



• SWIMMING

Pool Filtration Water Savings Case Study Colmar, France

HydroFLOW® treatment reduced filter backwash water use, chlorine consumption and heat loss, improving pool filtration efficiency with a 0.7-year ROI.

2,535 m³

Water Savings

15%

Chlorine Reduction

41,275

kWh Heat Saved

0.7 yr

ROI

⇒ BEFORE & AFTER

● BEFORE

- ✗ High backwash water consumption
- ✗ 78 filter washes per year
- ✗ Heated chlorinated water wasted

● AFTER

- ✓ 2,535m³ water saved annually
- ✓ Lower chlorine use during washes
- ✓ Heat losses reduced significantly

OVERVIEW

Colmar Nautical Stadium is a public aquatic facility in France with one indoor pool, a 25m sports pool, four outdoor pools, an Olympic pool, family pool, leisure pool and paddling pool. The City of Colmar's energy department tested *HydroFLOW®* treatment on the indoor pool to assess whether the filtration system could reduce water use. The successful trial led to interest in treating two other aquatic sites in the city.

CHALLENGE

The pool needed to cut water, chemical and heat losses from frequent filter backwashing.

- Backwashing used 52.5m³ of heated chlorinated water per wash
- Three sand filters required 21 minutes per cleaning cycle
- Annual filter washing used 4,095m³ of water
- Rising operating costs made water and energy savings essential

SOLUTION

A *HydroFLOW*® P160 unit was installed upstream of the filtration system to reduce backwash demand and improve filtration efficiency.

UNIT INSTALLED

1x *HydroFLOW*® P160

INSTALLATION POINT

Upstream of filtration system

INSTALL DATE

13 October 2014

PERFORMANCE REVIEW

10 June 2015



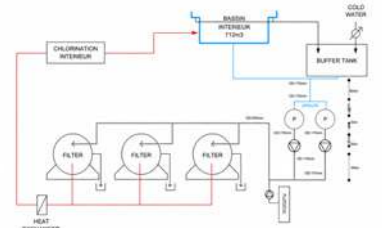
INSTALLATION

HydroFLOW® P160 on filtration line



SITE

Indoor pool at Colmar facility



DIAGRAM

Pool filtration system layout

RESULTS

Water Use Reduced

Annual backwash water demand dropped by 2,535m³

Chlorine Use Lowered

Filter washing used 15% less chlorine

Heat Loss Reduced

Lower backwash demand reduced heat loss by 41,275 kWh

Fast Payback

The project achieved a return on investment of 0.7 years

Filtration Improved

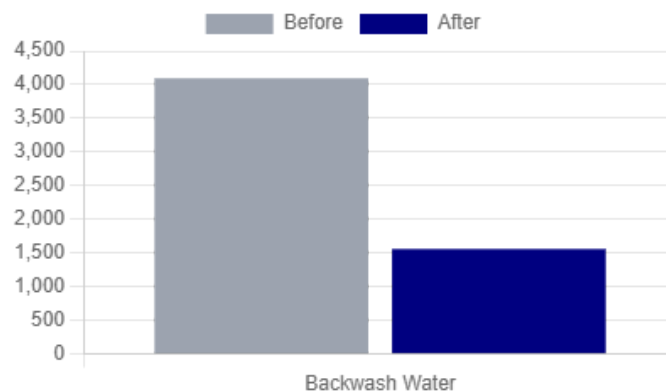
Hydrophobic treatment supported better flocculation before filtration

Wider Rollout Considered

The city reviewed two further aquatic sites after the trial

GRAPHS

Annual Backwash Water Use (m³)



Annual backwash water demand before and after *HydroFLOW*® treatment.

KEY TAKEAWAY

Summary

HydroFLOW® treatment at Colmar Nautical Stadium reduced heated backwash water losses and improved pool filtration efficiency. The indoor pool achieved 2,535m³ annual water savings, lower chlorine demand during filter washing and a 0.7-year ROI. Successful results led the city to review additional aquatic sites.

2,535 m³

ANNUAL WATER SAVED

15%

LOWER CHLORINE USE

0.7 yr

ROI



ADDITIONAL PHOTO EVIDENCE



INSTALLATION

Pool filtration pipework with HydroFLOW® unit

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