



Addressing Traditional MEP Challenges in the Hotel Industry: Grundfos Revolutionizes High-End Hospitality with Modular Innovation

Project Background

In Shangyu, Shaoxing—a place steeped in the rich cultural heritage of Jiangnan—a landmark project that blends humanity and nature, the Shangyu Marriott Hotel, officially opened in September 2023. Drawing inspiration from the region's historical legacy and natural landscapes, the hotel design seamlessly fuses Jiangnan charm with modern luxury to create an ideal living space where poetry and quality coexist. Striving to deliver an exceptional guest experience, this landmark project, with a total investment of 650 million yuan, not only charts a sustainable development path for reinventing the high-end service industry through innovative technologies but also sets new benchmarks for modern hotels in terms of comfort, intelligence, and sustainability.

Balancing Energy Efficiency and Stability, Prioritizing Operational Experience

As a key project under management of a major international hotel chain in China, the developers placed stringent requirements on the MEP systems: not only must they ensure an exceptional guest experience, but they must also achieve dual goals—optimization of lifecycle operational costs and a transition to low-carbon operations.

Given the nature of the hotel industry, the HVAC system must deliver year-round, uninterrupted consistent temperature control. It must handle seasonal temperature fluctuations that challenge system stability, while also intelligently adjusting to the dynamic load demands of different functional spaces through smart zoning and regulation—ensuring a consistently comfortable indoor environment and high-quality water experience for every guest.

At the same time, the hotel management has high expectations for intelligent and user-friendly operation and maintenance. The system is expected to feature capabilities such as self-diagnosis and remote monitoring, significantly reducing the day-to-day maintenance

burden on the operations team. This allows the hotel management to focus more on enhancing guest service quality rather than being repeatedly disrupted by equipment failures or complex adjustments.

Grundfos Empowers Green Hotel Operations Across the Entire Value Chain:

Modular, High-Efficiency, and Sustainable

To meet Marriott International standards and demands for high energy efficiency, system stability, and intelligent O&M in its HVAC and water supply systems, Grundfos delivered a green, high-efficiency modular intelligent plant room solution.

From space optimization and construction time reduction in the early building phase, to energy savings and operational stability during



GRUNDFOS 

Possibility in every drop



Compared to traditional solutions, the plant room footprint was reduced by **over 30%**

The overall operational efficiency of the distribution system improved by **5–20%*** compared to traditional solutions

*The number varies by different projects

day-to-day use, and further to intelligent support for long-term maintenance, Grundfos' solution provides values to the entire lifecycle of the hotel's equipment system. This highly integrated, sustainable system architecture not only enhances resource utilization efficiency but also creates a quieter and more comfortable environment for guests.

High-Efficiency Modular Equipment Configuration

To meet the hotel's multiple demands for space, high efficiency, and reliability, Grundfos introduced Grundfos DELTA prefabricated intelligent pump set and Hydro series water supply units, equipped with IE4 high-efficiency motors to significantly reduce energy consumption.

"Grundfos' integrated solution design has significantly reduced both construction and operational costs. At the same time, the system's efficient and stable performance has greatly lowered energy expenses, driving a notable improvement in the hotel's green operation index. This kind of solution—balancing short-term benefits with long-term sustainability—is exactly the core standard by which we choose our partners."

Zhang Linling, Owner Representative
Wolong Group, Investor of Shangyu Marriott Hotel

The solution features a highly integrated system design with a more compact and flexible layout, reducing the plant room footprint by over 30% compared to traditional solutions and substantially lowering civil engineering costs. For core equipment, key accessories such as Grundfos-certified pipes and valves are pre-assembled and tested at the factory to ensure efficient pump operation and optimal hydraulic system matching. The fully integrated system is delivered ready for installation on-site, reducing construction complexity, significantly shortening the build timeline, and enabling the hotel to be put into operation as soon as possible.

Intelligent Digital Operation and Maintenance Platform

This solution is also paired with Grundfos iSOLUTIONS intelligent monitoring system, allowing the hotel to achieve full visibility of equipment operating status and remote intelligent management. This not only enhances operation and maintenance efficiency but also supports predictive maintenance, effectively reducing the occurrence of failures and maintenance costs. Compared to traditional systems, the overall system efficiency has increased by 5-20%, significantly reducing energy waste and providing solid support for the hotel's sustainable operation goals.

From construction and operation to maintenance, Grundfos provides a full lifecycle solution, offering technical support for the long-term value assurance of the hotel's assets. This helps the hotel achieve the triple goals of a guest comfort, efficient operations, and green transformation—creating an outstanding guest experience while injecting innovative momentum into the sustainable development of the industry ecosystem.

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