

Case Study: Hotel & Leisure

Centralized hot water generation Two Q-ton CO₂ heat pumps installed at Sunrise Beach Hotel Protaras

Fact File

Project: Sunrise Beach Hotel Protaras, Cyprus
Project Plan: Sanitary hot water refurbishment
Product: Two 30kw Q-ton system
Two 4,000 litre hot water storage tanks



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Cypin Ltd supplied the system and helped the Consulting Engineer with the design and the Mechanical Contractor with the installation. Cypin also monitors the system for optimization of operation, as well as making suggestions for corrective measures to save energy.

In order to make sure Sunrise Hotel can accommodate sanitary hot water efficiently, CYPIN LTD worked in collaboration with MHIAE and connected two Q-ton to two 4,000 litre hot water storage tanks.

The hotel features a central plant room including now, two 4000LT hot water storage tanks connected in series with two Q-ton CO₂ heat pumps. There is also a 4000LT cylinder preheated by a Chiller heat recovery system, and another 4000lt cylinder heated by the boiler. The system is now in full operation and the Q-ton heat pumps are currently supplying 25,000 liters of sanitary hot

water a day at 70°C and 10,000 liters from the boilers.

It is possible to recover heat from the chillers (June, July, August and September) and during that period, the use of the existing boiler will be minimized.

The hotel is now saving up to 50% compared to their previous running costs with their existing boiler and 55% savings on carbon emissions.

Mitsubishi Heavy Industries supplied an effective solution improving quality and comfort to their client. Q-ton ticked all the boxes and contributes to substantially reduced running costs as well as carbon emission savings.



Overlooking Perna Beach, this 282 room relaxed hotel in a contemporary building is located 1 km from the hilltop Church of Profitis Ilias, and 6 km from Cape Greco National Forest Park.

