



## **LIST OF MORE IMPORTANT PROJECTS' REALIZED IN 2011 YEAR**

### **Boiler Department**

- Documentation workshop - mounting the boiler pressure parts CKTI 75 No. 3 for Soda Poland CIECH EC. Janikosoda
- Documentation workshop - mounting replacement furnace and boiler funnel OP 650B No. 5 in the El. Pątnów associated with development of NOx reduction system.
- The supervision of construction and installation of internal fittings of the boiler drum OP 650 in El. Łaziska
- The supervision of construction and installation of internal fittings of the boiler drum 650-060 OP No. 2 in El. Jaworzno III
- Design and documentation workshop and assembly division bundles the water heater, boiler OP650 El. Łaziska associated with development of NOx reduction system.
- Documentation of modernization BFB 100 boiler water heater in the EC Czechnica
- Technical Analysis of the causes of failure of high pressure boilers installed in the plant Koksownia Przyjaźń
- Update DTR OP 650 boiler including biomass co-firing - for El. Ostrołęka
- Documentation upgrading the water heater boiler WP 70 No. 5 in the EC Będzin
- The project to modernize and adapt to natural gas combustion boiler OP 140 No. 7 in EC Będzin
- Documentation workshop - installation of biomass boiler pressure of 90 t/ h for EC Elbląg
- Documentation workshop and assembly, and the concession superheater bundle modernization of the K-11 in Siekierki
- Workshop and assembly documentation and concession modernization of primary steam superheater III boiler No. 8 and a steam secondary superheater III boiler No. 5 El. Kozienice
- Workshop documentation and concession cell waste heat boiler ZUSOK Warsaw
- Workshop documentation and concession modernize the steam air heater boiler No 1, 2 and 3 in El. Ostrołęka
- Documentation and assembly workshop modernization tubular air heater boiler OP230 No. 5 in the El. Żeran
- Current service of Power Plants and Thermal-Electric Power Stations: Kozienice, Łaziska, Łagisza, Siekierki, Jaworzno, Rybnik, Ostrołęka, Blachownia and Power Janikowo and Będzin.



### **Boiler Furnace and Firing Installation Department**

- Workshop documentation of air and flue gas for the CHP unit with a capacity of 50 MWe in CHP Bielsko-Biala
- Design and documentation workshop - mounting assembly grates boiler OP 650B No. 5 in the EI. Państw associated with development of NOx reduction system.
- Design and documentation of technical modernization of the boiler K-3 to adapt to technological developments in combustion gases Pulawy Nitrogen Plant
- Design and documentation workshop - mounting boot fluidized bed boiler burners OFz in EI. Jaworzno
- The design documentation the gas system (natural gas) for OP-140 boiler No. 6 and 7 and WP-70 boiler in EC Będzin.
- Documentation of the executive system of cold air to the mills for boiler OP-140 in EC Zofiówka.
- Documentation of the executive in the modernization of the wires of dust for the boilers OP-650 No 4 and 5 in EI. Połaniec.
- The design documentation and an executive system of blast furnace gas and coke boiler OPG-430 EC Nowa.
- Documentation executive air and flue gas for the boiler OS-90 EC Elblag.
- Design and documentation workshop - mounting a complete installation of the boiler furnace for a modernized CKTI-75 No. 3 boiler in EC Janikowo.
- Design and documentation workshop - mounting modernization of main dampers and operating platforms in their area for boilers OP-650 EI. Kozenice.
- Design and documentation implementing the modernization of gas and oil installation complete boiler OP-120 EI. Blachownia.
- Workshop documentations the modernization of the coal bunkers, boiler OP-650 in EI. Ostrołęka.
- Workshop documentations the modernization of the air intake for boilers OP-650 EI. Ostrołęka.
- Design and workshop drawings for drying gas generator of the ash in Kamien Długoleka.

### **Steel Structure, Brickwork & Insulation Department**

- Design and documentation implementing the modernization of the seal slab for OP 140 No. 10 in EC Karolin Poznań
- Documentation executive of the new boiler supporting structure CKTI-75 No. 3 Soda Poland CIECH EC. Janikosoda
- Design and documentation workshop - installation of external insulation and armouring of the combustion chamber and the hopper boiler OP 650B No. 5 in the EI. Państw associated with development of NOx reduction system.



- Calculations OP 650 boiler construction in El. Łaziska the additional loads due to buildings SCR installations
- Load analysis for the assembly work on the boiler OP 650 in El. Łaziska
- Documentation executive lining for insulation and air heater replacement OP 230 K5 boiler in EC Żeran
- Documentation executive insulation and brickwork in the modernization of boiler K11 in EC Siekierki
- Documentation workshop - installation of insulation boiler WP 70 in the area of the water heater in EC Będzin.

### **Measurement and Control Systems Department**

- Documentation of the boiler instrumentation CKTI -75 No. 3, together with the installation of oil burners and water degassing station No. 2 in Soda Poland CIECH EC Janikowo
- Design, technical documentation, delivery, installation, supervision and commissioning of instrumentation in the industry modernization of the gas burners on the boiler No. 6 type OP-120 in El. Blachownia
- Design, technical documentation, delivery and assembly supervision mazout station modernization in El. Blachownia
- Selection and installation of two oil burners with the fitting of the boiler OP-120 No. 2 in El. Blachownia
- Design, technical documentation and repair of installations and air ducts mazout with the supervision of assembly and commissioning of the installation of auxiliary boiler No. 5 type OP-120 in El. Blachownia.
- The design and technical documentation and delivery of two regenerative heat exchangers and PWP-7 PWP-8 for boiler No 6 in El. Konin in the field of instrumentation
- Design and technical documentation and delivery, installation, commissioning and as-built documentation automation mills on the boiler OP-650 K2 in El. Rybnik.
- Design installation and electrical connections and to develop a control algorithm for start-up burners boiler No. 4 in El. Kozienice
- Executive project exhaust generator in the industry automation for ERBUD Katowice; object:–project Kamień Długołęka
- Design, documentation workshop - mounting modernization of the make-up water and degassing in EC Lublin-Wrotków
- The design, documentation workshop - assembly and delivery of installation kindling a biomass fluidized bed boiler for El. Jaworzno III in the control of burners
- Verification of control algorithms for the fluidized bed boiler start-up burners OFz 450B boiler in EC Żeran



- Analysis of the operation of the protection from loss of flame in the combustion chamber OP 650 boiler EI. Rybnik

