

nothing is impossible



### nothing is impossible

Bydgoszcz 2014 Second Edition

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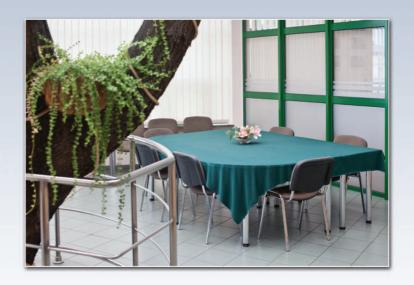
### **ABOUT AS**











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Dear Sir or Madam,

we are proud and pleased to present you with the latest edition of our catalogue, that który summarizes the company's achiewements within the past 25 years.

All projects presented here are our own projects with the vast majority of them being of our own design. However, with limitations imposed by the size of this publication we are unable to show the full extent of our portfolio.

All we have implemented so far is the product of the entire team, partners and owners of **PPM PROMONT**.

We hope this publication will provide an informative read for those wanting to have a closer look at our operations.

Owners, employees and partners **PPM PROMONT** Bydgoszcz





Our achievements and awards

### **ABOUT AS**

#### Our advantages

Since it establishment in1988, **PPM PROMONT** has designed and implemented projects related to the environmental engineering. The majority of our projects are turn-key, meaning that, as well as being an established manufacturer, we have considerable experience in the design area. With access to modern design facilities, our design team is constantly developing their skills.

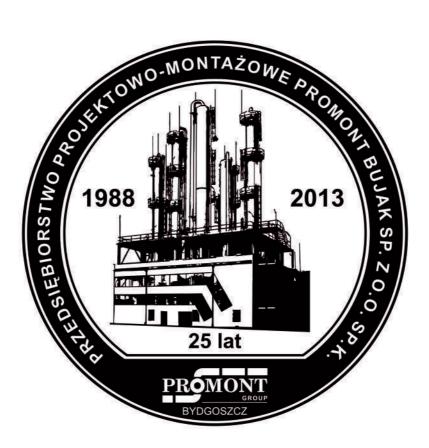
**PPM PROMONT** is a reliable partner in comprehensive project implementation. Core areas of our operations include:

- General and industrial construction,
- Residential buildings,
- Public utility buildings,
- Waste incineration facilities.

We deliver turn-key solutions, i.e. from the concept and construction design stage to occupancypermit. We have been running a service department allowing us to respond quickly to emergencies.

Our prorities are attention to detail and reliability. We seek to take account of economic aspects of proposed solutions, which is possible due to our working to ISO 9001:2008, ISO 14001:2004 and AQAP 2110:2009 standards.

Our quality will not entail extra charges, we see quality as being inherent to our business.





### **ABOUT AS**

#### Our staff

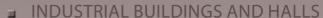
**PPM PROMONT** employs highly qualified personnel, including engineering doctors and holders of MSc degrees in sanitary and telecommunication engineering. Continuous trainings and research, including done as part of doctoral studies, result in development of modern design solutions ensuring technical advancement and low operational costs.

Using proven models, we are able to successfully implement innovative solutions, while taking into account our customers' interest.









- **INCINERATION PLANTS**
- SPIRIT RECTIFICATION
- INDUSTRIAL BOILER FACILITIES







■ UNILEVER Polska S.A. in Bydgoszcz



■ UNILEVER Polska S.A. in Bydgoszcz





UNILEVER Polska S.A. in Bydgoszcz



UNILEVER Polska S.A. in Bydgoszcz





UNILEVER Polska S.A. in Bydgoszcz



Residential building in Nakło - Gimnazjalna 14



Residential building in Nakło - Gimnazjalna 14



Frosta Sp. z o. o. in Bydgoszcz



■ MEDICAM specialist hospital in Gryfice





■ Dairy in Łuków



■ Dairy in Łuków











#### **BOILER HOUSES**

- Natural gas boiler house
- Light fuel oil boiler house
- Medium fuel oil boiler house
- Heavy fuel oil boiler house
- Biomass boiler house
- Fine coal boiler house
- Coal boiler house

#### ■ NETWORKS:

- Process networks
- Water networks
- Steam networks

#### ■ HEAT TRANSFER STATIONS

- SOLAR PANELS
  - floor heating
- HEAT PUMPS

We have designed and built over 100 boilerhouses with a power of 1 MW each. The total heat power in boiler houses we have built for the past 25 years exceeds 200 MW (200.000kW).

