



# Provider of measuring instruments with over 50-year experience

JSC Elektropribor (Elektropribor) was incorporated on 10 February 1953. Today it is the leader in the electric instruments market of the Russian Federation. The range of products released by the company includes over 100 items and 600 types. Elektropribor offers both analog — ammeters, voltmeters, wattmeters and varmeters, as well as digital measuring instruments, including multifunctional devices and converters. Currently the company employs over 500 people and exports its products to CIS countries (Kazakhstan, Belarus, Ukraine, Georgia, Armenia), as well as to Italy, the Philippines, Bulgaria, Estonia and others. The company's mission is to have the most effective and balanced supply of high-quality electrical equipments to the users in the Russian Federation and abroad, as well as to perform with a high degree of reliability in relation to short and long-term contracts. Caring about the partners and employees and improving the quality of production are the main values of Elektropribor.

# **Turning points**

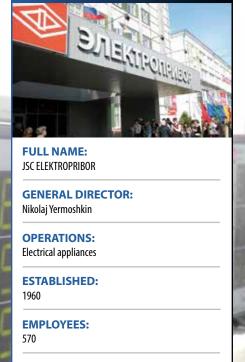
The moment of birth is the most important moment in everyone's life. Similarly, the most important day for Elektropribor was a day when the Council of Ministers of the former Soviet Union made a decision to construct Cheboksary Plant of Electrical Measuring Instruments (renamed in 1978 into Elektropribor) on 10 February 1953. Subsequently, during the

next 7 years, active construction works have been performed and issues pertaining to organization of production have been discussed. Already in 1960, the plant released 3664 self-developed instruments. It was the first success of the company. For the next three decades, up until 1992, the production volume had been increased, the plant was successfully developed and the prod-



General Director Nikolaj Yermoshkin

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ucts it released won the market. In 1991, the plant produced 4.5 million pieces of electrical appliances - it was the highcompany's existence. In 1992, the entity was impacted by recession, associated with the reduction of production in all industries. As a result of this process, the production plummeted. All industrial enterprises were facing the same difficulties at that time; some of them had to be reorganized. The leadership of Elektropribor has done a great work to improve financial condition of the company and preserve the personnel. The management was looking for solutions increasing production through



the development and introduction of competitive products. Thanks to this, in 2000 Elektropribor developed, and est number in 31-year history of the in 2001 released a new series of digital electrical measuring instruments for direct and alternate current. These devices were designed for energy sector which in this period was in the process of reequipment. One of the first customers to which digital devices were delivered was Moscow United Electricity Network Company (Moscow United Electric Grid), cooperation with which allowed the company to take into consideration and subsequently implement all the requirements of power plants. This moment was the next milestone in the history of Elektropribor. The company hopes it will have another reasons to be proud of in the future.

#### **Success factors**

The greatest potential of the company is its people. Current competitiveness of the plant was built by several generations of workers and specialists, which made an invaluable contribution to the development of industry and defense of Russia. For over 50 years of its operation, the company has released approximately 110 million analog electrical measuring instruments of more than 200 types. It was possible thanks to the employees of Elektropribor. Currently, there is a process of personnel renewal the company employs young professionals, who are taught by the veterans of the plant, assisting them in gaining knowledge about the job, helping to resolve production issues and whose experience assures change of generations and continuity of work. Among the key advantages of the company, there are: production of the widest range of digital and analog electrical measuring instruments in the Russian Federation, certification of all products as means of measurement, and marking production with initial verification stamps before their release from the factory. Moreover, the company has its own design and technological bureau, totaling about 100 people, which assures the development of new technology, is involved in implementing it into production as well as able to produce customs solutions. Last but not least, the company is able to deliver the most popular devices within 4-7 days thanks to stocks.