### **Heat Exchangers, Power Engineering Equipment & Water Treatment Department**

- Design and documentation workshop - assembly and delivery of feedwater degassing station with a capacity of 65 kg/h and a network water with a capacity of 4.5 kg/h for EC Bielsko Biala
- Modernization of the make-up water and degassing. Phase II - Main building of pumping stations - EC Lublin.
- Workshop documentation and concession stations for water degassing unit No. 6 with a reflux vapor for EI. Konin.
- Documentation of the upgrading the condenser 50 KCS-5 for EI. Konin.
- Upgrading of diesel-type regenerative heater PWU (XW21) for PGE EC2 Bydgoszcz with the new pipeline condensate.
- Design and documentation workshop - assembly and delivery of two regenerative heat exchangers and PWP-7 PWP-8 for boiler No.6 in EI. Konin
- Documentation modernization high pressure regenerative heater WP6 and WP7 for PGE
- Workshop documentation including calculations strength and the buffer tank of oil to the project's IFE Engineering Corporation (Romania)
- Documentation upgrading water-water heat exchanger 2WW-2 in EC Wrocław
- Documentation upgrading low-pressure regenerative heaters 02-NP1 and NP2 0.02-02-NP3 - EC Czechnica
- The technical modernization of the regeneration of diesel heaters PWS -1 -770 / 680 - 011, PWS - 770/680 - 2 - 011 and PWS-770/730-3-011 (Soviet production) in PKE SA EI.Jaworzno III.
- Design and documentation workshop - assembly and delivery of steam condenser 575 m<sup>2</sup> and a reservoir tank drains and drainage for Polchar Kostrzyń.
- The design, documentation workshop - assembly and delivery of 14 tanks and blowdown cooler and a heat softened water for EC1 Bielsko Biala
- The design, documentation workshop - assembly and delivery of the gland steam condenser for Mondi.



## **LIST OF MORE IMPORTANT PROJECTS' REALIZED IN 2010 YEAR**

### **Boiler Department**

- Retail and workshop documentation for project VALDOSTA (Andritz) – FOSTER WHEELER ENERGY, Fakop – Sosnowiec
- Technical elements documentation of K2, OP650 boiler in Thermal-Electric Power Station "B" for ZREW Ostrołęka
- Coil pipes for Hogdalen project – Sweden for ZREW Ostrołęka
- Air heater for Odensee - Denmark – for ZELKOT Koszęcin
- Re-superheated steam pipelines – for Kozienice Electric Power Station
- Steam pipes from collector part CTKI 75 No 1, 2, 3 boilers in Janikowo Thermal-Electric Power Station – for Energoserwis - Lublin
- Updating of technical-motion documentation boiler OP-650 with taking into consideration combustion biomass and second fuels for Kozienice Thermal-Electric Power Station
- Boiler OP-430 in Siekierki Thermal-Electric Power Station – modernization of pressure part – ENREM Połaniec
- Analysis of boiler No 2 work and assessment realizability of parameters form boilers 2, 3, 5 and 7 in Blachownia Electric Power Station
- Thermal calculation of OP-650k boiler in Łaziska Thermal-Electric Power Station – for STRABAG
- Rebuilding of boiler No 5 and 7 from coal on gas in Będzin Thermal-Electric Power Station
- Modernization of OP-380 boiler No 2 and 3 in Żerań Thermal-Electric Power Station – for ZREW Warszawa
- Updating of documentation OP-380 No 2 boiler in Łagisza Thermal-Electric Power Station
- Building development of ash blowers in CTKI-75 boiler in Janikowo Thermal-Electric Power Station – for ENERGOSERWIS Lublin
- Building development level indicator and pressure impulses on boiler drum OP-650 No 4 in Kozienice Electric Power Station- for IASE Wrocław

### **Boiler Furnace and Firing Installation Department**

- Modernization of oil economy for KOGRNERACJA Wrocław
- Gas installation for Pauker OP-120 boilers in Blachownia Electric Power Station
- Documentation for air and furnace gas of biomass boiler in Konin Electric Power Station
- Adaptation of gas installation for fuel changing from earth gas ion coke gas in Nowa Thermal-Electric Power Station
- Modernization of mazoute outer economy and oil burners building on boiler No 3 and 7 in Blachownia Electric Power Station



- Technical-Movement Documentation of K1 to K8 boilers with adaptation to combustion different types of biomass in Kozienice Electric Power Station
- Modernizations of coal containers for OP-650 No2 boiler in Ostrołęka Electric Power Station
- Project of changes seals furnace chamber funnel of WP-120 boiler – KOGENERACJA Wrocław
- Installation project of barrage air for OP-650 No 2 boiler in Ostrołęka Thermal-Electric Power Station
- Adaptation of light up oil installation for boiler No 1 from high-pressure to low-pressure steam pulverization – Opole Electric Power Station

### **Steel Structure, Brickwork & Insulation Department**

- Executed and after executed documentation of platforms in area compensation bulk-head superheater of front wall boiler OFz-450 Żerań Thermal-Electric Power Station
- Executed up documentation of new carrying construction boiler CKTI-75 No 1 in Poland Soda CIECH – Janikowo Thermal-Electric Power Station
- Executed up documentation of insulation and outer boiler casing for 08-B1 boiler in cracking installation in PKN Orlen – Płock
- Heat exchanger 500-LDF for KGHM Cedynia – documentation of brickworks and insulation heat exchanger gas heater of air
- Conception of changing fuel from coal dust to gas in Będzin Thermal-Electric Power Station – changing steel construction, boiler brickworks and insulation
- Executed documentation of boiler brickwork and insulation in area of seal inter floor and dam air installation insulation of boiler OP-650 K2 in Ostrołęka Electric Power Station
- After executed documentation of modernization of brickwork, insulation and construction of boiler OP-230 No 2 in Żerań Thermal-Electric Power Station

### **Measurement and Control Systems Department**

- Automatics and Control System (AKPiA) of CKTI-75 No 1 boiler with oil burners installation in Poland Soda CIECH – Janikowo Thermal-Electric Power Station
- Documentation of Automatics and Control System (AKPiA) and deliveries for increase gas burners on boilers OP-120 No 2, 3, 5, 7 in Blachownia Electric Power Station
- Documentation of Automatics and Control System (AKPiA) in ZEW KOGENERACJA Wrocław
- Control algorithm by mazout burners of OFz-450 A boiler in Żerań Thermal-Electric Power Station
- Documentation of Automatics and Control System (AKPiA) and deliveries for changing of



control system by mazout burners on boiler OP-230 No 5 in aim connection with system DNA Metso in Żerań Thermal-Electric Power Station

