

# Customer Case Study

# Heathrow

**London Heathrow, one of the world's busiest airports, caters for more than 200,000 passengers every day. With a network of 120 pumping stations, it needed a smart, energy efficient solution to address chronic clogging in aircraft toilet wastewater, which contains high levels of non-biological solids, including wipes and nappies.**



REDUCING  
ENERGY



REDUCING  
POLLUTION



REDUCING  
EMISSIONS



REDUCING  
LEAKAGE



REDUCING  
WATER USE

## The solution

Heathrow wanted to reduce the operational costs and environmental problems associated with high levels of floating debris on the wet well surface and non-biological solids in the wastewater. Xylem's Flygt Concertor, with integrated intelligence that uses sensor monitoring, self-optimising technology and adaptive hydraulics, was the perfect smart, energy-efficient processing method.

## The process

Concertor's energy minimiser function, together with patented Adaptive-N hydraulics and the IE4 efficiency motor, automatically ensure that all the pumps run at their most efficient duty point. As there is no need for ventilation, cooling or heating of cabinets, customers also benefit from substantial energy savings over the system's total lifecycle.

The central area sanitation unit adjacent to Terminal 1, a receiving area for aircraft toilet waste, was experiencing regular clogging and the sump required significant operational activity to maintain cleanliness.

Xylem's state-of-the-art pumping system, Concertor, was able to solve these chronic clogging problems. It delivered proven reliability at the lowest total cost of ownership, while reducing energy consumption, helping Heathrow to achieve its OPEX and sustainability goals.

## The outcome

Concertor has provided clog-free operation as well as a remarkable improvement in the wet well environment.

- Cost savings: Approximately 87.5% reduction in cleaning and service costs.
- Time savings: Call outs have been reduced.
- Energy savings: Consumption reduced by 53%.

***"We have used a number of Flygt technologies over the years and have found the team to be very willing to listen to our needs, always eager to find a solution to our particular challenge. As well as peace of mind - which really is priceless - the cost savings are significant, at approximately 87.5% of the annual costs in cleaning and servicing."***

Ian Jolly System Specialist, Water Services, Heathrow Airport

**87.5%**  
reduction in  
service and  
cleaning costs

**53%**  
reduction in  
energy

**200,000**  
passengers  
per day

**120**  
pumping  
stations

**Countdown to zero.**

**xylem**  
Let's Solve Water