



electrification, instrumentation & automation

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Foks was established in 2002 for providing the services of electrification of industrial facilities, designing of instrumentation and automation systems, manufacture, commissioning.

The Founding Partners are Atila TÜRK and Özcan KARATAŞ.

Our company has concluded a large number of projects each resulting successfully since its foundation to the present day. Foks; complying the rapid development of technology in a changing world easily, has become the architect of persistent and accurate solutions to the needs of many different sectors, institutions and organizations terms and in this perspective.

Foks is primarily active in the "water and energy" sectors.
It has significant references and knowledge in these two sectors.

Water Sector

Foks provides permanent, economic, scientific and accurate solutions for the electrification, instrumentation and automation in the systems of waste water treatment, drinking water treatment, drinking water distribution facilities.

It provides services in the subjects of designing supply, production, programming of, erection and commissioning of such as energy supply, control and power wiring, grounding and lightning protection, uninterruptible power supplies, motor control boards (MCC), DCS, RTU, PLC control panels, SCADA and telemetry systems, flow, level, pH, oxygen, pressure, temperature, turbidity, residual chlorine transmitters.

about us

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The Energy Sector

It provides services in detailed designing, supplying, production programming, installation and commissioning of energy supply, control and power wiring, MV Panels and protection control relays (IED). grounding and lightning protection, uninterruptible power sources, distribution boards (MDP), control panels (RTU, PLC), synchronization panels (SYNC), SCADA and telemetry systems as well as CCTV systems in the hospitals, work towers, shopping malls, airports, metro and light rail systems, as well as the facilities such as hydropower plants (HPP), where the energy applications are critical, wind energy plants (WEP), solar power plants (SPP).

Its career and professional knowledge over 20 years and experience for ten years since its establishment up to the present day, brought the analytical thinking, high performance and professionalism. Foks; offers all of these values gained to the benefit of the customers in their project solutions. In the course of the time, Foks has become strong organization, known in the fields of electrical, industrial automation. It produces a large portion of systems, control panels, software, and mechanical parts used in the projects or applications in its own premises.

Foks controls its quality of service under the certifications of "TSE Sufficiency of Service Place and ISO 9001 Quality Management".

For a sustainable growth and development, Foks considers the environmental protection and human health as the primary reason of its existence in its projects. It follows such priorities in the first hand in the projects.

Water Sector

DSİ, Bank of Provinces, Municipal Water Distribution Stations, Drinking Water Treatment Plants, Wastewater Treatment Plants, Pumping Stations, Electrical Instrumentation, Automation Systems with Agricultural Fields, Irrigation Control Systems (ICC) ...

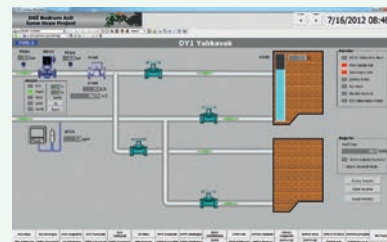
It consists of all services of automatic control and observation of all units ranging from the production planning to control; from environmental control units to auxilliary premises of a plant or premise thanks to the comprehensive and integrated Supervisory Control and Data Acquisition - SCADA. Thanks to such arrangements; the system provides a comprehensive observation of the past activities on the day and time of occurrence by storing the instant events and alarms. Due to its "layered" features forming the structure of the system, it provides all the control needs of different businesses gradually.

Drinking water Distribution and control systems

Thanks to its business management and SCADA system of line pressure, well water, water tank and pump upgrading automations; Foks; designs, manufactures, installs and provides services for PLC and RTU-controlled automation systems, GPRS, radio, telemetry, Wi-Fi, wireless modem, Scada systems of deep well automations, which provide the follow up and saving of the data. It provides easy configuration and assembly of the SCADA system scattered with ABB RTU, PLC and DCSs.

Some Of The Basic Features: Configurations such as start and stop of the pumps according to the operation times, start and stop in the desired order, or operating with backups etc. are possible. Disabling the pumps according to the temperatures of their bed and stator, activating the least used pump (or the reserve) instead and saving alarms according to profile of the changes in the pressure and flow rate of each of the pump being activated is possible. The communication between the well or spring water centers to the water tank and pumping station through , wireless, wires and optical fiber structures can also be provided.

