



better together

CASE HISTORY

Zenit Uniqa efficiency for healthy and sustainable wastewater services in Turkey

Situation

The Bodrum peninsula is one of the most popular tourist areas in Turkey. It is also an important natural habitat with unique land and marine ecosystems.

The coasts of the peninsula are nearly entirely lined with tourist facilities and this has caused many problems, including increased water pollution.

Given the need to provide healthy and sustainable wastewater services, a new Advanced Biological Wastewater Treatment Plant was built to discharge to the deep waters of the Aegean Sea without risks for the environment.

Solution

Pumping system efficiency was identified as the key factor for reducing energy costs given the size and relevance of the plant.

The General Directorate of the Muğla Metropolitan Municipality Water and Sewerage Administration (MUSKI) decided to favour a new, more modern pumping system over obsolete, inefficient technology. Following negotiations with MUSKI and feasibility studies conducted by plant managers, the solution identified by Zenit consisted in replacing of several pieces of mechanical equipment and, more in detail, included the supply of 47 Uniqa High-Efficiency submersible pumps with power spanning from 9 up to 90 kW fitted with anticlogging channels impeller.

Benefits

Plant efficiency increased by 30% as a result of the combination of the chosen motors and hydraulics at the working point following the replacement.

The tests carried out so far have demonstrated that the efficiency increase could reach 50-60% in the long term and under standard conditions.

The efficiency and reliability of the UNIQA pump motors have made it possible to optimize energy consumption and importantly also to limit maintenance activities, meaning an even further reduction in management costs.



The pumps before the installation



Installation phases

Customer	MUSKI (Muğla Metropolitan Municipality Water & Sewage Administration)			
Company Profile	Municipality			
Location	Muğla	Country	Turkey	Area Europe
Application	Wastewater Treatment Plant			
Installed Products	ZUG OC065C 9/2BW 155; ZUG OC100A 18,5/4AW 270; ZUG OC080D 9/4AD 230; ZUG OC100B 37/4AW 322; ZUG OC100B 30/4AW 295; ZUG OC080W 30/2AW 201; ZUG OC100C 45/4AW 342; ZUG OC250B 37/6AW 400; ZUG OC200A 45/4AW 334; ZUG OC100C 90/4AW 403; ZUG OC200B 22/4AW 275; ZUG OC100F 55/2AW 230			
Date	February 2021			