





The EXPERT-CABLE factory is located in the Russian town Orel and covers an area of over 25,000 sq.m. The company is engaged in the development and production of cable and wire products, both traditional and unique brands for all industries.

Today, the EXPERT-CABLE factory is a modern, multifunctional full-cycle enterprise with high quality products made with the help of modern technologies, materials and equipment, and many years of experience of its staff.

Our own copper-smelting production, rolled metal products and cable and wire production are a source of pride for our factory and something sets it apart from other factories. More than 50 modern production lines allow more than 20,000 brand sizes of cable products to be produced.

We are constantly modernizing and expanding our production equipment stock.

Each stage of the technology of production of finished products is automated and strictly monitored from the moment raw materials are selected until finished products are transferred to the warehouse. Our own highly developed measuring and testing base ensures all types of testing are performed during the development and production of cable products.

All products go through mandatory and voluntary certification. Our quality is backed by both national and international certificates of compliance.

The company has implemented and is actively further developing a quality management system in accordance with GOST R (Russian national standards) and ISO 9001:2015.

A full set of support and technical documentation is issued for each batch.

The company's large amount of warehouse space means the most popular cable product brands are always kept in stock, and having our own delivery fleet means that products are brought to the customer in the shortest possible time.

## EXPERT-CABLE FACTORY

- > 380 qualified employees;
- > 25,000 sq. m of production space;
- > 10,000 tons of copper processing per year;
- > more than 50 modern production lines;
- > our own measuring and testing facilities;
- > more than 7000 satisfied customers.

03 \_\_\_\_\_www.expert-cable.ru

# DELIVERY ACROSS RUSSIA AND CIS

The EXPERT-CABLE factory is constantly expanding its coverage. We have offices in Moscow, St. Petersburg, Krasnodar, Kemerovo, Yekaterinburg and Kazan.

The company has a wide network of suppliers and can deliver products by any and all modes of transport not only to Russia and CIS countries, but also to Europe and Asia.



The EXPERT-CABLE factory is a reliable supplier for large Russian energy, oil and gas, petrochemical, construction enterprises, for metro and rolling stock maintenance companies, and also for public facilities and the Russian Ministry of Defence and Ministry of Internal Affairs.

#### **EXPORTS**

The EXPERT-CABLE factor is a regional leader in export supplies.





### WHY CHOOSE US?



Flexible cooperation terms and a personalised approach to each order



Contract production



We deliver products throughout Russia and CIS countries by any mode of transport



We use cutting edge materials from trusted manufacturers



Large stock availablity, custom-made orders manufactured from five days after order is placed



We work 24 hours a day, 7 days a week

## FULL CYCLE PRODUCTION

- COPPER SMELTING:
  - copper wire rods 8mm and 25mm in diameter
- COPPER PROFILE PRODUCTION: copper busbars according to GOST (Russia and CIS country standards) 434-78 on solid and soft copper busbars
- WIRE AND STRAND MANUFACTURING
- CABLE AND WIRE PRODUCTS:
  more than 20 000 cable types and sizes

# MODERN TESTING LABORATORY



The EXPERT-CABLE factory has its own highly developed measuring and testing base, providing complex tests during the development and production of cable products.

The production of modern, high-quality cable and wire products requires careful monitoring at every stage, from incoming raw and auxiliary materials inspection to the transfer of finished products to warehouse.

All test and measuring equipment is subject to periodic metrological certification and verification.

The test centre regularly undergoes a competency confirmation procedure.



## COPPER-SMELTING FACTORY



Our copper processing workshop with a capacity of 12,000 tons of products per year, equipped with the latest production lines. Our channel induction furnace, which carries out copper cathode remelting by continuously casting it into copper wire rods with a diameter of 8 and 25 mm.

Our laboratory, equipped with modern equipment, which conducts incoming raw material monitoring, intermediate sampling, testing of finished products for compliance with GOST requirements.

The Expert-Cable factory sells copper wire rods produced in the factory. Products comply with GOST R 53803-2010 and GOST 859-2001.





## **ROLLED METAL**

#### **PRODUCTS**



The Conform 500 continuous extrusion line produces copper profiles of various shapes.