In these systems; monitoring the total amount of the transferred water, water quality monitoring, dosing and measurement of chlorine, monitoring temperature trends in the beds, filling the tanks when the cost of energy is in lower tariff, determination runaway based on the proportion of water entering and leaving a branch point, electronic remote control of the whole system, start or stop the advancement pump stations automatically and backwards investigation of the recorded data is possible. It can send a default message to a predefined e-mail address over the web, and send SMS to more than one GSM at the same time. Thanks to the HTML structure you can check the system from anywhere via Ms-IE, and delete the failures. The Service Centre can be connected to the PLC/RTU/SCADA system with the ADSL Modem, and all types of remote assistance can be provided to the technician. Its small structure enables the modernization of existing systems. PLC and RTU programs are designed module by module. Each module is tested for long periods and guaranteed to work flawlessly. The structure can be easily configured according to user requests in fast and reliable way. So, the operating costs would be decreased and user complaints would be prevented.



Agricultural Areas, Irrigation Control Solutions

ICC (Irrigation Control Center) Agricultural Irrigation Control Systems are systems that provide the irrigation of large areas of farmland by using less energy and water. Through these systems; irrigation and fertilization processes are carried in the right way with correct timing and correct amounts by considering the soil moisture and meteorological data.

Irrigation areas and the pumps are controlled with remote wireless radio systems. Through the irrigation flow meters installed in every irrigation area, the quantity of instant and total irrigation is measured and saved. The soil moisture of irrigated areas is measured and saved. The amount of the instant and total energy consumed is measured and saved. Meteorological data is seen instantly and saved. Such data, stored for an irrigation area throughout the season may be recorded in a data table and recalled for the calculations of the yield and provides convenience to the estimates for the next irrigation period. The control systems consist of; pump control panels, valve controlling unit, meteorology stations and ICC software.

In short the system features: The ICC (scada) software running over the computer system, reaches the control boards through the help of the wireless modem. The customized irrigation area is graphically designed by our programmers on software. The instant and total amounts of irrigation can be seen easily in these screens. Irrigation areas can be opened or closed. Soil moisture is visible. The amount of fertilizer dosage can be seen in and dosing quantities can be changed. The periodic irrigation and humidity amounts, meteorological data and energy consumption can be seen in Ms Excel ® or Ms Word ® format by using the report menus. Invoices in "pdf" Format can be created automatically for each user. It can send text messages of default to the mobile phone of a predefined operator. The ICC system may be reached through any web browser safely and you can watch the entire system. This feature of the system helps the users if their operations are different. Every user can see the detailed data for irrigation for his/her own area on the Internet.

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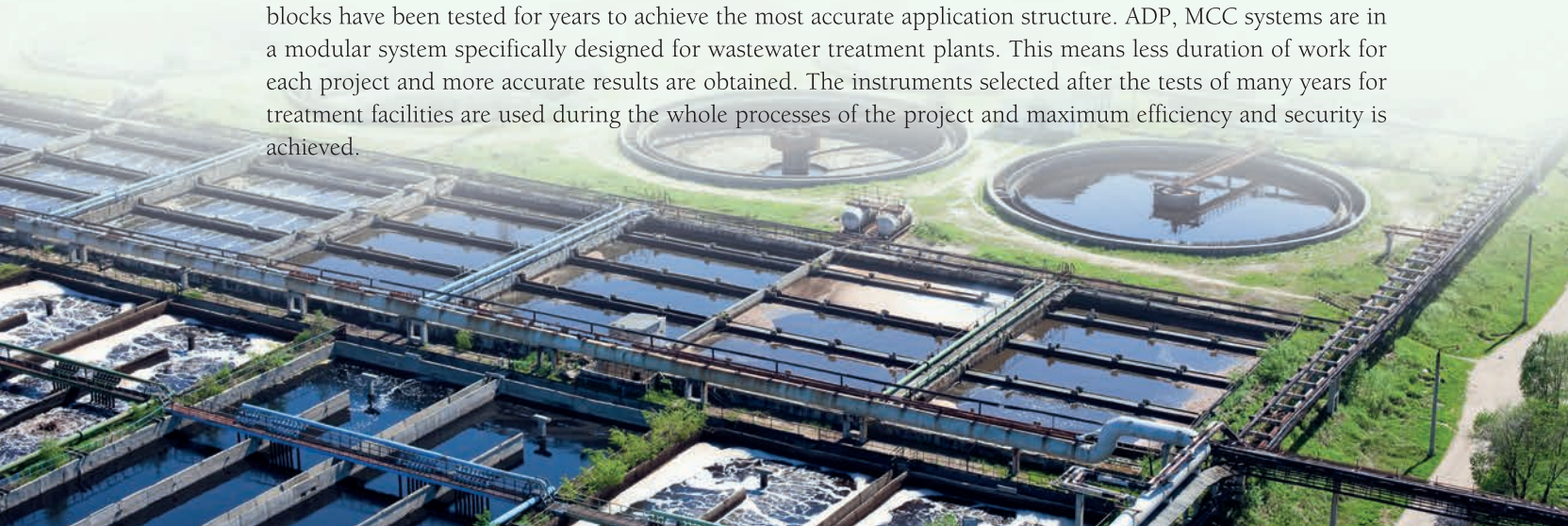
Drinking water and wastewater treatment plants

