SWIMMING

Wave Pool Case Study
Ukraine

*Hydro*FLOW® treatment improved water clarity in a public health centre wave pool while reducing chlorine consumption and backwashing frequency during the trial.

60%	620m³	95.7%	↑
Chlorine Reduction	Pool Capacity	E. coli Reduction	Improved Filtration

⇄ BEFORE & AFTER

BEFORE

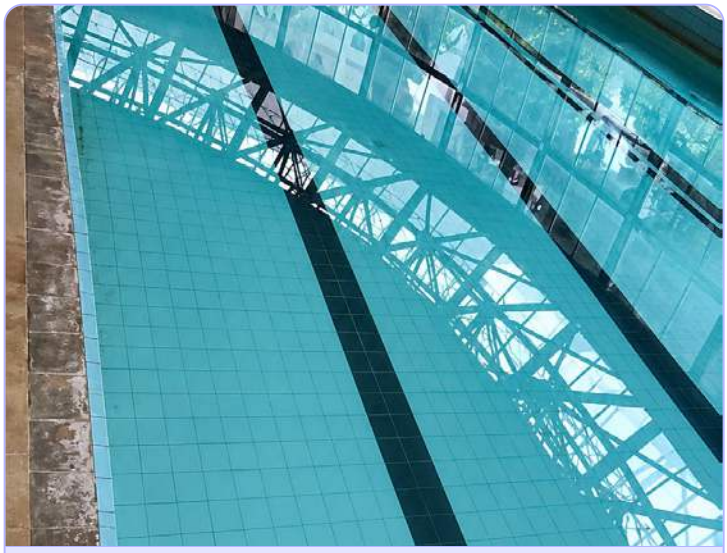
- ✕ Frequent filter regeneration required
- ✕ High chlorine dosing required
- ✕ Biofilm formed on water surface

AFTER

- ✓ Water became clear and blue
- ✓ Chlorine use reduced by 50-60%
- ✓ Biofilm and particles removed

BEFORE

Pool condition on 27 July 2018



AFTER

Clearer pool water on 17th July 2018

OVERVIEW

A children's health and recreation centre conducted a *Hydro*FLOW® trial on its 620m³ swimming pool to reduce chlorine consumption while improving water clarity. The unit was installed before the pump and sand filters after the pool experienced poor water quality, biofilm formation and high chlorine demand.

CHALLENGE

High chlorine consumption and poor water clarity created maintenance and hygiene challenges.

- 15 litres of chlorine used daily
- Pool water quality remained poor
- Biofilm formed on the water surface
- Organic particles reduced clarity

SOLUTION

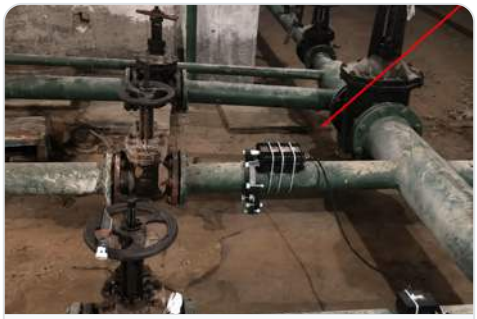
A *Hydro*FLOW® unit was installed before the circulation pump and sand filters on 27 June 2018 to improve filtration performance and reduce chlorine dependency.

UNIT INSTALLED
1x *Hydro*FLOW® unit

POOL SIZE AND TYPE
620m³ public swimming pool

INSTALLATION POINT
Before pump on sand filter supply

INSTALLATION DATE
27 June 2018



INSTALLATION

HydroFLOW® fitted to pool pipework

SITE

Eastern Europe public health centre

RESULTS

Chlorine Reduced 60%
Daily chlorine consumption dropped from 15 litres to 4-6 litres.

Water Clarity Improved
Pool water became clear with a blue appearance.

Biofilm Removed
Surface biofilm and suspended particles were reduced.

