

# SOLON® FLANGE WASHERS SOLVE GASKETED JOINT LEAKS IN NUCLEAR POWER STATION HEAT EXCHANGERS

# **INDUSTRY CHALLENGE**

A nuclear power generating station in Florida had a chronic problem with leakage on one of their heat exchangers. The exchanger had a 24" head and used a graphite spiral wound gasket to seal a water and steam process. The exchanger often cycled between ambient and  $4500^{\circ}$ F, due to process variations. Different gaskets and bolting techniques were attempted, but did not resolve the issue.

#### **SOLUTION**

*Solon*® *Flange Washers* were recommended and installed using normal assembly techniques which resolved the gasketed joint leak. No further leakage occurred.

There are many variables that occur in a typical flange assembly, some include; tool inaccuracies, flange/gasket tolerances, or complex elastic interactions. Mathematical reasoning, laboratory experimentation, and field experience indicate that Belleville spring flange washers are an effective method of creating a more reliable flange assembly.

Solon Flange Washers are designed to mantain sufficient bolt tension and resultant gasket pressure in high temperature and high-pressure applications where safety and emission containment take priority.

### **SOLON ADVANTAGES**

- Reduce fugitive emissions
- Maintain bolt integrity
- Maintain leak-free joints
- Made in the USA
- Comprehensive Risk Analysis contact a Solon engineer for a live load design audit

## **CUSTOMER BENEFITS**

- Economical alternative to costly system enhancements
- Simplified installation
- Low maintenance



Solon® Flange Washers

