

HydroFLOW Case Study - Municipal Building Chillers

Installed: May 2023

Last Inspection: October 2023



nwi

new water innovations



RESPONSIBLE WATER TREATMENT SOLUTIONS

HydroFLOW[®]
U.S.A.

Background

The Customer

A large Municipality in Arizona, United States.

The Customer's Problem

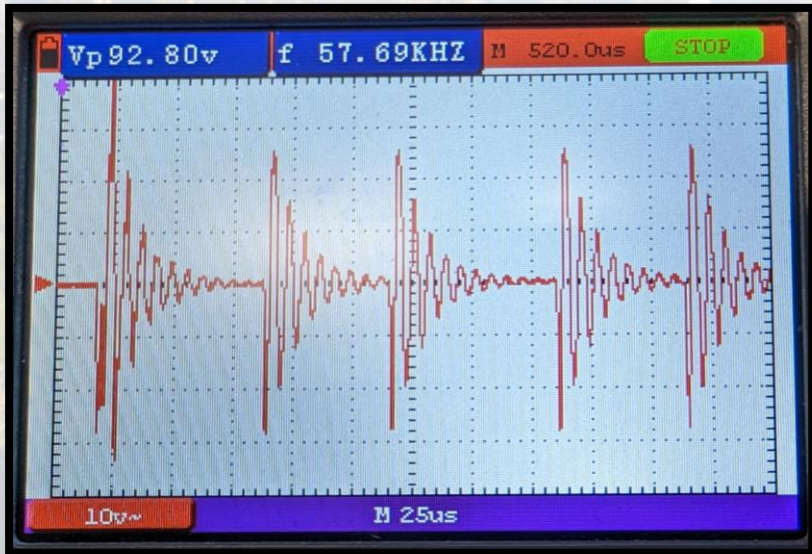
Water scarcity is a serious problem for any facility operating in the Southwest that relies on water to keep its processes and HVAC systems going. The drought in the region has caused organizations to seek creative ways to reduce their water usage.

The Municipality's goal was to reduce the water and chemical usage of their cooling towers, while maintaining them within industry standards. A 5.5-month proof of concept product evaluation was performed to determine *HydroFLOW*'s ability to achieve this objective.

