


RESEARCH AND PRODUCTION ENTERPRISE



**EXPERT DEVELOPMENT, DESIGNING
AND PRODUCTION OF EQUIPMENT FOR POWER
INDUSTRY ENTERPRISES, PETROLEUM,
PETROCHEMICAL AND NUCLEAR INDUSTRIES**



**HIGH-TECHNOLOGY EQUIPMENT
FOR POWER AND PETROLEUM
INDUSTRIES FROM THE MARKET
LEADERS**



The success and efficiency of any enterprise directly depend on the equipment quality, which is used in the works. Power and petrochemical industries are no exception. BASET Ltd team offers expert help, developing cost-effective, efficient and modern equipment for enterprises.

We will handle assigned tasks locally, or in an integrated manner “key ready”, according to the enterprise needs.

BASET is a major player on the Russian market of specialized and nonstandard equipment intended for use in different fields of petroleum and power industry. Vast experience, highly qualified specialists, own research, design and technological base enable us to guarantee perfection of the made decisions.

We create and bring to life hundreds of projects of various levels of complexity and immensity.

OUR BUSINESS DIMENSIONS:

POWER ENGINEERING

Constant increasing of the quantity of the consumed electric power on the back of environmental protection and necessity of the resources conservation places energy complex before clear challenges that must be dealt only with the innovative methods. The leader in this field is who able to raise profitability of production and bring down prime cost of the energy products. It can be achieved only using a real qualitative and maximum efficient equipment, which fully complies with the modern requirements. Our equipment reliability is beyond all doubt, because we dedicate towards a high level of quality and double-check at every stage of the production process.





BASET Ltd. lends substantive support to energy providers developing such equipment by reference to specific features of client personal companies and their present-day requirements. We successfully meet such challenges regardless of complexity, developing and producing reliable, cost-effective and efficient equipment for energy field – in the form of single or continuous deliveries.

You can see examples of the equipment made by us further.



WASTE-HEAT BOILERS

To the waste-heat boilers belong units fueled by external gases. The efficiency of such equipment is based on the feasibility of using of recoverable resources and enhancing the efficiency of production. BASET Ltd. develops and produces gas- and water-tube, convection and other waste-heat boilers of different model types for energy providers.



INDUSTRIAL POWER BOILERS

Industrial power boilers as opposed to waste-heat boilers are units without which the principal process is unable to proceed or suffers significant changes during their turning-off. The example of such equipment – forced cooling systems of process units, and boilers for cooling of production streams. BASET Ltd. develops and produces gas- and water-tube, convection and other types of boilers (SRB and MRB):

- SRB - Soda Recovery Boiler;
- MRB – Magnesium Recovery Boiler;

The number standing behind the alphabetic acronym shows dry steam-production capacity tpd, letter C – concentrator.



STEAM BOILERS OF AVERAGE POWER

Special boilers for production of water steam with different parameters may be with natural or forced circulation and with conceptually different hydrodynamics in evaporating heating surfaces. Steam boilers of average power are used in the area of power industry for power generation, also for steam generation, which is used by the process and residential users.

BASET Ltd. specializes in designing, production, setting and maintenance of the steam boilers of average power, including natural-circulation boilers with the steam pressure at the boiler exit from 1,36 MPa (14 kgf/sm²) to 3,9 MPa (40kgf/sm²), the capacity from 10 tons per hour to 160 tons per hour, the feedwater temperature from 105 °C to 145 °C and the steam temperature on the saturation line or with the superheat not over 440 °C.



WATER-HEATING BOILER

Water-heating boilers are intended to produce hot water of given parameters and extensively used in heating and hot water supply systems, in ventilation system for process and residential users. Such equipment is used not only on industrial electric stations but also on steam stations for factoring heating and ventilating loads.

BASET Ltd. specializes in designing, production, setting and maintenance of water-heating boilers with tower-type arrangement, conventional arch boiler, L-shaped boiler with the the capacity MW (Gcal-hr): 23,3 (20); 35 (30); 58,2 (50); 116,3 (100) and 209,4 (180).