Due to the increasing needs of water as a result of rapid growth of population and industrial developments in today's conditions, the supply of water requires the purification of the water obtained from poor quality water sources and treatment of the polluted water requires complex control systems.

Foks designs, manufactures, installs and provides maintenance and services for complete energy supplies, wiring, instrumentation (flow, level, pH, conductivity, Dissolved Oxygen, chlorine residual, turbidity, pressure, etc.), DCS automation systems, main distribution panels, motor control panels, Scada systems for drinking water and waste water treatment facilities.

Some Of The Basic Features:

It provides easy configuration and assembly of the SCADA system scattered with DCSs. Modular function blocks have been tested for years to achieve the most accurate application structure. ADP, MCC systems are in a modular system specifically designed for wastewater treatment plants. This means less duration of work for each project and more accurate results are obtained. The instruments selected after the tests of many years for treatment facilities are used during the whole processes of the project and maximum efficiency and security is achieved.





The Energy Sector

All production steps ranging from designing to the production of the panels, from installation to commissioning of the of industrial control systems (PLC, SCADA, RTU) as well as automated energy management, monitoring and control in the premises such as hospitals, shopping malls, work towers, airports, schools, subway and light rail systems, where the carefully monitoring applications of the energy applications is inevitable, are carried out by our team.

The main features: Many special applications applied under the heading of Energy Automation such as monitoring the LV, MV, HV systems, recording the defects, Automatic Transfer Management, Operation of the Automatic Generators, Redundant Generator Management through the Network, Generator Load Sharing, Monitoring the Automatic Compensation and Notification of Registration of Exceeding Limit Values, Record of Transformer Notifications and Trips, Automatic Load Shedding and Taking Priority Loads in accordance with the default, monitoring and recording of the notifications and alarms of the UPS systems, keeping the energy consumption statistics as well as reporting Periodic Consumption.

Electrical Distribution SCADA Systems

- monitoring, recording, reporting the alarm readings and notifications of the IED relays which communicate with IEC61850, IEC61870-5 -101,103, 104 protocols by using SCADA and RTU from a center in the main and substations that make up the distribution system
- Monitoring of LV, MV, HV switchgear locations and automatic direction selection and saving the results in the automatic line selection mode
- Recording and reporting the energy quality data in the EN50160 standards, monitoring periodic and instant trends
- Keeping records of the event status of user operations
- Tracking the single line through color variations, Main Mimic Tracker,
- Alarm Management: (in the order of priority) evaluation of notification, filtering in accordance with the alarm type, management of operator SMS notifications,
- Remote management with WEB interface.

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Energy billing and meter reading system (AMR)

The automatic remote meter reading and billing systems in terms of the energy economy and discipline of a business or institution is very important especially for work towers, AVMs, organized industrial zones and university campuses.

