

Energy of unity

Combining experience and modern technologies to create electrical solutions

Our mission and values

We discover the world of energy through cognition, creating reliable and effective solutions for human use. Bringing together experts in pursuit of development, awareness and positive change. We know that to achieve best, you need to work together with like-minded people. And only this path will lead to sustainable development. We unite just such people and companies

**KEAZ is a component of sustainability
in an ever-changing environment**

**Trust
Passion
Creativity**

Geographical spread of the company

6 Warehouse complexes

Kursk
Novosibirsk
Novokuybyshevsk
Yekaterinburg
Kazakhstan
Almaty

6 Business offices

Moscow
Kursk
Cheboksary
Saint Petersburg
Novosibirsk
Yekaterinburg

4 Research, testing and training centers

Moscow
Protvino
Kursk
Cheboksary

2 Production sites

Kursk
Cheboksary

> 150 Representatives in Russia and abroad

90 000 m² Production facilities

Bringing together experts

2 448

Specialists work in the KEAZ Group of Companies

8,5 лет

Average length of work in the company



We are trusted

We value our business reputation and trust of our customers



KEAZ equipment is used in strategically important industries

VOSTOCHNY COSMODROME. SAKHALIN DOWNRANGE TRACKING STATION

It is extremely important to use accurate and high-quality electrical equipment for space exploration. Based on these requirements, KEAZ electrical products were chosen for the control system of spacecraft launched from the Vostochny Cosmodrome when equipping low voltage distribution switchboard of the tracking station packaged transformer substation. The packaged transformer substation based on OptiDin modular equipment, OptiMat D molded-case circuit breakers and PML electromagnetic contactors has been commissioned and is operating stably.

PRIRAZLOMNOYE FIELD GAZPROM PJSC



Continental shelf of the Russian Federation

KEAZ electric products are installed at a unique facility. Prirazlomnoye field is the only oil production site on the Arctic shelf of Russia. During the arrangement of 0.4 kV low voltage distribution switchboard, modern power circuit breakers with OptiMat D microprocessor release, OptiDin VM63, VA47-100 and VA47-29 compact modular DIN rail devices, designed specifically for operation in severe climatic conditions with temperatures reaching -60°C , were used for electrification of well clusters.

NADEZHDIISKIY METALLURGICAL PLANT, MMC NORILSK NICKEL PJSC

Norilsk Nickel launched the unique project called Sulfur Program, which involves recycling production waste and converting it into sulfuric acid with further neutralization.

The following devices were used for assembling the low voltage switchgear: OptiDin modular devices, OptiMat D and OptiMat A circuit breakers, OptiPower DR power supply units and OptiSave H ATS (automatic transfer switch) units, OptiSwitch DI load-break switches and disconnectors. KEAZ product portfolio equipment was installed as well: VD1-63 residual current circuit-breakers, VN-32 and VNK load-break switches, PML and PML12 contactors, RP fuse disconnectors.

WILL TOWERS RESIDENTIAL COMPLEX

A modern residential complex shall meet all safety requirements, especially in terms of electricity supply.

KEAZ keeps up with the times. And the use of KEAZ product portfolio and KEAZ Optima equipment at all stages of power distribution proves it. The equipment is used to complete lead-in distribution devices, main, floor and entrance distribution boards, as well as for lighting automation and electricity metering boards in multi-apartment buildings

