



BYR PEX



RESEARCH
INNOVATION
PRODUCTION
SALES
DESIGN
CONSTRUCTION



MODERN ENGINEERING SYSTEMS





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RESEARCH

Research gives confidence in the right choice. In the period from 2001 to 2008, we conducted in-depth studies of the long-term strength of pipes made of various types of cross-linked polyethylene with a coolant at a temperature of 95 °C, which had no analogues in the world. The knowledge gained today helps in assessing the quality and applicability of emerging materials.



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INNOVATION

The knowledge gained from research activities, combined with the accumulated own experience and analysis of world trends, help to correctly formulate requirements, select material and direct engineering thought to solve the necessary problems. This is how non-tricky solutions appear, which are rightly called innovative.



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PRODUCTION

BYR PEX Corporation is a manufacturer of pipes made of molecularly cross-linked polyethylene and connecting elements for them. Production is deployed on our own premises of more than 2000 sq.m. and is constantly evolving.



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SALES

The sales network of BYR PEX Corporation is represented in 30 cities of Russia and neighboring countries. All offices offer qualified assistance in the selection of products, provide advertising and technical catalogs, and ensure the fastest possible delivery.



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DESIGN

The company designs heating systems, water supply and other engineering systems of buildings. In addition, we cooperate and help design organizations in many cities in Russia and abroad.

We have designed systems for more than 1 million m² of areas for various purposes.



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CONSTRUCTION

The corporation carries out the whole range of works on the arrangement of internal engineering systems and equipment adjustment throughout Russia. We have installed systems for more than 2 million square m. in residential and public buildings.



RESEARCH

Research gives confidence in the right choice.

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There are different kinds of research. Technical research provides us with the information about the properties of materials, their applicability for the implementation of specific engineering systems. Marketing research is about how to use the products of various companies in such a way as to achieve the optimal ratio of price and quality.



The main activity of BYR PEX Corporation is production of components for modern internal systems of drinking hot/cold water supply, heating, including «warm floor», and cooling. Therefore, polymeric materials that are most suitable for these systems and Russian conditions were studied as a priority.



We studied our own products and those of other companies, both on our own base (in a production laboratory) and on the basis of well-known Russian institutes. At the moment, the most interesting is the latest study «Comparative analysis of the structure and properties of polyethylenes crosslinked by various methods», conducted jointly with the D. Mendeleev University of Chemical Technology of Russia.

RESEARCH

Research aimed at comprehensive quality assurance of manufactured and supplied products and work performed.

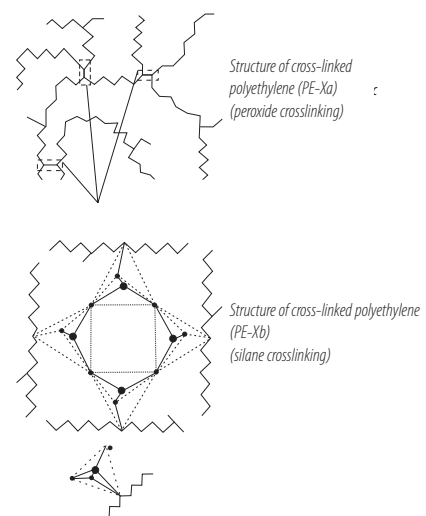


The Engineering Department of the Corporation conducts tests of new equipment for engineering systems that appear on the market for quality and mutual compatibility. For our customers, the result of this work is expressed, in particular, in the advice of qualified specialists on the use of equipment, and in the engineering recommendations published on the website in the "Engineering" section.



Our partners and clients can see the results of marketing department research in our catalogs and information materials. Full version of a dynamically updated electronic catalog with the possibility of online ordering for registered customers has started operating in 2013.

A comparative analysis of physicochemical parameters showed significant advantages of high-density silanol-crosslinkable compositions over compositions with other types of crosslinking. The reasons are a smaller intermolecular distance, a large bond energy, and a larger number of bond bundles and their more correct construction. The result in particular is a reduction in the oxygen permeability values of the pipe wall without the additional layer. All this makes it possible to operate pipes made of molecularly cross-linked polyethylene with a heat carrier temperature of 95 °C and a pressure of 10 bars without stress accumulation (fatigue), which greatly increases the service life of pipes, and the best reality (stress relief) allows you to withstand emergency emissions up to 120 °C, as well as pressure surges, without any consequences.





INNOVATION

The knowledge gained from research activities combined with the accumulated own experience and analysis of world trends help to correctly formulate requirements, select material and direct engineering thought to solve the necessary problems. This is how simple solutions appear, which are rightfully called innovative.

