



AVK JSC

Reliable Russian partner with
expert service for oil and gas
processing and chemical industry

MOSCOW, 2026



GENERAL INFORMATION



The main activity of the AVK company is the development, production, and sale of industrial and special chemical products, as well as equipment.

1

AVK started its operations in 2009 and since then has been creating solutions for refining, chemical, and petrochemical industries for 16 years, leveraging its extensive and distinctive expertise.

2

Since 2024, AVK Group has included the Samara Catalyst Plant, which produces vanadium catalysts for the production of sulfuric acid.

3

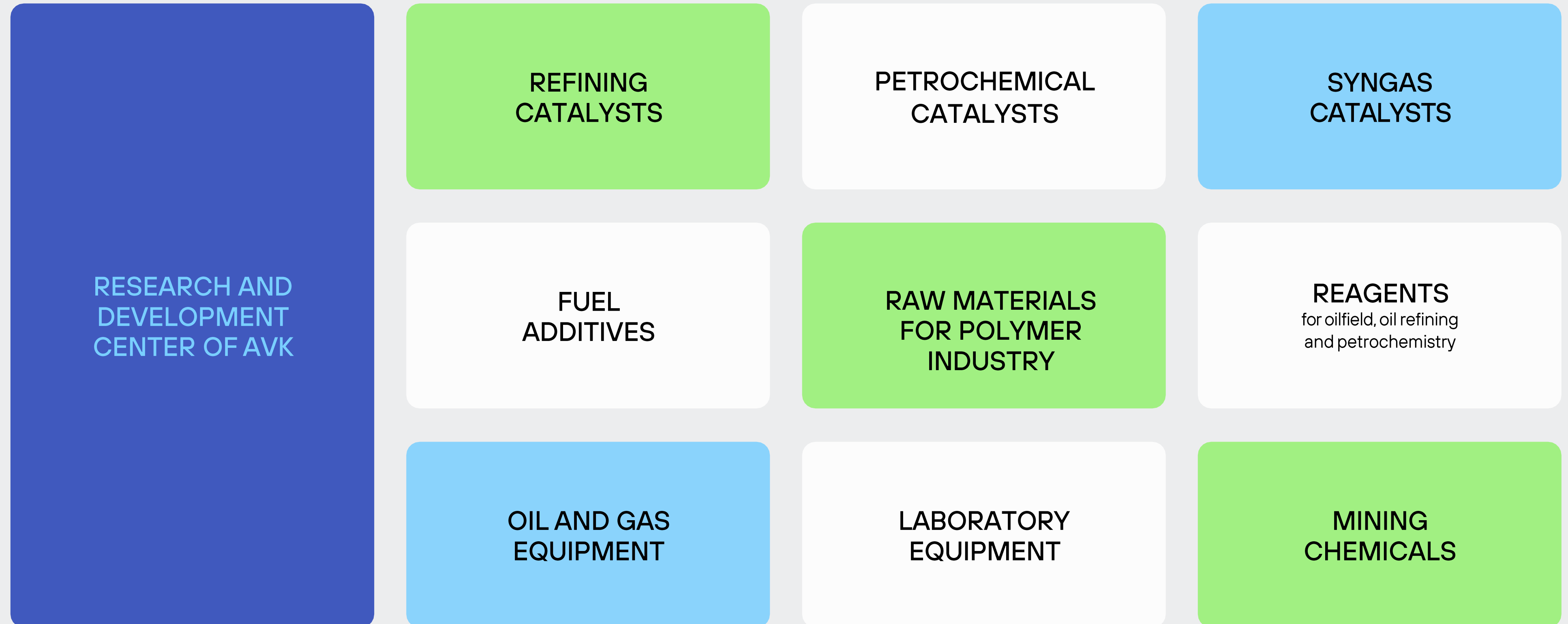
Today, the AVK Group has representative offices and production sites in 9 countries (Russia, Belarus, Kazakhstan, Kyrgyzstan, China, Turkey, UAE, Austria, Lithuania).