KEAZ Group of Companies

KEAZ

Production of electrical equipment and APCS

KZKM

Production of composite materials

Elat-Instrument

Manufacture of parts based on drawings and composite road elements

Soyuz Industrial Park

Industrial and technology park with modern infrastructure

Energо-Service

Industrial park operator

Energy Center

Production of electrical solutions

Schetmash

Development and production of electronic auto components

Portal Energy

Electric vehicle charger project

2 448

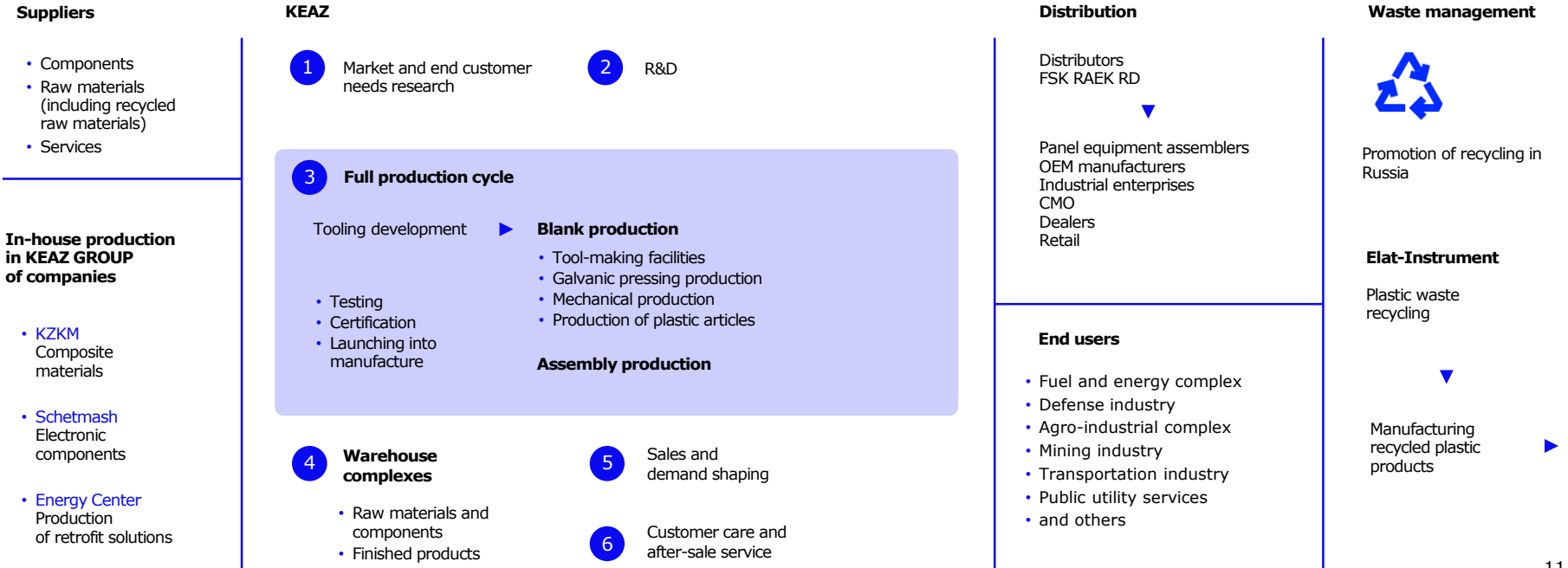
Specialists work in the KEAZ Group of Companies

We create an industrial standard together



KEAZ business model

KEAZ is a developer and manufacturer of electrical products and APCS with full-cycle production and high level of vertical integration



Development

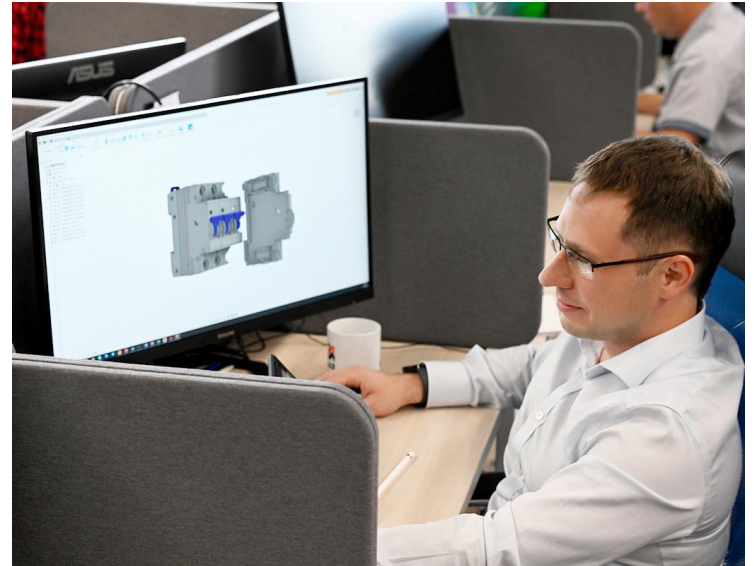
> 150 developers, designers and programmers

- KEAZ specialists received more than 100 patents
- We have mastered the production of machinery with an electronic trip device
- We have enriched our product range with devices up to 6300A
- They develop software
- They create new electrical products and end-to-end solutions

3,8 billion **4 centers**

Investments in R&D, equipment, development of competence centers and innovative developments

For development, research and own test center - Kursk, St. Petersburg, Cheboksary, Protvino



Strategic development directions



Production

Production upgrading and productivity improving. Development of infrastructure and practices of cyclical economy



R&D

Investment in development. Establishment of own research and training centers



Product portfolios

We develop the product range suited for the tasks of our customers and partners. We develop customized solutions for individual industries



Sustainable supply chain and commodity independence

We achieved full cycle production and even manufacture our own raw materials



Transformation of culture and processes

Improving operational and management efficiency. Unlocking human potential



Excellent customer experience and service

We provide world-class service to Russian companies

A 3D rendering of a red, rectangular box with a lid, shown from a perspective view. The box is open, and the lid is slightly offset to the right. The lighting creates highlights and shadows on the edges and surfaces, giving it a three-dimensional appearance. The background is a solid, vibrant red color.