EQUIPMENT OF INDUSTRIAL ENERGETICS

BASET Ltd. specializes in designing, production, setting and maintenance of efficient and cost-effective equipment for industrial energy demands. We develop and deliver to customers autonomous economizers, dedicated for water heating at the cost of the stack gases sensible heat and heat recovery of the other heat sources.



ROTARY REGENERATIVE AIR PREHEATERS

Rotary regenerative air preheater (RRAP) is set up on steam boilers and is dedicated for heating of air, which enter to burner devices of boiler units using the heat of stack gases. Controlled system of radial, axial and circumferential seals is called for decreasing airflow to the gas in our configurations. System of water washing, steam blowing, firefighting, rotor lift are ensure safety and efficacy of the equipment.



ENERGY CALORIFERS

Energy calorifiers delivered by the BASET Ltd. produced from steel pipes with welded spiral finning. The equipment is dedicated for air preheating before its input to gas-air heaters of boilers, which are burned liquid, solid and gaseous fuel, also for use in ventilation and warm-air heating systems of power plants rooms and the industrial enterprises.



HEAT-EXCHANGE EQUIPMENT

BASET Ltd. specializes in designing, production, setting and maintenance of high pressure superheater for schemes of regeneration of turbine plants, and also for water-to-water and steam-water heat exchangers, evaporators, steam transformers, water coolers, collector- and coil-type high- and low pressure heaters, including boilers. Our design concepts enable to intensify heat exchange, to reduce metal consumption, to enhance the compactability and reliability.



DEAERATORS

BASET Ltd. develops and produces various types of deaerators:

- thermal;
- vacuum;
- atmospheric;
- high-pressure;
- with different operational parameters.



EQUIPMENT FOR FUEL OIL PREPARATION

Our Research and Production Enterprise engineers efficient and cost-effective solutions on the bases of the modern requirements of electric power industry enterprises, which using fuel oil in their work. BASET produces and supplies fuel oil heaters, designed to high-viscosity fuel oil heating while its burning in steam and hot water boilers on large-scale GRES power plants, industrial and district boiler houses.



BOILER ACCESSORIES

We produce following types of equipment for use in the function of accessory equipment:

- Starting external vessels designed for receipt of station drainages, periodic blowdown, deaerators blowoff and overflow, surface blowoff, discharging of superheaters and also for main steam and other leads blowing.
- Continuous and intermittent blowdown vessels designed for separation of the steam-water mixture, which appear from the purge medium of steam generating units.

SPARE PARTS

In view of extensive list of products produced by the BASET Research and Production Enterprise, we care about long-term serviceability of equipment, producing and realizing to our clients full list of necessary spare parts and assemblies among others – for exchanges on the overage equipment, which were set by the other manufacturers.

The listed dimensions and the equipment is only approximate and not complete list of the business dimensions of the BASET Research and Production Enterprise. We presented essentially short list not to spend your time for reading the complete list. You will be able to learn about opportunities for cooperation with us, by contacting the following contacts.

OUR BUSINESS DIMENSIONS:

EQUIPMENT FOR PETROCHEMICAL AND GAS INDUSTRY

The main trends of the further development and improvement of the enterprises of the oil and gas industry are:

- increase of machine power unit to optimal parameters for product cost minimization;
- increase quality of selectability and reduction of labor input of materials selection process for the purpose of its economy;
- lowering of power consumption and energy recuperation;
- involvement into processing new commodities, including heavy charges and waste products of other processes.





All of this is possible only using advanced, intellectual, effective and reliable equipment. BASET Ltd. helps to meet all of these challenges, putting the most suitable equipment for usage in particular conditions.

We offer point or overall solutions for equipment of the enterprises of the oil and gas industry regardless of complexity of assigned tasks and the scope of future supplies. If it is necessary, we can individually design, test and launch a line according to your project.

We give some examples of supplied equipment for the oil and gas industry.



