

## Water technologies

- Water purification and treatment technologies
- Sludge drying
- Control systems and electrical engineering
- Metering and process equipment



# WATER PURIFICATION AND TREATMENT

We are the leading Slovenian provider of water technologies for drinking water purification, process and waste water treatment in the infrastructure, energy and industry. We cover the following areas:

- Drinking water purification
- Purification of water for pharmacy
- Purification of water for the beverage and food industry
- Treatment of process water for all types of industries
- Treatment of boiler and cooling water
- Waste water treatment

## Drinking water purification

We use modern water purification technologies that ensure minimal adverse environmental impacts with negligible amounts of chemicals:

- membrane ultrafiltration,
- nanofiltration,
- reverse osmosis.

If the application of membrane technology does not enable optimal solutions (removal of iron and manganese, arsenic, etc. from deep drillings), we also use traditional methods:

- coagulation,
- sedimentation,
- oxidation,
- ozonization,
- filtration,
- adsorption.



## Process water treatment

For the preparation of process water, we select the appropriate technologies according to the requirements of the technological process and the characteristics of the water input:

- reverse osmosis,
- softening,
- nanofiltration,
- electrodeionization.



## Waste water treatment

For mechanical-chemical waste water treatment, we use methods such as:

- coarse filtration with drum filters,
- flotation,
- sedimentation.

For membrane-biological treatment, we use SBR or MBR methods, which also enable the recycling of the treated waste water.



# SLUDGE DRYING

We offer technologically advanced and energy efficient solutions for various fields of waste management. Our waste management technologies comprise drying sewage sludge, drying solid substances from a separator and other organic products.

With our sludge drying solution we offer unique procedures for reducing the volume of sewage sludge waste, substances from a separator, and producing substitute fuel (for the cement industry, coal thermal power plants, waste incinerator plants, biomass DHS).

The sludge drying technology process consists of the following units:

- Sludge storage silo for dewatered sludge /wet sludge
- Innovative belt drying system with low temperature waste heat
- Product storage silo for dried sludge
- Bio-filtration technology



# CONTROL SYSTEMS AND ELECTRICAL ENGINEERING

Our complete solutions for the control systems and electrical engineering in the community infrastructure and energy sector enable the control and management of:

- water supply and facilities,
- sewerage networks and facilities,
- district heating networks.