- Documentation of Automatics and Control System (AKPiA) for elimination pyrites from mills in OO-650 No 7 boiler in Rybnik Thermal-Electric Power Station
- Borne – algorithm of mills on 10 block in Kozienice Electric Power Station
- Documentation of Automatics and Control System (AKPiA) for adjust of mazoute burners installation form high-pressure to low-pressure at BP-1150 No 1 boiler in Opole Electric Power Station
- Documentation of Automatics and Control System (AKPiA) and deliveries complete quantity of air fan together with control for IP&S Warszawa

### **Heat Exchangers, Power Engineering Equipment & Water Treatment Department**

- Technical documentation of modernization high-pressure regeneration heaters XW1, XW2 and XW3 for turbine 13K225 in Jaworzno III Electric Power Station
- Technical project of degassing water and regeneration high-pressure heaters for ZBA Płock
- Documentation of heat exchanger for KGHM Cedynia
- Documentation and delivery of turbine modified exchanger for ELCHO Chorzów
- Documentation and calculation of necessary shape for HAMSTER firm - Holand
- Modernization and arrangement supplementary water and degassing (stage II) in PGE Lublin – Wrotków Electric Power Station
- Documentation and delivery of steam condenser for Polchar Firm - Kostrzyń



## **LIST OF MORE IMPORTANT PROJECTS' REALIZED IN 2009 YEAR**

### **Boiler Department**

- Workshop documentation of pressure parts for modernization of OP230 boiler type nr 2 and 3 in Żerań Thermal-Electric Power Station
- Documentation of injection installation (regulation valves) for OP230 boiler type nr 4in Bydgoszcz Thermal-Electric Power Station
- Pressure elements' documentation for OP650 boiler nr 1 in Ostrołęka Electric Power Station
- Gas feeding project of OPG430 boiler in "Nowa" Thermal-Electric Power Station
- Documentation of dehydration collector and level gauge building for OP215 nr2 boiler in Nitrogen Plant – Puławy
- Conception of modernization and air heater workshop documentation during cal and biomass combustion in OP130 nr K-4 boiler in Czechnica Thermal-Electric Power Station
- Design and workshop documentation for modernization of CKTI75 nr 1 boiler in Janikowo Thermal-Electric Power Station
- Combustion chamber documentation of WR25 boiler
- Project of drum measurements for OP650 nr 8 boiler type in Electric Power Station
- Modernization conception of steam superheater for OR35 type – Gliwice
- Outlet header repair documentation of OR35 type boiler – Jasło
- Modernization of drum inner fittings and water heater documentation in Jaworzno III Electric Power Station
- Documentation of boiler installation in Bodaczow Fat Plant
- Workshop and assembly documentation of measurement vessel for OP650 K-1, boiler type in Ostrołęka "B" Electric Power Station
- Documentation building' of level indicator and pressure pulse for OP650, K-7, boiler type in Kozienice Electric Power Station
- Water heater and steam superheater of OP230 boiler type in Białystok Thermal-Electric Power Station
- Documentation building' of pneumatic and control devices for AP1650 boiler type in Kozienice Electric Power Station

### **Boiler Furnace and Firing Installation Department**

- Modernization of mazut installation in Gdańsk Thermal-Electric Power Station
- Modernization of light up installation for WP-200 boiler in Siekierki Thermal-Electric Power Station
- Technical documentation of OP650, nr 1, type boiler in Ostrołęka Thermal-Electric Power Station





- Documentation for fire up burners together with burners junction of OP430, nr 2 type boiler – Kogeneracja Wrocław
- Documentation of slag hopper, suspensions of first stage superheater re-superheated steam (RH-1) and mixing node of primary steam for AP1650 boilers type in Electric Power Station – Kozienice
- Elaboration of conception – study realizability' of rebuilding OP650 boiler type for burning 100% biomass in Electric Power Station – Ostrołęka “B”
- Making inventory and technical documentation of elements for OP650 boiler type in Electric Power Station – Jaworzno III
- Adaptation of OP430 boilers nr K2 and K3 to automatic mode when are working start up burners - Kogeneracja Wrocław
- Analyze of possibility limitation of mill capacity on OP230 nr 1 boiler type in Thermal-Electric Power Station – Wrocław
- Modernization of start up installation for boiler K6 in Thermal-Electric Power Station Rybnik
- Execution documentation' of start up installation for boiler nr 2 together with feeding system documentation on trestle bridge in Thermal-Electric Power Station – Opole
- Modernization of furnance installation for CTKI75 nr 1 boiler in Janikowo Thermal-Electric Power Station

### **Steel Structure, Brickwork & Insulation Department**

- Workshop documentation of thermal insulation for TGU TRINIDAD CKPP project 720 MW in LA BREA – TRINIDAD & TOBAGO
- Workshop documentation of modernization CTKI75 nr 1 boiler - in Janikowo Thermal-Electric Power Station in scope: supporting structure, bandages, boiler insulation, air ducts and flue gas together with pipeline in boiler area and service platforms.
- Documentation of ducts insulation for project “Modernization of OPP together with auxiliary installations” for BB1150 K4 boiler in Bełchatów Thermal-Electric Power Station
- Workshop documentation of gas burners brick work and insulation of modernization air ducts OPG430 boiler in “Nowa” Thermal-Electric Power Station
- Workshop documentation of service platforms OPG430 boiler in “Nowa” Thermal-Electric Power Station
- Workshop documentation of supporting structure and service platforms of main gas ducts OPG430 boiler in “Nowa” Thermal-Electric Power Station
- Workshop and after workshop documentation of brick work and insulation for tube roof, also insulation and casing for roof housing – all in scope of seal OP140 nr 1K2 boiler for Karolin Thermal-Electric Power Station



- Workshop and after workshop documentation of brick work, insulation, boiler casing and construction in scope boiler OP230 nr 3 modernization for Żerań Thermal-Electric Power Station
- Workshop documentation of brick work, insulation, boiler casing and construction in scope boiler OP230 nr 2 modernization for Żerań Thermal-Electric Power Station
- Workshop documentation of brick work, insulation and casing in scope modernization tube roof seal of OP650 nr 1 boiler in Ostrołęka "B" Thermal-Electric Power Station
- Project and workshop documentation of suspension first stage re-superheated steam (RH-1) and mixing knot of first steam in boiler AP1650 Thermal-Electric Power Station - Kozienice