Reliability
without compromise
in keeping with the best traditions

Product quality



Quality taken as a whole

- Quality KPIs are corporate indicators and are implemented in the motivation system
- All indicators are promptly monitored and analyzed
- Quality control is carried out at 150 test benches, among which there are unique test benches developed at KEAZ
- Technical control implemented throughout the production cycle



Business processes

- The quality management system has been implemented where lean manufacturing is part of and the core of the system
- The continuous improvement system through improvement proposals has been implemented
- The change control and management system has been implemented
- Standardization of work is carried out to ensure stability and repeatability of processes



Procurements and equipment

- Supplier policy developed and implemented
- Work in underway to develop suppliers
- The equipment maintenance management system has been implemented



IT

- The centralized information system based on 1C was implemented to capture and analyze information on the quality of the company's processes and products. Each incident is analyzed according to the "5 Whys" method, deterrent and corrective measures are implemented



Personnel

- Involvement of production personnel in quality management through InfoCenters
- Training and development of production personnel
- Recruitment, motivation and organization of employees' work



Service

- Online service for filing complaints and tracking the progress of applications has been implemented
- Provision of spare parts
- Work is underway to develop and improve the quality of the services offered by our customer care department

Production infrastructure

Combining experience and modern technologies to create electrical solutions

Continuous improvement

Kaizen's Japanese philosophy of continuous improvement and lean manufacturing principles shape the nature of KEAZ and lead us along the path of development, awareness and positive change

Expansion of production infrastructure

Since 2013, KEAZ has been developing the SOYUZ Industrial Park in the Kursk Region, acting as an anchor resident and main investor. In 2023, the following new production facilities are planned to be built:



8 **Molding production**



9 **Press-forging production**



10 **Production and logistics complex**



>2,8 billion

Investments in the construction of the Soyuz Industrial Park and the Test Center in Kursk

Production of electronic modules

The shortage of electronic components has led to serious difficulties for many manufacturers.

KEAZ invested in the development of electronic production, which makes it possible to produce and supply:

- Electronic trip device units for OptiMat D and VA53-55 circuit breakers
- OptiLogic PLC
- OptiSave automatic failover modules
- Production of 3rd generation electronic trip devices for OptiMat A air circuit breakers is scheduled to start

223 418

Electronic modules were made by KEAZ in 2022

Blank production

140 000 000

Parts and assemblies per year are made by the blank production

Component independence

KEAZ develops and manufactures process and pressing tools for the entire fleet of equipment.

Components of electrical equipment up to the smallest spring are manufactured in the blank production, which indicates a high level of localization and the presence of unique competencies of the company.

Production infrastructure



Tool-making facilities



Mechanical production



Galvanic pressing production



Production of plastic articles

Assembly production

Lean manufacturing

KEAZ assembly production works using the best practices of lean manufacturing

Manufacturing equipment

Our workshops are equipped with a modern fleet of equipment - automatic and semi-automatic special-purpose machines for the manufacture of unique devices

7500

Product units were made in 2022

150

testing benches

The assembly production is equipped with machinery enabling the full scope of tests



See our video on how the KEAZ [assembly production is arranged](#)



Testing laboratory

KEAZ equipment undergoes comprehensive testing throughout all stages of product design and production at the Russian Test Center, which guarantees a high level of product quality and reliability. Russian Test Center is a laboratory that has been developing its competences and infrastructure since 1945. Today it is a unique place for a wide range of various tests of low-voltage equipment, including certification tests:

- limiting breaking/making/ switching capacity;
- thermal and dynamic resistance;
- exposure to climatic and mechanical factors;
- mechanical strength;
- and even single impact 1,000 g



Ecology, social aspect and corporate governance

Excellent customer experience and world-class service are the top priorities of KEAZ

KEAZ sustainable development strategy

KEAZ is a component of sustainability in an ever-changing environment



Priority subjects

- Waste management. Development of practices of cyclical economy
- Climate impact and energy efficiency management



Priority subjects

- Ensuring occupational health and safety of personnel
- Development of employee engagement. Employee training and development
- Supporting local communities and developing business locations



Priority subjects

- Product quality management
- Customer experience and customer care management
- Development of a sustainable supply chain and commodity independence
- Improvement of the corporate management system



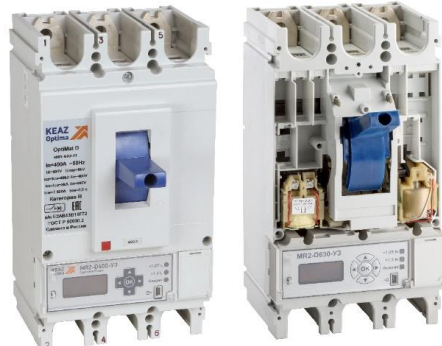
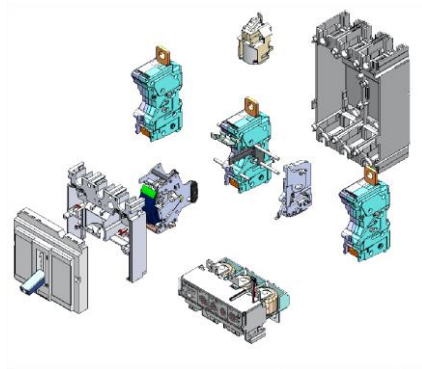
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Technological and industrial independence

using Optimat D circuit breaker

96% Localization level of power circuit breaker with Optimat D electronic trip device

