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Innovative Automation & SCADA Systems Solutions





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» **INTRODUCTION**

INTRODUCTION



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Company Profile

Prizma Group Automation based in Ankara, Turkey was founded to serve our customers in industrial automation and control systems market. Our expertise and quality in industrial control systems, has rapidly grabbed attention and attracted our local and international customers.

Prizma Otomasyon provides tailored, turn-key solutions to our invaluable customers including engineering, design, installation, commissioning and maintenance services for new and existing projects;

Industrial Control Systems,

- Plant DCS / SCADA / PLC / RTU Systems,
- Plant / Process Local Control Systems and Instrumentation
- Building Automation, Lighting and HVAC Automation Systems,
- Automatic Meter Reading – AMR Systems,
- Communications Systems (Fiber Optic, UHF/VHF RF, GSM/GPRS),

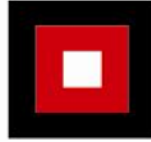
Besides the industrial control and automation solutions, our company offers complete Electrical Contracting and Electrification services to our invaluable customers in order to provide turn-key complete solutions;

Complete Electrical EPC Contracting Projects,

- MV / LV Electrification Works for Plants,
- MV – Medium Voltage and LV – Low Voltage Switchgear Systems,
- Transformers and Generators Systems Installations,
- MV / LV Motors Installations and Startup services,
- Electrical systems' conduiting, cable support and cable tray installations,

Our competent team of personnel has extensive experience and expertise in providing solutions for;

- Water/Wastewater Treatment Plants,
- Oil and Gas Field / Pipelines / Tank Farms,
- Power Transmission and Distribution Systems,
- Hydroelectrical Power Plants,
- Pharmaceutical and Chemical Factories,
- Cement, Concrete and Asphalt plants,



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Our Vision

We provide superior quality industrial products and tailored solutions. In order to deliver timely services and to meet the deadlines, we have never compromised on one of the most important pillar of our success that is quality.

Our Strengths

Our main strength comes from our competent team of personnel with extensive experience and expertise in providing design, engineering, installation and commissioning services for our area of business.

Our Services

Supported with sophisticated technologies and reliable industrial products from leading manufacturers, we offer;

- Turnkey Electrical EPC Contracting and Automation systems, ■
- Supervisory Control and Data Acquisition – SCADA Systems, ■
- Telemetry / RTU / PLC Applications, ■
- Distributed Control System – DCS Systems, ■
- MV/LV Switchgear / MCC Applications, ■
- Fiber Optic / RF / GSM / GPRS based networks, ■



Our Assurance

We have never compromised on quality and have successfully achieved a high level of customer appreciation resulting in long-lasting relations.



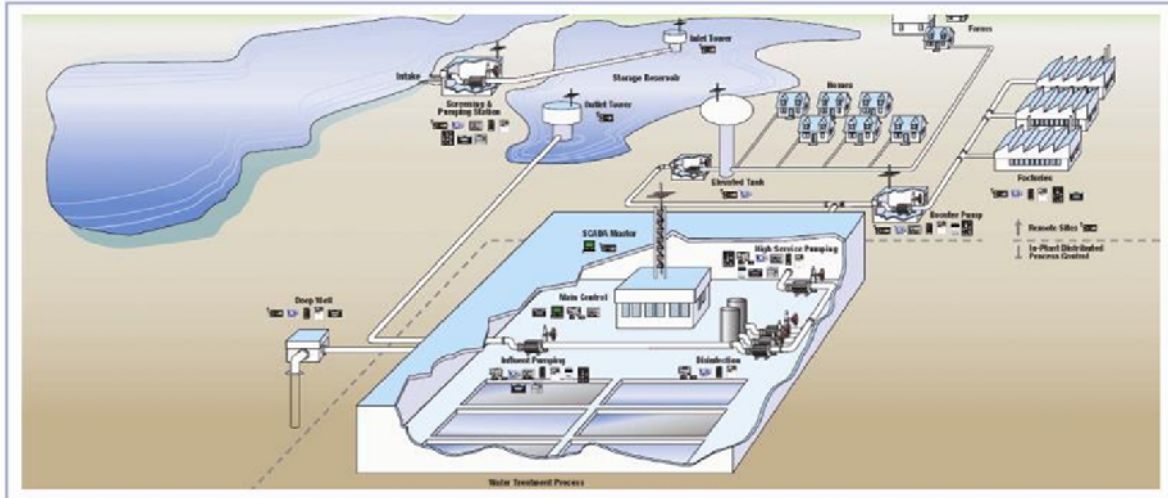
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automation

» FIELD OF ACTIVITIES

FIELD OF ACTIVITIES



DRINKING WATER TREATMENT PLANTS



More stringent environmental constraints demand cleaner water and the need for more efficient Drinking Water Treatment Plants.