This makes it possible to mass produce electrical copper sheets in accordance with GOST 434-78 with sections from 200 to 3800 mm in length and a width of up to 240 mm.

### ELECTRICAL

#### **COPPER BUSBARS**



Electrical copper busbars are made from electrical copper only. They have high throughput capacity and do not require additional maintenance.

## WE OFFER BOTH SOLID AND SOFT COPPER BUSBARS MADE ACCORDING TO GOST 434-78.

#### **DIMENSIONS AVAILABLE FOR ORDER\***

3x20	4x40	4x80	5x40	5x80	8x30	8x80	10x40	10x70	10x100
3x30	4x50	5x25	5x50	5x100	8x50	8x100	10x50	10x80	10x120
4x30	4x60	5x30	5x60	6x60	8x60	10x30	10x60	10x90	10x160

<sup>\*)</sup> custom size orders are also available.



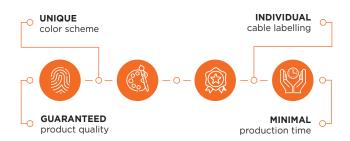
## CABLE AND WIRE

#### **PRODUCTS**

The EXPERT-CABLE factory is equipped with more than 50 modern production lines from the world's leading manufacturers.

The range of products includes more than 20,000 types of cables and wires with various types of insulation (including halogen-free compositions, high-strength ethylene-propylene rubber and other modern materials).

Marking is applied along the entire length of cable and wire products set 1 metre apart, which additionally serves as protection against theft, and also facilitates installation and monitoring at facilities.



The Expert-Cable factory offers production of copper profiles and copper products according to the customer's specifications, including of wire and strand.





# LIST **OF ISSUED TYPES**



#### NOTE:

cold resistant versions of cables can also be produced, in which case "- HL" is added to the cable brand

#### POWER CABLES WITH PVC INSULATION UP TO 3 kV



#### Cable design:

Aluminum or copper

**PVC** Insulation

Copper tape screen available on request

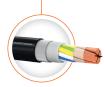
Armour (on request): steel/aluminum wire, steel/aluminum tape

PVC, Polyethylene sheath or protective hose

#### The following types of cable can be manufactured:

- flat
- reduced flammability
- · low flammability with low smoke release
- reduced flammability without halogens
- flame resistant
- low flammability or flame resistant with low toxicity

#### POWER CABLES WITH PVC INSULATION UP TO 3 kV



#### Cable design:

Aluminum or copper

Cross-linked polyethylene (SPE) insulation

Copper tape screen available on request

Armour (on request): steel/aluminum wire, steel/aluminum tape

PVC, Polyethylene sheath or protective hose

#### The following types of cable can be manufactured:

- reduced flammability
- · low flammability with low smoke release
- reduced flammability without halogens
- flame resistant

#### **CONTROL CABLES**



#### Cable design:

Aluminum or copper

Insulation made from PVC or from PE-HF composition Screen

Casing: steel/aluminum wire, steel/sluminum tape PVC. Polyethylene sheath or protective hose

#### The following types of cable can be manufactured:

- reduced flammability
- low flammability with low smoke release
- reduced flammability without halogens
- low flammability or flame resistant with low toxicity
- Flame resistant

#### **POWER CABLES 6-10 kV**



#### Cable design:

Aluminum or copper

PVC or cross-linked polyethylene (SPE) insulation

Copper screen

Casing: steel/aluminum wire, steel/sluminum tape

Sheath: PVC or PE

#### The following types of cable can be manufactured:

- reduced flammability
- · low flammability with low smoke release
- reduced flammability without halogens

#### WIRES AND INSTALLATION CABLES



#### Cable design:

Copper core: class 1, 2 or 5 flexibility Insulation made from PVC or PE-HF polymer composition

Shell: PVC or PE-HF polymer composition

#### The following types of cable can be manufactured:

- reduced flammability
- · low flammability with low smoke release
- reduced flammability without halogens
- low toxicity low flammability