We have built:

- natural gas boiler houses,
- liquefied petroleum gas boiler houses,
- light, medium and heavy fuel oil boiler houses,
- hard coal,
- biomass,
- animal fat boiler houses.

Ourboilerhouses are operated in many industrial facilities (meat factories, bakeries, production plants, potato processing plants, LCD production

facilities and paper plants), public utility buildings (hospitals, clinics) and residential buildings, including multifamily dwelling.

Our customers include small, medium and large enterprises such as:

- UNILEVER Polska S.A.,
- CADBURY Wedel Confectionery Production Plant in Skarbimierz,
- SHARP Manufacturing Poland Sp. z o.o.,
- Oncology Hospital in Bydgoszcz,
- LG ELECTRONICS Polska Sp. z o.o.,
- D'AUCY Polska Sp. z o.o.,
- FROSTA Sp. z o.o. in Bydgoszcz,
- Milk Powder in Piotrków Kujawski,
- NEUPACK Polska Sp. z o.o. in Bydgoszcz.

Our boiler houses produce hot water, low-pressure saturated steam, high-pressure steam, superheated steam and thermal oil.



Dr Jan Biziel Provincial Hospital in Bydgoszcz



Provincial Hospital in Włocławek



■ KRUSZWICA S.A. Fat Processing Plant in Kruszwica





LG Electronics in Kobierzyce



■ Bridgestone Diversified Products Poland Sp. z o.o. in Żarów





Potato Processing Plant in Iława



■ SZPC HANKA KUJAWIANKA in Włocławek



ELGO Lighting Equipment Producion Plant in Gostynin



UNILEVER Polska S.A. in Bydgoszcz



APIS S.A. Beekeepers Cooperative in Lublin



■ Healthcare Centre in Radziejów





■ CADBURY WEDEL Chocolate Products Production Plant in Skarbimierz



SOBIESKI S.A. Distillery in Starogard Gdański - boiler house





■ PREFABET S.A. Group, Branch in Reda - boiler house



■ PREFABET S.A. Group, Branch in Reda - boiler house



CADBURY WEDEL Chocolate Products Production Plant in Skarbimierz - boiler house



CADBURY WEDEL Chocolate Products Production Plant in Skarbimierz - boiler house





FROSTA Sp. z o.o. in Bydgoszcz - process boiler house, thermal oil



FROSTA Sp. z o.o. in Bydgoszcz - process boiler house, thermal oil



FROSTA Sp. z o.o. in Bydgoszcz - process boiler house, thermal oil



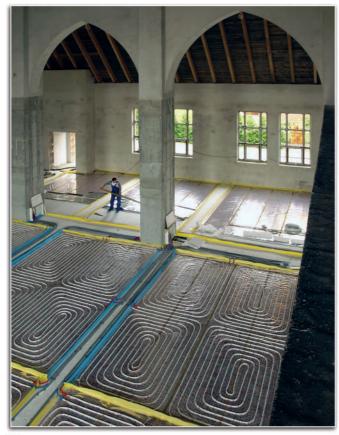
State-Owned Health and Spa Centre in Ciechocinek - exchanger room



AUGUSTO S.A. in Bydgoszcz



Solar panels



Floor heating under construction



Finished floor heating









- **RESIDENTIAL BUILDINGS**
- HOSPITALS
- MILITARY FACILITIES
- INDUSTRIAL BUILDINGS
- PUBLIC UTILITY BUILDINGS

We are specialised in ventilation and air conditioning systems for industrial and health care facilities. We always implement our projects to specifications and technological requirements. Among our major projects are:

