

Case Study: Water Treatment Style 206

CASE STUDY : In a brine concentrator, an original competitor's expansion joint failed upon start up.

INDUSTRY:

Water Treatment

BACKGROUND:

This facility is a Zero Liquid Discharge (ZLD) power plant. Water is initially pumped from a well, pretreated, used as process water, then reclaimed and retreated with a Brine Concentrator for use in their cooling towers. No city water is used and no waste water is disposed of from the site.

Brine concentrators use thermal energy to evaporate water, which is subsequently condensed and discharged as clean distilled water.

Brine Concentrators are also used in water treatment facilities in desalination plants, mining operations and well drilling operations in the oil & gas industry.

- 1. Size: 24 "x 10" FF
- 2. Temperature: 221° F
- 3. Media: Brine Slurry
- 4. Pressure: 30 psi

OBSERVATION:

The original expansion joint unfortunately failed catastrophically without warning on start up. After consultation with the OEM of the Brine Concentrator the recommendation was that only Garlock Expansion Joints be used for this aggressive application. The original expansion joints were replaced with Style 206 expansion joints which are built with a 4 to 1 safety factor.

VALUE PROPOSITION:

Upon start up Garlock Expansion Joints offer superior performance, reliability and service life. This in turn improves plant safety, increases the mechanical integrity of equipment and allows customers to gain a competitive advantage in the market place.

For more information, please visit www.garlock.com.

