DEVELOPMENT OF A NEW RESIDENTIAL AREA | ULMEN, DEUTSCHLAND

REFERENCE: HOMA CONTROL PANEL AND PUMP STATION KEEP DEVELOPMENT COST LOW

To develop a new residential area the municipality of Ulmen was forced to transfer the wastewater from the new buildings efficiently to the existing sewer system. The task: A wastewater pumping station had to be specified, installed, and integrated into the existing control system of the Ulmen utilities. Due to the long distance and the long dwell time of the wastewater in the pressure pipe HOMA was asked to supply also a solution which avoids unpleasant odors from the wastewater. For that reason, HOMA suggested including a small compressor station in the design specification and calculated the required airflow.

The challenge:

The customer requested an efficient and reliable pumpstation and control panel that would fulfill the local demands, and which could be easily integrated into his existing control system.

Components installed:

- HOMA-IWS SK 15 pump station made of HDPE, preassembled with guide bars and discharge connection
- HOMA HMC2 Control panel including electrical meter and
- Special designed compressor station with an airflow 180 l/min at 5bar. (max. dB 67)
- 2 GRP36 D EX grinder pumps.

In close cooperation with the consulting engineer from HSI Consult GmbH, HOMA developed a tailormade solution with a preassembled pump station Type HOMA SK and two HOMA GRP36 D EX submersible grinder pumps that met all the requirements of the project.

The pump station is controlled by a HOMA HMC2 control panel, which not only manages the operation of the pumps but also 2 small and silent compressors which are wall-mounted in sperate cabinet next to the control panel. The compressor station is preventing the formation of odorous gases to avoid complaints from residents.

None-return valves in the air-pipes protect the compressors from a sewage backflush. Special attention was paid to the remote-control of the system: The telecontrol system, which was tailored to the SCADA system of the municipality, was tested and validated at the factory. This factory test enabled a very fast commissioning of the panel on site and increased the operational reliability of the entire station.

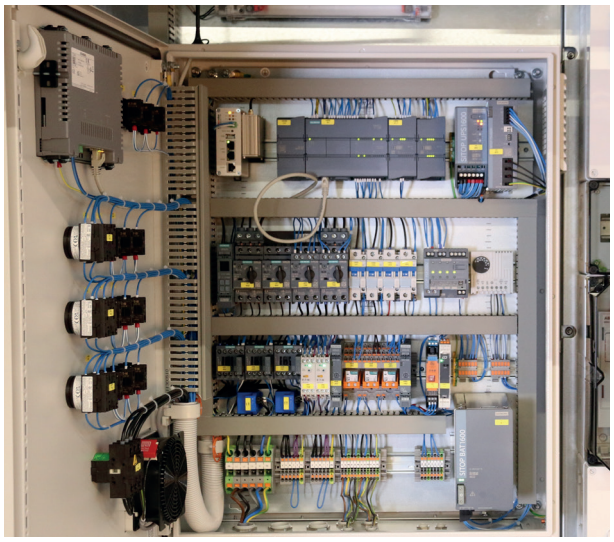
A panel was mounted in a double-walled aluminum control cabinet specially designed for harsh outdoor conditions. The sophisticated design with effective heat dissipation offers perfect protection against heavy rain or extreme temperatures and can't be opened by unauthorized people. It

