

Vulcanizing Equipment Loss



ILC Assignment:

- Determine the cause and extent of damage and confirm the costs associated with the replacement of two vulcanizing pressure vessels used to vulcanize rubber hose materials.

ILC Analysis:

- Insured personnel discovered that stainless steel steam injection/water cooling piping within one of the (2) vessels had broken due to corrosion.
- Upon closer inspection by the personnel, both vulcanizing pressure vessels were found to exhibit cracks in multiple locations.
- The insured was using water to cool the vessels/product to expedite production.
- Tests were performed on the cooling water which showed the presence of chloride contamination.

Summary:

- It was concluded that the stainless steel, which generally does not corrode to the observed magnitude, that composed the vulcanizing pressure vessels was adversely affected by the high concentrations of chloride in the cooling water.
- The corrosion and crack development within the vessels were consistent with the culmination of long-term conditions and inconsistent with a sudden and incidental event.
- ILC confirmed that continued use of the pressure vessels was a safety concern, repair of the pressure vessels was not prudent, and replacement of the pressure vessels was the only way to safely return the pressure vessels to production.
- ILC confirmed the costs of the Ø3' pressure vessel of \$468,797 and the Ø5' pressure vessel of \$681,950.