

Case Study: Power Generation - Condensate Style 204EVS Expansion Joint



INDUSTRY

Power Generation - Condensate Application

CUSTOMER

A co-generation power station producing electricity for the local area using a combination of natural gas and coal. The facility, which began commercial operations in 1976, consists of two 865-megawatt coal-fired units. These units are capable of producing 1,840 megawatts of electricity, and on average, can supply enough energy to power approximately one million homes. Electrostatic precipitators on units 1 and 2 remove more than 99% of the fly ash from the boiler exhaust stream. A digital boiler control system, low NOx burners and Selective Catalytic Reactors, installed since initial operation, have reduced nitrogen oxide (NOx) emissions by almost 90%. The use of cooling towers and the closed-loop steam cycle prevent thermal pollution.

PROPOSITION VALUE

Garlock Expansion Joints offer superior performance, reliability and service life. This results in an improvement of plant performance and safety.

OPERATING CONDITIONS

1. Size: 24"
2. Application: Condensate System
3. Media: Water
4. Vacuum: Full Vacuum
5. Pressure: 5 psi

SOLUTION AND BENEFITS

The original Garlock Style 204 expansion joints had been in service for 11 years. They were finally replaced in August, 2014 with a competitor's expansion joint. These replacements lasted 2 weeks before the arches collapsed. The expansion joint developed many cracks around the body and allowed air into the system, causing one of the two lines to be shut down. The power plant then replaced these joints with Garlock Style 204EVS joints because of the previous great service life of the 204 joints.

For more information, please visit:
<http://www.garlock.com>