### **Measurement and Control Systems Department**

- Modernization of control system lighting-up burners at boiler OP230 nr1 in Żerań Thermal-Electric Power Station
- Workshop, assembly and technical documentation feeding of OP430 nr 6 boiler in "Nowa" Thermal-Electric Power Station
- Modernization of lighting-up for K8 Kozienice Thermal-Electric Power Station
- Modernization of mazut installation in Gdańsk Thermal-Electric Power Station
- Workshop, assembly and technical documentation of modernization of lighting-up installation WP200 nr K16 boiler in Siekierki Thermal-Electric Power Station
- Workshop, assembly and technical documentation of modernization of lighting-up installation OP430 nr K2 boiler in Wrocław Thermal-Electric Power Station
- Technical documentation of reduction-cooling station 5RS1 in Ostrołęka Power Plant
- Conception of new installation for light OFz425 nr K1 and K2 in PKE Siersza Power Plant
- Algorithm control of burner when glycerin is burned in OP650 nr 5 and 6 in Rybnik Power Plant
- Actualization of lighting-up installation documentation for OP650 nr 6 in Rybnik Power Plant
- Actualization of documentation for automatic make away pyrite from mills for OP-650 boiler type No 6 in Electric Power Station Rybnik
- Technical project of live steam reducer development in Rybnik Power Plant
- Workshop, assembly and technical documentation of modernization of lighting-up installation OP430 nr K3 boiler in Wrocław Thermal-Electric Power Station

### **Heat Exchangers, Power Engineering Equipment & Water Treatment Department**

- Modernization documentation of turbine set nr 5 – high-pressure preheaters PWC6, PWC7, PWC8 replacement and PNC3 low-pressure heater attemperator of steam from



PS50 stuffing boxes together with replacement of piping's in area these devices

- Modernization documentation of reduction station 10/32 nr 11 in Nitrogen Plant - Puławy
- Repair documentation of following heat exchangers: PWU 300/250-1-230 (1XW1) in Gdynia Thermal-Electric Power Station and Gdańsk Thermal-Electric Power Station
- Repair documentation of tube insert: PN-380/300-4 for Łaziska Power Plant, PN-380/300-4 and PN-500/420-3 for Rybnik Power Plant, 1XN3 for Wrocław Thermal-Electric Power Station and R6 (PWU-500/420-1-010 for Siersza Power Plant
- Modernization technical documentation of low-pressure regeneration heaters XW1, XW2, XW3, ZZ feed water tank and CT2 cooler for turbine 13K225 in PKE – Jaworzno III
- Current technical documentation with stock-taking of 5RS1 reduction-lowering station
- Documentation and building of measurement reducer on OP230 boiler outlet pipeline
- Delivery of vapours attemperator for laundry in Leżajsk
- Delivery of water purification plant on reverse osmosis technology for Ursus Power Engineering



## **LIST OF MORE IMPORTANT PROJECTS' REALIZED IN 2008 YEAR**

### **Boiler Department**

- Workshop and assembly documentation of OP140 boiler nr 9 – Dwory Power Engineering
- Workshop and assembly documentation of CTKI 75 boiler nr 2 – Thermal-Electric Power Plant Janikowo
- Workshop and assembly documentation of OS14 boiler which is firing straw in Thermal-Electric Power Plant Wałcz
- Workshop and assembly documentation of waste-heat XU8,5 boiler in Thermal-Electric Power Plant Wałcz
- Workshop and assembly documentation of OS110 boiler in which is fired straw – Szolonok - Hungary
- Modernization of OP650 nr 1 boiler in Ostrołęka Power Plant
- Modernization of water heater soda boiler in Stora Enso - Ostrołęka
- Modernization of injection installation for OP650 boiler type nr 1 in Ostrołęka Thermal-Electric Power Plant
- Modernization of OP230 type boiler for Bydgoszcz Thermal-Electric Power Plant
- Drum inner fittings of 22 boiler Orlen Płock

### **Boiler Furnace and Firing Installation Department**

- Oil installation project of OP650 K1 and K2 boilers in Ostrołęka Thermal-Electric Power Plant
- Sealing – cooling installation project of floor for OP650 K1 boiler in Ostrołęka Thermal-Electric Power Plant
- Oil installation project of OP230 boiler in Kogeneracja Wrocław
- Oil installation project of OP200 boiler in Kawęczyn Power Plant
- Furnace installation project of straw fired OS14 boiler in Thermal-Electric Power Plant Wałcz
- Furnace installation project of straw fired OP140 nr 9 boiler for Oświęcim Dwory Power Engineering
- Furnace installation project of CTKI 75 nr 2 boiler for Thermal-Electric Power Plant Janikowo
- Gas burners project of OPG 260 nr 6 and nr 7 boilers for Bokaro Power Plant - India
- Furnace installation project of straw fired OS110 boiler for Szolonok – Hungary

### **Steel Structure, Brickwork & Insulation Department**

- Modernization of CTKI 75 nr 2 boiler for Janikosoda SA – workshop and assembly documentation of steel construction, insulation and brick work



- Modernization of OP140 nr 9 boiler for Oświęcim Dwory Power Engineering
  - workshop and assembly documentation of steel construction, insulation and brick works
- Modernization of WP120 nr 5 boiler for Siekierki Thermal-Electric Power Plant
  - workshop documentation of confection draught and combustion chamber
- Modernization of combustion gas desulfurization installation for power unit nr 1 and nr 6 in Rybnik Power Plant – documentation after execution
- Opinion about calculation of OP650 nr 5 boiler supporting structure in Koziencice Power Plant connected with burners modernization
- Boiler OS14 for Thermal-Electric Power Plant Wałcz - workshop and assembly documentation of steel construction, insulation and brick works
- Project of beam for hoisting beam at LUVO-block nr 4 in Bełchatów Power Plant
- Boiler OS110 for Szolonol - Hungary - workshop and assembly documentation of steel construction, insulation and brick works
- Casing of water heater for Stor – Enso Ostrołęka – workshop documentation
- Boiler XU8,5 for Thermal-Electric Power Plant Wałcz - workshop and assembly documentation of insulation and brick works
- Basic and workshop project of insulation at duct modernization OPP with auxiliary installation BB1150 nr K4 boiler in Bełchatów Power Station
- Modernization of brick work second draught for E2-BKZ-75-39FB nr 4 boiler in Thermal-Electric Power Plant – Wilno – workshop documentation
- Brick work of LMF-Type ASK-T burner with bandage elements for OO-420 nr 4 and nr 5 boilers in PKN Orlen Płock – workshop documentation
- Brick work, insulation and boiler casing of tube floor in area combustion chamber and second draught for OP650-030 nr 3 boiler in Ostrołęka Power Plant – workshop documentation