#### FLEXIBLE CABLES UP TO 1 kV



#### Cable design:

Aluminum or copper Insulation made from TEP or PVC

Copper tape screen available on request

Armour (on request): steel/aluminum wire, steel/aluminum tape

Sheath or protective hose: PVC, TEP, PE-HF

#### The following types of cable can be manufactured:

- · reduced flammability
- low flammability with low smoke release
- reduced flammability without halogens
- · flame resistant
- low flammability or flame resistant with low toxicity

#### FLEXIBLE CABLES WITH EPR INSULATION UP TO 1 kV



#### Cable design:

Flexible copper core

**EPR** insulation

Copper tape screen available on request

Armour (on request): steel/aluminum wire, steel/

aluminum tape

Sheath or protective hose: PVC, TEP, PE-HF

#### The following types of cable can be manufactured:

- reduced flammability
- low flammability with low smoke release
- reduced flammability without halogens
- flame resistant

#### FLEXIBLE CABLES WITH EPR INSULATION 6-10 kV



#### Cable design:

Flexible copper core

**EPR** Insulation

Copper screen

Casing: steel/aluminum wire, steel/sluminum tape

Sheath: PVC or PE

#### The following types of cable can be manufactured:

- reduced flammability
- low flammability with low smoke release
- reduced flammability without halogens

#### POWER CABLES WITH EPR INSULATION UP TO 3 kV



#### Cable design:

Aluminum or copper

**EPR** Insulation

Copper tape screen available on request

Armour (on request): steel/aluminum wire, steel/aluminum tape

PVC, Polyethylene sheath or protective hose

#### The following types of cable can be manufactured:

- reduced flammability
- · low flammability with low smoke release
- reduced flammability without halogens
- flame resistant

#### POWER CABLE WITH EPR ISOLATION 6-10 kV



#### Cable design:

Aluminum or copper

PVC or cross-linked polyethylene (SPE) insulation

Copper screen

Casing: steel/aluminum wire, steel/sluminum tape

Sheath: PVC or PE

#### The following types of cable can be manufactured:

- reduced flammability
- · low flammability with low smoke release
- reduced flammability without halogens

#### NYM, NYY



#### Cable design:

Copper core

**PVC Insulation** 

Shell or protective hose made from PVC

#### **STEEL INSULATED WIRES**



#### Cable design:

Aluminum core Cross-linked polyethylene insulation

#### **MINING CABLES**



#### Cable design:

Flexibility class 2 or 5 copper core PVC insulation, EPR Steel tape armour Shell: PVC, TEP

#### **ELECTRICAL COPPER BUSBARS**



#### Types

• Soft copper busbars, solid copper busbars



# **EXPERt class® and UMCa®** PRODUCTS

The **EXPERt class**\* and **UMCa**\* trademarks have been developed for the most diligent customers, and are superior to imported and domestic counterparts in terms of fire hazard indicators and properties, and operational reliability.

**EXPERt class\*** and **UMCa\*** brands can be made with various design features and unique protection against counterfeiting or theft (for example, individual marking for each item, unique color scheme, etc.).

With the correct installation and operation of the **EXPERt class\*** cable, your electrical networks and installations will be able to operate without interruption.

## UNIVERSAL MOUNTING CABLES UMCA®

**UMCa\*** brand cables are designed for data transfer, digital and analog signals in automation and electronics, communication, control and monitoring systems, including engineering communications and other building and structure subsystems, safety and fire protection systems, ACS TP industrial networks, and can be laid in class 0-2 explosive zones in accordance with GOST R IEC 60079-14 and GOST 31438.1-2011 (EN 1127-1:2007).

### MAIN ADVANTAGES EXPERt class®



The conductive core is made of 99.95% purity copper with a nominal cross-section area. Products undergo all laboratory tests and are able to withstand increased electrical loads without losing its stated properties and quality characteristics.

Orange and green cables ensure that the required groups of cables can be recognised during installation.



The orange flame resistant cable is designed for systems that must continue to operate in during a fire.



High raw material quality and nominal cross-section of conductive cores ensure power supply reliability, electrical safety and a reduced loss of electricity in networks.



Marking the length of the cable in increments of 1 meter will make installation easier and simplify accounting and monitoring at the construction site.



High quality polymers and plastics ensure that cables can be quickly and easily cut.

In critical situations, they can withstand heat and kinks, thereby guaranteeing a cable life of more than 30 years.



