



HOSPITAL

Hospital Heat Exchanger Case Study Acre, Israel

HydroFLOW® eliminated limescale buildup in a high-demand hospital hot water system, extending cleaning intervals from 3 months to 17 months without chemicals.

17+ mo

Scale-free Operation

0

Acid Cleanings Since Install

ΔT

Remained Stable

0

Shutdowns for Cleaning



BEFORE & AFTER

BEFORE

- Shutdowns every 3–4 months for cleaning
- Reduced thermal efficiency in exchangers
- Chemical handling and gasket wear risks

AFTER

- ✓ 17 months with no shutdowns or cleaning
- ✓ Stable pressure, flow and Delta T
- ✓ Maintenance-free scale protection



OVERVIEW

Mazor Mental Health Center Complex in Acre, Northern Israel, is a major psychiatric hospital with over 300 inpatient beds and high daily hot water demand. Its energy room supplies hot water through two boilers and plate heat exchangers, but extremely hard municipal water above 380 ppm CaCO₃ caused repeated limescale buildup, shutdowns and chemical cleaning every few months.



CHALLENGE

Persistent limescale in the hospital heat exchangers caused frequent shutdowns, reduced efficiency and repeated chemical cleaning.

- Shutdowns every 3–4 months for acid cleaning
- Reduced thermal efficiency in heat exchangers
- Safety risks from chemical handling
- Seal and gasket wear from cleaning agents

SOLUTION

HydroFLOW® units were installed with 1x HydroKNCT for remote monitoring, with no downtime or plumbing changes.

UNIT INSTALLED

2x HydroFLOW® units: 1x Pearl Plus, 1x i100

INSTALLATION POINT

Make-up water line and heat exchanger inlet

INSTALL DATE

5 February 2024

MONITORING

1x HydroKNCT remote monitoring unit



INSTALLATION

i100 on exchanger inlet



INSTALLATION

Pearl Plus on make-up line



MONITORING

HydroKNCT control cabinet

RESULTS

17+ Months Scale-free

No cleaning required for over 17 months.

Zero Acid Cleaning

No chemical cleaning since installation.

Reduced Maintenance

No ongoing maintenance required.

No Shutdowns Required

Avoided shutdowns previously needed every 3 to 4 months.

Stable Thermal Performance

Pressure, temperature and flow remained stable.

Confirmed by Site Team

No performance loss or scale observed.

TESTIMONIAL

"After 17 months of operation, we are fully satisfied with the results and recommend using the HYDROFLOW systems for the treatment and reduction of limescale crystallisation."

— Head of Maintenance, Mazor Hospital

KEY TAKEAWAY

Summary

At Mazor Medical Center, hot water system operated for more than 17 months without acid cleaning following installation in February 2024, maintaining stable performance and clean internal surfaces.

17+ mo

SCALE-FREE OPERATION

0

ACID CLEANINGS

ΔT

REMAINED STABLE



ADDITIONAL PHOTO EVIDENCE



INSTALLATION

i100 unit on heat exchanger inlet line



INSTALLATION

HydroFLOW® installation on pipework



SITE

Heat exchanger system at Mazor Medical Center



INSTALLATION

HydroFLOW® unit in operation



INSTALLATION

HydroFLOW® installation

HYDROPATH

The Forefront of Sustainable Water Treatment

Hydropath Technology is a world leader in sustainable water treatment solutions, providing chemical-free alternatives for industrial and commercial applications across more than 50 countries.

50+

COUNTRIES

30+

YEARS EXPERIENCE

1M+

UNITS INSTALLED

HYDROPATH

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