Electrical, Instrumentation and Automation systems of these Drinking Water Treatment Plants must be equipped with latest technology, robust and reliable products.

These products used in electrical, instrumentation and automation systems should be tested and approved for water applications, suitable for the environment and responding to the needs of operations and maintenance of these plants.

Our company offers complete, turn-key Electrical EPC Contracting, Electrification, Instrumentation and Automation systems for Drinking Water Treatment Plants.

Our solutions cover a wide range of electrical, instrumentation and automation systems from Medium Voltage – MV Switchgear Systems to SCADA Applications.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

DRINKING WATER TREATMENT PLANTS

Electrical and Instrumentation Systems



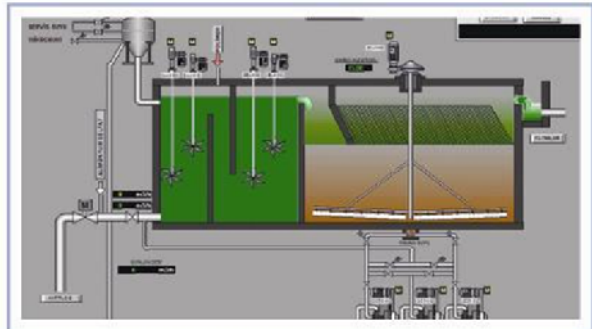
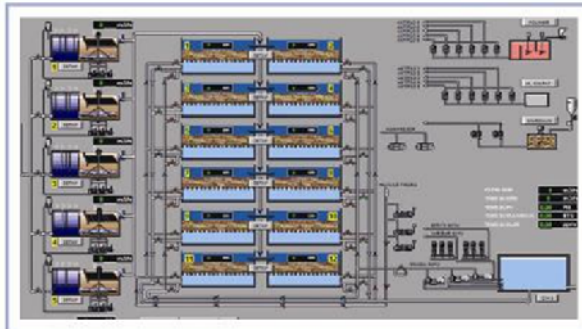
Our company offers engineering, design, procurement, productions, installations, test and commissioning services for the following systems;

- 33kV / 12kV / 6.6kV MV Switchgear Systems,
- Medium Voltage / Low Voltage Transformers,
- 0.4kV Low Voltage Switchgear Systems,
- Low Voltage Motor Control – MCC cabinets,
- Low Voltage Distribution Panels,
- Pumps, Mixers, Clarifiers, Flocculators Motor Systems,
- Electrical Installations, Cabling, Conduiting and Cable Tray Works,
- Plant-wide process control equipment, electric actuated valves,
- Chemical / Chlorine Injection & Dosing Systems,
- Filter Instruments and Equipment,
- Pressure, Flow, Turbidity, Residual Chlorine, Level Instruments,
- Instrumentation test, commissioning and calibration,

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

DRINKING WATER TREATMENT PLANTS

SCADA / Automation Systems



Our company offers engineering, design, procurement, productions, installations, test and commissioning services for the following SCADA / Automation systems;

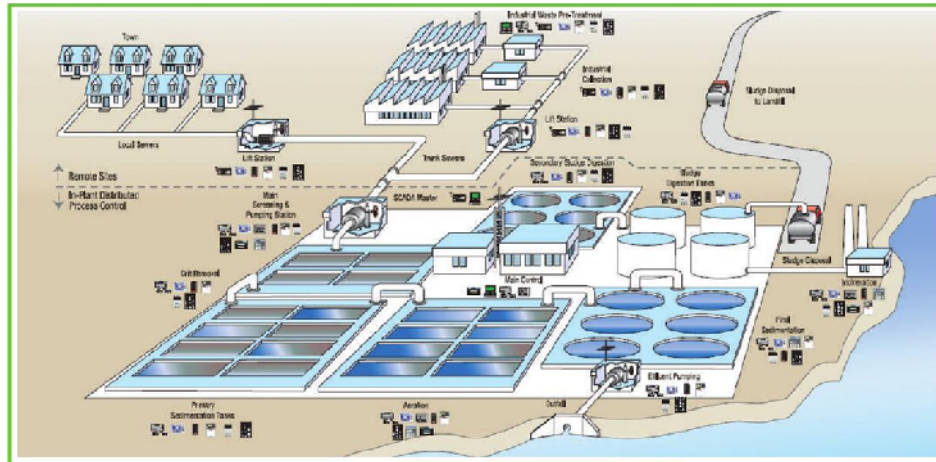
- SCADA Control and Monitoring Center,
- Communications Network (Fiber Optic, UHF/VHF RF, GSM/GPRS),
- Treatment PLC's and Filter Control Panels,
- Pumping Stations PLCs or RTU Units,
- Reservoir PLCs or RTU Units,
- Chemical, Chlorine Injection and Dosing Units,
- Water Hammer Protection / Surge Tank Control Systems,
- Instrumentation Systems,