GAS SEPARATORS

Gas separators are designed to provide steady work of the bottomhole pump during pumping of the high-gassy fluid, and for fine separation of associated natural gas and gas from oil separator unit from liquids. BASET Ltd. designs, produces and maintains gas separators of all types, including screen gas separator which is used in industrial-scale plants of gas treatment at the oil and gas refineries.



COLUMN EQUIPMENT

Column equipment is designed for petroleum refining. Diameter of devices delivered ready-to-install is limited only by the possibility of their train shipment. Devices with large diameters are supplied in knock-down form and installed on site. Columns are supplied by trays (an inner element of column equipment) of different constructs. Types of column equipment which we ready to deliver:

- distillation columns;
- packed columns;
- vertical vessels for condensate
- cleanup;
- equipment for production of hydrogen peroxide;
- absorbers;
- adsorbers;
- stabilizers;
- vaporizers.



WATER TANKS

It is a vessel equipment, which is used in oil and gas industry for settling of stratal water, it traps particles of oil and gas separation, which are used for oil and water treatment at oil fields and oil refineries. BASET Ltd. delivers to its clients water tanks with the given production characteristics, which are fully meet the production needs.



LIQUID GAUZE FILTERS

Liquid gauze filters is designed for pumping and other kinds of equipment protection from solids while transmission of liquids over pipelines in processing plants, which is used in oil and gas industry. BASET Ltd. designs and produces filters for complete and incomplete treatment with different operational characteristics.



EQUIPMENT FOR MASS EXCHANGE AND CHEMICAL PROCESSES (ALL-WELDED AND SPLIT UNITS)

Equipment for running of mass exchange and chemical processes belongs to the most common in oil and gas field.

In cooperation with BASET Ltd., you may order necessary all-welded and split units (including jacketed) with the specified operating parameters, which are fully met your manufacturing requirements.

EXCHANGER EQUIPMENT

Our enterprise produces a wide range of the heat exchangers, which are different in design, rated parameters and materials. Types of produced exchanger equipment for oil and gas enterprises:

- “Pipe-in-pipe” heat exchangers of TTM, TTOH, TTOP types.
- Fixed head heat exchangers.
- Floating-head heat exchangers, U-shaped.
- Evaporators of ИП, ИХ, КХ types.
- Shell-and-tube heat exchanges.

This is not complete list of the equipment for oil and gas enterprises, which BASET Ltd. may produce for your company. Contact us to see complete list of our production and learn more about partnership with our enterprise!



VESSEL EQUIPMENT

We design and produce bulk capacity vessels, which are used in processing plants of gas, oil, oil processing, petrochemical and other lines of industry, including for exploitation in combustible and dangerous medium. The examples of our bulk capacity vessels:

Vertical all-welded units with lower conical bottom and flat bottom at the head (with the coil), БКП 1-1 (1-4)-type are used for receipt, storage and deliverability of liquid non-explosive, non-combustible and nontoxic medium under atmospheric pressure with permanent or periodic heating (or cooling).

Vertical all-welded units with lower conical (900) beaded bottom and elliptic bottom at the head, БКЭ 1-1-V-p-type are used for receipt, storage and deliverability of liquid and gaseous medium with rated pressure in unit from 0,6 MPa and above.

Vertical all-welded units flat-bottomed, (with the coil), ВПП 1-1(1-4)-type are used for receipt, storage and deliverability of liquid non-explosive, non-combustible and nontoxic medium with maximal density 2000 kg/m³ under atmospheric pressure with permanent or periodic heating (or cooling).

Horizontal all-welded units with conical (1400) bottoms, ГKK1-1(1-6)-type are used for receipt, storage and deliverability of liquid and gaseous medium with rated pressure not over 0,07 MPa.

Horizontal all-welded units with elliptic bottoms, ГЭЭ1-1-V-p-type are used for receipt, storage and deliverability of liquid and gaseous medium with rated pressure in unit from 0,6 MPa and above.

