Washdown Problems Solved

Application Note

Description

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General Description

The Swift & Company pork processing plant in Marshalltown Iowa is kept clean through twice a day wash downs, with water pressure reaching 1600 psi.

Problem

During these high-pressure wash downs, liquid was leaking into electrical limit switches, causing malfunction. As a result, the plant was scheduling downtime three times a week to replace failed limit switches.

Not only was it costly to purchase and install new limit switches, but the conveyor needed to be shut down and could not be used to transport product during this time.

Solution

The Cutler-Hammer E50 6P+ Heavy Duty Limit switch was suggested. The 6P+ is unique in that the body is epoxy filled, offering outstanding protection against contamination.

The change-out has been a success. The new 6P+ switches have been installed for over 4 months with no problems reported.

As insurance against future problems, Swift is now in the process of changing out all limit switches in this area with the 6P+.
For More Information
Contact your Cutler-Hammer sales person or visit www.cutler-hammer.com.

A detailed document on the E50 6P+ limit switch is available at www.ch.cutler-hammer.com/unsecure/cms1/PG05C09T_E.PDF

Summary
Based on current costs, this change is saving Swift $28071 per year per limit switch. See details below.

<table>
<thead>
<tr>
<th>Labor Rate Hour</th>
<th>Changeouts per week</th>
<th>Cost of Square D per year</th>
<th>Cost of CH</th>
<th>Productivity Improvement Cost/year</th>
<th>Downtime Cost/year</th>
<th>Bottom Line Cost/year</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25</td>
<td>3</td>
<td>$106</td>
<td>$16,536</td>
<td>$165</td>
<td>$3,900</td>
<td>$7,800</td>
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