To achieve excellence and perfection in all aspects of our SCADA Systems designs, we offer our clients a wide range of innovative and latest technology incorporated products and software applications.

Customers benefit more than remote monitoring and control over their plants with real-time data collected and historical data storage providing alarms, trends, reports and other analysis tools necessary to efficiently operate their plants.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

WASTE WATER TREATMENT PLANTS



Increasing urban population, growing cities and industries are causing a remarkable waste water capacity that endangers the clean water supplies and the environment.

Wastewater Treatment Plants are designed to accept and treat wastewater from residential areas, industries and other institutions. It is very important that these treatment plants treat waste water rapidly and safely before the clean water supplies and the environment are endangered.

Hence, wastewater treatment plants must be equipped with latest technology, robust and reliable electrical, instrumentation and automation systems in order to safely manage waste water.

These products used in electrical, instrumentation and automation systems should be tested and approved for waste water applications, suitable for the hazardous and corrosive environment and responding to the needs of operations and maintenance of these plants.

Our company offers complete, turn-key Electrical EPC Contracting, Electrification, Instrumentation and Automation systems for Waste Water Treatment Plants.

Our solutions cover a wide range of electrical, instrumentation and automation systems from Medium Voltage – MV Switchgear Systems to SCADA Applications.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

WASTE WATER TREATMENT PLANTS

Electrical and Instrumentation Systems



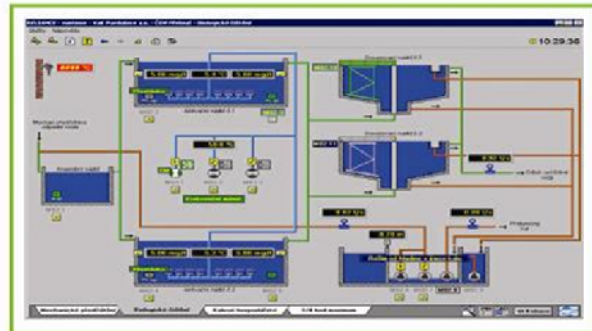
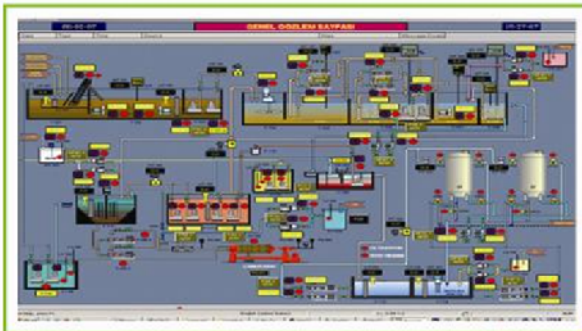
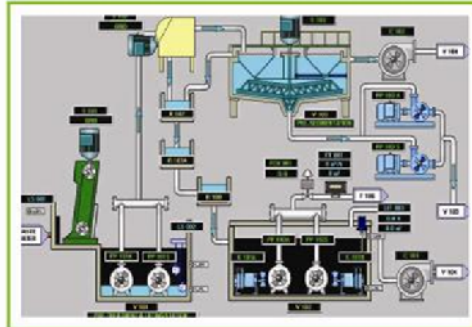
Our company offers engineering, design, procurement, productions, installations, test and commissioning services for the following systems;