Vertical all-welded units with elliptic bottoms, ВЭЭ 1-1-V-p-type are used for receipt, storage and deliverability of liquid and gaseous medium with rated pressure in unit from 0,6 MPa and above.

Air banks are used in air hoses and for air stocking when operated at general-purpose stationary air compressors and rotary compressors, also at air compressors with rated pressure from 0,8 MPa and above.

Receivers are used for oxygen or nitrogen gas accumulation and storage.





WHO WE ARE AND WHY YOU MAY TRUST US

The core business of the BASET Ltd. is developing, designing and producing equipment for the enterprises of energy, oil and gas. Our company enters the market in 1994 and exists in the same form today. For this period we established close trust relations with many Russian and foreign enterprises of the denoted area.

BASET Ltd. has not only wide research and design capacities. Our enterprise has its own modern production base with custom shops fitted with high-technology equipment. Due to the pioneering work of our specialists, we use innovation technologies that together allows us to produce even complex equipment with a guarantee of its efficiency, cost-effectiveness, productivity and reliability.

■ OUR GOALS

More than 20 years we produce heat exchange, column and vessel equipment from anticorrosion and carbon (bimetal) steel for petrochemical and gas industry, power and atomic engineering. Production of reliable equipment, which helps to clients to cut down manufacturing expenses, to reduce prime cost of the final product, having increased thus its quality – was always our goal.

■ OUR TASKS

Tasks that facing the team of BASET Ltd. are seeking optimal solutions of the problems actual for enterprises of oil and gas industry. We bend with the modern requirements offering to clients high-technology, cost-effective, efficient and reliable equipment which were produced according to individual requirements of the customer.

■ OUR MISSION

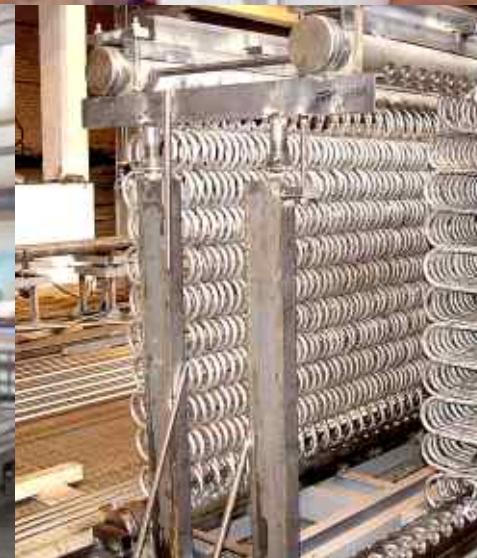
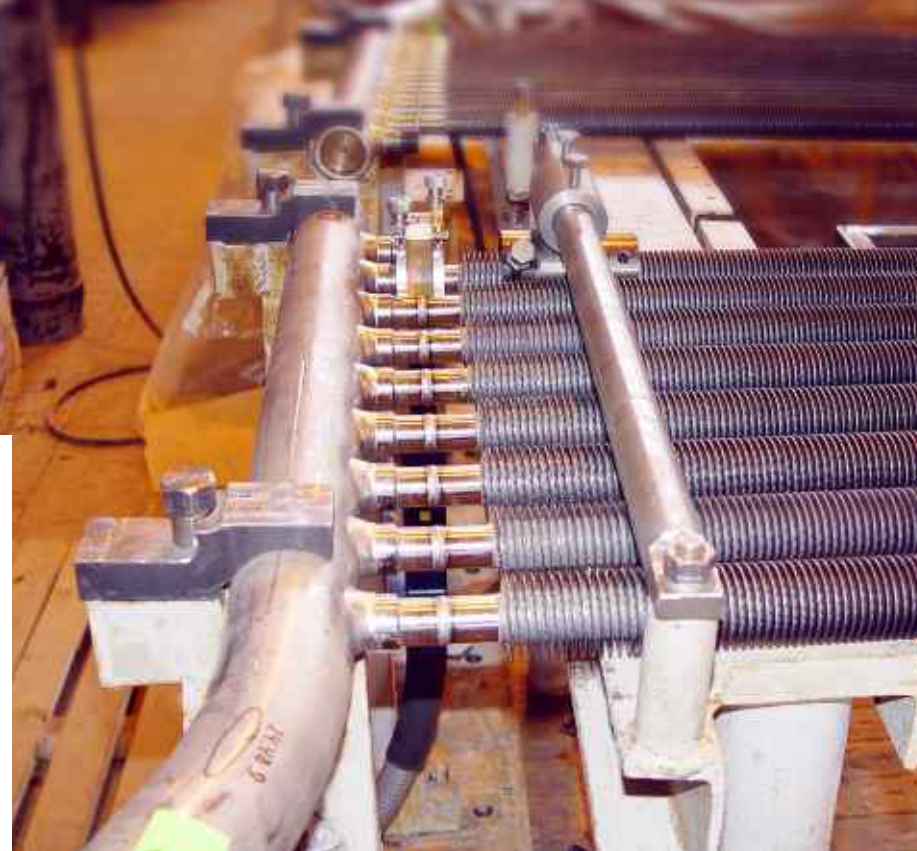
In our engineering, we focus on environmental disposal of the designed equipment and on profitability of its usage that our clients could organize their manufacture in accordance with the modern requirements, keeping thus highly competitive ability.