4

The quality management system of AVK is certified to ISO 9001:2015.



BUSINESS UNITS



WHY CUSTOMERS CHOOSE AVK



AVK is trusted by industry leaders

Unique long-term experience of completed projects for major customers: LUKOIL, Gazprom neft, Rosneft, SIBUR, FortelInvest and others. AVK reference list is available upon request.

R&D Center AVK

A team of 9 PhDs and ScDs, senior technologists and engineers, R&D laboratories and scientific partnership with leading institutes ensure product development and optimization for changing customer needs.

Rapid adaptation of materials to meet your specific needs

We quickly adapt our materials to changes in your raw materials, technology or the development of your products thanks to our own laboratory and the efforts of our specialists.

Reliable fulfillment of obligations due to a stable financial position

The stable financial position of AVK ensures uninterrupted supplies and fulfillment of all obligations.

Confidence in the result with the AVK team of industry experts

Strong industry experts in the team with many years of experience in both Russian and international companies. The high level of expertise and competence ensures predictable results at every stage of the project.



R&D CENTER OF AVK



AVK's engineering laboratory is equipped with modern equipment and has a staff of technical experts.

Main R&D Center functions

- Development of chemical materials for oil refining and petrochemical, as well as technologies for their production
- Analysis of fuel and additive properties; development of additive formulations
- Implementation of technologies and solutions in the field of industrial chemistry
- Design and prototyping of industrial solutions
- Re-engineering, equipment production in the Russian Federation

Completed and ongoing projects

- Development of technology for the synthesis of cyclic peroxides (polymerization initiators)
- Development of a device for dispensing bulk materials (catalysts, additives)
- Development of technology for the construction of high-resource winter temporary road ice surfaces
- Development and implementation of mobile robotic technological complexes
- Development of a laser system for surface cleaning without compromising the integrity of the protective coating
- Development of machine quality control systems for work performed
- Localization of an industrial painting and cathodic electrodeposition (CED) line in Russia