- 33kV / 12kV / 6.6kV MV Switchgear Systems,
- Medium Voltage / Low Voltage Transformers,
- 0.4kV Low Voltage Switchgear Systems,
- Low Voltage Motor Control – MCC cabinets,
- Low Voltage Distribution Panels,
- Sludge Pumps, Mixers, Clarifiers, Scraper Motor Systems,
- Blower, Aerator Control Systems,
- Grid, Sand Trap & Filters Monitoring Systems,
- Submersible Pumps and Mixers,
- Electrical Installations, Cabling, Conduiting and Cable Tray Works,
- Plant-wide process control equipment, electric actuated valves,
- Chemical Injection & Dosing Systems,
- Filter Instruments and Equipment,
- Pressure, Flow, Turbidity, Level Instruments,
- Instrumentation test, commissioning and calibration,

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

WASTE WATER TREATMENT PLANTS

SCADA / Automation Systems



Our company offers engineering, design, procurement, productions, installations, test and commissioning services for the following SCADA / Automation systems;

- SCADA Control and Monitoring Center,
- Communications Network (Fiber Optic, UHF/VHF RF, GSM/GPRS),
- Waste Water Treatment PLC's and Control Panels,
- Pumping Stations PLCs or RTU Units,
- Chemical Injection and Dosing Units,
- Instrumentation Systems,

To achieve excellence and perfection in all aspects of our SCADA Systems designs, we offer our clients a wide range of innovative and latest technology incorporated products and software applications.

Customers benefit more than remote monitoring and control over their plants with real-time data collected and historical data storage providing alarms, trends, reports and other analysis tools necessary to efficiently operate their plants.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

OIL & GAS INDUSTRY



Current conditions and the future outlook for the oil and gas industry are resulting in unprecedented challenges for companies serving it from intensifying global demand for affordable energy to increasing regulatory pressures and skyrocketing capital and operational costs to a shrinking pool of experienced employees.

So no matter what your focus is in the oil and gas supply chain, from exploration through delivery, our in-depth knowledge of automation and industry expertise help you apply integrated information, control, power and safety solutions to respond to global demand for affordable energy, meet stringent government regulations and drive down costs.

In order to optimize your operations and maximize your profitability, you need cutting-edge automation technology, industry proven control and instrumentation systems that will keep pace with uptime demands and reduced manpower requirement in hazardous production environments.

Our company offers;

- DCS / SCADA / PLC / RTU Solutions,
- Integrated Architecture Process Solutions,
- Safety Solutions and Emergency Shutdown Systems,
- Oil&Gas Fields Instrumentation Systems,
- Oil&Gas Pipelines Instrumentation Systems,
- Oil&Gas Pipelines Leak Detection Systems,
- Horsehead Automation / Well Management,
- Tank Farms Management Systems,

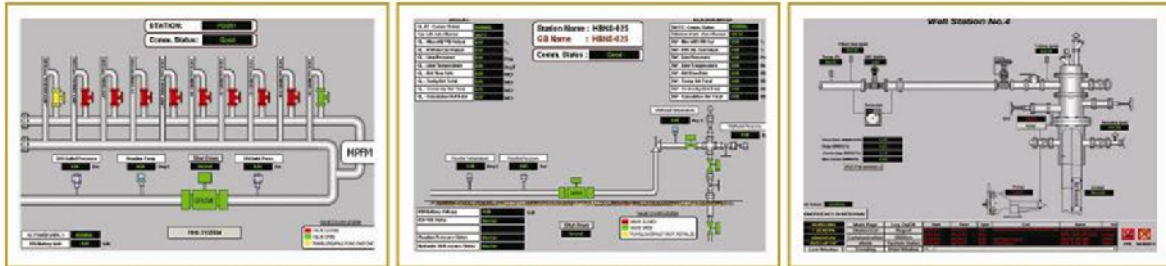
for the Oil and Gas industry.

Our team of competent, experienced and skilled engineers, leverages its in-depth industry knowledge to design, implement, deploy and support your business needs no matter where your operations take you around the world.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Emerson Rosemount, Krohne and Endress Hauser.

OIL & GAS INDUSTRY

Oil&Gas Fields SCADA Systems



Prizma Group Automation offers SCADA / Telemetry / PLC / RTU Systems for Oil & Gas Fields.