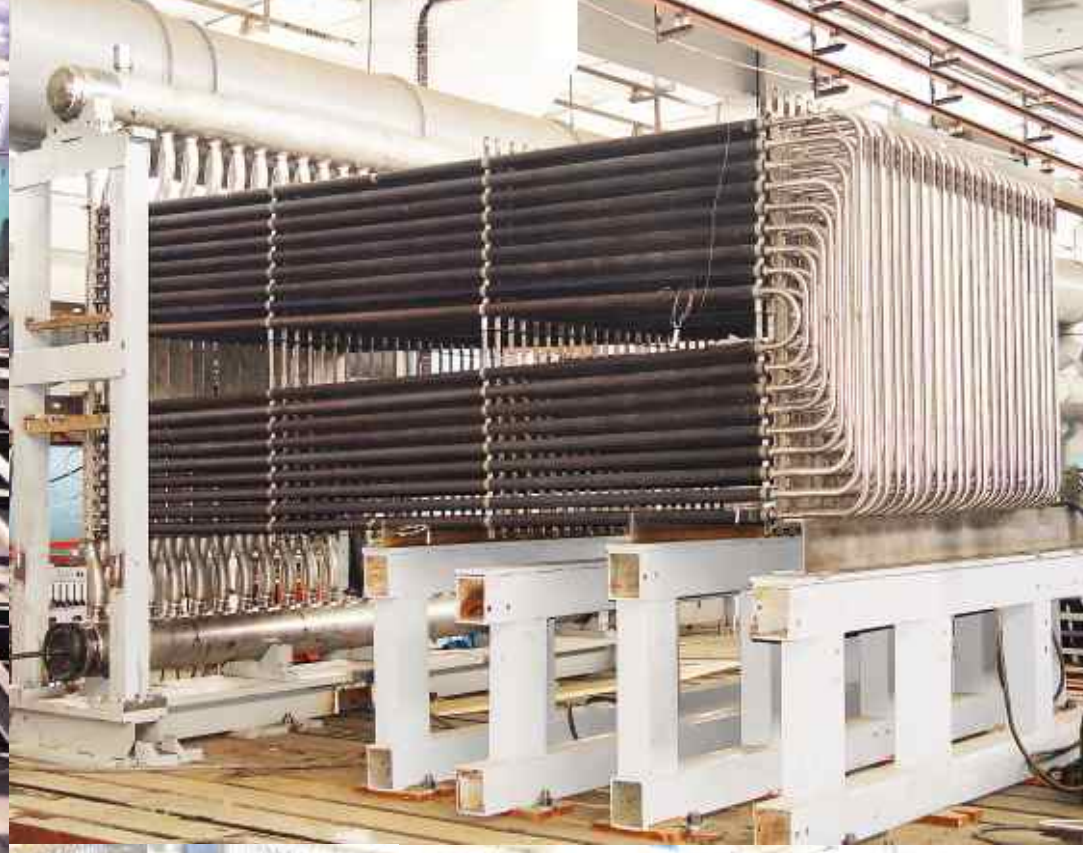




■ OUR MANUFACTURE

High quality of production of BASET Ltd. is achieved due to use of wide range of technological tools, existence of own engineer units and instrumental mechanical assembly production.