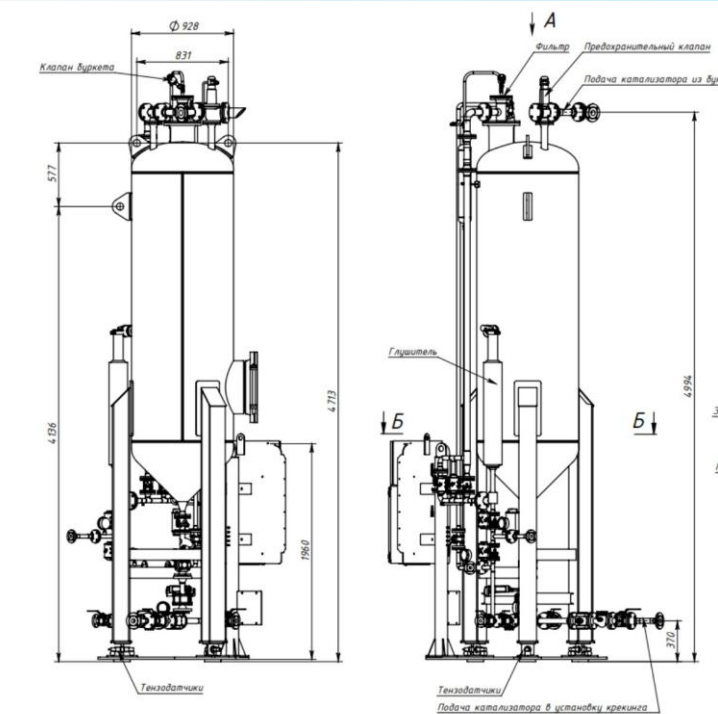
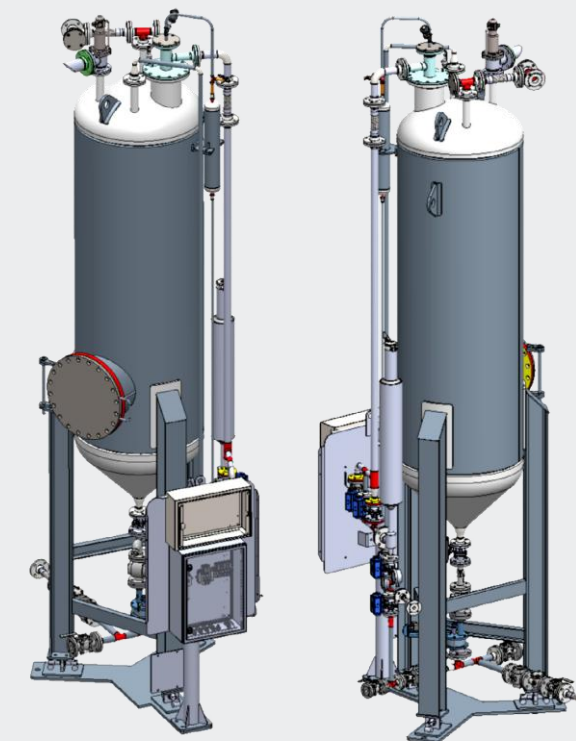
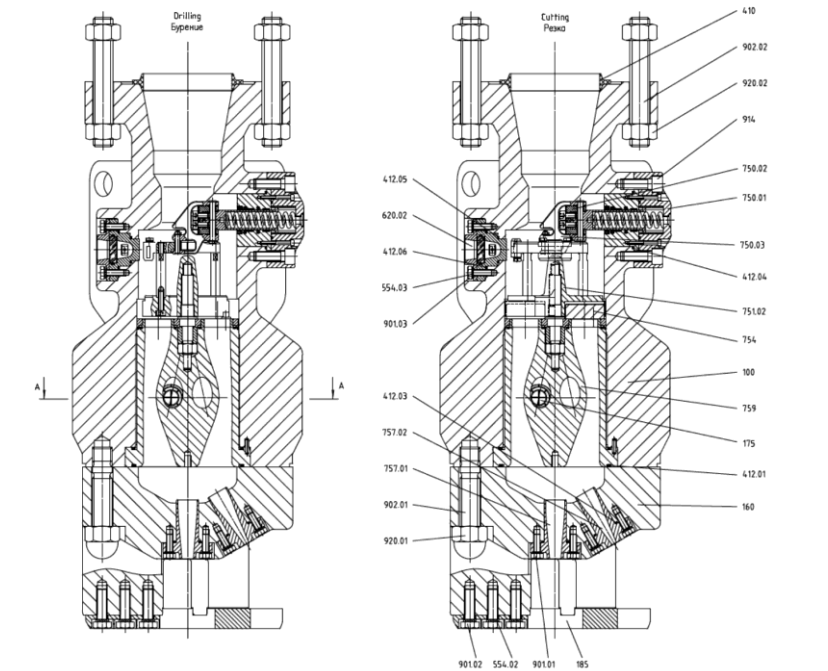


DESIGNING INDUSTRIAL SOLUTIONS

In the context of the sanctions regime, supplying devices and spare parts is a particularly acute problem. This challenge is being successfully resolved by our technical experts from the industrial equipment division.

In addition to equipment supplies, the main tasks of the division are:

- Engineering
- Reverse engineering
- Preparation of working documentation
- Design of details, assemblies
- Design and programming of microcontrollers, electrical circuits
- Development of centralized industrial automation systems
- Development of multifunctional robotic platforms for industrial applications



ADDITIVES FOR FUELS AND LUBRICANTS



1 QUALITY

The high quality of AVK materials is a direct result of 16 years of experience in developing, producing, and selling additives for fuels and lubricants.

No claims or complaints throughout the entire supply period of the Green product line

0 complaints

2 COMPETENCIES

Our team possesses substantial expertise and a strong technical track record in the fuel additives sector.

Additive supplies in 2025 totaled.

13 000⁺

3 CUSTOMIZED SOLUTIONS

We develop the appropriate formulations tailored to individual customer requirements, taking into account specific characteristics of raw materials and processing technologies.