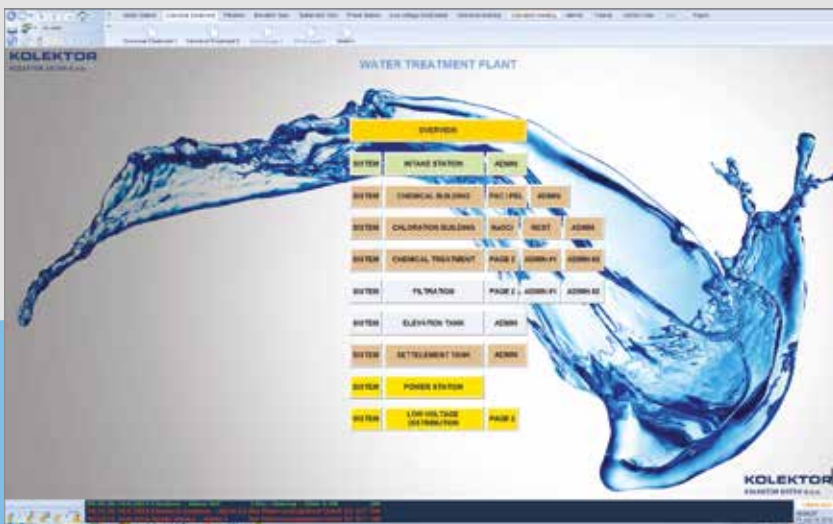
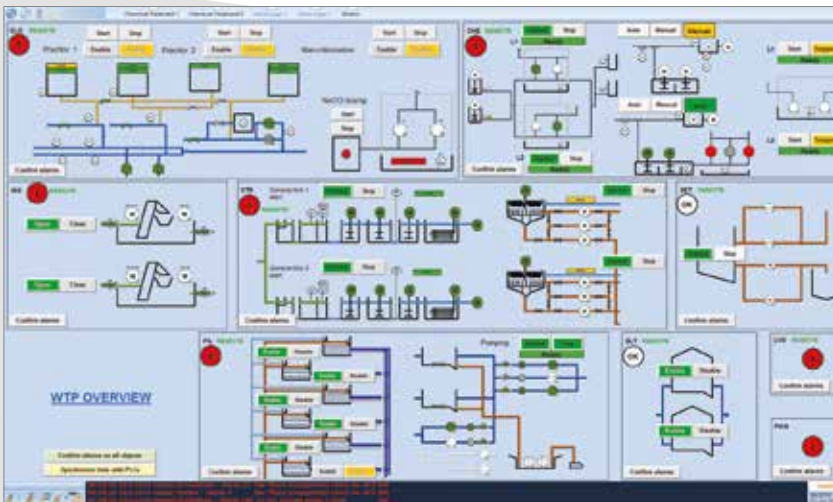
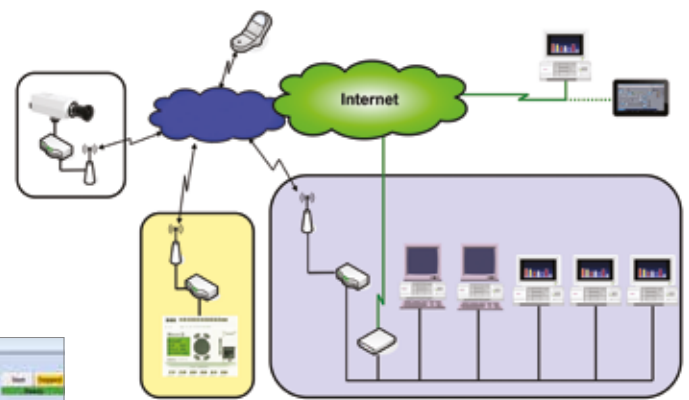
Benefits for the user :

- autonomous functioning of facilities and systems,
- an insight into the condition of the systems and distributed facilities,
- qualitative and safe water and heat supply,
- more sophisticated collection and treatment of urban wastewater,
- rational energy consumption,
- immediate notification in case of errors or anomalies,
- a substantial reduction of costs for system operation and maintenance.

We provide the following solutions:

- electrical engineering with the local automation of facilities (measurement shafts, boreholes, water reservoirs, pumping stations, water purification facilities, waste water treatment plants, heating stations, ...),
- telemetry control systems (communication solutions between the facilities and the control centre),
- central surveillance systems in control centres for data acquisition, analysis and control management.

