As a group of approved partners in water management, the companies 70 percent belonging to the most important cornerstones of our drinking water supply. Regardless of the options of groundwater, spring water and surface water catchment, with groundwater catchment at around 80 percent, have taken on the task of finding a universal solution for the order to provide sufficient drinking water in both rural and urban areas, the water supplier can look to the

### Ventilation

- **Type**: WILO TWI 06.18-B submersible motor
- **Features**:
  - Easy to maintain thanks to quick assembly and dismantling
  - Integrated backflow preventer
  - Standard and configurable variants available
  - Either encapsulated or rewindable motors
  - Suitable for operation with frequency converter
  - Suitable for high sand content up to 50 mg/l
  - Material options: Y2A (AISI 304) or Y4A (AISI 316)
  - Extensive range of accessories
  - Optimised hydraulics with high degree of efficiency
  - Pump size: TWI 06.18-B
  - Optimised hydraulics with high degree of efficiency
  - Suitable for limited space thanks to low overall height

### Joint demonstration model Water catchment

- **Hawle Armaturen GmbH**
  - Based in Freising and one of the leading manufacturers of valves and fittings for municipal potable water, gas and sewage pipe systems.
- **Phoenix Contact Deutschland GmbH**
  - A world leader in the manufacture of electrical joining, electronic interface and industrial automation technology.
- **VISION GmbH**
  - Offers software solutions for the automation technology with the focus on infrastructure, energy, process, production and building automation.
  - The product range includes HMS/SCADA, working with reports and analysis as well as alarm behavior and remote control.

### Automation solutions

- **Type**: Ventilation
  - Permanent system overview with integrated visualisation on-site and in the control room
  - Easy handling for plant operator with pre-programmed, standardised solutions
  - Simple integration of measurement and electro-technological with standardised protocols
  - Secure monitoring of measuring and drive technology
  - Simple start-up by means of parameterisation via web server
  - Easy to multiply and easy to upgrade thanks to modular hardware and standardised software
  - High plant availability thanks to integrated overvoltage protection concept
Wilo pump technology
The untreated water is extracted using an innovative submersible type Wilo TWI 06.18-B motor pump. This continuously controlled or frequency controlled machine enables the cost-effective extraction of relatively clean water. It is wear-resistant and easy to install. The flow rate is between 1 and 250 m³/h at a pressure head of up to 470 m (in the TWI entire range 4“ to 10”).

Process automation from Phoenix Contact
Phoenix Contact ensures reliable operation with interruption-free power supply and overvoltage protection with IQ technology. Compact controllers in the 100 class ensure reliable regulation and control of the flow rate and flow volume. The water process library Waterworx enables user-friendly and simple integration of measuring and drive technology.

Hawle fitting technology
For the protection and efficiency of the equipment, the automatically functioning air release valve 987 guides the air drawn in during the pump process out again. Thanks to the soft sealing E2 gate valve it is possible to completely open or close the flow cross-section. In the manhole, operation can be manual or automatic via an electronic actuator and controller.

KROHNE measuring technology
The flow of untreated water is measured using an energy self-sufficient, battery operated WATERFLUX 3070 C IP68/NEMA 4P water meter. Thanks to the integrated pressure and temperature sensor, all relevant parameters are measured right away. The GSM module KG422 transfers the measurements via GPRS from the remote well houses to the central control room.

Wavin manhole and pipeline technology
Wavin Tegra 1000 is one of the first plastic manholes of its class in DN1000 that can be trodden upon and has proven itself in practice for almost 20 years. The robust construction with thick walls, closely positioned rib structure and patented cone design can withstand any load, even heavy traffic load, large installation depths and high groundwater levels.

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Modern control technology from VIDEc
atvise, the consistent web SCADA system, allows for continuous monitoring of all system parts – from the remote station to the control room. Pure web technology makes data and visualization available everywhere and via every common web server. All necessary archiving and logging functions are saved to the ACRON plant usage meter.