# FIRE RESISTANT CABLE LINE (FRCL)

### MAIN ADVANTAGES OF FRCL:

- Our qualified specialists are ready to assist in choosing the best FRCL configuration for you;
- A wide range of different cables, trays and accessories, allowing you to implement highly complex projects without needing to contact another supplier;
- O3. Detailed instructions for installing cable lines are available;
- **O4.** FRCL is guaranteed to operate in fire conditions for some time;
- **O5.** FRCL certificates are available, making it easier for your building to be passed by regulatory authorities.

FRCL is an obligatory element of fire protection systems consisting of fire resistant cable produced by the Expert-Cable factory and cable-bearing systems.

FRCL, should maintain working capacity (to transmit electricity continuously or in individual pulses) in fire conditions for the specified time in accordance with GOST R 53316 and Building Rules (BR) 6.13130.2013.

Flame resistant cable for use as part of FRCL must comply with the current requirements on fire safety and application (GOST 31565- 2012).

When developing FRCL, we took advantage of the rich experience of our subsidiary company, Expert-Electric, which

has more than 18 years of experience in designing and building responsible facilities.

Our fire-resistant cable lines are a combination of our own personal experience and of best practices from around the world, all used together to create a comprehensive solution for fire protection systems.

Fire-resistant cable lines have been developed in close cooperation with leading cable support systems manufactures, such as DKS, Promrukav, IEK, KM-Profil, EAE and Vergokan.

## **KEY** FACILITIES

01 ELECTRODEPO «SOLNTSEVO» Moscow. 2020

1103COW, 2020

O2 ELECTRIC SUBSTATION (PS)
No. 567
"POLYGRAPH"
Chekhov, st. Polygraphists, 1,
2020

03 RELECTRIC SUBSTATION
No. 245
«PYATNITSKAYA»

Kashirsky district, 2020

O4 PENZA VODKA
FACTORIES,
Penza, 2020

OSTANKINO
st. Academician Korolev, 12, 2020

O6 FOREST OPERATOR
OF GK «TITAN»
Arkhangelsk, 2020

07 REGIONAL CLINICAL INFECTIOUS HOSPITAL Voronezh, st. Rostovkaya, 90, k 6. 2020

OBJECT
of the Northern Fleet
of the Russian Navy
«BERTH No. 17»,
Severomorsk, 2020

«KOSTROM ONCOLOGICAL DISPENSARY»
Kostroma, Nizhnyaya Debrya, 19, 2020

10 RC «RUMYANTSEVO PARK» Moscow, Rodnikovaya st., 17, 2020

PJSC «SIBUR HOLDING» Moscow, 2020 12 IZHEVSK
ELECTROMECHANICAL PLANT
«KUPOL» CONCERN EKR
«ALMAZ-ANTEY»

Izhevsk, st. Sand, 3, 2020

TULA BRANCH OF PJSC «ROSTELECOM»

Tula, Lenin Ave., 33, 2020

14 CONCENTRATING FACTORY «COKE»

Prokopyevsk, st. Frunze site, 2020

SEC GALEON
Moscow, Leninsky prospect,
123v. 2020

FGKU COMBINE
«HORIZON» ROSREZERVA
village Borok, rep. Udmurt,

Kambarsky district, Borok village, st. Lenin, 1, 2020

17 IKEA TC EUROPOLIS Moscow Prospect Mira, d 211 to 2, 2020

18 AMKOR LIMITED,
FLEXIES
NOVGOROD
Nizhny Novgorod

Nizhny Novgorod, 2020

19 BIOCARD PLANT
Strelnya

TUNOSHA AIRPORT
Yaroslavl. 2020

21 PLANT OF COMPOSITE MATERIALS «METACLAY»
Karachev, 2020

NORTHERN
MACHINE-BUILDING
ENTERPRISE «TITAN PKP»
Arkhangelsk, 2020

MTSENSKY
NON-FERROUS
METAL PROCESSING PLANT
Oryol region, Volia settlement,

24 SITE FOR
CONSTRUCTION
OF SPP «ASTERION»
Volgograd region, 2020

2020

25 FEDERAL
STATE UNITARY
ENTERPRISE
«MOSCOW ENDOCRINE
PLANT»

Bryansk region, g / p Ramasukhskoe, 2020.