BYR PEX Corporation began its activity in 1999 with the development of a new technology within the CIS for the production of pipes for heating and water supply systems. An innovative solution in the energy-intensive section of steam-water treatment made it possible to reduce energy costs by 15-20% and halve the processing time with-

out the loss of finished product properties. The production of pipes using the new technology turned out to be very successful and surpassed foreign analogues in many respects. BYR PEX pipes have become one of the few on the Russian market that can be operated for a long time at a temperature of 95 °C at a pressure of up to 10 bars.



Every year, the company's specialists improve the technological process, the equipment of technological lines and our products.

In 2000, the BYR PEX Company issued specifications for the production of compression and press fittings, which took into account all the available experience, from analogues of world manufacturers to details in the production of work. This is how the fittings turned out, which have optimal shapes, weight, etc.

In 2005, a 100% visual control of the extrudate, which has no analogues in the world, was developed and launched. It captured the slightest changes in the structure of the material, which provides a 99% guarantee of the quality of the finished product.

In 2010, a long-standing and reliable partner of BYR PEX Corporation, the British company Micropol, whose raw materials we have been using since the

beginning of pipe production, announced a new brand of cross-linked polyethylene for injection molding machines, i.e. suitable for the production of fittings. This event allowed us to start developing plastic fittings for our pipes. They will be free from the known problems of the CCP widely used by our competitors, which are known to have poor resistance to external impact (brittleness), and also do not allow making a fitting with an internal thread.



INNOVATION

More and more new technological solutions are used in the design of engineering systems of modern buildings.

Pilot castings were obtained in 2011 and three patents were protected simultaneously on one small product. Preparations for production were made so that at the beginning of 2012 new products would be available in commercial quantities in the warehouses of the Corporation.

The need for effective application of efforts and existing experience in all corners of Russia forced us to abandon the dealer schemes of work and led to the opening of our own representative offices.

All divisions of the Corporation are united by a single modern telephone network, corporate communication tools, including the so-called GroupOffice solutions, electronic databases, etc.



BYR PEX Corporation pays great attention not only to the environmental friendliness of the materials used in production, but also to the environmental friendliness of the final engineering solutions for buildings and structures where these products are used. We believe that caring for human health and protecting the environment are the most important aspects of life for humanity.

BYR PEX Corporation uses and improves the device of modern environmentally friendly, aesthetic and energy-efficient solutions such as «warm floor» or «cold panel», which are easily connected to a single temperature sensor in the room and act as a «smart home» without additional expensive automation equipment.

BYR PEX Corporation constantly invests in innovative projects to obtain new knowledge and develop ideas to improve people's lives in the technological and organizational form of existence.

Innovations are aimed at improving the efficiency and economy of systems, the quality of life and customer satisfaction of our company.





PRODUCTION

BYR PEX manufactures pipes from molecularly cross-linked polyethylene PE (PE-Xb), fittings for them and additional equipment for internal heating and water supply systems.



In January 1999, in Saratov, BYR PEX was the first in the CIS to master the Isoplas raw material processing technology from Micropol using equipment from Boston Matthews (Great Britain), which makes it possible to produce up to 24 km of pipes per day. The launch of the line and training of personnel was carried out under the guidance of experienced English engineers. The range of BYR PEX pipes includes 14 standard sizes: 7 diameters and 3 strength classes.



Despite the crisis of 2008, BYR PEX purchased and put into operation the second production line to prevent shortages: the demand for the company's products is constantly growing.

BYR PEX has been an official partner of SCE (Hong Kong) since 2000. Together with them we produced compression and press fittings under the trademark EAGLE-BYRPEX. The fittings are made from food-grade dezincification-resistant brass by hot stamping, which makes them exceptionally strong and durable.



Additionally:

- we mastered the production of fasteners and manifold cabinets;
- together with the company Klauke (Germany), we developed and put into production, a convenient and compact electro-hydraulic tool which automates the processes of expanding the pipe and pressing the sleeve.

In 2012, serial production of fittings from molecularly cross-linked PE begins at our own facilities.



PRODUCTION

BYR PEX Corporation is a manufacturer of PE pipes, fittings of compression, pressing and crimping types, as well as fasteners.



