



SIEMENS

Ingenuity for life

These buildings fulfill a vision.

Building management systems from Siemens make the Dubai Airport Freezone a perfect place for people to be happy.

#CreatingPerfectPlaces

The Dubai Airport Freezone is a state-of-the-art business park in the United Arab Emirates that provides a perfect place where businesses are free to grow.

Creating the perfect infrastructure

Established in 1996, Dubai Airport Freezone quickly became an ideal base for conducting business in the Middle East. From business setup, to administrative and operational services, to office space, Dubai Airport Freezone is a one-stop shop for new and existing clients. Today, Dubai Airport Freezone boasts 15 office buildings with more than 1,600 clients, including many Fortune 500 firms. Two new buildings are under construction. In addition to fully customizable office space, the complex also offers warehouses and light industrial units.

Siemens installed its first building management system at Dubai Airport Freezone in 1998, when the first two buildings were under construction. Siemens and Dubai Airport Freezone have been partners ever since. "We have had a strong partnership with Siemens for almost 20 years now," said Wilfred Castelino, Facility Officer for the building management systems at Dubai Airport Freezone. "I look to Siemens for new technology to help us save energy and work toward sustainability."

Achieving energy and sustainability goals

Siemens provides lifecycle support for the building systems installed in Dubai Airport Freezone's office buildings. Throughout the years that has meant stepwise and continuous modernization of existing systems to the latest technology, a goal of Dubai Airport Freezone's management to reduce energy costs. The results have been remarkable. For example, Dubai Airport Freezone was able to reduce costs on electricity and water from 34 million AED in 2010 to 20 million AED in 2017. Dubai Airport Freezone accomplished this 14 million AED reduction despite the fact that new buildings came online during this period.

"Siemens has helped us in every energy saving activity," Wilfred said. "They have given us very good solutions, particularly Demand Flow™, the patented solution from Siemens for chiller plant optimization. Now we are going with Desigo™ CC as a new technology." Currently Dubai Airport Freezone's building systems are being modernized to the building management platform Desigo CC. The user-friendly platform allows multiple building systems to be operated from one station.

A perfect place in numbers

42,000 legacy data points



1,600 clients, including many Fortune 500 firms



48% total accumulative CO₂ reduction since 2010



41% cost savings in electricity and water consumption*



1 Airport Freezone

* 2017 in comparison to 2010

Smartest buildings in the region

Dubai Airport Freezone chose the building management platform Desigo CC to meet its goals of having the latest technology and an integrated platform for its different building systems. "We want to have an automation and digitalization landmark solution that gives us the smartest buildings in the region," Wilfred said. Data is a crucial element of such a solution. As part of system modernization begun in 2013, Siemens migrated 9,600 data points on automation level. The current transition to Desigo CC calls for the migration of another 42,000 legacy data points. Working together, Dubai Airport Freezone and Siemens turn this building data into opportunities to improve energy efficiency and reduce operating costs.

Integrated building management with Desigo CC

The buildings are becoming increasingly complex and the expectation of efficient building management is rising, too. The number of installed systems is vast – and the necessity that they be interlinked and communicate with each other is a prerequisite for business optimization and improving efficiency. As a result, the traditional management station as a silo monitoring solution is no longer sufficient. Integrating all disciplines into one management platform becomes a must. New technologies

allow for a common, consolidated view of all systems.

"Desigo CC simplifies our tasks and gives us one platform to control all of our building systems," Wilfred said. Dubai Airport Freezone is using Desigo CC to integrate its third-party lighting system, video surveillance, access control and fire alarm system.

Dubai Airport Freezone plans to pass on the technology benefits of Desigo CC to its clients. For example, the platform has a mobile application that clients can use to control lighting and individual office temperature set points.

Public dashboard

Dubai Airport Freezone has a Siemens public dashboard in its food court to share its success stories with clients and the public as a way to help motivate building occupants to participate in energy saving measures. The public dashboard displays current data about the building's energy consumption and environmental efforts. The information is gathered and transmitted by the Energy Monitoring and Controlling Solution (EMC) from Siemens.

For example, Dubai Airport Freezone's overall CO₂ accumulative reduction is 48 percent since 2010. "Clients feel that there is some responsibility toward society and as they see it they help us achieve our goal to minimize operation costs," Wilfred said.

Highlights

- Consequent and well-planned modernization of the field and control levels
- Integrated management of all building systems by Desigo CC
- Modernization to latest technology
- Public dashboard: increased awareness through displayed success stories
- Share technology benefits with clients

Article no. BT_0154_EN (Status 03/2018)

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