Amenity

- Integration with IEC1107 RS485 counters with serial output,
- Optical interface cards,
- IEC1107 Ethernet Gate-ways,
- Monitoring over the Internet,
- In addition to the counters of the electric power, natural gas, water meters and calorimeters can be read,
- SQL data storage,
- GPRS, GSM, Fiber optic, Ethernet, RS485, ADSL, Wireless Modems work
- Pulse output, MODBUS and MDBUS integration with networked measurement devices,
- Managing customer data,
- Automatic and manual invoicing,
- Active, reactive consumption values for unit price and tariff periods for detection,
- Invoicing Generator consumptions,
- Invoicing consumptions of the communal areas,
- Sending monthly billing information per email and to mobile phones,
- Integration with accounting software.



Solar Power Plants

Foks; Sun Energy (Solar PV) and solar tracking system (Tracking System) offers turn-key solutions in the installation and operation of the systems.

It offers the best quality product at the most reasonable prices by contacting the producers all over the world in obtaining the materials to the customers and uses the most appropriate solar PV and other devices for each installation.

- Selection, supply, installation and commissioning of solar invertors,
- Production of PV Mechanical Assembly groups
- Optimization of the Solar Farm, preparation of the reports on the Shading - Sunning
- Selection, supply, installation of Solar Panels
- Supply, installation and commissioning of Solar Trackers,
- Periodic optimizations of solar tracking software
- Establishment LV, MV systems,
- Remote monitoring and management,
- Production reporting and Business analysis.

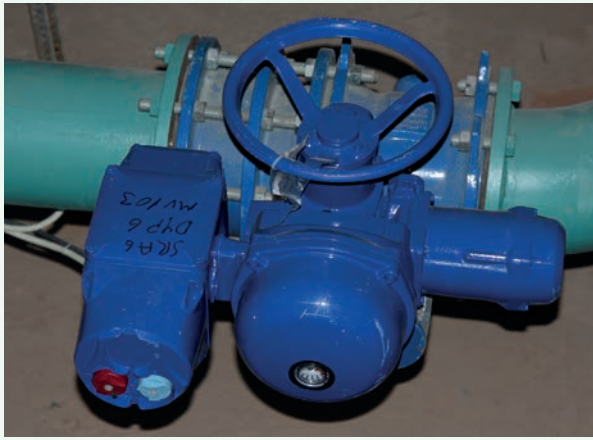
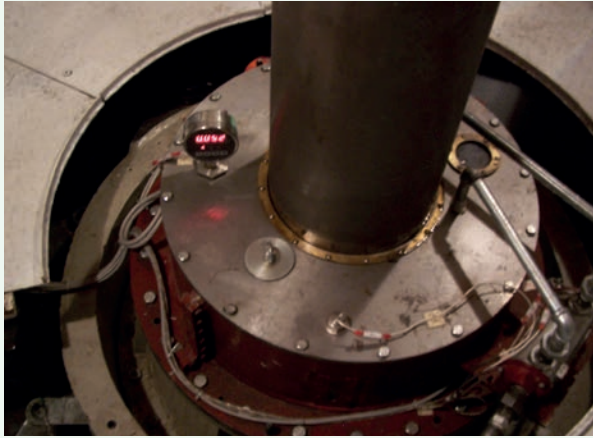
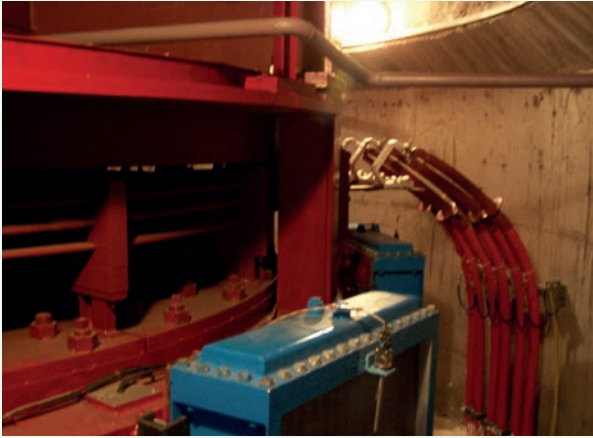
Wind Energy Production Facilities.

- RTU systems required for monitoring and control and management of the MV RMUs and transformer center
- Production of the SCADA systems.

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references

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► SOLUTION PARTNERS

ABB



MOTOROLA

WINLOG
PRO

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OSBRIDGE

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