

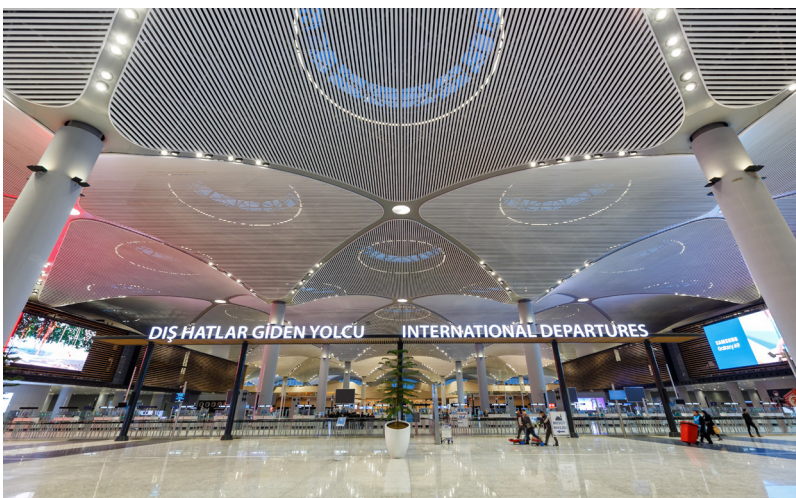
# A Helvar Case Study

## Istanbul Airport

Istanbul, Turkey

**Helvar**

## Delivering a lighting intelligence mega-project

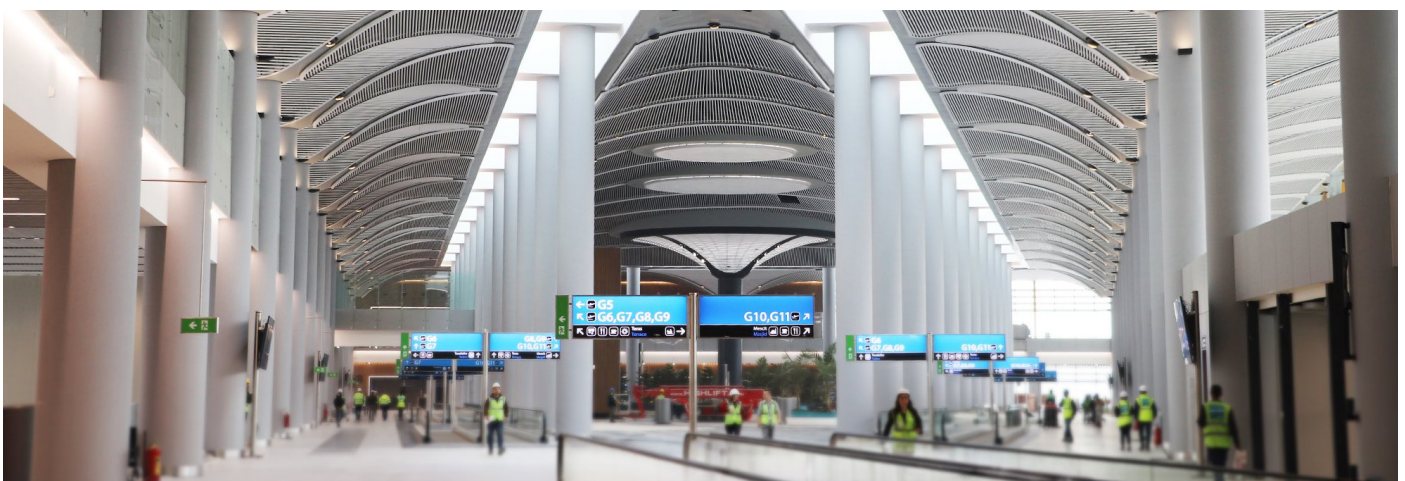


In 2015, the construction of Istanbul's New Airport started to take shape, the airport has been designed to create a unique, spacious and environmentally friendly environment for its estimated 200 million passing passengers. The design and inspiration of the architecture has been drawn from its surrounding influences of Turkish-Islamic culture and heritage.

The first phase included the construction of three independent runways and taxiways, the apron, terminal building, air traffic, communication and meteorology systems is almost complete.

The first terminal building covers an area of 1.3 million m<sup>2</sup> and at the time, was the biggest terminal building under one roof, serving around 30 million passengers per year. Istanbul's new Airport opened in Spring 2019, and held the title of the largest airport constructed from scratch, with 76.5 million square meters of area.

This new development was a significant investment to Istanbul, creating a number of jobs not just for the 23,000 construction workers but also in the long term when this is a fully functioning airport. 100,000 m<sup>2</sup> of space is home to retail stores and food services available to passengers travelling through the airport. The space is currently the largest duty-free zone in the world with more than 400 national and international brands.





# Helvar

“We had a huge area to control, quickly and accurately - a tailor-made solution is what we needed, and Helvar was the one who helped us to achieve this.”

## SERHAN UÇAK

Electronic Systems Project Manager, IGA Istanbul Airport

Istanbul's new airport is supported with a fully automated DALI lighting control system by Helvar using the DALI standard (EN32386) lighting protocol. Elekon, Helvar's Turkish distributor known for their experience of large lighting installations, are managing the installation of Helvar's lighting control system.

Using Helvar's two standard open protocols such as DALI and TCP/IP, Helvar can communicate with DALI luminaires, sensor and control panels via automation cable, saving a considerable amount of installation and commissioning time. The lighting controls at the airport are monitored via a BMS system

which measures the energy efficiency of Helvar's lighting system, and highlights lighting faults in real time to ensure maximum uptime.

With an area as large as this, it's vital to monitor and reduce energy usage as much as possible, so additional features such as daylight harvesting are in place to ensure that lights are not in use when the right level of natural light is available.

There are over 300,000 lighting

fixtures across the Istanbul airport, which combine to create near-natural light throughout the airport - this is not only vital for the 40,000 staff who work across the airport, but it's also important for the millions of passengers who pass through the gates - lighting controls which create a welcoming and comfortable experience for when you need it most.

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