



List of Main Works for Automated Process Control Systems Commissioning

| Customer | Application | AUTOMATED PROCESS CONTROL SYSTEMS | Type of Works Performed |
|---|---|---|---|
| LLC "KINEF" Kirishi Russia | <p>Deep Conversion Plant: Units of 430-10-"Combined Residue Conversion Unit" Facility consisting of:</p> <p>Section 1000 (Vacuum Distillation),</p> <p>Section 2000 (Hydrocracking),</p> <p>Section 3000 (Visbreaking),</p> <p>Section 4100 (Hydrogen Production),</p> <p>Section 4200 (Hydrogen Purification),</p> <p>Section 5100 (Wastewater Treatment),</p> <p>Section 5200 (Sour Water Stripping),</p> <p>Section 5800 (Engineering Systems).</p> <p>430-11 and 430-12-Tank Farm of Combined Residue Deep Conversion Unit</p> <p>430-14-Tank Farm of Demineral Water;</p> <p>430-15-Pump Station for Oil Product Delivery to Tank Farm of Combined Residue Deep Conversion Unit;</p> <p>430-16-Tank Farm of Acid Water;</p> <p>430-25-Pump Station of Demineral Water Transfer;</p> <p>672-20-Unit of Elemental Sulphur Production with Regeneration Unit of DEA Saturated Solution with a Capacity of 75,000 tons/year;</p> <p>Deep Conversion Plant: Off-Plant</p> | <p>Distributed Control System with ESD and gas detection systems on Honeywell Experion PKS base</p> | <p>Startup and Commissioning Works in parts of Automation Systems of Production Technology (including Instrumentation and Automation), gas detection and ESD systems;</p> |

| Customer | Application | AUTOMATED PROCESS CONTROL SYSTEMS | Type of Works Performed |
|---|---|--|---|
| | Facilities consisting of: 730-30-Nitrogen Unit and Nitrogen Tank Farm; 740-20-Air Compressor Unit; 862-34-Recycling Water Supply Unit; 872-21-Off-Plant Facilities Operator Room; 880-14-Condensate Station with Heating Plant; 901-05/1-Warehouse of Fresh Catalysts and Reagents in Small Containers With Charging Station; 901-05/2-Warehouse of Dead Catalysts and Replaceable Filtering Elements; 901-09-Unit of Alkali and Ammonia Water Reception and Storage; 901-10-Condensed Ammonia Discharge Unit; 930-01-Interconnections; 930-09,10-Flare System Unit; 930-20-Hydrocarbon Gases Recovery Unit; 872-02-Communication and Signaling Networks | | |
| LLC "KINEF" Kirishi Russia | LK-2B High-Octane Number Gasoline Components Production Facility; Facilities: 310-10 "LK-2B Combined Unit", 930-01 "Interconnections", 310-11 "Tank Farm No.1", 310-12 "Tank Farm No.2", 310-13 "Tank Farm No.3" | Distributed Control System with ESD and Gas Detection Systems on Honeywell Experion PKS Base | Startup and Commissioning Works in parts of Automation Systems of Production Technology (including Instrumentation and Automation), Gas Detection and ESD Systems |
| LLC "KINEF" Kirishi Russia | L-24-10/2000 Hydroprocessing Unit | Distributed Control System with ESD and Gas Detection Systems on Honeywell Experion PKS Base | Startup and Commissioning Works in parts of Automation Systems of Production Technology (including Instrumentation and Automation), Gas Detection and ESD Systems, General Ventilation Automation Systems |