■ OUR MANUFACTURE



CERTIFICATES AND DOCUMENTATION

BASET Ltd. in its activities strictly adhere to the requirements of the international legislation, receiving timely the necessary documents, certificates, licenses confirming quality of our production, its safety, efficiency and the right to be engaged in the chosen activity.



EXAMPLES OF COMPLETED PROJECTS

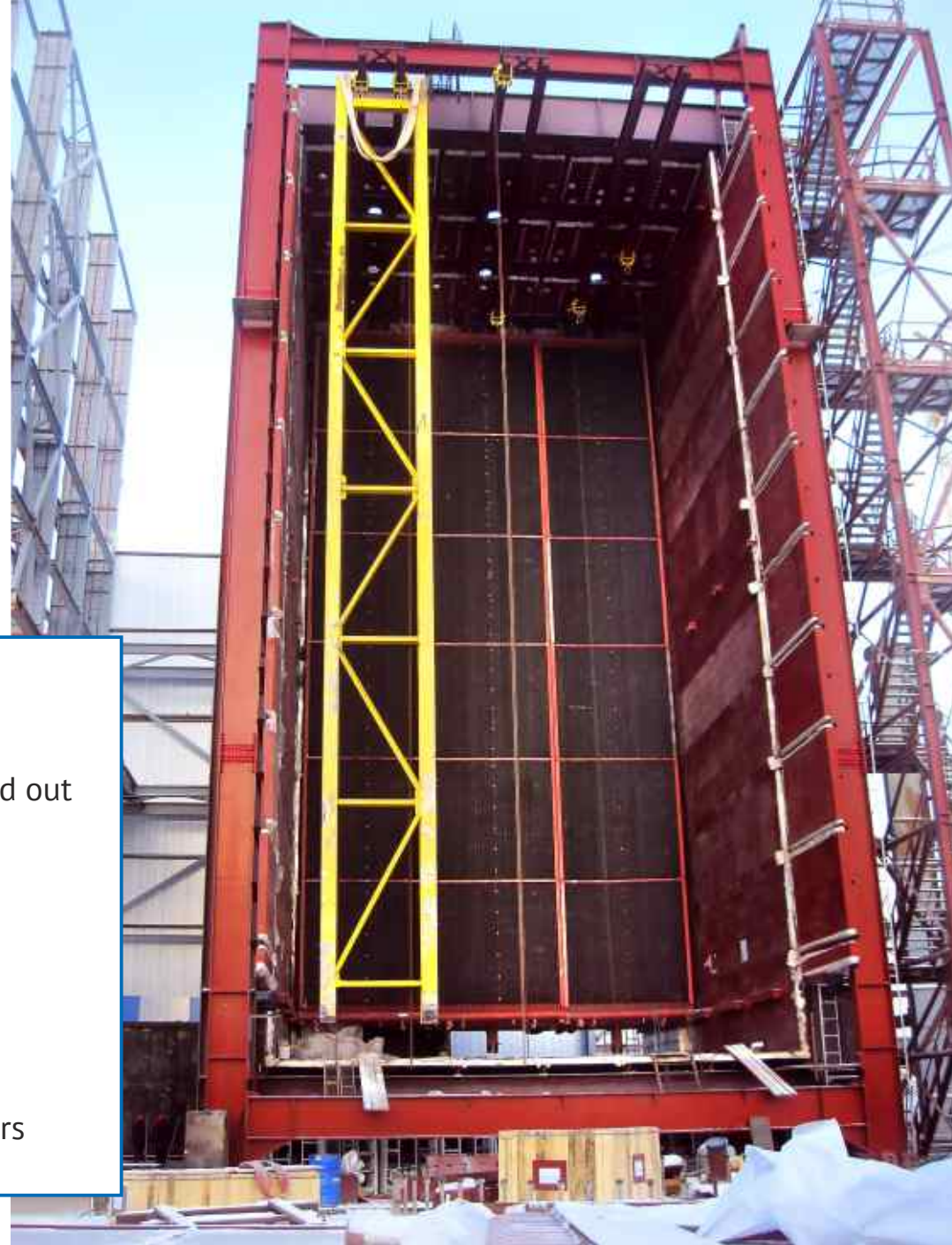
Client: “Inter RAO” Group of companies (power engineering)

