# Cedar Falls Utilities Reduces Maintenance Costs With Vibrating Fork Technology

#### **RESULTS**

- Reduced maintenance costs
- Decreased utility costs
- Lowered risk of damage to capital equipment



# **APPLICATION**

Tank level and pump control on steam condensate return tanks and reverse osmosis tanks

#### **CUSTOMER**

Cedar Falls Utility (CFU), Iowa, USA

#### **CHALLENGE**

Cedar Falls Utility had difficulty controlling the level on their steam condensate return tanks. Low tank levels risked pump cavitation.

CFU previously used a pneumatic pressure controller with a bourdon tube inside it. The pneumatic system controlled a recirculation valve leading to the condensate tank. Reliability issues with the controllers led to continuously running pumps. Routine monitoring on hourly operator rounds were needed to manually turn on and off the pumps and avoid running them dry.

Undependable level control led to several negative business impacts for CFU. The previous pneumatic technology was unreliable and led to increased maintenance costs for routine checks and repair. Manual pump controls risked plant efficiency and higher utility costs. Lastly, the CFU risked damaging capital equipment by running their pumps dry.

Cedar Falls Utilities utilized the heartbeat LED to quickly diagnose status and health of the 2120 which led to simpler operations.







#### **SOLUTION**

Cedar Falls Utilities now has a much simpler control design, using two Rosemount 2120 Vibrating Level Switches to solve their challenges on the steam condensate return tanks. Unlike the previous technology, the 2120 provided reliable level detection for condensate return tank control with no moving parts for reduced maintenance. Also, CFU utilized the heartbeat LED to quickly diagnose status and health of the 2120 and let the operator know at a glance that everything is normal.

The Rosemount 2120 helped Cedar Falls Utilities reduce maintenance costs by eliminating the previous pneumatic technology. CFU also decreased utility costs by not having the pumps run continuously. Finally, CFU lowered risk of damage to capital equipment by ensuring their pumps didn't run dry.



# **RESOURCES**

## **Emerson Process Management**

http://www2.emersonprocess.com/en-US/brands/Rosemount/Pages/index.aspx

## Rosemount 2120 Vibrating Fork Liquid Level Switch

http://www2.emersonprocess.com/en-US/brands/rosemount/Level/2100-Series-Level-Switches/2120-Level-Switches/Pages/index.aspx

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