TEKLEEN®
AUTOMATIC SELF-CLEANING
WATER FILTERS

CLEANER COOLING AND LOWER COSTS

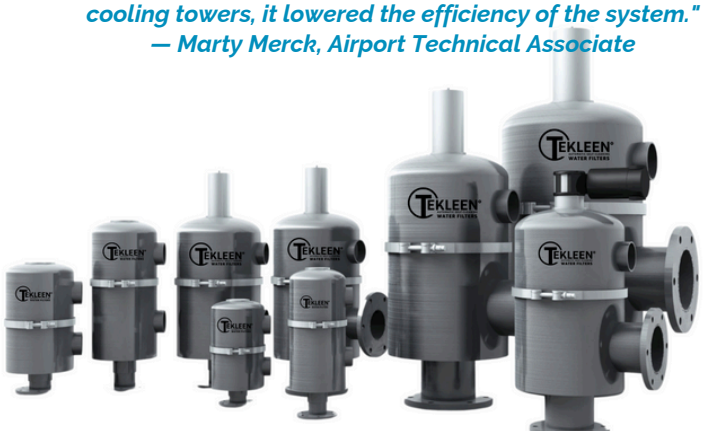
AT CALIFORNIA'S JOHN WAYNE AIRPORT

JOHN WAYNE AIRPORT
ORANGE COUNTY

PROJECT OVERVIEW:

John Wayne Airport, located in Santa Ana, California, faced challenges with its cooling system due to the lack of filtration. Dirt and dust from airplanes lowered efficiency, requiring harder pumping and frequent cleaning. Tekleen's self-cleaning filters offered a solution.

> *"We originally had no filtration system whatsoever. As all the dirt and dust from the planes got into the cooling towers, it lowered the efficiency of the system."*
> *— Marty Merck, Airport Technical Associate*



CHALLANGES:

- **Inefficient Cooling System:** The lack of filtration allowed dirt and dust to accumulate, reducing system efficiency and requiring additional pumping power.
- **High Maintenance Costs:** Frequent cleaning of the cooling towers was necessary due to the buildup of contaminants.
- **Environmental Concerns:** Traditional cleaning methods used large amounts of water, raising environmental concerns.

> *"Tekleen's backwash mechanism results in less water usage, which was important for us from both an economic and environmental standpoint."*
> *— Marty Merck, Airport Technical Associate— Marty Merck, Airport Technical Associate*

SOLUTIONS:

Tekleen's self-cleaning filters effectively addressed the challenges of inefficient cooling systems, high maintenance costs, and environmental concerns. By implementing this technology, the airport achieved significant improvements in system efficiency, cost savings, and environmental sustainability.

RESULTS:

- **Improved System Efficiency:** The Tekleen filters eliminated the need for additional pumping power due to cleaner water flow, leading to reduced energy consumption.
- **Reduced Maintenance Costs:** The automatic backwash feature significantly minimized the need for manual cleaning, lowering overall maintenance costs.
- **Environmental Benefits:** The reduced water usage for cleaning contributed to a more sustainable operation.
- **Cleaner Water Flow:** The airport observed cleaner water flow through the system, indicating improved system performance and potential for extended chiller life.
- **Fast Payback Period:** The reduced pumping costs and maintenance savings are expected to offset the initial cost of the Tekleen filters within the first year.