### **Measurement and Control Systems Department**

- Workshop – assembly documentation of modernization start up burners system for OP230 boilers in ZCh Police –adjustment to combustion of combustible light oil
- Algorithm of oil burners control and ventilation OP650 nr 4 boiler in Rybnik Power Plant
- Workshop – assembly documentation of modernization in scope system operation oil installation together with burners of OP650 nr 1,2 and 3 boiler in Ostrołęka Power Plant
- Workshop – assembly documentation of Control Apparatus Measurement and Automatics for boiler with capacity 110t/hour which is fired by straw for Szolonok - Hungary
- Algorithm of powered – fuel burners control for OP650 nr 3 boiler in Rybnik Power Plant
- Starting of control system blast-furnace gas burners (BFG) for OPG260 nr 7 and nr 8



boilers in Bokaro Power Plant - India

- Modernization of start up burners in control system – OP230 nr 2 boiler in Żerań Thermal-Electric Power Plant
- Modernization of start up burners in control system – OP650 boiler in Koźienice Power Plant
- Workshop – assembly documentation of modernization control gas burners system for OP140 nr 9 boiler – Power Industry – Dwory Oświęcim
- Workshop – assembly documentation of modernization Control Apparatus Measurement and Automatics for OP140 nr 9 boiler – Power Industry – Dwory Oświęcim
- Workshop – assembly documentation of modernization control oil burners system for OP140 nr 9 boiler – Power Industry – Dwory Oświęcim
- Workshop – assembly documentation of start up burners system for OP230 nr 1 boiler in Wrocław Thermal-Electric Power Plant
- Workshop – assembly documentation of start up burners system for WP200 nr 4 boiler in Kawęczyn Thermal Power Plant
- Workshop – assembly documentation of modernization Control Apparatus Measurement and Automatics for OS14 boiler – Wałcz Thermal-Electric Power Plant
- Workshop – assembly documentation of modernization Control Apparatus Measurement and Automatics for XU8,5 boiler – Wałcz Thermal-Electric Power Plant
- Workshop – assembly documentation of modernization Control Apparatus Measurement and Automatics for start up installation of CTKI 75 nr 2 boiler – Janikowo Thermal-Electric Power Plant
- Workshop – assembly documentation of modernization Control Apparatus Measurement and Automatics for water deaerating station in Janikowo Thermal-Electric Power Plant

### **Heat Exchangers, Power Engineering Equipment & Water Treatment Department**

- Documentation of deaerating station new and old demoralization station and modernization water decarbonization station for Janikowo Thermal-Electric Power Plant
- Delivery and supervision above assembly of water decarbonization station for project “Construction of Thermal-Electric Power Plant -3 in Brzeg Dolny”
- Delivery of 100 pieces spirals right and left for PKN Orlen - Płock
- Documentation of modernization heat exchanger 4XA in Kraków Thermal-Electric Power Plant
- Documentation of reconstruction preheating system row water in Szczecin Power Plant
- Documentation of high pressure regeneration new heaters PWU type for Zofiówka Thermal-Electric Power Plant
- Documentation of degasifying water station for Kielce Thermal-Electric Power Plant



- Documentation of steam desuperheater OP130 boiler for Energoserwis - Lubliniec
- Documentation of high pressure regeneration water heater PWU type (WP7) for Bełchatów Power Plant
- Repair documentation of low pressure heat exchanger elements for Rybnik Power Plant
- Documentation of modernization high pressure regeneration water heater PWU240-200-4B for Kogeneracja Wrocław
- Documentation of new elements regeneration heat exchanger PW4 and PW5 for Dalkia Łódź



## **LIST OF MORE IMPORTANT PROJECTS' REALIZED IN 2007 YEAR**

### **Boiler Department**

- Boiler OS110 type fired by straw for Hungary, basic project, for workshop and assembly documentation
- Boiler OS14 type fired by straw for Wałcz- Poland Thermal Power Station- basic project, workshop and assembly site documentation
- Boiler XU 8,5 waste- heat type for Wałcz- Poland Thermal Power Station- basic project, workshop and assembly site documentation
- Boiler OP140 type fired by black coal for Dwory Power Station- basic project, workshop and assembly site documentation
- Jaworzno Power Station- updating of documentation
- Ostrołęka Power Station- updating of boiler documentation
- Dalkia Łódź Power Station- boiler OP130- new documentation of the stage super-heater
- Updating of documentation for Łaziska Power Station,
- Elaboration of modernization conception for OP230 type boiler in Bydgoszcz Power Station
- Elaboration work analysis of OP650 type boiler in Ostrołęka Power Station
- Elaboration of basic project for modernization CKTI-75 type boilers in Janikowo Power Station
- Documentation of waste-heat type boiler for Vitrosilicon- Iłowa
- Water heating of OP140 type boiler for Kraków Power Station
- Modernization of WP120 type boiler No 6 and 7 for Siekierki Power Station

### **Boiler Furnace and Firing Installation Department**

- Modernization of start up oil installation for boilers OP1150- BOT Opole Power Station
- Calculations and documentation for orifice of coal dust in Police Chemical Company- OP230 boilers type
- Air installation for mineral wool factory- Chorwacja Doosan Rybnik
- Gas installation for OP215 boiler type in Blachownia Power Station
- Building of additional gas burners together with installations on boilers K4 and K5- Moszczenica Thermal and Power Station
- Attached boiler combustions installation for OS110 boiler type in Szolnok- Hungary
- Modernization of carrying away flue gas installation for boiler number K3, K4, K5, K6 in Moszczenica Thermal and Power Station
- Attached boiler combustions installation for OS14 boiler type M-Plus Sp.O.O. in Wałcz
- Building of guide elements in flue gas outlet ducts from electrostatic precipitators of 460MW power unit in Pątnów Power Station- SNC Lavalin- Poland- Warsaw





- Modernization of gas installation and blast - furnaces for boilers in Bokaro - India- Energotechnika- Energopomiar Gliwice, Poland
- Analysis of work and brief foredesign for modernization of powdered - fuel burners- OP230 boiler type in Bydgoszcz Company Thermal and Power Station
- Modernization of OP140 boiler type No 9 in Power Engineering Dwory Oświęcim - Poland
- Modernization of oil start- up installation for OP650 boiler type, No K3- Rybnik Power Station

