

# *HydroFLOW* Case Study

## Orthopedic Surgery Hospital Ice Machine Biofilm Removal

Installed July 25<sup>th</sup>, 2022, and updated on May 19<sup>th</sup>, 2023.



# Background



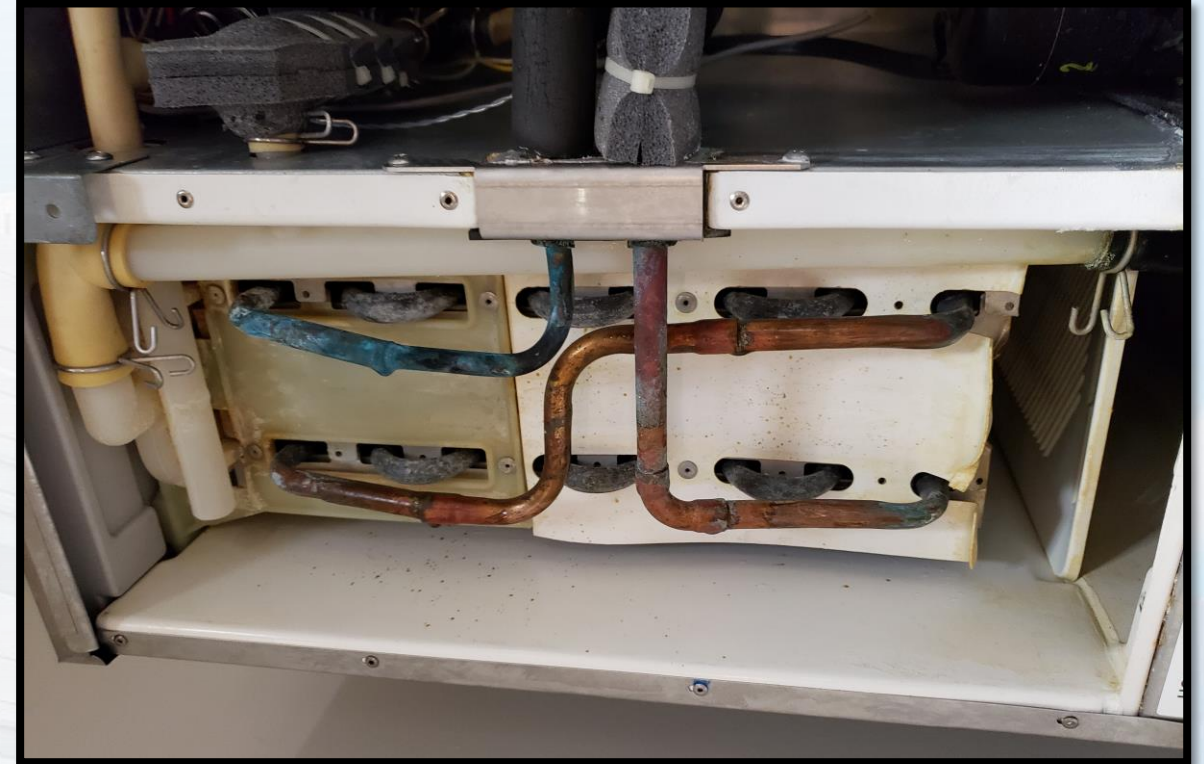
## The Customer

A premier orthopedic surgery hospital in the Mountain region of the United States.

## The Customer's Problem

The hospital has 112 ice machines throughout their facility, each requiring cleaning and disinfection every 3-4 months due to biofilm accumulation and the legionella risk it poses.

Since *HydroFLOW* water conditioners reduce biofilm and limescale formation in plumbing systems, a product evaluation began in July 2022 to evaluate how well a *HydroFLOW* s38, now the new Pearl Plus model, could extend the time between cleaning and disinfection by reducing biofouling.



Inside of an ice machine

# Installed Equipment

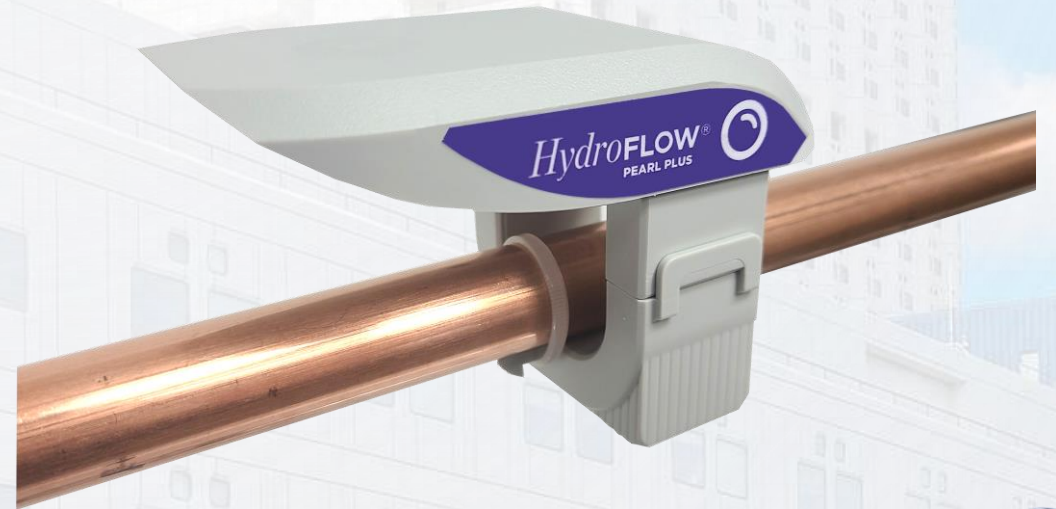
A *HydroFLOW* s38 unit was installed on the water line feeding the ice machine. The ice machine chosen for this product evaluation went through routine cleaning and disinfection.



The *HydroFLOW* s38 model that was used in the product evaluation.



The new and improved Pearl Plus model that was launched in 2023.



# Results

- Three weeks after the product evaluation's start, the ice machine was drained. A significant amount of bio-film that was not removed by the routine cleaning and disinfection three weeks earlier, was released due to *HydroFLOW*'s ability to purge biofilm.
- The maintenance team has been monitoring biofilm buildup since the above-mentioned three-week purge; the ice machine has experienced very little fouling during the past ten months.
- Based on the product evaluation's results, the hospital decided to install *HydroFLOW* Pearl Plus units on all 112 ice machines in the coming months.

***“The HydroFLOW water conditioner was able to flush out hidden biofilm our cleaning regimen didn’t remove.”***

**- Hospital Facilities Manager**



Purged biofilm