Elektropribor specializes in the produc-

### **Production characteristics**

tion of electric measuring instruments for direct and alternate current. The company has been producing switchboard measuring instruments using modern technology and equipment. The range of products released by the company is wide and varied. It includes over 100 items and 600 types. First of all these are analog instruments - ammeters and voltmeters, wattmeters and varmeters. The history of the plant began with them and thanks to them the company became popular. Despite the fact that there is a constant discussion over the transition to digital measuring devices and there are well-founded reasons for that, there is no tendency to the complete withdrawal from switchboard devices. Analog instruments have several advantages over digital devices - they can be applied to many objects in which the use of digital instruments is impossible or unpractical. Therefore, as for now analog panel meters are the instruments used on a mass-scale worldwide. The next group of electrical appliances produced by Elektropribor comprises of digital devices released in the following series: Shch, Shchp, Shchv, Shchk in different dimensions - 120x120, 96x96, 72x72, 96x48. Along with simple digital devices, the company also offers multifunctional devices and converters -SHCHM120 and E900EL. They measure 29 basic electrical parameters of threephase AC networks: voltage, current, power, frequency, power ratio and others. They also have the possibility to reprogram display ranges, control display



brightness, and connect external modules. They are equipped with data transfer protocol IEC 60870-5-104 (Ethernet port) and up to 3 ports RS485 Modbus RTU. In addition, the company offers measuring converters, shunts and current transformers. Products released by Elektropribor are widely used in energy sector, nuclear energy, engineering, railway, oil and gas industries, military-industrial complex, as well as aviation and space industries. One of the advantages of Elektropribor is the fact that it is a closed-cycle enterprise, with developed tool and blank production, plating and assembly shops (including automated assembly of printed circuit boards), which means the company is held responsible for the quality and production TAT, remaining independent from suppliers and contract assembly.

### **Production technology**

The company has its own tool and blank production. It works on equipment supplied by leading world manufacturers - Top Work, HAAS, or Mitsubishi. Highly qualified engineering personnel can design and manufacture complex



tools. The tool shop uses almost all major engineering technologies: turning, drilling, grinding, metal processing, pressing, aluminum pressure die casting followed by processing. Injection molding of parts from thermoplastic materials (polystyrene, polyamide, armamide, polyethylene, etc.) are produced on the modern automatic molding machine manufactured by Demag. The plant is also equipped with a combined galvanic line to galvanize steel parts, nickel copper parts and its alloys or and coating with tin-bismuth copper alloy elements.

## Export

The company's customers are organizations of Russia, CIS countries (Kazakhstan, Belarus, Ukraine, Georgia, Armenia), as well as Italy, the Philippines, Bulgaria, Estonia and others. During its existence, the company has developed strong relationships with Ukraine and Kazakhstan, where it operates a dealer network, which is developed every year. Export's share for the last year amounted to approximately 10 percent of the total production. New markets' research is one of the primary challenges of the



factory. Elektropribor is constantly working to expand and upgrade the portfolio of products.

#### Changes

The current state of production, research and design base, interaction with customers and sales enabled the company to significantly expand its specialization and positively look into the future. Having retained high scientific and industrial potential as well as traditions of responsible attitude towards job, having done great work on reconstruction and modernization, rebuilt in the recent years team of Elektropribor can look into the future with hope. The market never stands still - in the last decade new standards of electric power quality have been introduced in Russia - and hence new demands have been imposed on modern electric measurements. New challenges in front of the company include increase in sales within the existing products' portfolio, as well as expanding the range of products. For example, one of the latest trends includes devices that automatically monitor the main indicators of power quality (SCE) and compare them with standard values - SCE analyzers. They are the extension of already existing simple digital and multifunctional devices. The plant is planning to work in this direction in the future. The history of Elektropribor plays an important role in the history of national instrumentmaking industry. Therefore, the successful operation of the plant was the starting point, which marked the beginning of a domestic instrument-making industry. The company is proud of this. For many years Eektropribor has been an equal partner of the largest instrumentmaking companies and organizations, and today it is the leading instrumentmaking scientific and industrial center in the country. ■

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