- Mechanical intake/exhaust ventilation system in the Mostostal Chojnice steel structure painting shop with a capacity of 130,000 m³/h equipped with an intermediate heat recovery system;
- Mechanical intake/exhaust ventilation system in the P-4 department of UNILEVER Polska S.A. in Bydgoszcz with a capacity of 65,000 m<sup>3</sup>/h equipped with an intermediate heat recovery system and recirculation;
- Mechanical intake/exhaust ventilation system in the FAM Chełmno casting shop with a capacity of 54,000 m³/h equipped with an intermediate heat recovery system;
- Mechanical intake/exhaust ventilation system in the SHARP Manufacturing Poland production hall in Łysomice with a capacity of 75,000 m³/h;
- Mechanical intake/exhaust ventilation system in the new production hall, UNILEVER Polska S.A. in Banino with a capacity of 25,000 m³/h;
- Mechanical intake/exhaust ventilation system in the production hall, UNILEVER Polska S.A. in Bydgoszcz with a capacity of 165,000 m³/h



Production Plant in Banino, UNILEVER Polska S.A., 2010



SHARP Manufacturing Poland Sp. z o.o. in Łysomice



SHARP Manufacturing Poland Sp. z o.o. in Łysomice



UNILEVER Polska S.A. in Bydgoszcz



UNILEVER Polska S.A. in Bydgoszcz





UNILEVER Polska S.A. in Bydgoszcz



UNILEVER Polska S.A. in Banino





UNILEVER Polska S.A. in Banino





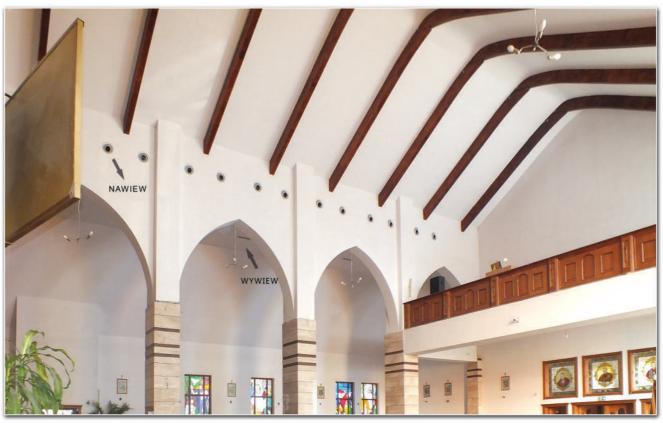
■ UNILEVER Polska S.A. in Banino



Milk Powder Plant in Piotrków Kujawski



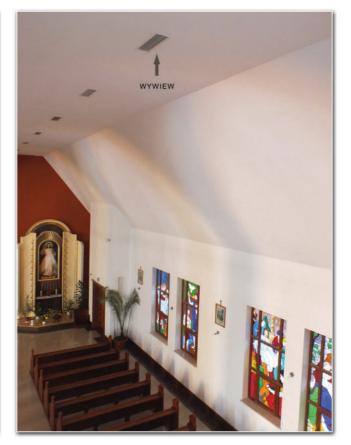
# **VENTILATION**



The Ascension Church in Bydgoszcz



The Ascension Church in Bydgoszcz



# **VENTILATION**



■ The Transfiguration of Jesus Church in Bydgoszcz



■ The Transfiguration of Jesus Church in Bydgoszcz

















We are specialised in the management of:

- municipal waste,
- medical waste,
- animal waste,
- hazardous waste.

We have built a number of waste management facilities for such customers as:

- Oncology Hospital in Bydgoszcz,
- Termo-Eko-Energia Sp. z o.o. in Chrzanów
- MEDICAM Specialist Hospital in Gryfice,
- Waste Management Plant in Konin,
- Regional Municipal Waste Management Plant in Machnacz,
- Distric Hospital in Chojnice,
- SABA Sp. z o.o. a manufacturer of self-adhesive tapes based in Płock.

Incineration plants designed and built by **PPM PROMONT** use rotary kilns mainly for incineration and degassing of liquid waste (after spraying), sludge and pastes and solid waste. Rotary kilns ensure efficient burning of solids; however, there is insufficient gas burning as the mixing with the air is poor. Therefore, there is usually a secondary burning chamber for gas afterburning behind the rotary hearth.