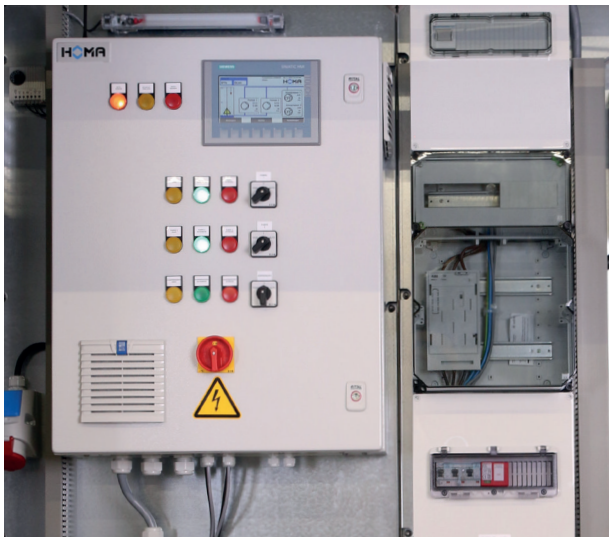
ensures trouble-free operation in the long term. A generous rain cover also provides protection for the maintenance personnel when working on site.

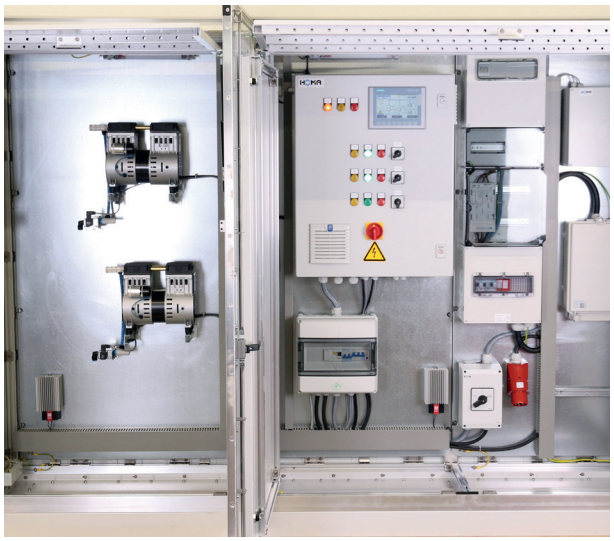
Another highlight of the project is the IWS-HOMA pump station type SK15-50/2 with an inner diameter of 1500mm made of double wall HDPE.

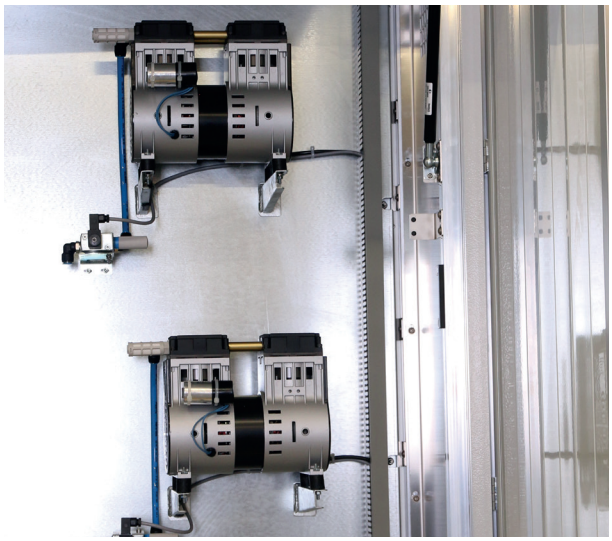
HOMA-IWS Pump stations are made of HDPE and are easy to install. The pumping station is completely secured against buoyancy. An expensive foundation plate made of concrete is not required. These stations are also 100% recyclable and have an expected service life of over 50 years, it stands for sustainable quality and durability.

The Ulmen municipality chose HOMA as its partner not only because of its good experiences from previous projects. The proven quality of the products, customer-oriented support, and the possibility of obtaining all components from a single source were important factors in the decision. The result: a powerful, future-proofed solution that fully meets the high requirements for operational safety and environmental compatibility.









HOMA PUMP TECHNOLOGY

HOMA Pumpenfabrik GmbH
Industriestraße 1, D-53819 Neunk.-Seelscheid
Tel. +49 (0)22 47 702-0, info@homa-pumpen.de
www.homa-pumpen.de

Find your local sales representative at

www.homa-pumpen.com/sales