2012-2023 KEAZ invests in Optimat D development and localization



Materials used in production



Silver



Copper



BMC



Steel

Full-cycle production: from raw materials to finished product

2,448

Jobs
in Russia

223,418

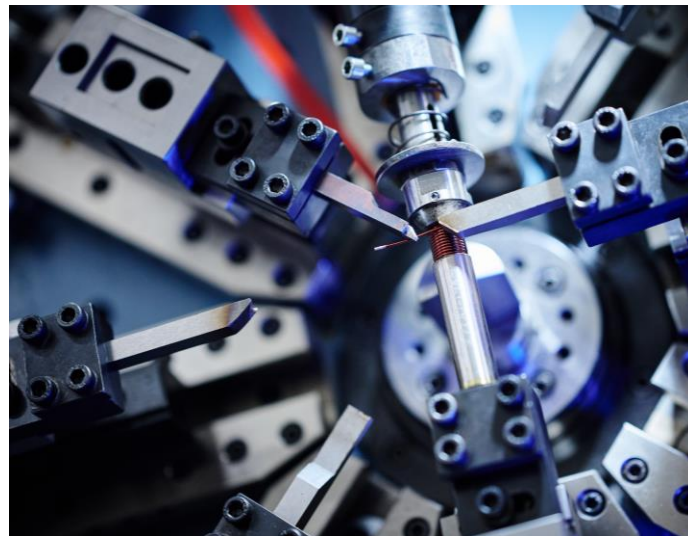
Electronic modules were made
in 2022 by KEAZ at its proprietary
electronic component production facilities

140 million

Parts and assemblies per year are
made by the blank production
of KEAZ

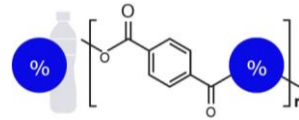


Implemented technologies for
recycling scrap materials and production
of KEAZit BMC

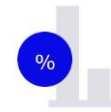


Replacement of European raw materials with BMC KEAZit

KEAZ uses secondary raw materials (PET) in the production of circuit breakers. Our unique processing technology allows us to produce BMC composite material with improved characteristics.



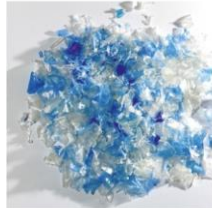
100% recycled PET bottle by glycolysis



Secondary raw materials are cheaper than fresh raw materials



Promotion of recycling in Russia



PET flakes



Resin with improved properties



KEAZit BMC



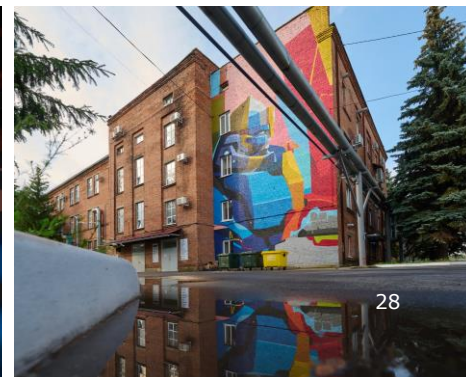
Industrial tourism

KEAZ takes an active part in ASI Industrial Tourism project and constantly organizes excursions to the plant. We changed the idea of the role of an industrial enterprise in shaping the urban environment by initiating and organizing the NewTon contemporary art festival.

Some of the most progressive street artists in Russia have created huge murals on the facades of KEAZ working production buildings. These works of modern art follow the concept of ecological coexistence of science and technology, production and art.

> 1,500

Specialists of the electrotechnical market visited the KEAZ production site (2021 to 2022 data)



Made in Russia

KEAZ is a Russian enterprise and is interested in the development of domestic industry.

To achieve technological and industrial independence, we need investments in scientific research, an effective production system, infrastructure and to develop technologies that will be sought-after and meet world quality standards.