### **Steel Structure, Brickwork & Insulation Department**

- Modernization of flue gas ducts for BB-1150 boiler type, insulation and boiler casing- Bełchatów Power Station
- Building of additional gas burners in OCG-64 boiler type in Moszczenica- Insulation- Energy Company “Jastrzębie”
- Insulation flue gas ducts in Miechowice Thermal and Power Station- ZRE Katowice
- Supervision of fluid boiler brick work
- Insulation and boiler casing of OS-14 boiler type in Wałcz- M-Plus Sp.z o.o.
- Insulation and boiler casing with boiler brick work XU 8,5 boiler type in Wałcz- M-Plus Sp.z o.o.
- Insulation and boiler brick work and steel construction for repair of burners- Bydgoszcz Thermal and Power Station
- Building multibranch project of OS-110 boiler type in Szolnok- Hungary- Euro City II
- Workshop documentation of bandage for WP-120 boiler type, boiler No K5- Siekierki Thermal and Power Station

### **Measurement and Control Systems Department**

- Complete documentation of control system for additional gas burner on modernized OCG-64 boiler type No 4 and 5 in Moszczenica Thermal and Power Station
- Documentation of burners control system for blast- furnace gas burners
- Control system documentation of blast- furnace gas burners (BFG) for OPG-260 boiler type No 7 and 8 in Bokaro Power Station- India
- Delivery of BF gas burners control cupboard and software controllers for OPG-260 boiler type No 7 and 8 in Bokaro Power Station- India
- Delivery of operator cupboards and software for burners in Power Station Bokaro- India boilers No 7 and 8
- Technical documentation of measurement and control system with electrical part for ORS-15 reduction- cooking station in Thermal and Electric Power Station- Ostrołęka
- Measurement and control system documentation for furnace and drier's of limestone in



Lhoist- Bukowa

- Modernization project of level signaling in XN, XW, CT and KO- Electric Power Station Rybnik
- Modernization proposition of measurement and control system for OP-230 boiler type No 4 in Thermal and Electric Power Station Bydgoszcz II
- Optimization of oil burners system control for OP-140 BOILER TYPE No K1 in Thermal and Electric Power Station Karolin
- Workshop, assembly and technical- operation documentation of control system for start-up installation OP-650 boiler type No 5 in Electric Power Station Rybnik
- Modernization documentation of start- up burner for OP-230 boiler type No 1 and 2 in Chemical Company- Police (adaptation burners for firing of light fuel oil)

**Heat Exchangers, Power Engineering Equipment & Water Treatment Department  
Documentation:**

- Condensate cooler V80-010
- Tube inserts PN-380/300-4 and PN-500/420-3 for Electric Power Station Rybnik and Łaziska
- Pzp tube insert XN4 for Electric Power Station Kozienice
- Tube insert of MV – F300 heater for Electric Power Station Stalowa Wola
- Tube insert of MV-F300 heater No 5 for Electric Power Station Adamów
- Tube inserts of PN-380-300-4 and F150 cooler for Electric Power Station Jaworzno III
- 3WW1 and 3WW2 heat exchangers and pipings around them for Thermal and Electric Power Station Kraków
- Modernization of CKTI-75 boiler type: water conditioning Station in Thermal and Electric Power Station Janikowo
- Modernization of 4XB heat exchangers for Thermal and Electric Power Station Kraków
- Modernization of W1 and W2 heat exchangers in Thermal and Electric Power Station Company- Polkowice
- Stock- taking and technical documentation of ORS-15 Station for Thermal and Electric Power Station Company in Ostrołęka
- Modernization of 2WW1 water- water exchanger for Thermal and Electric Power Station in Wrocław
- Degasifier water Station for Thermal and Electric Power Station in Mielec
- Steam chamber main flange replacement of PWU high pressure regeneration heater for Thermal and Electric Power Station in Gdańsk
- High pressure regeneration heater PWU type for Thermal and Electric Power Station II in Bydgoszcz



- Modernization of PWP high pressure heater for Nitrogen Company in Puławy

**Delivery:**

- Thermal, nozzle degasifier for Thermal and Electric Power Station "District Company" in Grudziądz.



## **LIST OF MORE IMPORTANT PROJECTS' REALIZED IN 2006 YEAR**

### **Boiler Department**

- Basic project and workshop documentation of OS41 boiler type for Nowy Dwór Gdański
- Modernization of pipings and steam attemperator of OP215 boiler type in Nitrogen Company- Puławy
- Modernization of WPI20 boiler type No 6 and 7 in Thermal and Electric Power Station- Siekierki
- Modernization of XU 17 boiler type in Nitrogen Company- Tarnów
- Workshop documentation for Coking Plant "Przyjaźń"  
Workshop documentation of boiler for Jebel Ali Dubai
- Analysis of heating surfaces and changes' basic project of OP380 and OP430 boilers type in Thermal and Electric Power Station- Kraków
- Workshop documentation of boiler for Columbus Nebraska- USA
- Expert opinion on modernization of CKTJ-75 boiler type in Thermal and Electric Power Station- Janikowo
- Modernization of OP-230 boiler type in Thermal and Electric Power Station- Żerań
- Workshop documentation of modernization BB-1150 boilers type in Thermal and Electric Power Station- Bełchatów
- Updating of boiler documentation for Thermal and Electric Power Station- Łaziska

### **Boiler Furnace and Firing Installation Department**

- Modernization of flue gas desulphurization station on block No 6 (6JOS) in Rybnik S.A. Power Station
- Documentation of transfer one burner from OR32 boiler type No 3 on OR32 boiler type No 1 in RCEkoenergia Czechowice Dziedzice
- Documentation of funnel with water seal for BB-1150 boiler type No 3 Bełchatów Power Station
- Testing and optimization of mazout burners for boiler No 5 in Turów Power Station S.A.
- Workshop and assembly documentation of mechanical construction branch for modernization of desulphurization flue gas installation- block No 8 (8JOS)- Rybnik Power Station
- Analysis of existing mazout installation in aspect of flue change in Thermal and Electric Power Station- Wybrzeże S.A. Gdańsk
- Workshop and assembly documentation for ducts with equipment for filter of sediment chamber for JSTRIA- Croatia
- Workshop documentation big overall dimension flaps' of flue gas ducts for NEM- Germany.



### **Steel Structure, Brickwork & Insulation Department**

- Technical- carrying out project support structure for feeding sets together with oil drain installation and technical- workshop- assembly of transport- crane for Pątnów Power Station
- Technical- workshop- assembly documentation for exchange electrostatic precipitator's of OP230 boiler type No 2 in Thermal and Power Station Bydgoszcz II
- Brick work and insulation documentation of OOG50 boiler type in INA SISAK- Croatia
- Brick work workshop and afterwork documentation modernization's of dryink ducts for coal mills No 1 and 2 of OP140 boiler type No 6 in Thermal and Electric Power Station- Będzin
- Documentation of boiler bandages for combustion chamber and convection draft- Łagisza Power Station
- Documentation: brick work and insulation of OR-10-011 boiler type in SPGK Sanok
- Insulation and boiler casing documentation of OP230 boiler type No1 in Kogeneracja Wrocław
- Documentation of traveling beam for hoists to service LUVO in Bełchatów Power Station
- Workshop and assembly documentation for recirculation duct of electrostatic precipitator UNIT No 3 in Seyitomer- TURKEY.