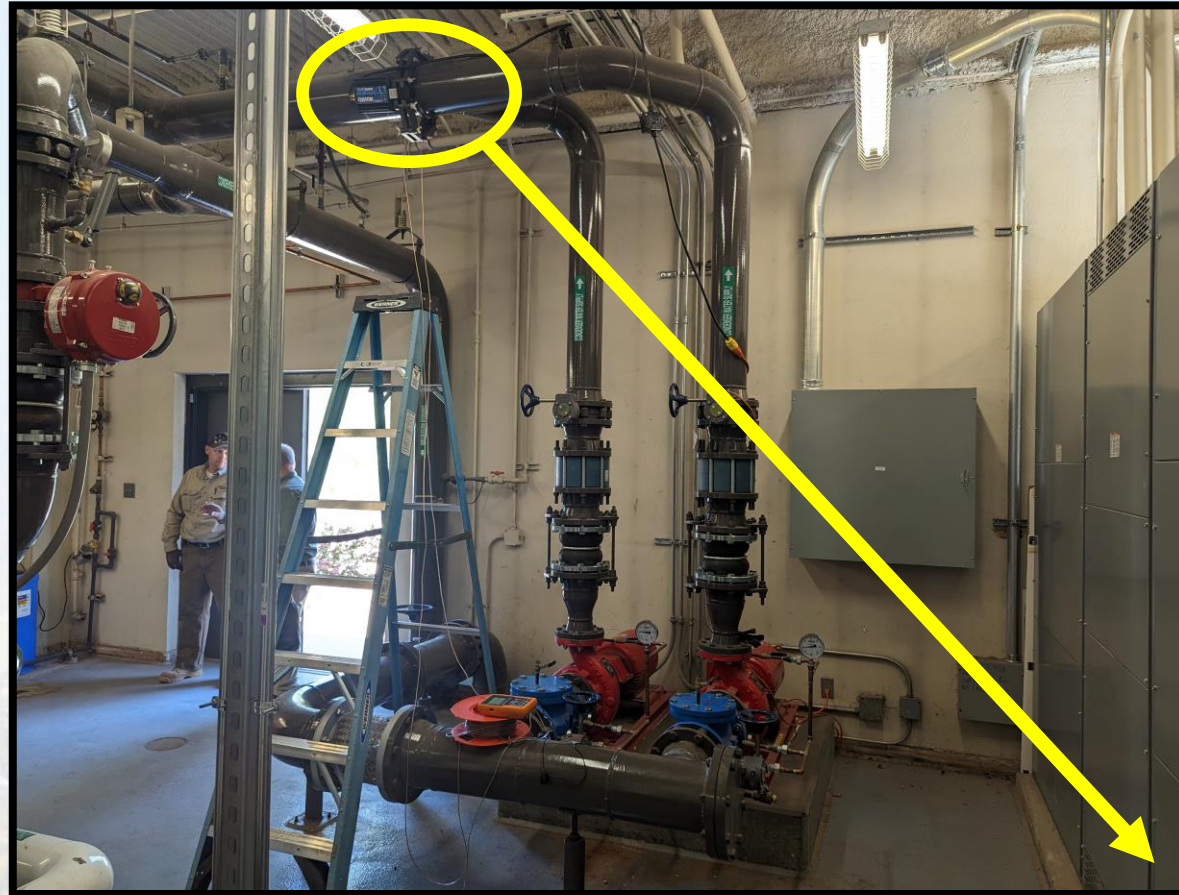


Installed Equipment

On May 1st, 2023, a *HydroFLOW* i8" Custom unit was installed on the condenser water line between the tower and chiller. Conductivity was increased from 3,000 $\mu\text{S}/\text{cm}$ to 7,000 $\mu\text{S}/\text{cm}$ and chemical usage was discontinued apart from small amounts of biocide.



Hydropath Signal



Installed *HydroFLOW* i8" Custom Unit

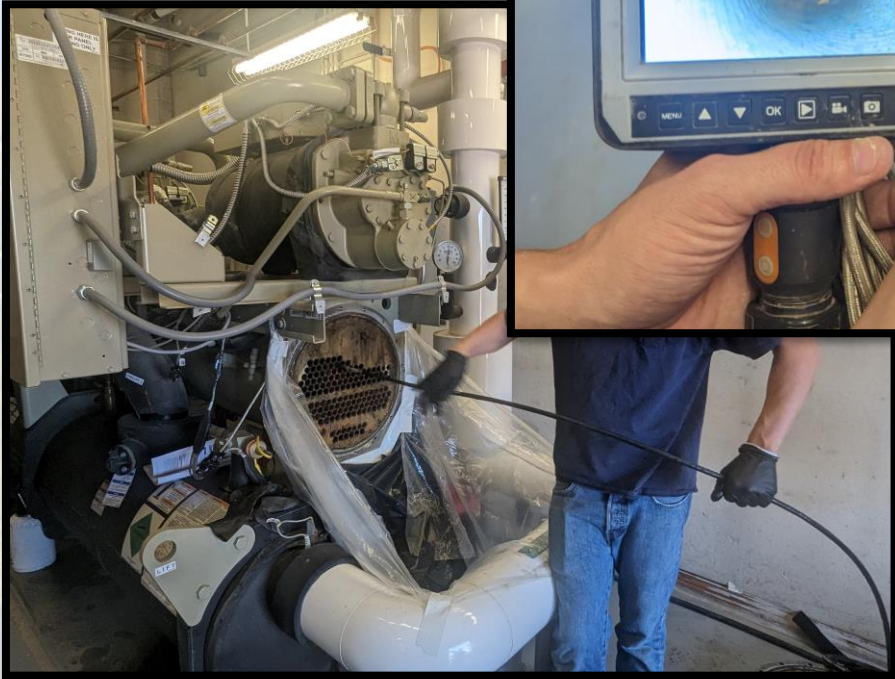


Conductivity meter at 7,000 $\mu\text{S}/\text{cm}$



Results

After 5 ½ months of operation at 7,000 $\mu\text{S}/\text{cm}$, with no chemical treatment apart from reduced amounts of biocide, through the blistering summer months, the chiller was opened for inspection on October 16th, 2023. Upon inspection the chiller was found to be with minimal soft scale deposits and the system's blow-down water usage was reduced by 68%.



For more information, please contact Mike Koepke: mike@hydroflow-southwest.net