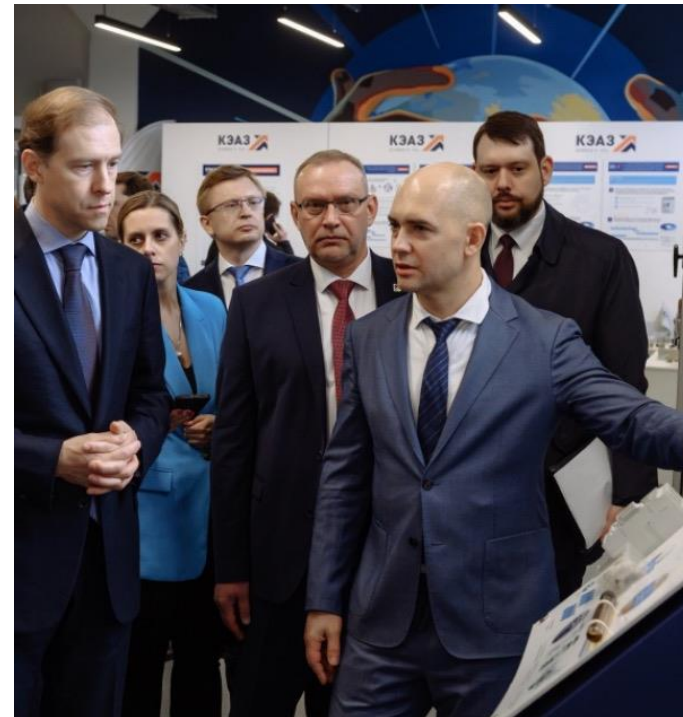


We are implementing projects

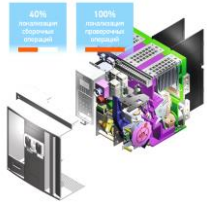
on the localization and development of the product portfolio, including with the support of the Ministry of Industry and Trade



KEAZ is included in the list of manufacturers of industrial products made in the Russian Federation



Implementation of projects with the support of the Ministry of Industry and Trade of Russia



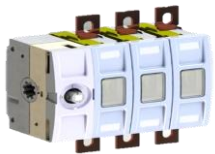
Localization of Optimat A air circuit breakers

RUB 146 mln - own funds
 RUB 285 mln - budget funds
 Sales start date: H1 2025



Upgrade and expansion of Optimat D series of circuit breakers

RUB 55.3 mln - own funds
 RUB 89.700 mln - budget funds
 Sales start date: H1 2024



Development of OptiSwitch DI disconnecter and switch manufacturing technology

RUB 134,480 - subsidies
 RUB 87,660 mln - own funds
 Sales start date: H1 2025



Production of 4-pole breakers for arrangement of TN-S grounding of electric networks with voltage up to 690V for rated currents up to 630A

RUB 62,100 - subsidies
 RUB 37,750 mln - own funds
 Sales start date: H1 2026

Products and solutions

Excellent customer experience and world-class service are the top priorities of KEAZ

Comprehensive industry solutions

We analyze the needs of the industry and adapt our products to the severe operating conditions and specifics of customers' processes. Our industry solutions ensure the continuity of processes, withstand the vibrations and severe conditions of different climatic zones and environments, and provide security for houses and urban infrastructure.

KEAZ is successfully working with companies in the following segments:



Power engineering

- Generation
- Distribution
- Storage



Oil and gas

- Oil and gas production
- Transportation
- Storage



Construction

- Residential and commercial construction
- Infrastructure development



Industry

- Chemical
- Food
- Metallurgy and mining
- Light industry



Transport



Military-industrial complex



Shipbuilding

- River shipbuilding
- Sea shipbuilding



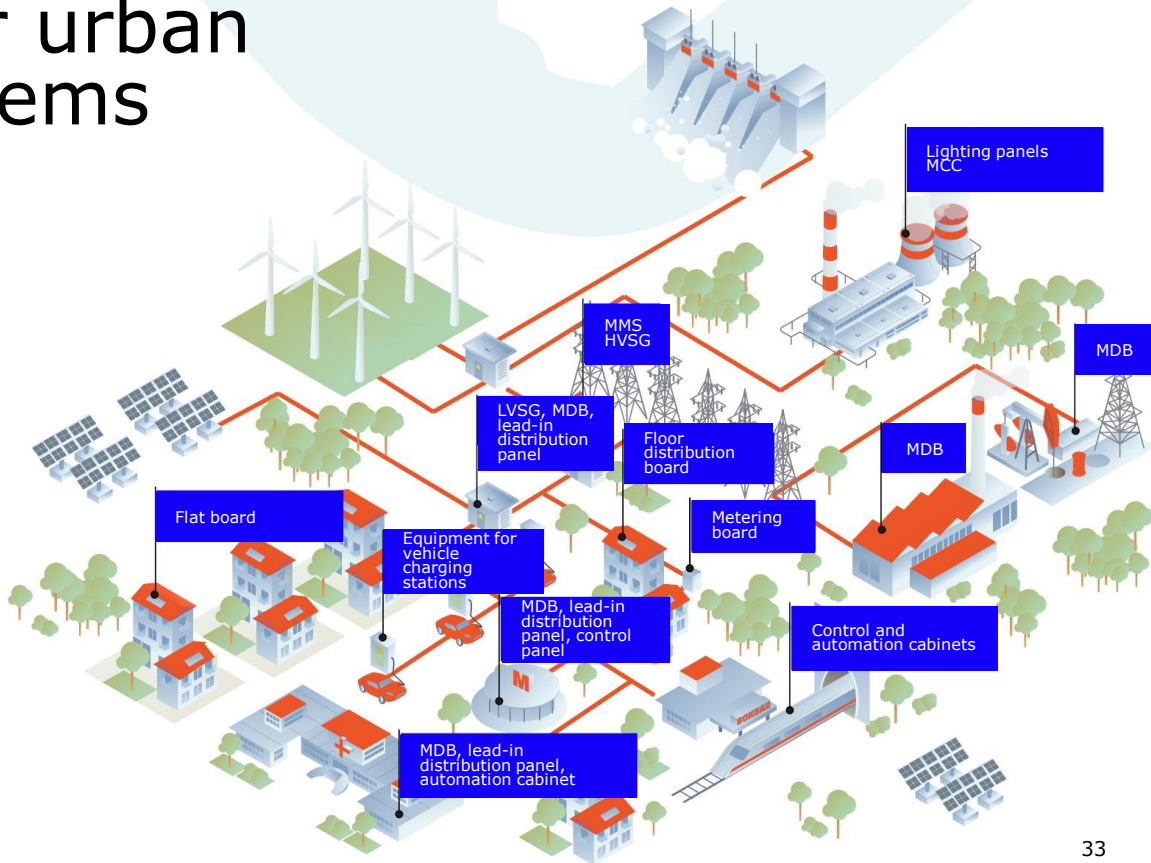
Information technologies and data processing centers