### **Measurement and Control Systems Department**

- Delivery of control cupboard for BF and CO gas, assembly and software OPG-260 boiler type No 2 in Bokaro Power Station- India
- Delivery and software of TP270 operator panel for OPG-260 boiler type No 6 in Bokaro Power Station- India
- Workshop and assembly documentation of two OR16 boiler type in area measurement and control system for gas beside boiler installation for Thermal and Electric Power Station- Jankowice
- Workshop and assembly documentation feed's of heating system for control air- operated equipment of safety valves power unit No 9 in Koziencice Power Station
- Delivery and assembly of measurement and control system, start modernization afterwork documentation of water level indicators in boiler drums with TV vision transmission for boiler- roon control station (No 701 and 702) in Coking plant "Friendship"- Dąbrowa Górnicza
- Delivery of two pieces start up burners (light oil ON-3-34 type) for Police Nitrogen Company
- Documentation automatic control engineering of pyrite removal from grinding mills No 5-8 in Rybnik Power Station



- Documentation for making measurement and control system' for gas burners of OP-215 boiler type No 12- Blachownia Power Station
- Delivery and assembly of equipment, software and start up measurement and control system of gas burners for OP-215 boiler type No 12 in Blachownia Power Station
- Project of protection before pressure increase in combustion chamber of OP-650 boiler type- units 200 MW No 2-8- Kozienice Power Station
- Workshop and assembly documentation of steam regulation system for OP-215 boiler type No 1 in Puławy Nitrogen Company
- Workshop and assembly documentation, technical operation documentation and after making of modernization measurements and control system for OP-230 boiler type No 3 in Thermal and Electric Power Station Żerań- scope of control system of mazout burners
- Delivery and assembly of equipment, software and start up of mazout burners for OP 230 boiler type No 3 in Thermal and Elektric Power Station - Żerań
- Delivery, assembly, software and start up control system' of gas start up burners for WP-70 boiler type No 2 in Thermal and Electric Power Station Lublin- Wrotków
- Workshop and assembly documentation, technical operation documentation fired by straw OS-43 boiler type in Nowy Dwór Gdański
- Delivery of start up burner 5ZGn-20 for Pia ZAP Puławy

### **Heat Exchangers, Power Engineering Equipment & Water Treatment Department**

#### **Documentation:**

- Documentation of vessels for Pątnów II Power Station
- Documentation of network water pipings in area heat exchangers- URSUS Power Engineering engine room
- Documentation of water deaerating heater station for Thermal and Electric Power Station in Mielec and Andaluzja II Piekary Śląskie
- Documentation complex readjustment's of reduction-cooking Station building according to Europe Council Instruction requirement No 97/23/WE
- Documentation of ammonia cooler and condenser for Kędzierzyn- Koźle
- Documentation of water degazifier station, heat exchangers, expander and drain tanks for Katowice Energoinstal

#### **General realization of investment:**

- Making of documentation, delivery and supervision over assembly and start up of steam condenser from KP-35-010 gland in Thermal and Electric Power Station- Saturn, Świecie
- Making of documentation and delivery degazifier for drain of toluene from condensate in "Bauer" Printing Hause - Ciechanów
- Making of documentation and delivery 4 pieces vessels and water heaters for Arctic



Paper- Kostrzyn

- Making of documentation and delivery 3 pieces 2x DN500 heat exchangers for Montar-Tarnów
- Making of documentation and delivery tube insert for Globus- Ełk
- Making of documentation and delivery 2 pieces exchangers for "Friendship" Thermal and Electric Power Station in Dąbrowa Górnicza
- Making of modernization installation documentation for make use of heat from degazifier vapours- block No 3- Dalkia- Poznań

**Repair documentation:**

- Assembly documentation of 3XR start up exchangers- block No 3- Thermal and Electric Power Station- Kraków
- Modernization and repair documentation of high- pressure regeneration PWU type exchangers for Thermal and Electric Power Station- Kraków
- Modernization and repair documentation of high- pressure WP 7 exchanger for BOT Thermal and Electric Power Station- Bełchatów.



## **LIST OF MORE IMPORTANT PROJECTS' REALIZED IN 2005 YEAR**

### **Boiler Department**

- Coal Main Knurów-Poland: Modernization of OP40 Pauker boilers
- Oil Refinery Enterprise, ORLEN-Płock - Poland: modernization documentation and new one for existing sets of steam generator which is installed in technological system of Refinery
- Basic project of OS43 boiler which is fired by straw in Nowy Dwór Gdański –Poland
- Modernization of boiler which is fired by municipal waste – on the base of basic project for V&SM firm Kaarst – Germany
- Modernization of water heater for:
  - boiler fired by municipal waste – Sundsvall - Denmark
  - OP215 boiler No 1 in Nitrogen Plant Puławy-Poland
- Modernization of air heater of OFz450 boiler for Żerań Heat Electric Power Station Warsaw-Poland
- Modernization of superheater of KSTK boiler-Coking Plant – Dąbrowa Górnicza-Poland

### **Boiler Furnace and Firing Installation Department**

- OP650 No 1 boiler, Rybnik Power Station - Poland:
  - flue gas ducts: connection of boiler with desulfurization reactor of the flue gas
  - transport of ash from reactor
- WR25 boiler, Brzeszcze Thermal-Electric Power Station –Poland: modernization of dust removal installations
- Modernization of air and flue gas installation for boilers:
  - OFz450 boiler – Żerań Thermal-Electric Power Station Warsaw - Poland
  - OP130 boiler – Kogeneracja, Wrocław -Poland
  - OP-650 boiler No 7 – Kozienice Power Station –Poland
- Workshop documentation of big dimensions flaps for NEM Power System Germany
- Modernization of oil installation for OP140 boiler DALKIA Poznań – Poland
- Modernization of start up oil installation for OFz450 boiler Thermal-Electric Power Station Żerań-Warsaw, Poland.
- WP70 boiler, Thermal and Electric Power Station Wrotków-Lublin - Poland: start up natural gas installation
- OPG230 boiler, Bokaro-India: modernization of installation with coke-oven and blast-furnace gas burners.