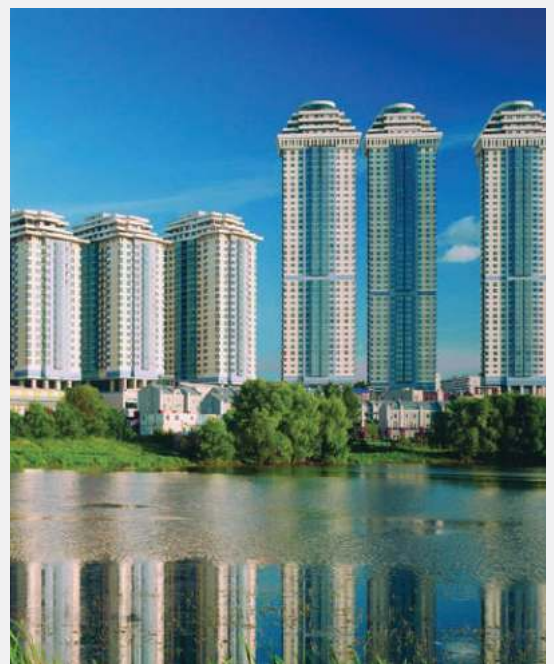
The quality of BYR PEX products is confirmed by the relevant certificates of the Russian Federation, Belarus, the European Union, as well as the expert opinion of the Russian Academy of Sciences and studies of the strength characteristics of the D. Mendeleev University of Chemical Technology of Russia. All products are tested by routine tests according to the requirements of our own specifications, which are higher than the requirements of the existing GOST-R and ISO for the main measurements of resistance to temperature and pressure for a long service life.

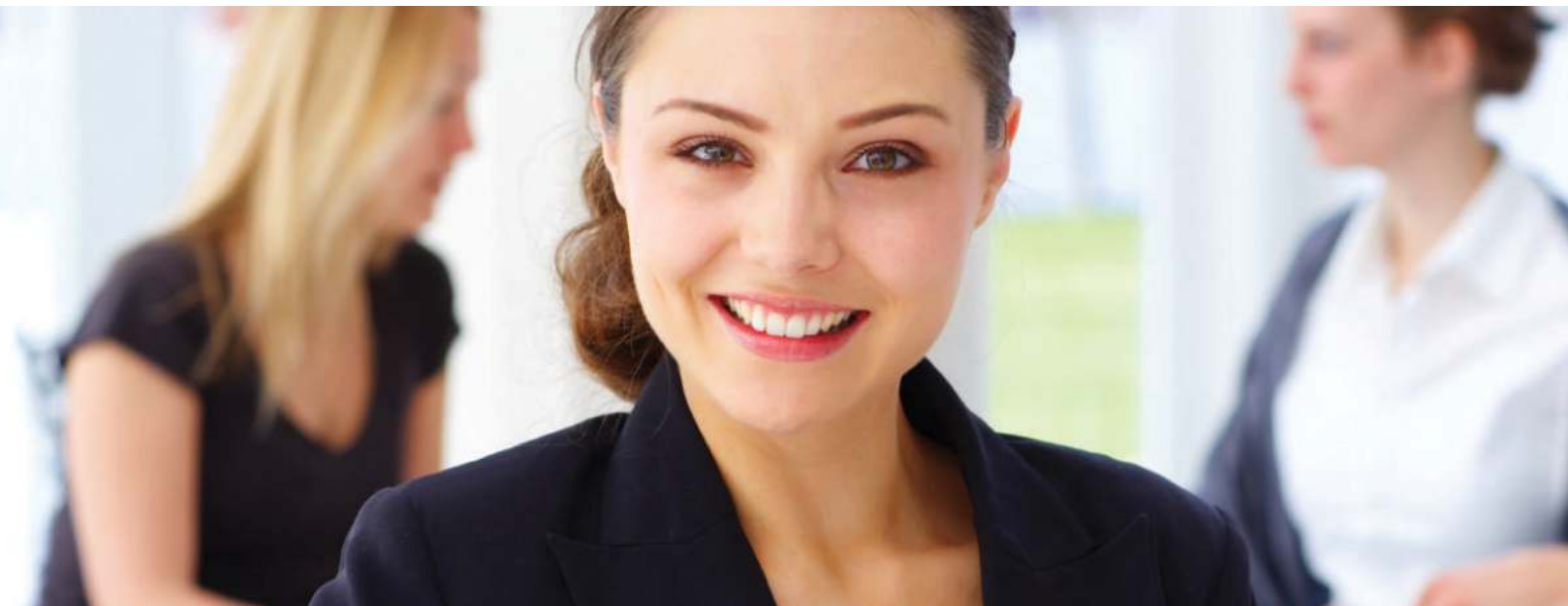


In January 2012, BYR PEX Corporation opened a new production site on the basis of its own Poyarkovo office and warehouse complex, where a number of process chains and additional equipment are located.

