compressed air and maintenance repair
- Achieved better instrumentation equipment performance

Reducing 100 SCFM can result in energy savings of \$10,000 + per year



Power plants use a tremendous amount of compressed air, often an area for significant savings.



Valves, solenoids, and positioners require consistent air pressure to work efficiently.



Sealing air leaks reduces waste and improves efficiency.