■ MEDICAM Specialist Hospital in Gryfice - medical and veterinary waste incineration





■ MEDICAM Specialist Hospital in Gryfice



MEDICAM Specialist Hospital in Gryfice



MEDICAM Specialist Hospital in Gryfice



Waste Management Plant in Konin



Waste Management Plant in Konin





Termo-Eko-Energia Sp. z o.o. in Chrzanów - animal waste incineration



Termo-Eko-Energia Sp. z o.o. in Chrzanów - animal waste incineration plant



■ Termo-Eko-Energia Sp. z o.o. in Chrzanów





- SOBIESKI S.A. in Starogard Gdański
- STOCK POLSKA in Lublin
- POLMOS BIAŁYSTOK S.A. in Białystok
- POLMOS LUBLIN S.A. in Lublin
- POLMOS TORUŃ S.A. in Toruń



Built in 2003, Sobieski S.A. distillery, formerly Polmos Starogard Gdański, is the first spirit rectification solution implemented by **PPM PROMONT**. The spirit rectification technology was delivered by Maguin-Interis. The system's capacity is 53,000 litres of extra neutral spirit perday.

To date, we have designed and built a total of 5 neutral or dehydrated spirit rectification systems and have become the leader in the field.

SOBIESKI S.A. in Starogard Gdański - spirit rectification



SOBIESKI S.A. in Starogard Gdański - spirit rectification





■ STOCK Polska Sp. z o.o. in Lublin - spirit rectification





STOCK Polska Sp. z o.o. in Lublin - spirit rectification







POLMOS S.A. in Białystok - spirit rectification





POLMOS S.A. in Białystok - spirit rectification





POLMOS Lublin S.A. in Lublin - spirit rectification





POLMOS Lublin S.A. in Lublin - spirit rectification





POLMOS Lublin S.A. in Lublin - spirit rectification system



■ POLMOS Lublin S.A. in Lublin - spirit rectification system















- PRESSURISED CONDENSATE RETURN
- CELLULAR CONCRETE PRODUCTION
- STARCH PRODUCTION AND DRYING
- **■** WATER TREATMENT STATIONS
- **■** COOLING SYSTEMS
- INDUSTRIAL WASTE TREATMENT SYSTEMS
- ANIMAL FAT INCINERATION SYSTEMS
- HEAVY OIL BURNING SYSTEMS

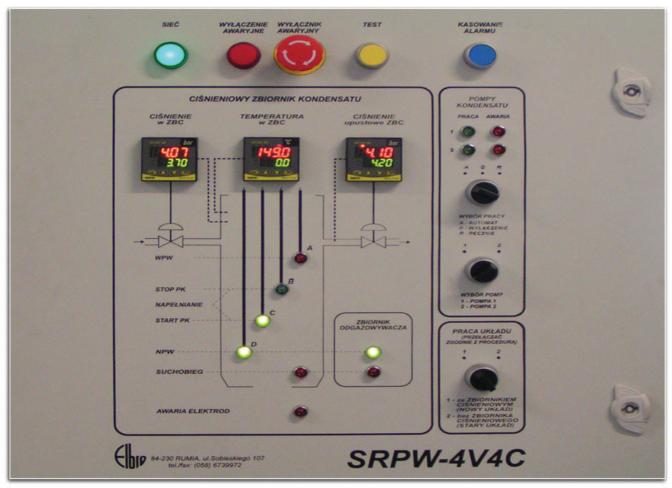
#### PRESSURIED CONDENSATE RETURN SYSTEM

return systems had no practical application in eliminates the probability of secondary Poland although process diagrams of such evaporation. systems were available in the relevant literature. The reason behind their non-system results in significant fuels a vings, while application was that they were regarded as the steam can be used for cardboard difficult to operate and requiring high production. The system's other advantage is qualifications from operators. However, with lower consumption of treated water, i.e. lower some systems already working, it turned out consumption of chemicals used in such water

The system's basic element is a pressurised after two years. condensate tank. Pressure inside the tank is

Until recently, pressurised condensate higher than that of boiling condensate, which

The use of a closed condensate return that the operation is in fact not so difficult. preparation. The invested money pays back



Control cabinet - pressurised condensate tank





■ PREFABET S.A. Group, Branch in Reda - cellular concrete production



■ PREFABET S.A. Group, Branch in Reda - cellular concrete production





■ IŁAWA S.A. Potato Processing Plant - starch dryers





■ POLMOS S.A. in Białystok - cooling systems



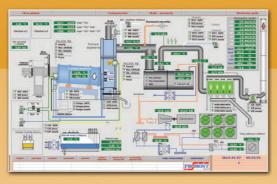
■ POLMOS S.A. in Białystok - cooling systems





