



INNOVATIVE COMPOSITE MATERIALS
Composite Fiber and Rebar

About company

We are an R&D and manufacturing company specializing in the production of innovative reinforcement bars made from composite materials by continuous pultrusion.

We implement:

- Development of production processes
- Manufacture of composite products and mortars
- BIM design of composite structures

On the market since 2011.

Implemented objects: more than 850,000 sq.m.

Technologies are protected by patents.

Products



COMPOSITE REBAR

Designed for linear reinforcement of concrete structures



UHPFRC

Ultra-high-strength concretes. Designed for use in critical and unique designs



COMPOSITE FIBER

Designed for dispersed reinforcement of concrete structures



REPAIR MIXES

Designed to repair concrete structures and give new properties

Our composite materials facilitate the production of works, reduce costs, increase the service life of structures up to 3 times.

Disadvantages of traditional materials

LOW CORROSION RESISTANCE

HIGH MATERIAL SPECIFIC WEIGHT

UNEVEN DISTRIBUTION IN CONCRETE

DIFFICULTY OF HANDLING FINISHED PRODUCTS

INCREASED WEAR OF CONCRETE PUMP HOSES

LOW MECHANICAL STRENGTH

POOR SPREAD IN CONCRETE

STEEL FIBER AND REBAR

POLYPROPYLENE FIBER

The use of traditional materials leads to an increase in cost, time and a decrease in the quality of work, as well as an increase in the cost of repairing structures.

Advantages of composite materials

RESISTANCE TO CORROSION

HIGH MECHANICAL STRENGTH

EQUAL DISTRIBUTION IN CONCRETE

LOW SPECIFIC WEIGHT

SIMPLICITY OF WORK

EASE OF HANDLING FINISHED PRODUCTS

NO WEAR ON THE CONCRETE PUMP HOSE

COMPOSITE FIBER AND REBAR

Our composite materials increase the reliability and quality of concrete structures, simplify operations and reduce overall costs.

Comparison of macrofiber with analogues

| Index | Unit | Our product | Strofiber | Monopol | Polyex Mesh | PolyArm | Bekaert |
|-------------------------|--------------------|-------------|---------------|---------------|-------------|---------------|-----------|
| | | ПКМ | polypropylene | polypropylene | polymer | polypropylene | steel |
| Thermal conductivity | W/(m*K) | 0,5 | 0,24 | 0,24 | 0,3 | 0,24 | 58 |
| Corrosion resistance | - | high | high | high | high | high | low |
| Electrical conductivity | - | dielectric | dielectric | dielectric | dielectric | dielectric | conductor |
| Density | kg/cm ³ | 1,9 | 0,91 | 0,91 | 0,91 | 0,91 | 7,8 |
| Tensile modulus | GPa | 55 | 1,5 | 1,5 | 1,7 | 1,7 | 190 |
| Tensile strength | MPa | 1200-1500 | 250 | 250 | 160-170 | 156 | 1100-1300 |
| Melting temperature | °C | 900 | 160 | 160 | 160-170 | 156 | 1450 |
| Elongation at break | % | 2,2 | 170-260 | 10 | 170-260 | 33 | 14 |

Our macrofiber has mechanical characteristics comparable to metal, high corrosion resistance and low weight.

Comparison of reinforcement with analogues

| Index | Unit | Our product | BZS (GOST 31938-2012) | Rockbar (GOST 31938-2012) | ASK (GOST 31938-2012) | Steel rebar AIII |
|------------------------------|--------------------|-------------|--------------------------|------------------------------|--------------------------|------------------|
| | | composite | composite | composite | composite | steel |
| Thermal conductivity | W/(m*K) | 0,5 | 0,5 | 0,5 | - | 58 |
| Corrosion resistance | - | high | high | high | high | low |
| Electrical conductivity | - | dielectric | dielectric | dielectric | dielectric | conductor |
| Density | kg/cm ³ | 14,2 | 14,2 | 12,5 | 12 | - |
| Tensile modulus | GPa | 55 | 50 | 52 | 50 | 190 |
| Tensile strength | MPa | 1300 | 890 | 1000 | 800 | 360 |
| UV protection during storage | - | protected | not protected | not protected | not protected | doesn't need |

Our composite rebar has the best ratio of adhesion to concrete and tensile strength, as well as high corrosion resistance.

Areas of application of materials

DRAINAGE CHANNELS

ROAD CONSTRUCTION

BRIDGE CONSTRUCTION

CIVIL ENGINEERING

INDUSTRIAL ENGINEERING

METRO CONSTRUCTION

INDUSTRIAL FLOORS

COMPOSITE FIBER AND REBAR

Our materials can be used in various critical designs designed to work in extreme conditions. Their use will allow to achieve a significant improvement in performance.

Cooperation opportunities

SUPPLY OF FINISHED PRODUCTS - supply of any volume of products to your construction sites with technical support and support at all stages.

SALE OF EQUIPMENT FOR PRODUCTION - production of our lines for the production of any volume of products in your country.

ENGINEERING AND STARTING PRODUCTION IN YOUR COUNTRY- design, construction and start-up of a turnkey enterprise in your country.

ORGANIZATION OF A JOINT VENTURE - organizing a joint venture and building a business.

We are ready to consider any mutually beneficial forms of cooperation. In addition, our experts will be able to offer the most effective way to use our products.

A close-up, shallow depth-of-field photograph of a construction professional's workspace. On the left, a white hard hat sits on a table covered with architectural blueprints. Next to it is a rolled-up blueprint. In the center-right, a person's hands are visible; one hand holds a black pen, poised to write on the blueprints, while the other hand rests on the table. A pair of compasses lies in the foreground, slightly out of focus. The background shows a bright window with a grid pattern, suggesting a modern office or construction site environment. The text "THANK YOU FOR YOUR ATTENTION!" is overlaid in the center of the image.

THANK YOU FOR YOUR ATTENTION!