For the production of our pipes, we choose only the best raw materials that best suit the purposes of use in Russian climatic conditions. Therefore, BYR PEX products demonstrate outstanding characteristics of resistance to pressure, temperature, which greatly increases the service life of the system when operating with operating parameters.

Systems using BYR PEX pipes are installed and operated in the highest and most famous buildings, in serial (municipal) construction, in stadium heating systems and ice rink cooling systems throughout Russia.





SALES

The sales network of BYR PEX Corporation is represented in 30 cities of Russia and neighboring countries. All offices will offer qualified assistance in the selection of products, provide advertising and technical catalogs, and ensure the fastest possible delivery.



As part of this activity, the Corporation's specialists constantly analyze the market for new materials and develop modern solutions for engineering systems. The result of this work is a constantly expanding range of products we offer and a verified choice of manufacturers for each of its types.

Today, the trade direction of BYR PEX Corporation represents many brands on the market. Among them: BYR PEX®, EAGLE®, Danfoss®, Kampmann®, Purmo®, SYR®, DÜKER®, Wavin®, Energoflex®, HL® and others. Thanks to our partnerships with various manufacturers, we offer our clients a complete set of all engineering systems at factory prices.



In 2008, due to the growth of trade turnover, the development of production capacities and the constant need to increase warehouse stocks, BYR PEX Corporation acquired a production and warehouse premises by MKAD along the Leningrad highway. It is more than 5000 sq.m. area on 1.5 hectares of land with developed energy and good access roads.

- In 2010, we acquired premises for the Corporation's central office on Leningrad highway (Voikovskaya metro area), with an area of about 600 sq.m., located directly on the line to the company's production and warehouse complex, between which a company bus runs.
- In 2012, the corporation's regional base office-warehouse was equipped in Saratov, Yekaterinburg and Kazan.



SALES

BYR PEX Corporation is the official distributor of many trade marks. Among them: BYR PEX®, EAGLE®, Danfoss®, Kampmann®, Purmo®, SYR®, DÜKER®, Wavin®, Energoflex®, HL® and others.



For the customers' convenience, BYR PEX Corporation, having its own fleet of vehicles, offers free delivery of goods (check with your managers for delivery conditions).



BYR PEX Corporation successfully cooperates with the largest construction organizations: CJSC DON-Stroy, CJSC SpetsVysotStroy, SK SU-155, JSC Megapolis, LLC RSU-37, CJSC Sheldom, LLC PPS Lesstr, LLC UK Gen-Stroy, LLC PSK Euro-Dom, LLC Stroy-Tech-Proekt, PJSC TAIF, LLC GSS Engineering, Group KONTI, CJSC Elgad. Some of the objects, in which we took an active part in the configuration, can be seen on the website in the «Portfolio of objects» section.

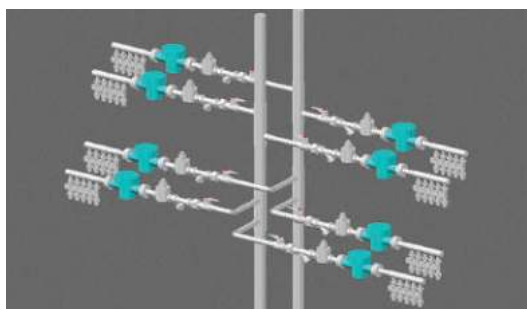
BYR PEX Corporation is represented on the two largest electronic trading platforms - Sberbank-AST CJSC and EETP OJSC. It is actively working with government customers, including the State Kremlin Palace, Military Unit 55056 (FSB), State Educational Institution DODSN MGFSO Moskomspor, Federal State Institution «State Academic Bolshoi Theater of Russia» and many others.





DESIGN

The company performs work on the design of building engineering systems, including heating and water supply systems using pipes manufactured by BYR PEX Corporation. All project activities of the corporation from the moment of the foundation of the project area undergoes the necessary certification procedures provided for by the current legislation of the Russian Federation. In addition, we also cooperate with design organizations in many cities of Russia and abroad.



The design department of the BYR PEX corporation performs all design work using specialized licensed software for creating drawings and calculations, which allows to reduce the likelihood of errors to a minimum, and, accordingly, complete design work in a short time.

