Background

A Municipal Casting Supplier in Wisconsin manufactures cast iron manhole covers, frames, grates and other products.

Problem

The Municipal Casting Supplier was having issues with meeting the 8,000 hour life expectancy for the hydraulic fluid due to oil degradation. The degradation was caused by water acting as a catalyst along with the metal particulate in the oil causing the acid number to increase above the acceptable levels. The degradation caused the early change out at approximately 5,000 hours. Customer looking to extend the life of the Benz Ultra Guard 552 polyester fire resistant fluid on their main hydraulic reservoir (~3,000 gallon).

Solution

Schroeder Industries TDS-E Dehydration Station was added to the system as a kidney loop system. The water content was at 400 PPM at the beginning and it dropped to below 100 PPM along with the removal of significant particulate contamination.

Specifications

<table>
<thead>
<tr>
<th>Type of Machinery:</th>
<th>Holding Tank</th>
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</thead>
<tbody>
<tr>
<td>Fluids Addressed:</td>
<td>Oil</td>
</tr>
<tr>
<td>Schroeder Product:</td>
<td>TDS-E</td>
</tr>
<tr>
<td>Flow Rating:</td>
<td>900 gallons/hour (15 gpm)</td>
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</tbody>
</table>

Result

The oil is now lasting over the target 8,000 hours and has saved them more than the cost of the unit in the first year of operation (ROI = 0.87 years).

Additional Benefits to customer:

- High dewatering rates and efficient particulate removal (Beta > 1,000) in one system
- Removed water is vaporized into the air (none on floor!)
- Ease of Operation with standard Touch Screen Terminal for simple controls
- Minimal Maintenance required (no Vacuum Pump to service)