| Customer | Application | AUTOMATED PROCESS CONTROL SYSTEMS | Type of Works Performed |
|---|---|---|--|
| LLC “KINEF” Kirishi Russia | <p>Capital Repair, Technical Re-Equipping, Modernisation with Partial Replacement of Equipment:</p> <p>Crude Oil Distillation Units: ELOU-AT-1, ELOU-AT-6, ELOU-AVT-2, ELOU-AVT-6.</p> <p>Reforming Units: L-35-11 / 300, L-35-11 / 600, LCH-35-11 / 600, LCH-35-11 / 1000.</p> <p>Hydroprocessing Units: L-24/6, LH-24/7, LCH-24 / 9-2000, L-24-10 / 2000.</p> <p>Bitumen Production Units: 19/6 and 19/10.</p> <p>Oil Product Blending Tank Farms.</p> <p>Ortho-ParaxyloI Production Unit.</p> <p>Mixed Xylenes Production Unit.</p> <p>Gas Fractionation Unit (GFU).</p> <p>Hydrogen-Flare System Unit.</p> <p>Parex 1 and 2 Units.</p> <p>Sulphuric Acid Production Unit (SAPU-1 and 2).</p> <p>Elemental Sulphur Production Unit.</p> <p>Carbonisation Unit.</p> <p>Reactant Unit.</p> <p>LAB-LABS Plant</p> <p>etc.</p> | <p>Honeywell, Siemens, ABB, Toshiba, Emerson Distributed Control System (DCS and ESD)</p> | <p>Startup and Commissioning Works in parts of Automation Systems of Production Technology (including Instrumentation and Automation), Gas Detection and ESD Systems</p> |
| LLC “KINEF” Kirishi Russia | <p>910-110 Light Oil On-Spot Loading Station, 872-22 Operator Room of Light Oil and Specialty Products and Relevant Facilities (Pump Stations and Tank Farms)</p> | <p>Siemens Distributed Control System</p> | <p>Startup and Commissioning Works in parts of Automation Systems of Production Technology (including Instrumentation and Automation), Gas Detection and ESD Systems, General Ventilation Automation Systems</p> |
| JSC “Mozyr Oil Refinery” Mozyr Belarus | <p>LK-6U No.2 Unit. Modernisation of Compressor Control, Monitoring and Protection System</p> | <p>Siemens PCS7 Distributed Control System</p> | <p>Project Design, Software Development, Control System Delivery, Start-up and Commissioning</p> |

| Customer | Application | AUTOMATED PROCESS CONTROL SYSTEMS | Type of Works Performed |
|---|--|---|--|
| JSC “Mozyr Oil Refinery” Mozyr Belarus | LK-6U No.1 Unit. Modernisation of Compressor Control, Monitoring and Protection System | Siemens PCS7 Distributed Control System (DCS and ESD) | Project Design, Software Development, Control System Delivery, Installation, Start-up and Commissioning |
| JSC “Mozyr Oil Refinery” Mozyr Belarus | Oil Tank Farms Facilities: Tank Farms, Gasolines Blending Station, On-Spot Loading Station | Toshiba Distributed Control System (DCS and ESD) | Project Design, Software Development, Control System Delivery, Start-up and Commissioning |
| JSC “Mozyr Oil Refinery” Mozyr Belarus | Wastewater Treatment Facilities: Oil Recovery Section. | Siemens Simatic S-7 Distributed Control System | Project Design, Software Development, Control System Delivery, Installation, Start-up and Commissioning |
| LLC “Rosneftebunker” | Facilities of Ust-Luga Sea Commercial Port, Leningrad Region: Oil Discharge Overpass. Automated Dispatching Monitor And Control System Of Power Supply Facilities | Distributed Control System (DCS and ESD) on Siemens S7-400 Controllers’ Base | Project Design, Software Development, Control Systems’ Delivery, Installation, Start-up and Commissioning |
| JSC “Vorkutaugol” | JV “Vorgashorskaya Mine” Main Ventilation Fan Unit JV “Vorkutinskaya Mine”. Main Ventilation Fan Unit | Toshiba Distributed Control System (DCS and ESD), TMEIC Adjustable Speed Drive | Project Design, Software Development, Control System Delivery, Installation, Start-up and Commissioning |
| Siemens AG Germany | Automated Process Control System of “Nord Stream” Pig Trap Area Russia (Vyborg) | Siemens PCS7 Distributed Control System | Startup and Commissioning |