Oncology Hospital in Bydgoszcz - water treatment station









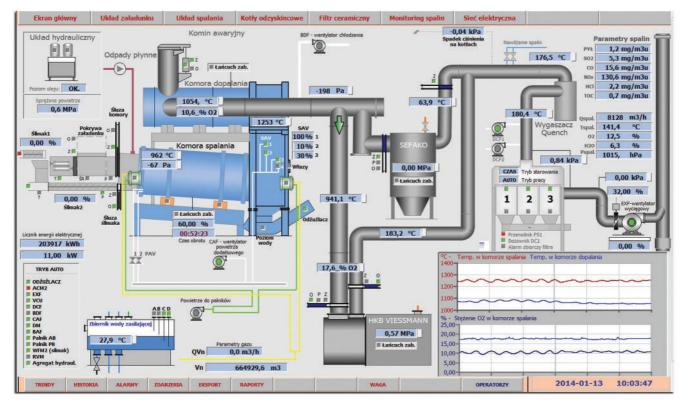
- CONTAMINANT EMISSIONS MONITORING SYSTEM
- COMPUTER-IDED DATA CONTROL AND STORAGE SYSTEMS
- PLC CONTROLLERS PROGRAMMING
- BUILDING CENTRAL MONITORING SYSTEM

Visualisation enables viewing a system's operating parameters and their presentation in a clear graphic form. The system allows for presentation of measured value trends and its recording, making it easier for operators to analyse events and operate the complex system. It ensures automatic indication of emergencies and their recording. The visualisation software includes functions which enable generation of reports on recorded operating parameters.

Measurements are made using referential methodologies specified in Attachment 6 to the Order of the Minister of the Environment dated 4 November 2008 on requirements for measurements of emissions and the amount of water consumption. Data originating from measurement devices are recorded and used in daily, monthly, quarterly, semi-annual and annual reports.

