



better together

CASE HISTORY

Energy efficiency for the new Hangzhou Metro Line 5

Situation

Hangzhou is one of the most important and populous cities in China, with a population of about 10 million people, and its metro network was recently upgraded with a new line, called the "Energy Line", which covers a distance of over 50 km segmented into 40 modern stations. The plant operator asked us for a system for collecting and relaunching wastewater with an energy efficiency equal to that of the brand-new and high-tech Metro 5 station.

Solution

The customer asked us to manage the wastewater coming from the facilities of the underground stations of Line 5 of Hangzhou, maintaining characteristics of high reliability and efficiency.

The supplied Zenit system includes lifting stations with blueBOX collection tanks and UNIQA electric pumps.

The blueBOX polyethylene collection tanks can be installed on the floor or underground. The many inlet and outlet pipe fittings allow optimal installation even with existing systems.

The blueBOX tanks were supplied with UNIQA Series electric pumps and full free passage vortex impeller, ideal for lifting biological liquids and sewage.

The blueBOX 400evo model, selected for this type of application, was installed with two external pumps in a horizontal position to ensure high flow rate in case of high input volumes.

The system management by means of an electronic control panel allows operation with alternating cycles to distribute the workload uniformly across the installed machines.

Benefits

The demand for energy efficiency was brilliantly met by the UNIQA motors, designed to reach the PREMIUM IE3 class.

Unlike common concrete tanks, blueBOX polyethylene prefabricated stations are maintenance-free and are more resistant to chemical and mechanical stresses to which they are subjected by the collected faeces, with significant savings.

Furthermore, the role of Zenit role as a single reference point for supplying both the pumping system and the collection tanks enabled the manufacturer to speed up the works and provide a higher quality of service.



Hangzhou Metro Station



Installation phases



Installation phases

Customer	Hangzhou Metro Group				
Company Profile	Urban transport government body				
Location	Hangzhou	Country	China	Area	Zhejiang
Application	Waste water collection and lifting				
Installed Products	BlueBox 60/150, BlueBox E 400S, UNIQA				
Date	June 2019				