



More than 10.000 systems from HERCO has been supplied worldwide.

## HERCO PREFERS GRUNDFOS PUMPS AND SENSORS iSolutions enables Transparent System Surveillance

### About Herco GmbH

*Industrial Water Treatment manufacturer*

Herco GmbH established in 1947 has made the brand HERCO synonymously with Water Treatment, “Made in Germany” and differentiating HERCO within Membrane Technologies. OEMs appreciate HERCOs quality offerings and efficiency within standard and project sales/systems. End customers are supplied within the Medical Industry under the HERCO name. General Industry is supplied thru distributors and the Pollet Water Group (PWG) with more than 20 sister companies, HERCO belongs to since 2006. Thru its 76 employees HERCO generates a revenue of 15 million euros.

### The situation

*Core Competence within Membrane Technology*

The product range is focused on HERCOs Membrane Technology for Reverse Osmosis and Ultrafiltration. The Membranes from HERCO are highly versatile, and separate unwanted or highly valuable particles from the water. The processes run continuously and avoid to a large extent the use of chemicals.

---

#### Topic:

Water treatment

---

#### Location:

Worldwide

---

#### Company:

Herco Wassertechnik GmbH

---

The core competence of Herco is to develop the best possible concepts for the customers application in terms of process engineering, to select the components such as membranes or pumps and to control the process by means of suitable measuring and control technology. Customers are increasingly expecting intelligent systems that can easily be integrated into existing higher-level SCADA systems.

### **The Grundfos solution**

#### *Higher Process Reliability and Optimized System Availability*

Membrane processes for the treatment of drinking, process and ultrapure water require pumps, which can generate high pressures.

HERCO hence prefers E-pumps from GRUNDFOS if the end-customer is not requesting something else: “Grundfos is our preferred choice for centrifugal pumps and Dosing pumps” according to Head of technology and development, Carl-Werner Tiefenbacher. As the Development Manager, his job is to bridge the customer needs with what is achievable from suppliers to provide new Innovative Solutions. HERCO also gets its need for pressure and flow sensors fulfilled from GRUNDFOS Direct Sensors™. The innovative sensor solutions fit perfectly to HERCOs applications and product program. A sensor technology based on GRUNDFOS Silicoat® patents enabling direct immersion of the sensor down into the water, providing amongst other things a combined sensor (eg. flow and temperature with one sensor) and recording of unbelievably fast temperature changes in the system.

For System Control, HERCO has developed its own microprocessor, which provides visualization and control of the system based on the sensor inputs. Tiefenbacher: “The digitization of the data offers the customer new possibilities to make his plant and its condition transparent. In this way, the operator gains a high level of process reliability, and the resulting system availability confirms the customers confidence in Herco’s water treatment systems. “

### **The outcome**

#### *iSolutions Makes the System Transparent*

iSolutions from GRUNDFOS merges own and sourced components (Pumps, Sensors, Controls and Safety modules as well as monitoring, data transfer and cloud services) into one intelligent offering, which works with several different applications.

Herco GmbH and Grundfos GmbH are jointly implementing the idea of Grundfos iSolutions. Herco integrates the MGE, combines it with the sensors and thus manufactures innovative energy and resource-friendly water treatment plants.

In HERCO membrane systems, this means:

Variable speed pumps and sensors ensure consistent and stable filtration performance even in case of changing process parameters.

The system also detects deviations in the running process in the standard parameters of the system and reports this information to the control system. The customer is thus given the opportunity to react preventively and maintain a longer system operating time without loss of quality than with conventional systems.

**Quote:**

„We take control of and demand quality from all our components and suppliers. We only cooperate with the best quality suppliers within the EU like GRUNDFOS, who also can supply a global Service” says Andreas Ilka, CEO of Herco.

**Additional images**



*Demanding more in terms of automation and energy efficiency made HERCO choose GRUNDFOS: 3rd Generation MGE-Motors living up to the demanding IE4 efficiency class. A motor control with integrated frequency converter for variable speed and advanced control modes algorithms.*



„We take control of and demand quality from all our components and suppliers. We only cooperate with the best quality suppliers within the EU like GRUNDFOS, who also can supply a global Service” says Andreas Ilka, CEO of Herco.  
Left to right: Carl-Werner Tiefenbacher and Andreas Ilka