Oil&Gas production wells, gas&water injection wells, gas lift skids are equipped with industry standard instrumentation for;

- Wellhead pressure and temperature,
- Flowline pressure and temperature,
- Christmas tree valves position switches,
- Hydraulic Wellhead Control Panel instruments,
- Electronic Flow Meters complying with AGA or other industry standards,
- Solenoid valves and other instruments,

Wells are equipped with Remote Terminal Units – RTUs for data acquisition from the above mentioned field instruments, signal processing and transfer of data to the SCADA Control Centers.

Radio Frequency – RF, Satellite or Fiber Optic based communications can be utilized as the system backbone.

SCADA Control Centers finally provides Supervisory Control and Data Acquisition functions for operations and maintenance personnel.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Emerson Rosemount, Krohne and Endress Hauser.

OIL & GAS INDUSTRY

Oil&Gas Pipelines SCADA Systems



Prizma Group Automation offers SCADA / Telemetry / PLC / RTU Systems for Oil & Gas Pipelines.

Oil&Gas pipelines sectioning valve stations, pumping stations, gas compressor stations, injection line valves, pig launching and reception stations are equipped with industry standard instrumentation for;

- Flowline pressure and temperature,
- Valve position switches and solenoids,
- Pumping stations equipment,
- Electronic Flow Meters complying with AGA or other industry standards,
- Pig signallers and other instruments,

Our SCADA System designs for Oil&Gas pipelines are equipped with robust and reliable, industrial RTUs, PLCs, instruments, communications and control center equipment to get the best performance and efficiency out of your production and transmission lines.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Emerson Rosemount, Krohne and Endress Hauser.

OIL & GAS INDUSTRY

Pipeline Leak Detection Systems



Imagine how a 1% leak in a 20" pipeline can translate into 450,000 barrels per year or could contaminate 10 square kilometers of lake within 24 hours if left undetected. Leaks can cause contamination of natural resources and sometimes massive environmental disasters.

Leaks usually considered to be problem of old pipelines, however leaks can happen even with new installations due to mechanical breakages and damages caused by unforeseen equipment failures, excavations and natural disasters.

When a leak occurs in a pipeline, an alarm should come automatically, as quickly as possible and give as accurately as possible the location and size of the leak. And of course zero false alarms

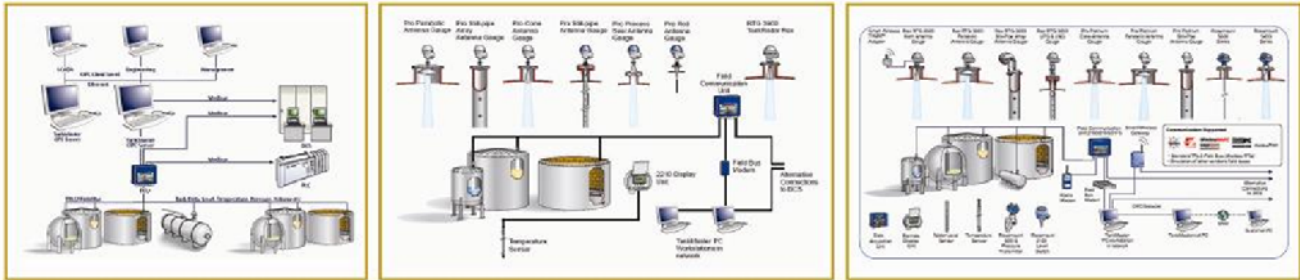
KROHNE's pipeline leak detection and localisation system has a very fast response time and can track the location of a leak as little as within 100 meters of a 10 km pipeline.

Not only in stationary conditions in a pipeline monitored, but also during standstill, start up and transient flow conditions. So at no time it will fail to detect a leak.

Our company offers Leak Detection Systems solutions for Oil & Gas Pipelines. These solutions are equipped with robust, reliable and accurate products from Krohne Oil&Gas Department.

OIL & GAS INDUSTRY

Tank Gauging / Tank Farm Management Systems



Every company in Oil&Gas Industry that operates a tank farm, terminal, refinery or bulk storage facility has its own technical and commercial requirements for gauging the contents of a tank.

Inventory management is one of the most important management tools for any refinery, terminal or storage company, since inventory represents assets, and the ability to accurately measure and control those assets is essential.

Tank Gauging is essential for day to day operations to ensure that each storage tank is working within safe working limits and that tank capacity is being fully utilised. Our proposed solutions are optimised to provide high performance to ensure that the operator is kept in touch with tank movements.