COMBINE

«RED NOV»

Ryazan region.,

Chuchkovsky district,

n. Dubrovka. 2020

27 HOTEL «HYATT», Vladivostok, 2020

28 ARTIK LNG - 2, NOVATEK DEVELOPMENT OF A LIQUEFIED NATURAL GAS FIELD,

Gydan Peninsula, Yamalo-Nenets Autonomous Okrug, 2020.

PJSC «SEVERSTAL»
Vologda region,
Cherepovets, st. Mira, 30,
2020

30 SAINT-PETERSBURG
GBUZ «CITY
HOSPITAL No. 33»
Kolpino, 2020

PORT COMPLEX «PETROLESPORT», St. Petersburg, 2020

























## COMPETITIVE ADVANTAGES



## THE COMPANY HAS COMPETITIVE ADVANTAGES IN TERMS OF EQUIPMENT AND SPACE

Financial stability for partners and dealers.



#### **FULL CYCLE PRODUCTION**

Availability of raw materials in stock. Minimal risk of breakdowns in production times.



## MORE THAN 20,000 OF CABLE TYPES AND SIZES

Full provision of cable product requirements up to 10 kV. Cable cross-section from 1 to 1000 mm sq. Conductive core flexibility up to class 6. Production and sale of copper tire solid and soft copper busbars, wires, strands and profiles.



## WE CAN PRODUCE TECHNICAL CABLES BASED ON PROJECT REQUIREMENTS

Satisfying customer needs. Manufacturing design range. Replacing imported counterparts.



## OUR OWN TESTING AND MEASURING LABORATORY

Continuous quality control at all stages of production, including incoming raw material monitoring. We use cutting edge materials from reliable partners.



#### CONTINUOUS PRODUCTION SEPARATION

Orders can be partially shipped (as manufactured). Full information about order fulfilment schedule by item. Reduced delivery time.



#### **CONTRACT PRODUCTION**

Products can be manufactured according to customer's technical specifications.

Production cycle can be monitored by the customer.



#### **FLEXIBLE DISCOUNT SYSTEM**

Customer-oriented. Open pricing policy. Individual payment schedule.



#### **CONSTANTLY IN TOUCH WITH THE CLIENT**

Order convenience. We can get information to you quickly 24 hours a day, 7 days a week (including weekends and holidays). Any form of communication. Transaction support by one employee. Customer support.



#### WIDE NETWORK OF REPRESENTATIVES

Representative offices in Moscow, Orel, St. Petersburg, Kemerovo, Krasnodar, Kazan and Yekaterinburg.

Proximity to customers and needs of the region.



#### QUALITY PACKAGING AND GOODS LABELLING

Products are kept safe during loading and delivery. Protection against counterfeit and theft.



## CABLE MARKING ALONG CABLE LENGTH 1 METRE APART

Convenient and quick to install. Simple residue monitoring on site.



## CAR PARK ON SITE. VERIFIED TRANSPORTATION COMPANIES

Safety and speed of delivery.
Round-the-clock cargo monitoring.



#### STOCKS

The most popular types and sizes of cable are available in stock. Prompt shipment at wholesale prices from warehouses in Orel, Moscow, Krasnodar.



#### ON SITE TRAINING CENTRE

Free training for company employees suppliers (full-time and part-time). Individual training available.



#### REGIONAL LEADER IN EXPORT SALES

Extensive experience and export supply coverage.



#### STATE COMPANY EXPERT-ELECTRIC

Integrated participation available in design, installation, switchboard equipment installation, laboratory testing, and commissioning. Licenses. Permits.

Shared responsibility for works and products.



#### WORK WITH DESIGN ORGANIZATIONS

Assistance with design. Consultations. Coordination. Choosing profitable alternatives.



#### PROJECT AND OBJECT SALES

Observance and protection of all participants' interests



#### **ADVERTISING SUPPORT**

Support from suppliers with advertising and information materials.





302040 OREL REGION, OREL, RAZDOLNAYA STR, 105



8 (495) 248-66-70 8 (800) 707-66-70



sale@expert-cable.ru