

HydroFLOW Case Study

Office Building Cooling Towers in the US Southeast



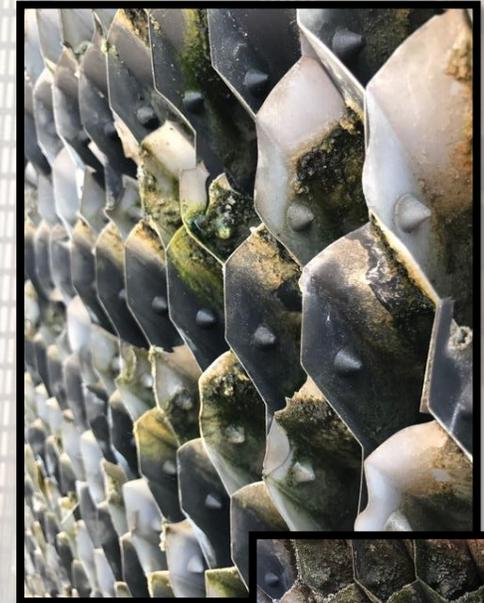
Background

The Customer

The commercial complex is a city-within-a-city, which includes 2.3 million square feet of office space in six buildings, over 50 vibrant restaurants and retail shops, and three world-class hotels with over 4,000 rooms. All buildings are interconnected by a unique series of skywalks that create an authentic urban experience.

The Customer's Pain Point

Due to high water costs, the facilities manager of the south and north towers ran his cooling towers at high cycles of concentration in order to reduce water usage, which resulted in severe scale and bio problems.



Background

Southeast Pump and Equipment (SPE) has been selling pumping and hydraulic equipment to the commercial complex since 2008. In 2018, SPE began to introduce *HydroFLOW* equipment in the south tower, as a cooling tower and chiller water treatment optimization method. The original plan was to conduct a 90-day trial, but a chemical injection system malfunction motivated the customer to purchase the *HydroFLOW* equipment outright.

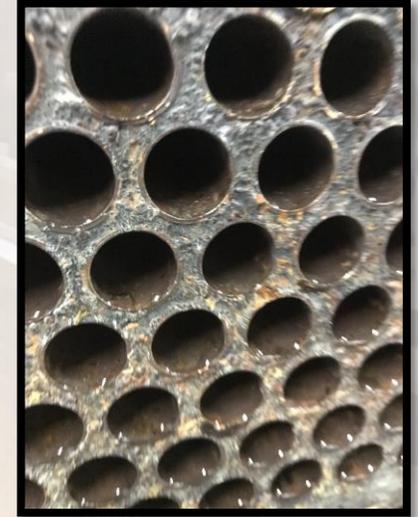
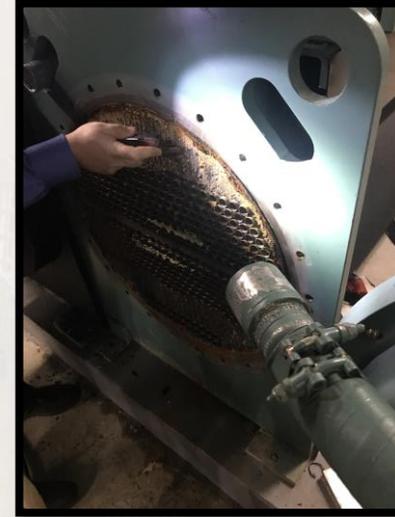
The main challenge was to reduce the cooling tower's bio-counts from 100,000 to under 10,000 CFU. After a few short days with a *HydroFLOW i14*" device, the CFU count dropped to under 1,000. Other added benefits included reduced scale and biofilm accumulation in the cooling tower and chiller tubes.



Installed *HydroFLOW i14*" device

Results

- The *i14*” device helped the commercial complex achieve a return on investment of roughly six months.
- These results motivated facilities managers of other buildings to request a capital budget to purchase *HydroFLOW* equipment. The global pandemic caused a brief delay in implementation, but at the end of 2020, SPE installed multiple custom *HydroFLOW* devices on cooling towers and potable water systems throughout the commercial complex.
- Following the success of this project, SPE began to explore energy rebate programs with a local power provider.



Cooling Tower Chiller Inspection



Installed *HydroFLOW* devices

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