

High Temperature Expansion Joints Keep Ice Breaker Moving.

Application:

A turbine exhaust ducting system on an ice-breaking ship. The turbine exhaust ducting system recovers unused gases from the cylinders and is directed to the exhaust gas boiler to recover most of the wasted energy.

Problem:

The High Temp Expansion Joints installed on the ship's Turbine Engine Exhaust were damaged and failing during a scheduled maintenance cycle. The damaged High-Temperature Composite Expansion Joints allowed hot turbine exhaust gases to enter the vessel interior, creating a scorching, hazardous work environment.

Solution:

The contractor in charge of the repair contacted Holz rubber with an urgent request to replace the (3) High Temp Expansion Composite Joints before the ship's scheduled departure date. Our Sales and Engineering team reviewed the system requirements and pictures of the installed joints. Based on the system specifications provided, Holz Rubber suggested a robust Multi-Layer composite belt design wrapped with stainless steel wire mesh for added protection of the belt during operation from any particles found in the exhaust stream and the 1,100° sustained temperature. Our High Temp Multi-Layer Composite Expansion joints were manufactured ahead of schedule and installed by the contractor allowing the ship to return to cutting ice, paving the way in the North Pole.

