

# *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. 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.

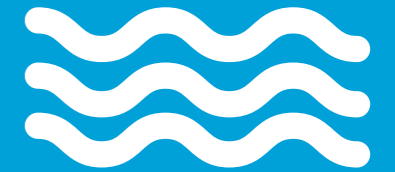


#### OUR CUSTOMERS SAY

"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 up to 200mm as standard
- No plumbing or cutting of pipes required
- Easy retrofit - no downtime

## APPROXIMATE DIMENSIONS

- 300 x 200 x 100 mm
- 3 meter cable

## TYPICAL INSTALLATION LOCATION

- Cold Inlet to heat exchanger
- See diagram

## FURTHER INFORMATION

For more detailed guidance on specification, installation or other information, please contact [sales@hydropath.com](mailto:sales@hydropath.com) or your local representative.



## 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



LIMESCALE



BIOFOULING



FLOCCULATION

[HYDROPATH.COM](http://HYDROPATH.COM)