KEAZ solutions for urban power supply systems



KEAZ has developed solutions for all stages of power distribution.

Two product portfolios - KEAZ and KEAZ Optima - with different price offers are available for project implementation.



KEAZ product range



DIN rail devices

- Modular circuit breakers
- Residual current devices
- Surge protection devices
- Modular contactors
- Modular command and signaling devices



Power circuit breakers

- Molded-case circuit breakers
- Air circuit breakers
- Retrofit



Disconnect switches/disconnectors/switches/fuses

- Disconnect switches and low-voltage disconnectors
- Cam-operated switches
- Low-voltage fuses



Start-up equipment

- Motor protection circuit breakers
- Contactors, starters and thermal relays for motor protection
- Frequency converters
- Command and signaling devices
- Travel switches
- Soft starters



Enclosures, boxes, low voltage distribution switchboards

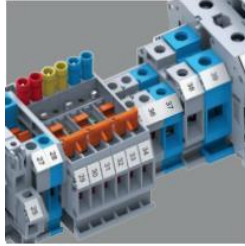
- Low voltage distribution switchboards
- Plastic enclosures and boxes
- Metal enclosures
- Floor-standing collapsible enclosures

KEAZ product range



Automation

- Programmable logic controllers
- Automatic transfer switch units
- Temperature sensors
- Operator touch panels
- Power supplies



Mounting tools, low voltage distribution switchboard accessories

- Electric installation tools
- Low voltage distribution switchboard accessories



Relay

- Modular control and protective relays
- Modular check and protection relays
- Intermediate relay and accessories



Metering and accounting devices

- Measuring current transformers
- Accessories for metering and accounting devices



High voltage equipment up to 35 kV

- High voltage circuit breakers and disconnectors
- High voltage fuses
- Vacuum circuit breakers
- High voltage insulators

Support for partners and clients

Excellent customer experience and world-class service are the top priorities of KEAZ

Customer service center

We develop our services focusing on customer interaction and feedback

Development and implementation

of strategic initiatives for improving business operations to enhance the customer experience

Analysis

of customer experience, business processes and systems

Communication channels

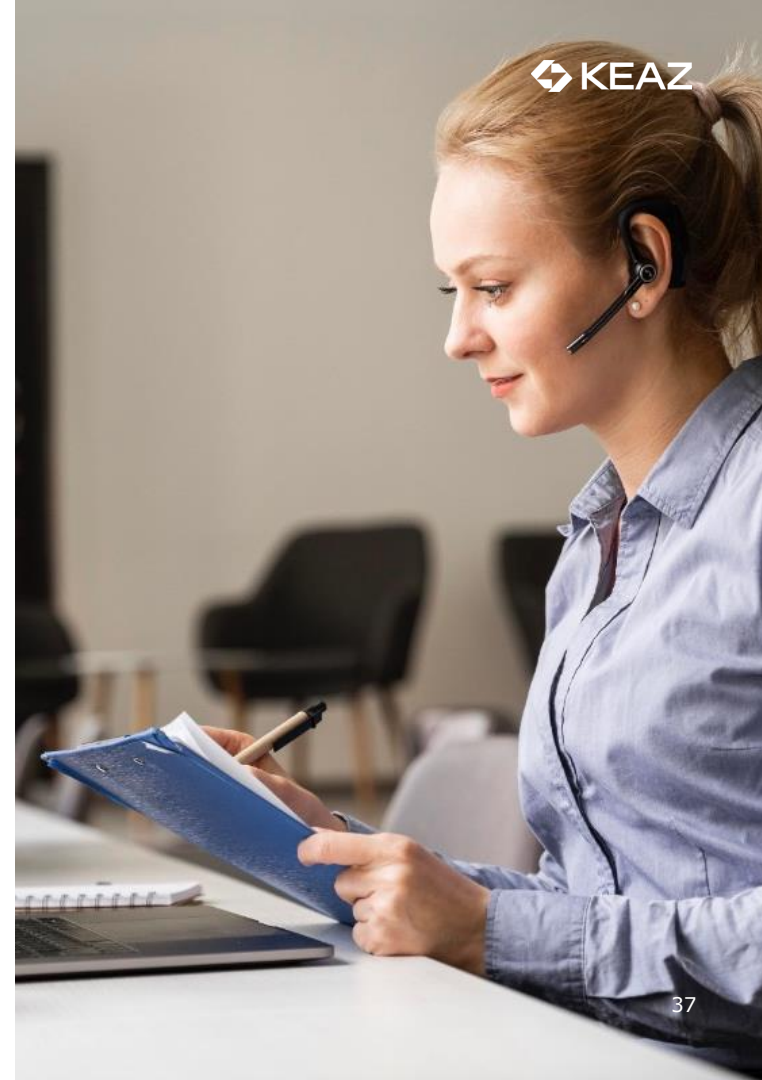
call center, email, online chat, personal account on the site