### **Steel Structure, Brickwork & Insulation Department**

- OS43 boiler fired by straw-basic project of support construction, buckstays, insulation and platforms - Poland
- OFz450A – Thermal and Electric Power Station Żerań-Warsaw – Poland
- Generator of Steam-Oil Refinery Polish Enterprise- ORLEN-Płock – repair documentation of casing, brick work and insulation
- OP130 boiler No 1, Nitrogen Plant – Puławy – modernization of support steel construction, insulation and casing – Poland
- OR32 boiler – Brzeszcze Thermal and Electric Power Station – Poland: basic project and workshop documentation of support steel construction and insulation for dust removal installation
- OP650 boiler No 1 Rybnik Power Station – Poland – basic projects and workshop documentation of support steel construction, platforms and insulation in desulfurisation installation area
- OP130 boiler – Kogeneracja, Wrocław – Poland – support steel construction, insulation and connecting flue gas ducts the boiler with chimney stack
- Steel construction and flue gas ducts for electrostatic precipitator
- OP650 boiler No 8 – Koziernice Power Station – making of geodesic documentation and inventory of technical state of carrier grid – Poland
- CFB fluidized boiler No 6 and OP140 boiler No 4 in Cellulose Plant Świecie-Poland.

### **Measurement and Control Systems Department**

- OCG64 boiler No 5 in Moszczenica Thermal and Electric Power Station – brief foredesigns for automatic control engineering and measurements
- F-201 Furnace and HON II and HON III burner installation in Oil Refinery Polish Enterprise – ORLEN-Płock – documentation after assembly
- OP40 boiler Pauker type No III and IV for Megawat Knurów Plant – brief foredesign for automatic control engineering and measurement
- OP120 boiler No 3 in Blachownia Power Station: documentation after assembly of automatic control engineering and measurement of optimization boiler's work for enlargement boiler capacity's on coke-oven gas
- BC-100 block in Karolin Thermal and Electric Power Station – workshop and assembly modernization documentation of control installation by start up burners
- WP-70 boilers No 1 and 2 – Wrotków-Lublin Thermal and Electric Power Station – workshop, assembly and technical-operation documentation of control system start up burners and modernization boiler's preservation



- Cooking Plant "Przyjaźń" Dąbrowa Górnicza: Technical documentation of remote level indicators in drums of boilers with tv pictures transmitter to boiler house control station
- OCG-64 boiler no 5 in Thermal and Electric Power Station Moszczenica: algorithm of boiler protections with CLDT approval
- Carbon Black Poland – Jasło – Inspection of natural gas installation on furnace of drier "A"
- WR-25 boiler – Brzeszcze – Technical documentation of modernization dust Extraction - electrical part
- OP-650 boiler No 4 – Jaworzno III Power Station – modernization's project of feeding system and control's start up burners
- OP-120 boilers No 2 and 5 – Blachownia Power Station: documentation after assembly of automatic control engineering and measurement of optimization boiler's work for enlargement boiler capacity on coke-oven gas
- 2xOR-16 boilers fired by gas: Jankowice Hard Coal Mine-Thermal and Electric Power Station: basic project of automatic control engineering and measurement
- OS-43 boiler fired by straw-Nowy Dwór Gdański – Poland – basic project of automatic control engineering and measurement
- ORS-7, ORS-11, ORS-14 Reduction – cooling stations – basic project of modernization electric and automatic control engineering part
- KSTK-25/39 boilers No 1 to 12 (without No 11) Cokery "Friendship" Dąbrowa Górnicza - Poland – basic project of steam superheater modernization, electric and automatic control engineering part of steam temperature regulation
- OPG-260 boiler No 6 in Bokaro Power Station – India: documentation of control system coke-oven and blast gas burners
- WP-70 No 1 in Wrotków-Lublin Thermal and Electric Power Station: deliveries, assembly and software of coke-oven and blast gas stop up burners control system with boiler's protection
- OFz-450B boiler in Żerań-Warsaw Thermal and Electric Power Station: automatic control engineering system – conception and reconstruction of boiler fire up installation.

### **Heat Exchangers, Power Engineering Equipment & Water Treatment Department**

#### **Elaborated documentations according to European Procedure No 97/23/WE:**

- F-35-030, F-12-010 oil coolers – Ostrołęka Power Station – Poland – documentation
- Documentation of heat exchanger for HOBAS Company in Dąbrowa Górnicza – Poland
- Documentation of waste water cooler in Gdańsk Thermal and Electric Power Station

#### **Elaborated documentations of new equipment and installation:**

- Documentation of full modernization ORS-7, ORS-11 and ORS-14 stations in Ostrołęka



Energy Plant

- Janikosoda Joint Venture: installation heat utilization of technological sewages for water heating distribution network Janikowo City
- Polish Power Concern – Siersza Power Station – boiler No 2: design of heat exchanger development station for cooling water auxiliary equipment

**Elaborated documentations of modernized equipment and installations:**

- Thermal and Electric Power Station Kraków-Poland: modernization documentation of WC-2950-II heat exchanger
- Technical modernization documentation heat exchangers's and cleaning system of research reactor "Maria" in Institute of Nuclear Problems, Department of Nuclear problems, Department of Nuclear Apparatus – Świerk-Poland
- Documentation of new tube insert for:
  - PW-240/200 heat exchanger in Thermal and Electric Power Station – Wrocław Poland
  - PN-380/300 heat exchanger in Power Station – Rybnik – Poland
- PWU-200 heat exchanger in Pomorzany – Poland
- Repair documentation of PWU-300/250 heat exchanger for Thermal and Electric Power Station Gdańsk – Poland
- Modernization documentation of net water degasifier for Thermal and Electric Power Station – Gdynia - Poland

**General realization of deliveries:**

- Delivery of expander for new turbine set in Thermal and Electric Power Station Żerań Warsaw – Poland
- Repair of two generator coolers for Thermal and Electric Power Station Gorzów Wlkp. Poland
- Delivery of turbine oil coolers for Thermal and Electric Power Station – Wybrzeże Joint Venture and Gdynia – Poland
- Delivery of steam ejector tube pak for ZEC Bydgoszcz Joint Venture – Poland
- Delivery of RS-50 and RS-20 reduction-cooling stations and elaboration documentation of installation then in Thermal and Electric Power Station "Energetyka" Ursus Warsaw – Poland
- Documentation of reduced steam collector exchange and steam pipings to heat exchangers in Thermal and Electric Power Station "Energetyka" Ursus, Warsaw-Poland
- Repair of water collectors for PWS heat exchanger No 1 – power unit No 7 in Thermal and Electric Power Station "ORLEN" Płock - Poland.