

Project:  
**SIPCO- Jeddah Distribution Center**  
**Kingdom of Saudi Arabia**

Building Type: Warehouse



Saudi Industrial Projects Company (SIPCO) makes, sells, and distributes some of the world's most recognized consumer brands. It is the responsible Pepsi manufacturer and distributor in the Western Region of Saudi Arabia. Jeddah distribution center is the largest PEPSICO Warehouse in the country with an area of more than 12,000 sqm. PEPSICO affiliated companies have installed Solutube® Daylighting Systems globally and is considered one of their main solutions towards green operations.

**Objective**

Lack of natural light forced the use of artificial lighting system that incur operational and maintenance cost. The installed 400W Metal Halide lamps, are operated at half strength to reduce power usage and heat build-up causing lower illumination levels. SIPCO installed Solutube® Daylighting Systems to meet the required illumination standards and subsequently dramatically reduce electricity consumption for lighting.

**Solution**

The area under study was a high open ceiling distribution center where the new series of Solutube® SkyVault® was a perfect solution. M74 DS-O were installed to achieve an average of 200 lux throughout the year. It is calculated that the installed units result in a savings of 648,240 KWH/year. After one month, the actual difference of SAR 17,011 (\$4530 USD) was observed in the electrical bill after installation of the recommended system. The reduction of heat dissipated by artificial lights has been tested using thermography camera and noted as an added benefit of the installation (image to the right). The impact of natural light in daily work activity is proudly welcomed by the workers. Management is satisfied by the results as it exceeds expectations and similar projects are currently under study for different locations.

**Products Used**

- 185 Solutube® M74 DS-O units (29 in/740 mm Daylighting System)

**Testimonial**

“After successfully piloting the technology in SIPCO-1 CO2 plant one of our manufacturing facility, we looked on to our biggest distribution center as the best site for application. We installed Solutube® Daylighting Systems as one of our biggest projects in relation to green operations and have found the technology to provide us instant results and satisfaction. The resulting savings and invaluable benefits of daylight to our employees bring us a consistent sense of accomplishment.”

**Prashant B. Amrutkar**  
Manager - Health, Safety & Environment  
**Camille Harmouch**  
Director - Manufacturing & Warehousing