Complaint management

and after-sale service

Advice and support

Training and sharing experience



Integrated project support

Project support at all stages:

- We select equipment for projects
- We select similar products
- We provide technical advice on KEAZ products at all stages of project implementation
- Product reservation at the KEAZ warehouse for the project
- We provide equipment for pilot operation
- We promptly respond to replacements and abnormal situations
- We can produce customized versions
- Developed service support



Detailed instructions on how to contact technical support online and find similar products

[Learn more >>>](#)



Online service for filing complaints

[Learn more >>>](#)

Document preparation for the finished product

Due to the wide experience of developing typical technical solutions with the use of enclosures and power part, KEAZ can offer:

Development

of the detailed design documentation (DDD) of low voltage distribution cabinets of any complexity and scope using the KEAZ equipment

Advice

on equipment operation, its setting and warranty service

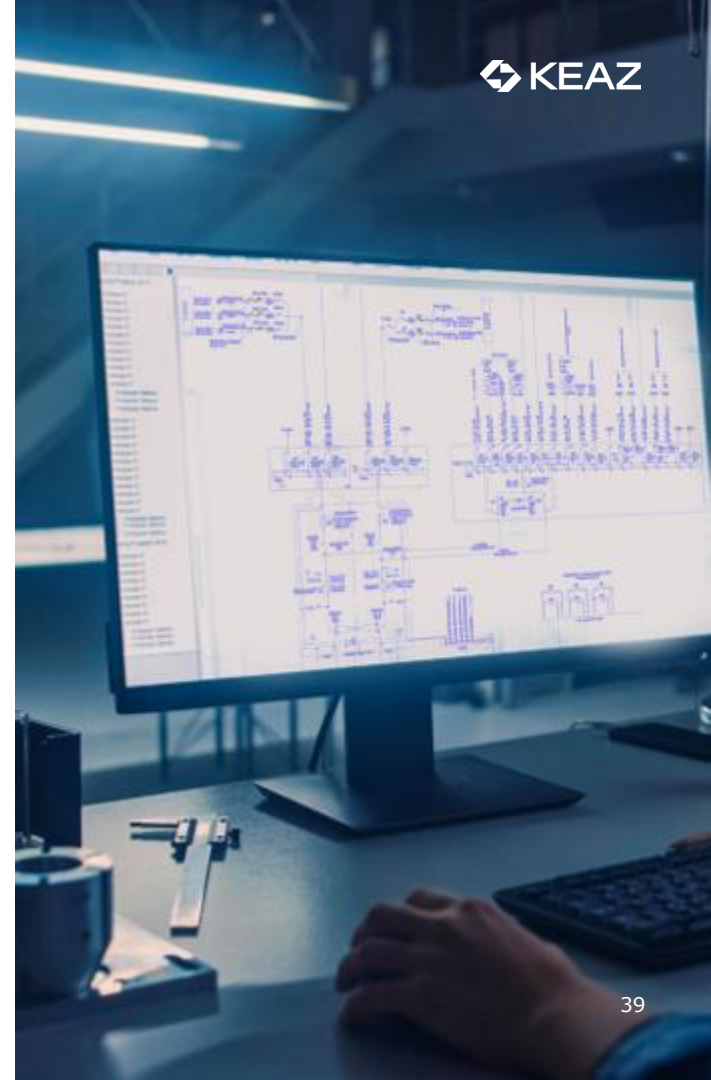
Feasibility study

regarding the choice of a particular equipment item

Software used

Compass-3D, AutoCAD, SolidWorks and it allows to obtain:

- General views
- Layout solutions
- 3D modelling of products
- Operating documentation



KEAZ academy brings together experts

Take training online and come to our production site.