Meeting these requirements, while selecting the best in tank gauging technology for the given application, is our area of expertise. This includes all aspects of tank farm instrumentation and automation covering design, production, installation, commissioning and servicing.

Our experienced applications engineers and a wide range of tank gauging products and instruments from leading manufacturers such as KROHNE and EMERSON ROSEMOUNT allow us to select the most appropriate measurement solution for your specific application.

HYDRO ELECTRIC POWER PLANTS

Electrical and Instrumentation Systems



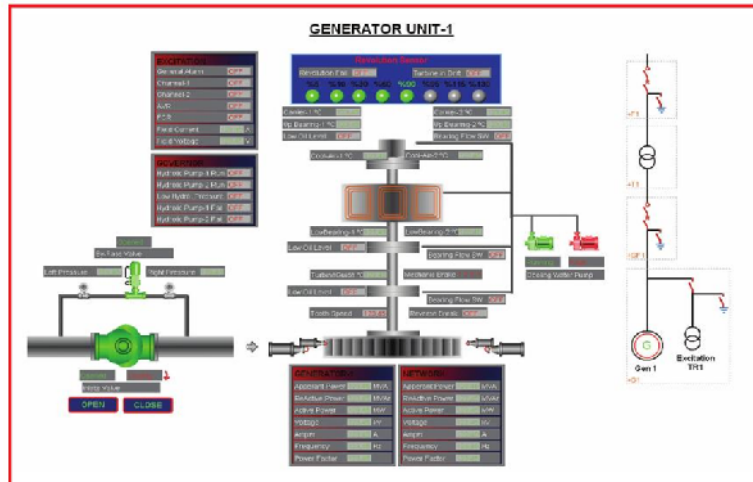
Our company offers engineering, design, procurement, productions, installations, test and commissioning services for the following systems;

- Medium Voltage Switchgear Systems (MV Cubicles),
- Low Voltage Switchgear Systems (LV Distribution Panels),
- Synchronization Systems,
- Electrical Installations, Cabling, Conduiting and Cable Tray Works,
- Instrumentation test, commissioning and calibration,

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

HYDRO ELECTRIC POWER PLANTS

SCADA / Automation Systems



Our company offers engineering, design, procurement, productions, installations, test and commissioning services for the following SCADA / Automation systems;

- SCADA Control and Monitoring Center,
- Communications Network (Fiber Optic, Copper Cabling),
- Common Systems PLC's and Control Panels,
- Turbine/Generator PLC's and Control Panels,
- Instrumentation Systems,

Following information and other data can be remotely monitored and all necessary controls can be safely executed from a SCADA System:

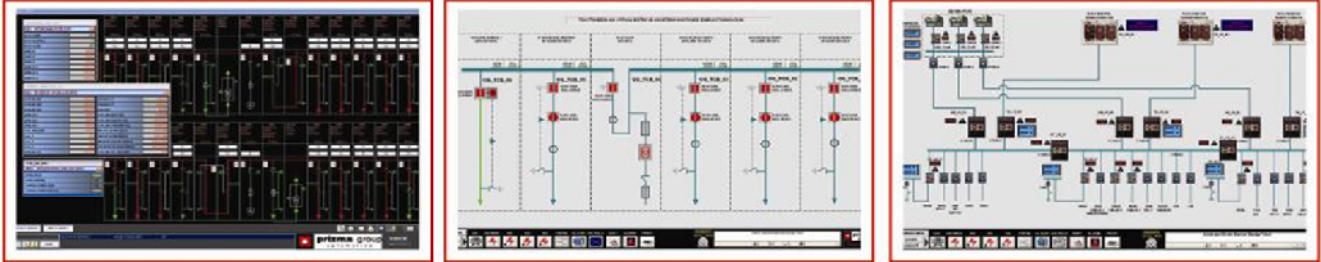
- Water Levels monitoring,
- Intake Gate controls,
- Turbine controls, exciter and governor controls,
- Synchronization of generators,
- Monitoring and control of MV/LV switchgear equipments,
- Monitoring of protection relays and energy analyzers,
- Emergency Shutdown scenarios,
- Turbine and governor temperatures, oil level and pressure, other critical information,
- Turbine cooling water controls,

Customers benefit more than remote monitoring and control over their plants with real-time data collected and historical data storage providing alarms, trends, reports and other analysis tools necessary to efficiently operate their plants.

