

*Hydro***FLOW**®

WATER TREATMENT FOR COOLING TOWERS



HYDROPATH Technology | The home of *Hydro***FLOW**®

WATER TREATMENT FOR COOLING TOWERS



HydroFLOW® units use non-chemical water treatment to address three problematic aspects of cooling tower operation: limescale on heat exchangers and tower surfaces, the level of blow-down required and build-up of biofilm and algae.

Reducing limescale means that heat transfer is no longer blocked and keeps exchangers operating at maximum efficiency, preventing wasted energy costs. With limescale controlled, towers can be operated at higher cycles of concentration, saving significant amounts of water. Flocculating particulates in the water improves filtration, reducing blow down levels and so saving on water and sewage costs. HydroFLOW® can also help address biofilm, allowing a reduction in the use of expensive chemicals.



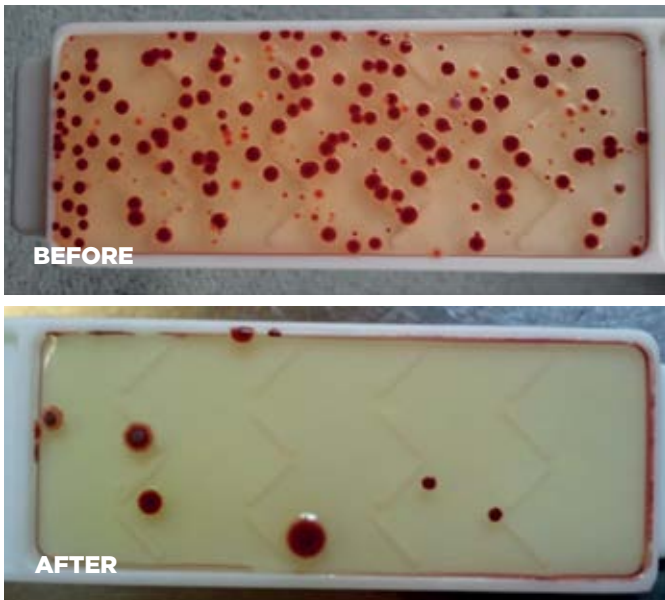
CASE STUDY

CENTRAL PACIFIC PLAZA, HONOLULU, HAWAII

The Central Pacific Plaza bank building in Honolulu, Hawaii, was cooled by two 300 ton cells and one 75 ton cell. Their objectives were to keep biological growth, scale accumulation and corrosion rate under control while using minimal amounts of chemicals. The towers were treated using a single Custom 14" HydroFLOW® unit, fitted before the chillers. Over a 90 day evaluation period, chemicals were gradually reduced or eliminated and the system carefully monitored.

RESULTS

Limescale and corrosion build-up inside the cooling tower and chillers remained under control even though anti-scalant and anti-corrosive chemicals were discontinued. Biocide chemical was reduced by 85% and bacteria levels reduced from 100,000 CFU to 1,000 CFU. Blow-down reduced by 50% and Conductivity remained stable at 1245 - 1295 Micro Siemens.



OUR CUSTOMERS SAY

“There is a HydroFLOW® unit treating the water of the cooling tower in the big V&D store in Eindhoven and also there the cooling tower is completely scale free. These successful projects with the HydroFLOW® units in the different locations in the last 4 years showed us that the HydroFLOW® technology meets all our expectations”

Project Leader, Grontmij Technical Management, NL.

RESULTS



**BLOW-DOWN
REDUCED BY**

50%

**BIOCIDE
REDUCED BY**

 **85%**



**BACTERIA
LEVELS REDUCED
FROM 100,000**

TO 1000 CFU

DESIGNED FOR

⊕ NEW LIMESCALE

⊙ EXISTING LIMESCALE

⊕ IMPROVED FILTRATION

≡ REDUCED BLOWDOWN

⊙ FIGHTING BIOFOULING

FEATURES

- Suitable for all pipe materials
- Available for pipes ranging from 45mm to 2 or more meters in diameter
- Assembled in place around existing pipe
- Easy retrofit - no downtime

APPROXIMATE DIMENSIONS

- Length approx. 300mm along pipe
- Extends approx. 100mm radially from pipe surface

TYPICAL INSTALLATION LOCATION

- Cold inlet to heat exchanger, condenser or chiller

FURTHER INFORMATION

For more detailed guidance on specification, installation or other information, please contact sales@hydropath.com or your local representative.



HYDROPATH.COM



LIMESCALE



BIOFOULING



FLOCCULATION

FROM COMBI BOILERS TO COOLING TOWERS

HydroFLOW® units are working all over the world on multiple applications, treating carbonate and non-carbonate scaling and filtration issues in a wide variety of industries. Check out our website for more information.

- From homes to heavy industry
- From spas to steel mills
- Suitable for any pipe material
- From 15mm to 1500+mm OD pipe diameter

To find out more about this and our other awards, visit hydropath.com/awards

AWARDED THE SOLAR IMPULSE EFFICIENT SOLUTION LABEL FOR ENVIRONMENTAL TECHNOLOGY

The Solar Impulse Foundation, operators of the first solar-powered flight around the world, use an international panel of independent experts to assess and verify clean technologies and their environmental benefits. HydroFLOW® are proudly part of #1000Solutions to protect the environment.