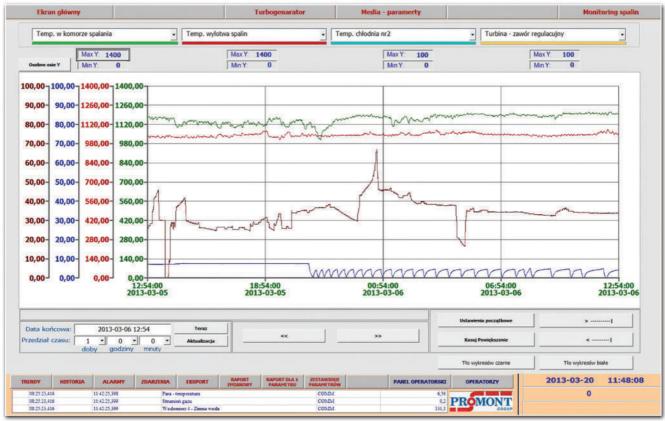


**■** Control cabinet

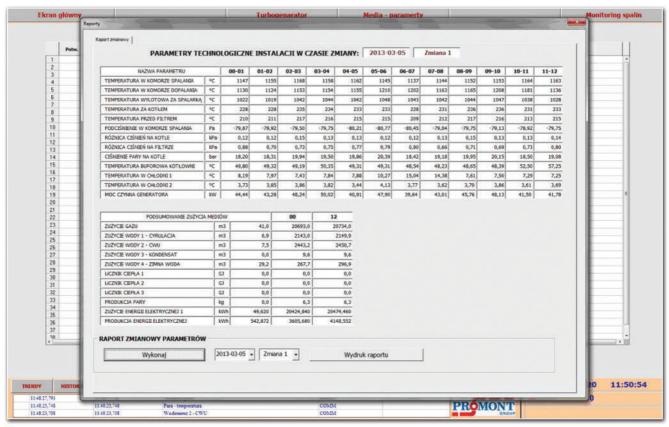


Main screen presenting waste thermal treatment process



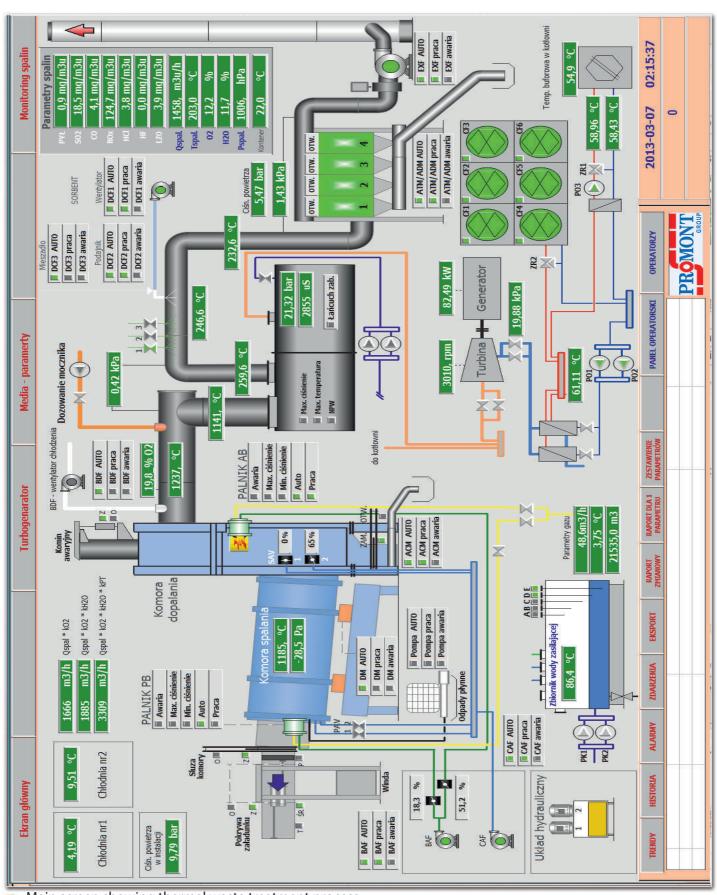


Screen presenting historical charts of waste thermal treatment process parameters



Shift report on thermal waste treatment process parameters





Main screen showing thermal waste treatment process

Monitoring system for current parameters in waste management plants is one of the examples of software that we develop. It enables you to meter simultaneously the level of the following flue gas particles: SO<sub>2</sub>, CO, NO<sub>x</sub>, HCl, HF, O<sub>2</sub>, TOC and dustingeneral, as well as temperature, static pressure and flue gas rate. Pollution gas analyzer and sample preparation system have been encased in air-conditioned measurement cabinet. You can control the system with a PLC. It sends a signal to a server that at the same time is a computer emitting, processing, visualizing and reporting measurement data for the environment protection body.





Our system have been entirely approved by the environment protection body











ISO 9001:2008



ISO 14001:2004



AQAP 2110:2009



NCAGE 1135H



CE 0035



UDT No. UC-03-228-W/1-06 for manufacture



UDT No. UC-03-228-W/1-06 for modernization



UDT No. UC-03-228-W/1-06 for repair



PERFECT CONSTRUCTION OF 1996

#### **DISTINCTION**

for steam boiler technology for BART company in Sulnowo, near Świecie



#### **SECOND TEAM AWARD**

FOR ACHIEVEMENTS IN TECHNOLOGY GRANTED BY POLISH FEDERATION OF ENGINEERING ASSOCIATIONS IN BYDGOSZCZ IN 1996 for steam boiler technology for *BART* company in Sulnowo, near Świecie



FIRST AWARD
for a steam boiler made for
KRUSZWICA S.A. fat processing plant



#### PERFECT CONSTRUCTION OF 1999

#### **FIRST AWARD**

for a water-steam boiler made for District Hospital in Chojnice



#### **SECOND TEAM AWARD**

FOR ACHIEVEMENTS IN TECHNOLOGY
GRANTED BY POLISH FEDERATION OF ENGINEERING
ASSOCIATIONS IN BYDGOSZCZ IN 1998
for a steam boiler made for
KRUSZWICA S.A. fat processing plant



#### **SECOND TEAM DISTINCTION**

FOR ACHIEVEMENTS IN TECHNOLOGY
GRANTED BY POLISH FEDERATION OF ENGINEERING
ASSOCIATIONS IN BYDGOSZCZ IN 1999
for a high-parameter water boiler made for
MASTER tannery in Włocławek



