Desuperheater Spray Valve

Chesterton Stationary Equipment Sealing Solutions

Power-Nuclear
Products: 5800 Set & Valve Management Tool
Case Study 005 SE

Challenge

Background

A fossil power plant was having an issue sealing their Desuperheater Spray Valve. Previous packing sets would leak at start-up. Mechanics would tighten until the leak stopped and then the actuator would “hunt” to overcome increased torque.

Goal

Increase valve reliability and minimize stem friction.

Solution

Product

Ran the process requirements through Chesterton's valve management software; **Chesterton’s 5800 Packing Set** and Live Loading were recommended.

The **Chesterton 5800’s** wedge-shaped design lowers packing friction compared to typical graphite packing. This design, combined with Chesterton Live Loading technology, will prevent over-tightening of gland bolts, allowing the actuator to function properly and minimize “hunting” by the valve.

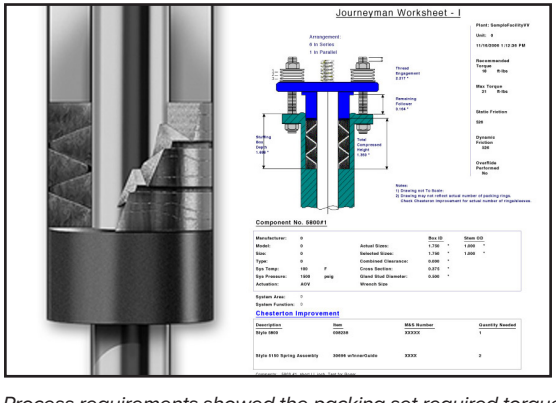
Results

- The installed Chesterton packing solution improved the valve performance by reducing the stem friction and eliminating start-up leakage
- Predictable friction torques

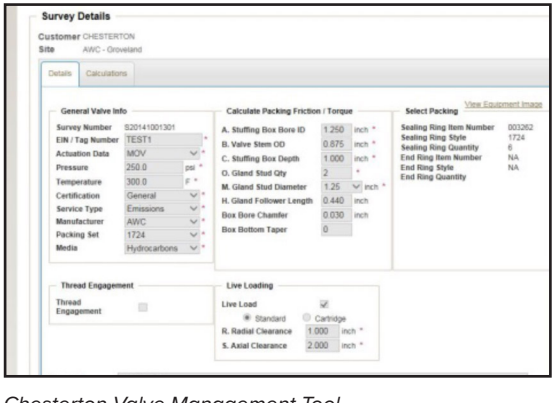
The Valve Management Tool is able to:

- Provide an engineered solution
- Maintain valve data and improvements
- Provide documentation and installation drawing

Fossil Power Plant was having issues with its linear control valve.



Process requirements showed the packing set required torque.



Chesterton Valve Management Tool.

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