

'Comfort with sustainability package' by Elite world hotels

The Situation

Elite World Hotels is a premier hospitality brand known for offering a blend of luxury and modern elegance across its properties in Turkey. Combining contemporary design with traditional elegance, the brand has been revolutionising hospitality for over 46 years, delivering utmost guest experience.

The existing set up of Elite World Istanbul Taksim Hotel was inefficient, requiring two chillers to meet the cooling demands, which led to higher energy consumption and increased operational costs. The system lacked the ability to balance and optimize energy use, resulting in unnecessary power usage and inefficiencies. Additionally, the mechanical room's layout needed a revamp as well.

We partnered with Grundfos previously and were impressed with their solutions. After an energy check, they proposed an efficient engineering solution for our older hotels, and the results exceeded expectations.

Murat Kurt Technical Coordinator Elite World Hotels

The Solution

To meet their needs Elite turned to Grundfos and its expertise in system optimization of HVAC system. The mechanical room was revamped in collaboration with the project engineer, ensuring that pumps and cooling equipment's were selected to align with new energy efficient design. TPED pumps were strategically placed next to the chillers in the rooftop unit to reduce the space usage in mechanical room and enable independent operation of the chillers. This setup allowed the chiller pumps to function independently, achieving the desired capacity while ensuring both energy efficiency and system flow balance.

The system previously required two chillers resulting in higher energy consumption however, with the new solution, cooling needs were met using a single chiller due to the achieved balancing. This not only met the anticipated energy saving from the pump replacement but also reduced the overall energy consumption of the cooling system due to system optimization.





17.5 m³ space savings

Upto 40.75% energy savings

13.835 kg/year

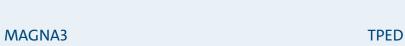
The Outcome

In addition to substantial energy savings, the redesign of the mechanical room created additionally usable space, which is particularly valuable in the Taksim area ,where every square meter is highly prized.

Grundfos Supplied

Circulator Pumps - TPE, TPED, MAGNA3, MAGNA3D, MAGNA3N







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