



Pumping complete sanitary water

water solutions

HOTEL NAVIS IN CROATIA

Situation

Navis Hotel is placed by the seaside, aside of the cliff in Croatia. Approach to the hotel is from the top by the public road where is the small car parking for the guests and the hotel reception.

Just under the same public road is pressurized public sewerage channel. 120 meters away from the hotel reception and 40 meters away from the nearby villa is placed the shaft where pressurized sewerage channel turn onto gravity flow. In the same shaft hotel have to pump their complete sanitary water.

Two main problems have to be solved: 21m geodetic difference and the long pipeline.

Project manager have calculated flow 7 lit/s and asked Salix alba for solution with grinder pumps. Pumping shaft have to be on the lowest point, inside garage.

Solution

Salix alba decide to design a three GRN550/2/G50H pump system. System is designed in such way that all pumps are exchanging in operation:

one pump is operating at low inlet flows (or low loads) while two pumps are operating at nominal and peak loads.

This system is designed to alternate the pump work, so that the three pumps doesn't operate at the same time. Pumping shaft is designed in such volume that:

- complete number of startups are low, but it is enough high that water is regularly exchanged;
- pressure pipeline diameter is selected in such manner that flow speed is low enough not to cause high pressure drop, and high enough to prevent sedimentation inside the pipeline, no matter is in operating one or two pumps at the same time;
- the volume of waste water in the pressure pipeline is lower than switching volume of the one pump (important in case of back flow valve failure).

Benefits

Three pump system has low possibility of failure in operation and low in power consumption. Also it is the cheapest multi pump system.



Navis Hotel



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The pumps used: GRN and GRbluePRO

Customer	Salix alba				
Company Profile	Zenit Group representative for Croatia and solution provider				
Location	Opatija/Preluk	Country	Croatia	Area	Rijeka
Application	Sanitary wastewater lifting				
Installed Products	3x GRN 550/2/G50H; 2x GRbluePRO 100/2/G40H				
Date	April 2015				