PERFECT CONSTRUCTION OF 2001

#### **FIRST AWARD**

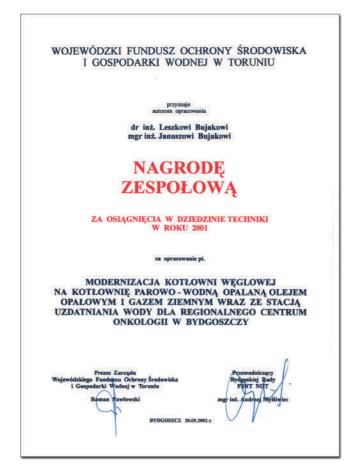
for a steam-water boiler with a water treatment plant made for Cancer Center in Bydgoszcz



#### PERFECT CONSTRUCTION OF 2001

#### **SPECIAL DISTINCTION**

for District Waste Management Plant in Machnacz, Brześć Kujawski District for the city of Włocławek



#### **TEAM AWARD**

FOR ACHIEVEMENTS IN TECHNOLOGY IN 2001 GRANTED BY PROVINCIAL FUND FOR ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT IN TORUŃ for conversion of a coal boiler into a steam-water boiler with water treatment plant in Cancer Center in Bydgoszcz







### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2002

#### **FIRST AWARD**

for a steam-water boiler with a water treatment plant made for Provincial Hospital in Włocławek

### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2004

#### **FIRST PRIZE**

for Medical Waste Management Plant in Cancer Center in Bydgoszcz





### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2005

#### **FIRST MERIT PRIZE**

for exceptional achievements and popularization of the contest

### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2006

#### **FIRST PRIZE**

for a high-temperature water boiler with medium-pressure industrial gas pipeline made for UNILEVER POLSKA S.A.

Branch for Detergents and Cosmetics in Bydgoszcz



### **PROFILE** – A POLISH WEEKLY CONSTRUCTION MAGAZINE

**GOLD TROWEL** 

WITH A 50<sup>™</sup> ANNIVERSARY MEDAL

51<sup>ST</sup> ANNIVERSARY GOLD TROWEL WITH A DIAMOND

50<sup>™</sup> ANNIVERSARY **PLATINUM TROWEL** 







#### **EXPERT IN TECHNOLOGY**

GRANTED BY THE COUNCIL OF FEDERATION
OF ENGINEERING ASSOCIATIONS IN BYDGOSZCZ
IN A NOT CONTEST

for achievements in technology in 2009

#### FIRST DISTINCTION

GRANTED BY THE COUNCIL OF FEDERATION
OF ENGINEERING ASSOCIATIONS IN BYDGOSZCZ
IN A NOT CONTEST

for achievements in technology in 2009



### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2010

#### **FIRST PRIZE**

for modernization of medical waste thermal treatment system in Cancer Center in Bydgoszcz





### **MERIT DISTINCTION**

GRANTED BY THE COUNCIL OF FEDERATION OF ENGINEERING ASSOCIATIONS
IN BYDGOSZCZ IN A *NOT* CONTEST
for achievements in technology in 2009



#### **CONSTRUCTION OF THE YEAR 2007**

in the Northern-Eastern Region for a multi-column spirit distillation plant







The first boiler in Poland with CE mark - LG ELectronics Sp. z o.o. in Biskupice Podgórne



### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2011

#### **FIRST PRIZE**

for thermal oil boiler made for FROSTA Sp. z o.o. in Bydgoszcz



### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2012

#### **FIRST PRIZE**

for construction and equipment of a modern organic waste recycling center for the purpose of implementing innovative fertilizers Termo-Eko-Energia Sp. z o.o. in Chrzanów



### SPECIAL AWARD OF THE CONTEST PARTNER

Perfect Construction of Kuyavia and Pomerania in 2013 for innovation in industrial and ecology constructions



### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2013

#### **SPECIAL DISTINCTION**

for modernization of waste thermal treatment system for Waste Management Plant in Konin



### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2013

#### **FIRST PRIZE**

for modernization of the system for medical and veterinary waste thermal management MEDICAM Specialist Hospital in Gryfice



### PERFECT CONSTRUCTION OF KUYAVIA AND POMERANIA IN 2013

#### **FIRST PRIZE**

for construction works for *Development*of Liquid Cosmetics Manufacturing
Facility investment
UNILEVER Polska S.A. in Bydgoszcz























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