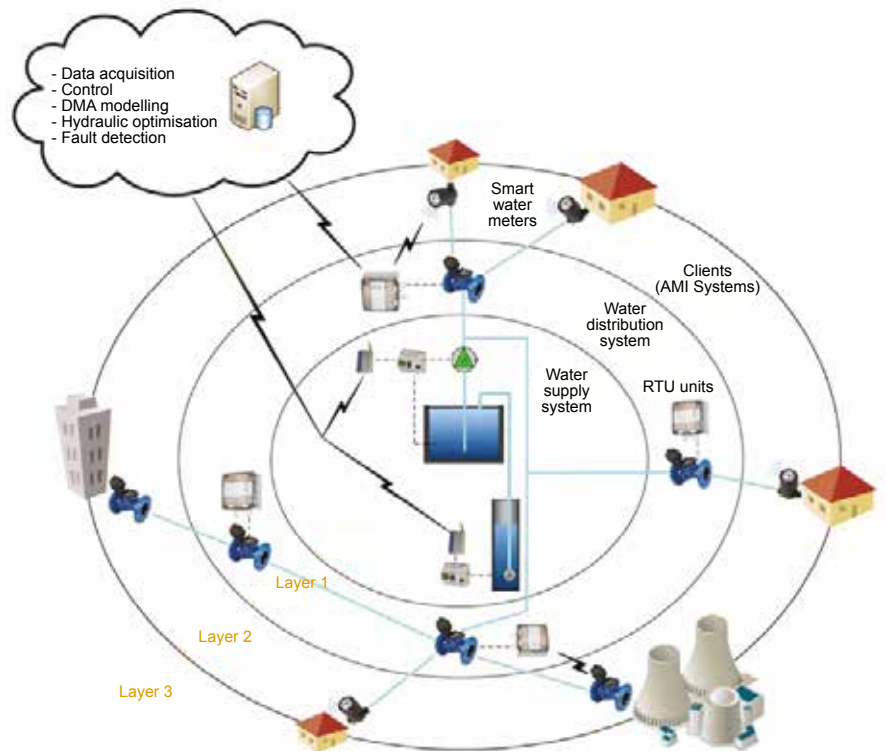
The acquired data serve as the base for system analyses and the optimization of their function.



# METERING AND PROCESS EQUIPMENT

## Equipment and solutions for the measurement of water consumption and hydraulic optimization for water distribution networks

Kolektor Sisteh is the official and exclusive representative of ARAD Ltd. Israel for Slovenia and other countries within Southeast Europe. ARAD is the world's leading manufacturer of metering equipment and **AMR/AMI** solutions for automatic meter reading and hydraulic optimization of water distribution networks.



## Process Equipment

- Equipment for dosing of chemicals – complete dosing systems or dosing pumps (diaphragm, piston, screw, from a few ml / h to 25 m<sup>3</sup> / h and with pressures up to 3,000 bar) of the German manufacturer Prominent, including the equipment for the preparation of coagulants and flocculants
- Equipment for water disinfection - chlorine dioxide generators, UV disinfection devices, ozone generators, in-situ chlorine generators and chlorine gas feeders
- Analysis and measuring equipment for drinking and process water (pH, redox, turbidity, concentration of chlorine, chlorine dioxide, ozone, bromine, peroxyacetic acid, hydrogen peroxide), including controllers
- Aseptic fittings (diaphragm, globe, ball and butterfly valves) - Gemü
- Butterfly valves for industrial use - Bray
- Pumps for chemicals and plastic fittings - ASV Stübbe
- Drum pumps for pumping chemicals – Jessberger
- Pharmaceutical UV devices for disinfection and decomposition of ozone – Aquafine



Kolektor is a trans-national company connecting almost 30 companies on strategic world markets and has more than 3000 employees. With an active policy of globalization and focused diversification based on organic growth and acquisitions, Kolektor is aiming at an annual turnover of €1 billion by 2020. Through the development of technologically demanding products and solutions, Kolektor will be among the leaders in individual market niches across three operating divisions:

- Components and Systems
- Electrical Power
- Engineering and Technology Systems

We provide services for the entire life cycle of projects:

- development of concept studies and consulting,
- preparation of project documentation,
- supply and assembly of equipment,
- parametrizing and commissioning,
- providing the customer with training and support in the operation and maintenance of systems.

## KOLEKTOR

### Kolektor Sisteh d.o.o.

Zasavska cesta 95 • SI-1231 Ljubljana – Črnuče • Slovenia  
 T: +386 1 5636 300 • F: +386 1 7227 930  
 sisteh@kolektor.com • www.kolektorsisteh.com

### PE Idrija

Vojkova ulica 8b • p.p. 57  
 SI-5280 Idrija • Slovenia  
 T: +386 5 372 06 50  
 F: +386 5 372 06 60

### PE Maribor

Limbuška c. 2  
 SI-2341 Limbuš • Slovenia  
 T: +386 2 421 35 90  
 F: +386 2 421 35 95

## Kolektor Locations Worldwide