Object: Yuzhnouralskaya GRES-2 (building industry)

Tasks: production, supply, setting of waste heat boilers for the undisturbed operation of the station on natural gas and fuel oil (in the quality of additional energy source).

Solution:

- were held consultations, organized meetings with representatives of the customer, during which were find out the list of necessary equipment and its parts, main requirements.
- Production of equipment and its parts was completed within the stipulated timescale.
- was carried out delivery of production to the place of installation and setting of sections of waste heat boilers



EXAMPLES OF COMPLETED PROJECTS

Client: NORTHGAS, CJSC (gas output)

Object: network of the enterprises for production of natural gas

Tasks: to upgrade equipment for clearing gas

Solution:

- was held consultation, organized face-to-face meeting with representatives of the customer.
- were find out requirements to purification equipment were designed screen gas separators specific to their future usage on concrete fields
- production of gas separators was completed within the stipulated timescale
- was carried out delivery of production to the place of installation and its setting





■ OUR ADVANTAGES:

**SEVEN REASONS TO
CONTACT US RIGHT NOW**

EXPERT LEVEL

confirms more than 20 years' experience of successful work in the area of development, production, deliveries, installation and maintenance of equipment for nuclear, oil and gas, power industry.

POWERFUL CAPABILITIES

We develop and produce any equipment under specific client's aims, including non-typical aims.

GUARANTEE OF QUALITY

BASET Ltd. delivers his clients reliably qualitative high-technology modern equipment.

INDIVIDUAL APPROACH

We find perfect solution for your enterprise.

SCIENCE AND TECHNOLOGY BASE

Our experts develop equipment specifically for your enterprise, which allows cutting down manufacturing expenses, to reduce prime cost of your production and to increase its quality.

OWN PRODUCTION

Thanks to existence of manufacturing facilities, we have an opportunity to keep cost of equipment at reasonably low level, guaranteeing its excellent quality and reliability. We take responsibility for a complete production cycle, without farming to contractors.

OPERATIONAL EFFICIENCY AND RESPONSIBILITY

We clearly carry out obligations, strictly adhering reached agreements and delivering orders right on time.

WHERE TO BEGIN?

Are you making far-reaching plans in oil and/or gas business? Are you plan to increase profitability of your company? Do you want to sidestep rivals, saving money? In such cases you need an excellent equipment, and we help you to receive it on the most favorable and convenient conditions. Call for us!



WE THANK FOR KIND ATTENTION!

The team of BASET Ltd. thanks you sincerely for paying attention to our information. We promise you that your time was not wasted – before you were opened new prospects for the development and improvement of your business by means of reliable high-technology equipment, which was created, especially for your enterprise.



RESEARCH AND PRODUCTION ENTERPRISE



This is a 3D perspective view of a topographic map of Europe and the surrounding Mediterranean Sea. The landmasses are colored in shades of green and brown to represent different elevations, with mountain ranges like the Alps and Pyrenees clearly visible. The ocean floor is depicted in various shades of blue, indicating different depths. The map is presented as a curved surface, giving it a globe-like appearance.





BASET Ltd. 2016