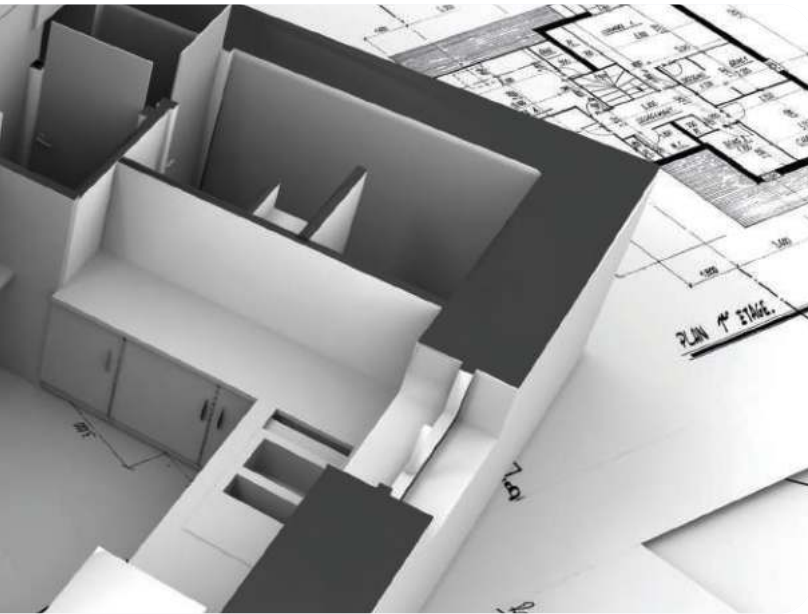
The compliance of project documentation with modern requirements is achieved by developing projects using innovative solutions. This ensures the maximum level of comfort for people's activities.



All projects, from standard solutions to complex technical units developed by BYR PEX engineers, comply with sanitary, environmental, fire safety standards and requirements in force on the territory of the Russian Federation. The cost, energy consumption, functionality, compliance with the wishes of the customer.



The designers of the BYR PEX Company coordinate with subcontractors, such as architects, designers, technologists.



DESIGN

We carry out the whole complex of works on design of internal engineering systems of residential, public and administrative buildings, apartments, cottages and townhouses.



The work on the project goes through all the necessary stages:

- Obtaining initial data, determining the scope of design work;
- Preparation of terms of reference for the design of engineering networks;
- Conclusion of a contract for design work;
- Implementation of design work;
- Passage of approvals in the relevant authorities (if needed);
- Author's supervision during installation and participation in the commissioning of the object (if needed);



The design of modern engineering systems is a complex of many components. All components of the project, such as a heating system, electrical or a sewer system, should be arranged as conveniently as possible and harmoniously combined with each other. The slightest flow entail problems in operation.

Successfully designed engineering networks make a client's life comfortable and directly affect many processes in the life of society.





CONSTRUCTION

BYR PEX is one of the largest Russian companies specializing in the creation of engineering systems for the life support of modern buildings, and performs on its own a full range of installation, commissioning and maintenance of internal engineering systems in the following sections:

- Ventilation
- Refrigeration supply (refrigeration centers)
- Heating, water supply, sewerage
- Water recycling systems
- Integrated security systems
- Systems of power supply, automation and dispatching of engineering systems
- Systems of heat and steam supply (boiler rooms)
- Other internal engineering systems



Qualified specialists carry out a full cycle of consultations, selection of optimal equipment models and layouts, installation, and commissioning of systems. The Company's specialists carry out all the necessary approvals for putting the facility into operation in the relevant approval and licensing authorities.

The concept of work of the BYR PEX Company is based on an individual approach and the provision of maximum assistance in creating a modern engineering life support system for buildings using the most reliable equipment and modern technologies.





CONSTRUCTION

The corporation carries out the whole range of works on the arrangement of internal engineering systems throughout Russia. We have installed more than 2 million m² in residential and public buildings.

The accumulated experience in the field of repair and maintenance of engineering systems of buildings allows the specialists of the service to carry out repair and service work with high quality and as fast as possible, as well as to carry out a technical examination of equipment with the provision of professional recommendations for preventive maintenance. It is also possible to conduct consultations in order to organize the high-quality operation of the equipment.




The construction service team is able to solve problems in the field of engineering systems of buildings of any level of complexity. The construction service has more than 150 employees of the engineering and technical staff, distributed in such departments as:

- Production and technical department;
- Service of the Chief Engineer;
- Estimate and contract department;
- Project Management Service.

Specialists of the BYR PEX Company have been trained in the selection, installation and commissioning technologies in Russia and abroad at manufacturing companies, have diplomas and qualification certificates for the design and installation of complex technical equipment, both foreign and domestic production.

When carrying out installation work, specialized professional equipment is used, which guarantees the impeccable quality of work. We use only high quality materials and mounting accessories.





MODERN ENGINEERING SYSTEMS



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