HOSPITAL

Hospital Ice Machine Biofilm Control Case Study USA

*Hydro*FLOW® S38 reduced biofilm buildup in hospital ice machines, extending cleaning intervals and enabling rollout across all 112 units.

112	3w	10m+	↓
Machines Upgraded	Biofilm Purge Time	Low Fouling Period	Cleaning Frequency

⇄ BEFORE & AFTER

BEFORE

- ✕ Cleaning every 3-4 months required
- ✕ Biofilm buildup inside machines
- ✕ Legionella risk in system

AFTER

- ✓ Hidden biofilm purged in 3 weeks
- ✓ Very low fouling over 10 months
- ✓ Extended cleaning intervals

OVERVIEW

A premier orthopedic surgery hospital in the United States operated 112 ice machines, each requiring cleaning every 3–4 months due to biofilm buildup and Legionella risk.

⚠ CHALLENGE

Frequent cleaning was required due to biofilm buildup and associated Legionella risk.

- 112 ice machines across facility
- Cleaning required every 3–4 months
- Biofilm buildup inside machines
- Legionella risk in water system

SOLUTION

1x *Hydro*FLOW® S38 installed on water line feeding the ice machine to reduce biofilm and extend cleaning intervals.

UNIT INSTALLED	INSTALLATION POINT
1x *Hydro*FLOW® S38	Ice machine water feed line

APPLICATION	INSTALL DATE
Ice machine biofilm control	July 2022

INSTALLATION

s38 on ice machine line

SITE

Ice machine unit

SITE

Inside of an ice machine

RESULTS

Biofilm Purge
Significant hidden biofilm released within 3 weeks.

Low Fouling
Very little fouling observed over 10 months.

Extended Intervals
Cleaning intervals extended beyond 3–4 months.

Reduced Risk
Lower Legionella risk due to reduced biofilm.

Full Rollout
Installed across all 112 machines.

Continuous Control
Ongoing control of biofilm accumulation.

TESTIMONIAL

> *"The HydroFLOW® water conditioner was able to flush out hidden biofilm our cleaning regimen didn't remove."*
>
> — Hospital Facilities Manager

KEY TAKEAWAY

Summary

*Hydro*FLOW® S38 reduced biofilm in hospital ice machines, flushing hidden biofilm not removed by prior cleaning within 3 weeks and maintaining low fouling for over 10 months, leading to rollout across 112 machines.

112	3w	10m+
MACHINES	PURGE TIME	LOW FOULING

ADDITIONAL PHOTO EVIDENCE

RESULTS

Biofilm released from ice machine not removed by prior clean

RELATED CASE STUDY

MGEN Centre Hospital Water Treatment

Trois-Epis, France

HydroFLOW® was installed at the MGEN Centre hospital in Trois-Epis, France for comprehensive water treatment. The system achieved 95% OPEX savings, 50% CAPEX savings, zero Legionella alerts and zero pipe clogging incidents over a five-year monitoring period.

95% OPEX Savings
Near-total reduction in operational water treatment expenditure

Zero Legionella
No Legionella alerts recorded throughout the five-year trial period

Zero Pipe Clogging
Completely eliminated pipe clogging issues over five years of use