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

POWER TRANSMISSION AND DISTRIBUTION

SCADA / Automation Systems



Prizma Group Automation offers Power Management and Energy Metering SCADA Systems for factories, shopping centers, buildings and industrial plants.

These SCADA Systems provide critical information and reliable control functions over the following parts of your network;

- ▣ Load Shedding,
- ▣ Active and Reactive Power Control,
- ▣ Generators and Turbines,
- ▣ Motors, Speed Drives and Softstarters,
- ▣ Transformer and Tapchanger,
- ▣ Circuitbreaker, Disconnecter and Earthing switches,
- ▣ Energy Analyzers, Power Meters and Protection Relays,
- ▣ Synchronization

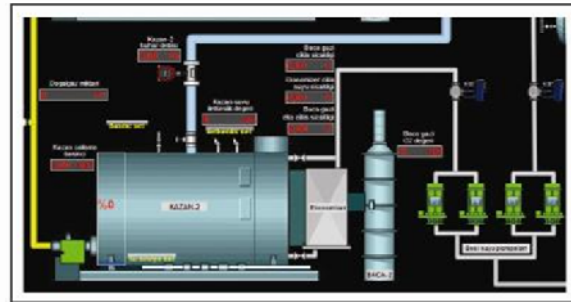
Growing power demands result in more complex distribution networks where manual/local operations are painful and dangerous.

Customers take advantage of remote control and monitoring from properly designed SCADA Systems and benefit from the advantages of SCADA/PLC based control systems;

- ▣ Easy Operation,
- ▣ Increased Productivity,
- ▣ Minimum operations cost,
- ▣ Efficient Power Usage,
- ▣ Most Availability,
- ▣ Least Damage to Equipment&Machinery,

Our SCADA System designs providing remote monitoring and control over your power distribution network are equipped with the best quality electrical equipment from leading manufacturers such as Schneider Electric, Rockwell, ABB and Siemens.

STEAM BOILER AUTOMATION



Prizma Group Automation offers Automation Systems for Steam Boilers in industrial plants, factories, hospitals and residential complexes.

Following information and other data can be remotely monitored and all necessary controls can be safely executed from a SCADA System:

- Boiler operating pressure and temperature,
- Water level and conductivity,
- Boiler water inlet/outlet temperatures,
- Boiler and pumps runhours,
- Chimney gases temperature and analysis,
- Degaser tank water level and temperature,
- Condenser tank water level and temperature,
- Fuel, Water and Steam flowrates and flow totals,
- Burner, pumps, fan and valves controls,
- Efficiency of pumps and boiler,

These solutions are equipped with robust and reliable products from the leading manufacturers such as Schneider Electric, Rockwell, ABB, Siemens, Krohne and Endress Hauser.

MOTOR CONTROL SOLUTIONS



Softstarters:

Prizma Group Automation offers Motor Softstarter solutions to our clients from a wide range of superior quality softstarters.

We offer softstarter solutions for motor control applications from Low Voltage – LV (380-690VAC) to Medium Voltage – MV (upto 15kVAC) and from simple / single motor applications to complex solutions.

Variable Speed Drives:

Prizma Group Automation offers Variable Speed Drive solutions to our clients from a wide range of superior quality drives from small size machinery drives to industrial drives.

We offer AC/DC Drives solutions for motor control applications from Low Voltage – LV (208-690VAC) to Medium Voltage – MV (upto 15kVAC) and from simple / single motor applications to complex solutions.

We offer sales, after-sales support, installation and commissioning of Motor Softstarters and Variable Speed Drives from leading manufacturers such as Schneider Electric, Rockwell, ABB and Siemens.

PANEL BUILDING SOLUTIONS



Prizma Group Automation provides panel building solutions, including production, installation, commissioning, sales and support services in order to provide turnkey solutions to our invaluable customers.

We provide the following panel building solutions;

- Withdrawable type and Form applied LV Main Distribution Panels,
- Withdrawable type Harmonics Filter Compensation Panels,
- LV Secondary Distribution and Lighting Control Panels,
- Outdoor type LV Distribution Panels,
- LV Meter Reading Panels,
- MCC Motor Control Center Panels,
- Softstarter and Variable Speed Drive Panels,
- Automation Systems DCS, PLC, RTU Panels,

Our panel building solutions are equipped with quality products from leading manufacturers such as ABB, Schneider Electric, Rockwell and Siemens.



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» **KEY SUPPLIERS**

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