



● COOLING TOWER

Cooling Tower Case Study Hong Kong

HydroFLOW® treatment removed remaining scale in condenser tubes within 12 months and reduced maintenance across over 50 shopping malls.

12 mo

Scale Eliminated Time

100+

Units Installed

1500 μ S

Max Conductivity Level

1200 μ S

Bleed-Off Stop Level



BEFORE & AFTER

● BEFORE

- ✗ Annual condenser tube cleaning required
- ✗ Scale build-up affecting performance
- ✗ Continuous chemical dosing in use

● AFTER

- ✓ Scale fully eliminated after 12 months
- ✓ Cleaning only done when needed
- ✓ Improved chiller performance maintained

**BEFORE***Scaled condenser tubes before***AFTER***Clean tubes after treatment*

OVERVIEW

Link REIT manages a large portfolio including retail, offices and logistics assets across multiple countries. In Hong Kong, over 50 shopping malls and the headquarters operate fresh water cooling tower systems for chiller plants. These systems relied on chemical dosing and annual condenser cleaning to maintain efficiency. A pilot study was conducted at Lok Fu Plaza in 2013, with condenser tubes not cleaned prior to installation.

CHALLENGE

Cooling systems relied on chemicals and frequent maintenance to control scale and maintain performance.

- Scale build-up in condenser tubes affected chiller performance.
- Annual tube cleaning required for performance.
- Dependence on chemical dosing programmes.
- Bleed-off was required to control conductivity levels between 1500 $\mu\text{S}/\text{cm}$ and 1200 $\mu\text{S}/\text{cm}$.

SOLUTION

HydroFLOW® units were installed on cooling water systems during a pilot study and later rolled out across multiple sites to treat scale and improve system performance.

UNIT INSTALLED

100+ HydroFLOW® units

INSTALLATION POINT

Cooling tower and condenser water pipes

INSTALL DATE

2013 (pilot at Lok Fu Plaza)

TRIAL DURATION

12 months



INSTALLATION

HydroFLOW on pipework



SITE

Cooling system setup



INSTALLATION

HydroFLOW on pipe

RESULTS

Scale Eliminated

After 12 months of HydroFLOW® operation, the remaining scale was completely gone.

Reduced Cleaning

Tube cleaning shifted from annual cleaning to an on-demand basis.

Performance Maintained

Chiller performance maintained without the need for frequent manual cleaning.

Wide Deployment

Installed across over 50 shopping malls and headquarters in Hong Kong.

Successful Pilot

Initial pilot at Lok Fu Plaza led to full rollout across multiple properties.

Operational Efficiency

Systems operated effectively without prior tube cleaning before installation.

KEY TAKEAWAY

Summary

HydroFLOW® pilot study in Hong Kong demonstrated complete scale removal in condenser tubes within 12 months without prior cleaning. The success led to deployment of over 100 units across more than 50 shopping malls. Maintenance shifted from annual to on-demand, improving efficiency.

12 mo

SCALE ELIMINATED

100+

UNITS INSTALLED

50+

SHOPPING MALLS TREATED



ADDITIONAL PHOTO EVIDENCE



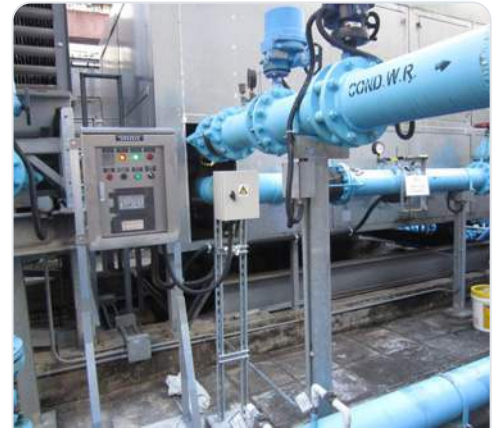
INSTALLATION

HydroFLOW® installed beneath protective grating



INSTALLATION

HydroFLOW® unit with adjacent control panel



SITE

Chiller plant with connected pipework system



SITE

Cooling water pipework and control assembly



INSTALLATION

HydroFLOW® units installed on pipework



SITE

Control panels integrated within pipework system



SITE

Plant room showing full pipework layout



INSTALLATION

Chiller unit with connected system pipework

RELATED CASE STUDY

Cooling Tower Biofilm Control Case Study

Hong Kong

HydroFLOW® was installed at Hong Kong Town Hall to control biofilm in seawater-cooled chillers, restoring efficiency, reducing cleaning frequency and maintaining compliance with chlorine discharge limits.

17% Efficiency Increase

Chiller efficiency improved by 17% within six months of installation.

Biofilm Removed

Condenser tube surfaces were fully cleared of biofilm after installation.

Reduced Cleaning

Tube cleaning frequency reduced, lowering maintenance workload and costs.

HYDROPATH 

Ready to eliminate chemical dosing?

Get a free consultation for your facility.

✉ sales@hydropath.com

☎ +44 (0)115 986 9966

🌐 hydropath.com

✓ ISO 14001:2015

✓ ISO 9001:2015

✓ GREENPRO

✓ SOLAR IMPULSE