

# OpenBlue Services

## Connected Chillers deliver enhanced comfort, performance and energy savings to business hub



Dubai, United Arab Emirates

In this renowned center of global trade, Johnson Controls was called upon by one of Dubai's most dynamic business hubs to consistently maintain a healthy and comfortable environment for its more than 1,500 tenant companies and visitors. Becoming its HVAC partner in 2004, Johnson Controls has been expertly and efficiently cooling the hub with connected YORK Chillers providing 20,000 tons of cooling capacity.

### The challenge

The business hub houses a growing number of vast industries, including aviation, freight and logistics, IT, telecommunications, pharmaceuticals, engineering, food and beverage, jewelry, cosmetics and more. It also services these industries with numerous amenities, continuing to expand these conveniences. Millions of square feet of office spaces and hot desks attract international executives and entrepreneurs, adding to the hub's vibrancy, allure and development.

The significant scale and continuous evolution of the site means increasing uptime, performance and energy efficiency; identifying and solving problems quickly; and preventing major failures are crucial. Also, improving occupant experiences through health, safety and comfort measures and reducing costs are equally fundamental – and complex – challenges.

### Chiller health and condition monitoring

Johnson Controls installed and maintained a suite of eight digitally connected centrifugal and air-cooled YORK chillers to address needs, challenges and possible problems early through data and fault diagnostics.

With a Johnson Controls connected chiller, a significant reduction in unplanned repairs and mean time to repair can be achieved while also reducing energy use and costs.

To eliminate chiller downtime at the hub, Johnson Controls prevents potential issues by monitoring its condition and operational performance. The Connected Chillers software has several performance monitoring metrics for fault detection and diagnostic tools. When one of the chillers in the facility began showing less-than-perfect performance according to the Chiller Performance Index, Johnson Controls was alerted and able to correct the matter.



## Chiller energy monitoring

The team also uses the Building Management System (BMS) to monitor and maintain added energy savings with the aid of a demand water flow system.

To further enhance the chiller's energy performance, Johnson Controls made several monitoring and maintenance recommendations, including:

- Condition-based monitoring and early identification of maintenance issues
- Resetting water flow measurements gallons per minute (GPM) to meet the design guide

## The outcome

By applying the digital capabilities of connected York chillers, the partnership between Johnson Controls and the business hub has demonstrated a return on investment against capital and operational investments alongside achieving comfort, performance and energy efficiency goals.

# OpenBlue

OpenBlue is a complete suite of connected solutions that serves industries from workplaces to schools, hospitals to campuses, and beyond. This platform includes tailored, AI-infused service solutions such as remote diagnostics, predictive maintenance, compliance monitoring, and advanced risk assessments. A dynamic new space from Johnson Controls, OpenBlue is how buildings come alive.

To read more about OpenBlue, visit:  
[www.johnsoncontrols.com/OpenBlue](http://www.johnsoncontrols.com/OpenBlue)



HQ2110025