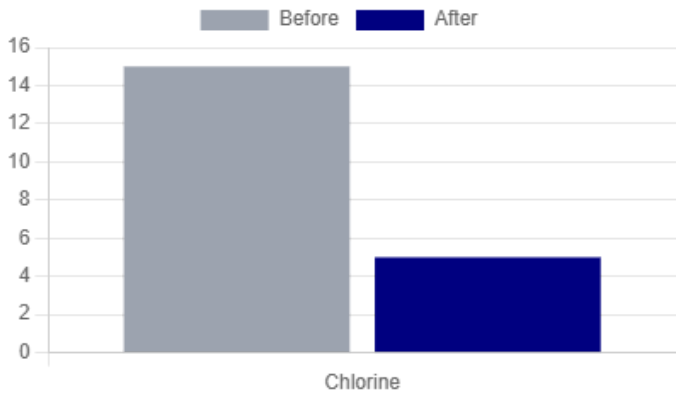
Water Standards Maintained
Pool water complied with analysis quality standards.

E. coli Reduced
Laboratory testing showed a 95.7% reduction.

Filtration Improved
Filter regeneration intervals were extended.

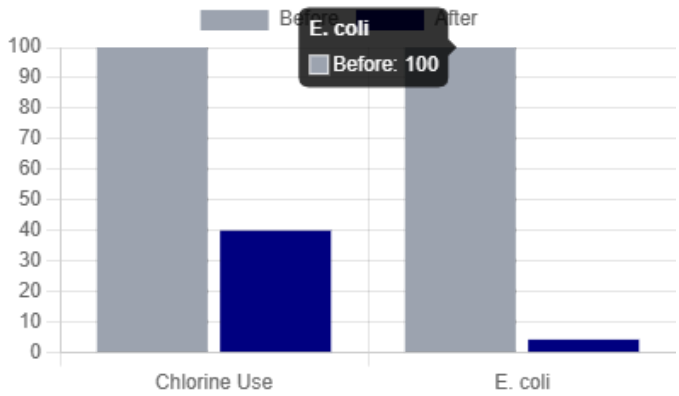
GRAPHS

Daily Chlorine Consumption (L)



Daily chlorine use reduced from 15L to approximately 5L.

Pool Condition Improvements (%)



Measured reductions during the trial period.

KEY TAKEAWAY

Summary

*Hydro*FLOW® treatment helped a Ukrainian public health centre significantly reduce chlorine use while improving swimming pool water clarity and hygiene performance. During the June to July 2018 trial, chlorine consumption dropped by up to 60% while pool water changed from cloudy green to clear blue within 12 days. The trial also reduced surface biofilm, improved filter performance and demonstrated a 95.7% reduction in E. coli bacteria during laboratory testing.

60%	95.7%	↑
CHLORINE REDUCTION	E. COLI REDUCTION	IMPROVE FILTRATION PERFORMANCE

ADDITIONAL PHOTO EVIDENCE

BEFORE

Pool condition before installation 27 June 2018

BEFORE

Unsatisfactory water clarity CL = 1.2

BEFORE

Surface biofilm visible before trial 27 June 2018

AFTER

Clear blue water after 12 days 09 July 2018

AFTER

Improved clarity at CL = 0.6

AFTER

Pool water restored during trial

RELATED CASE STUDY

Colmar Nautical Stadium Pool Case Study

Colmar, France

A HydroFLOW® P160 was installed at the Colmar Stade Nautique indoor pool in France for a 1-year evaluation of filtration and flocculation. Filter washes were reduced from 78 to 52 per year with wash duration cut from 21 to 12 minutes, saving over €10,000 annually.

33% Fewer Washes

Filter backwashes reduced from 78 to 52 per year with improved results

43% Shorter Washes

Wash duration cut from 21 minutes to just 12 minutes per cycle

€10K Annual Savings

Total annual cost savings of €10,360 with ROI in under 9 months