



• THEME PARK & HOTELS

## Multi-Application Water Treatment Case Study Hong Kong

35 *HydroFLOW*® installations across Hong Kong Disneyland's park and hotels, improving chiller, pool, fountain and kitchen water systems while reducing chemical use and maintenance.

**35+**

HydroFLOW® Units Installed

**14%**

Pool Chemical Reduction

**14 mo**

Chiller Data Log Period

**30 min**

Steamer Maintenance Time

### ⇒ BEFORE & AFTER

#### ● BEFORE

- ✗ Higher inhibitor and chemical consumption
- ✗ Ozonator and carbon filter remained in service
- ✗ Steamer descaling took 1 day using manual force

#### ● AFTER

- ✓ Chemical use was reduced across systems
- ✓ Ozonator and carbon filter were bypassed
- ✓ Steamer cleaning fell to 30 minutes

### OVERVIEW

Hong Kong Disneyland has installed more than 35 *HydroFLOW*® units across Hong Kong Disneyland Park, Disney's Hollywood Hotel and Hong Kong Disneyland Hotel. The applications cover central chiller plant, swimming pools, water features, fountains, heat exchangers, thermal mixing valves, heat pumps, kitchen equipment and chilled water circuits. The programme was used to support water quality, scale control and operational efficiency across multiple systems on site.

### CHALLENGE

Disneyland needed one treatment approach to support multiple water systems while reducing chemicals, scale and maintenance.

- Condenser tubes needed to remain free of scale buildup
- Chemical consumption had to be reduced
- Pool and fountain O&M costs needed control
- Kitchen steamers required long maintenance shutdowns



## SOLUTION

More than 35 *HydroFLOW*® units were installed across the park and hotels to support chiller plant, pools, fountains, TMVs, heat pumps, kitchen equipment and chilled water circuits.

### UNITS INSTALLED

**35+ *HydroFLOW*® units**

### SITES COVERED

**Park, Hollywood Hotel and Disneyland Hotel**

### PRIMARY APPLICATIONS

**Chillers, pools, fountains and kitchen equipment**

### CHILLER MONITORING

**14-month COP data log**



#### INSTALLATION

*Chiller plant install*



#### INSTALLATION

*on water feature system*



#### INSTALLATION

*On kitchen equipment line*



## RESULTS

### % Pool Chemical Reduction

Sodium hypochlorite consumption in the swimming pool was reduced by 14%.

### 🛑 Ozonator Shut Down

The pool ozonator was shut down to save O&M cost while water quality was maintained.

### 🚫 Carbon Filter Bypassed

The pool carbon filter was bypassed, eliminating discharge of carbon granules.

### ↗️ Chiller Performance Maintained

HydroPATH treatment helped keep condenser tubes scale-free while maintaining chiller performance.

### 💰 Lower Chemical Use

Inhibitor use in the central chiller plant and sodium hypochlorite use in water systems were reduced.

### 🕒 Faster Steamer Maintenance

Steamer maintenance fell from one day with mechanical force to 30 minutes using a high-pressure water jet.

### KEY TAKEAWAY

## Summary

35 *HydroFLOW*® installations at Hong Kong Disneyland, covering the park and hotel water systems. Applications include central chiller plant, swimming pools, water features, fountains and kitchen equipment. Reported outcomes include a 14% reduction in pool sodium hypochlorite consumption, shutdown of the ozonator, bypass of the carbon filter, reduced inhibitor use in the chiller plant and a reduction in steamer maintenance time from one day to 30 minutes.

**35+**

UNITS INSTALLED

**14%**

POOL CHEMICAL REDUCTION

**30 min**

STEAMER MAINTENANCE



## ADDITIONAL PHOTO EVIDENCE



INSTALLATION

Water feature pipework and controls



INSTALLATION

Fountain treatment control assembly



INSTALLATION

Water feature filtration system



SITE

Fountain filtration vessel



INSTALLATION

Kitchen equipment water line



INSTALLATION

Steamer supply pipework



INSTALLATION

Kitchen equipment control point



INSTALLATION

Kitchen water treatment assembly



INSTALLATION

HydroFLOW® on steamer line

**HYDROPATH**

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