

# Baggage-Free Eaton Strainers® Make Perfect Landing at JFK

## **Location Details:**

New York

## **Segment Details:**

Terminal HVAC

#### Problem:

24-hour maintenance-free water filtering of the HVAC equipment

#### Solution:

Eaton filtration systems

#### Results

Fifteen years of uninterrupted service

### **Contact Information:**

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Christopher Gogola, maintenance manager, JFK Energy Center

# **Background**

Located on Jamaica Bay in the southeastern section of Queens County, N.Y., John F. Kennedy International Airport has more than 30 miles of runway surface and occupies some 4,930 acres of land. Better known as JFK, the airport has seven operating airplane terminals and roughly 125 aircraft gates.

More than 90 airlines operate out of JFK, which also serves as the base of operations for JetBlue Airways and the international gateway hub for American Airlines and Delta Air Lines. The airport is the fourth largest hub for American and the sixth largest hub for Delta.

JFK handles close to 60 million yearly passengers, making it the world's 12th busiest airport by that measure. The airport also serves as the work site for some 35,000 employees.

## Challenges

All those passengers and employees are kept warm in the winter and cool in the summer thanks to a heating, ventilation and air conditioning plant with a cooling tower located in the central terminal area. The tower must operate efficiently 24 hours a day seven days a week through all weather conditions.

To ensure this critical function is ready, the tower needs a strainer system that can not only handle the full load of 25,000 gallons per minute running through the tower, but also be maintenance-free and automated. Because of space constraints, the strainers also needed to be the primary source for removing dirt and other impurities.



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#### Solution

JFK eventually chose Eaton for the job and selected a Model 2596 36-inch fabricated, automatic, self-cleaning strainer. Designed for the continuous removal of entrained solids from liquids, the automatic backwash strainer ensures maintenancefree operation of the system.

"This strainer has handled the full load of our water continuously for years for the supply of power to all of JFK airport," says Christopher Gogola, maintenance manager for the JFK Energy Center. "It is critical to us to be sure there is no interruption in the power supply to the facility. Eaton has been a key component in this endeavor."

With an automatic control system constantly monitoring the strainer operation, cleaning is accomplished by an integral backwash system in which a small portion of the screen element is isolated and cleaned by reverse flow. The remaining screen area continues to strain thereby providing uninterrupted water flow. The efficient design requires only a small amount of the strained liquid to carry away and dispose of the debris from the strainer.

#### Results

Fifteen years ago, when the strainers were initially installed, Eaton's engineers believed they had the precise design needed at JFK. That turned out to be a very good call, as the Eaton strainers are still delivering continuous, uninterrupted, maintenance-free service.

Gogola agrees, and noted, "The Eaton strainer has been operating at JFK airport for the last 15 years without maintenance or attention. The ruggedness and durability has been great."

During that 15-year run, JFK has, of course, experienced delays and cancellations, unfortunately associated with any airport. Safely putting people and aircraft into the air and onto the ground practically dictates complications...especially so at one of the world's busiest facilities.

Fortunately, all of those same people dealing with the delays and cancellations remained cool, warm and comfortable thanks, to a large degree, to the uninterrupted service of Faton strainers



Eaton Model 2596 automatic, self-cleaning strainers have been delivering 15 years of uninterrupted service at JFK airport.

## **Eaton Corporation**

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