> 200

KEAZ holds industry events annually independently and together with leading electrical distributors

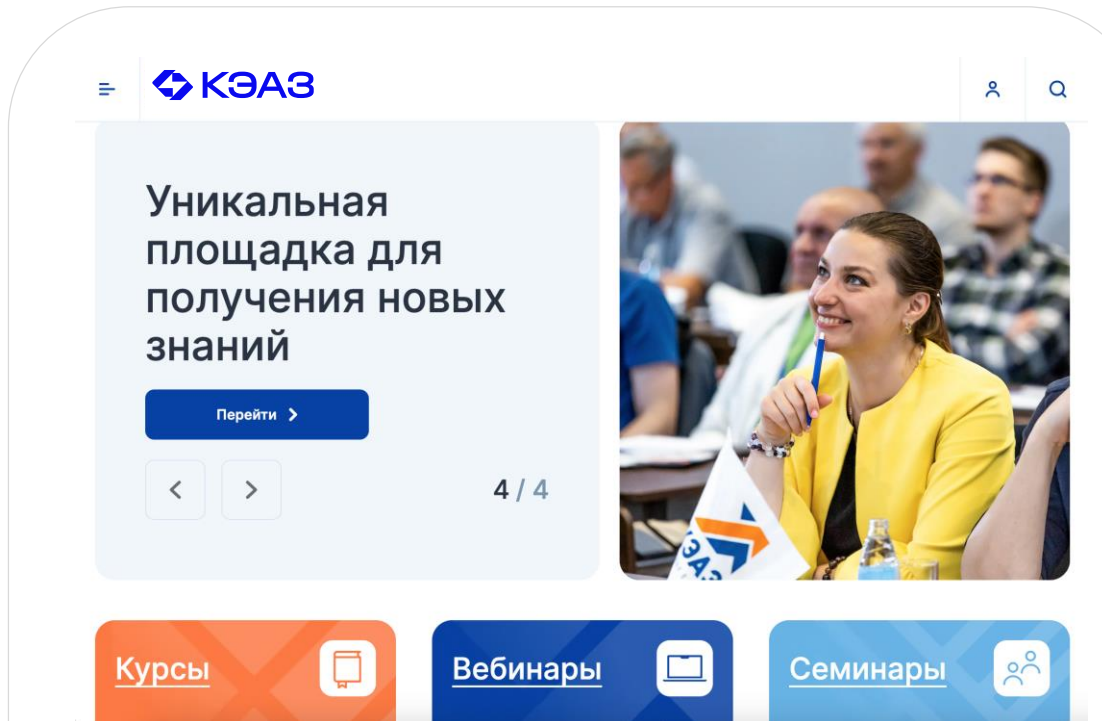
> 250

Master classes on the basis of the mobile exhibition complex were held in 2022.



E-courses, seminar schedule and mobile exhibition complex
academy.keaz.ru

KEAZ is a Russian manufacturer



Every person in the company is responsible CSI

Customer service center



Technical support and training



Customer service management



Design solution department



Complaint department

CSI 4.2 (84%)

Level of satisfaction with KEAZ customer care.

CSI reaches 95% for individual stages of customer experience

KEAZ City

The unique KEAZ production complex represents a city, where all conditions for product development and production have been created.

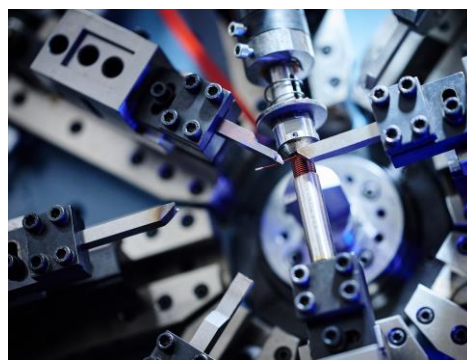
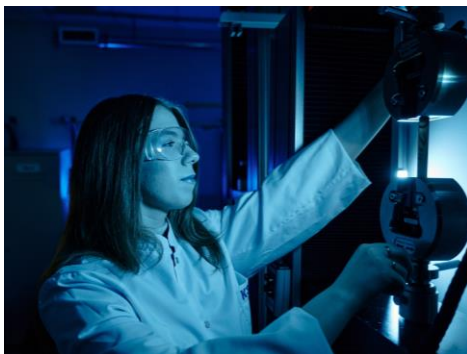
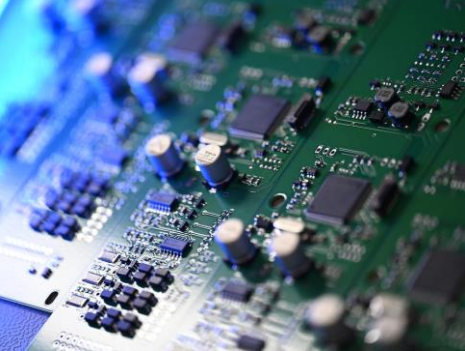
Each building here is responsible for a different stage in the production of electrical equipment.

An interactive tour around the company's Industrial Park will allow you to see the production even if you can't visit us.



gorod.keaz.ru





We are always there



Official VKontakte
community



Official Telegram
community



Official YouTube
channel

www.keaz.ru

8 /800/ 777 94 62

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