Number of formulations developed over the past year based on the math modeling approach.

50⁺



RANGE OF ADDITIVES FOR FUELS



Greenflo®

Cold Flow Improvers
for diesel fuels (CFI).

Greenflo®

Pour Point Depressant (PPD)
for heavy and residual fuels.

Greenpur®

Fuel Performance Packages
for automobile gasoline (GPP).

Greenpur DT®

Fuel Performance Packages
for diesel fuels (DPP).

Greencet®

Cetane improver
for diesel fuels.

Greenlub®

Lubricity improver
for diesel fuels.

Greenock®

Antiknock additives for
automotive gasoline.

Greenfine®

Hydrogen sulfide
H₂S scavengers.

TECHNICAL SERVICE



Our technical service team supports current supplies:

1 Monitoring

Collection of base fuel on a permanent basis to monitor changes in composition and modification or development of the product in accordance with the Customer's requirements.

2 Emergency Technical Support

Providing timely technical support in emergency situations/incidents at production facilities.

3 Technical visits

Technical visits of AVK specialists as per Customers orders.

4 Formulation development

Development of new formulations and optimization of existing recipes.

5 Dosage control

Monitoring of the effectiveness of additives and adjusting dosages during fuel production.

6 Compatibility Assessment

Exclusion of antagonistic effects of additives when used in combination.



CATALYSTS AND ADSORBENTS FOR OIL REFINING PROCESS



By understanding the needs of Russian refineries and the capabilities of Russian and Chinese manufacturers, our company selects reliable, efficient, and profitable catalytic solutions for oil refining.

Our key products are:

- Catalysts for catalytic cracking (FCC)
- Catalysts for hydrotreating and hydrocracking (HTC, HCC)
- Catalysts for catalytic reforming (SRR, CCR)
- Catalysts for sulfur production and tail gas treatment (Claus)
- Catalysts for sulfuric acid production (WSA)
- Catalysts for hydrogen production processes
- Adsorbents for the purification and drying of hydrocarbon gases and petroleum products
- Short-cycle adsorption adsorbents
- Inert materials

In 2025, our supply of catalysts and adsorbents for oil refining reached:

6 000_t



CATALYSTS AND ADSORBENTS FOR PETROCHEMICAL PROCESSES



An extensive global partner network allows the division's employees to select the most cost-effective solutions for clients, paying special attention to the characteristics of the final products.

Main products:

- Polymerization catalysts
- Hydrogenation catalysts
- Oxidation catalysts
- Solutions and adsorbents for the fine purification of monomers
- Solutions and adsorbents for the fine purification of butene-1, hexene-1, and olefins

The volume of supply of catalysts and adsorbents for petrochemical industry in 2025 amounted to:

1120_t



SAMARA CATALYST PLANT



Samara Catalyst Plant produces vanadium SO_2 conversion catalyst for sulfuric acid production, as well as a catalyst for the production of high-octane gasoline or aromatic hydrocarbons from refined petroleum products.

Production development:

In 2005, Samara Catalyst Plant underwent production reconstruction with an increase in production capacity and a complete upgrade of equipment. This made it possible to expand the range of SO_2 conversion catalysts of any standard sizes and international quality standards.

Currently, SCP is conducting research and development work to further improve the operational characteristics of catalysts, production technologies, and create new types of catalysts.



CATALYSTS FOR SYNGAS, AMMONIA AND METHANOL SYNTHESIS

Expertise, knowledge and understanding of market specifics, and the availability of a complete package of products for the industry are the foundations that allow us to offer our customers/partners the most technologically advanced and effective solutions.

Our key products are:

- Hydrogenation catalyst
- Catalysts for sulfur and chlorine removal
- Pre-reforming catalysts, reforming catalysts (primary, secondary)
- Low-temperature CO conversion catalyst (LTC)
- Medium-temperature CO conversion catalyst (MTC)
- Methanation catalyst
- Ammonia synthesis catalysts
- Methanol synthesis catalyst



CATALYSTS AND ADSORBENTS: TECHNICAL SERVICE

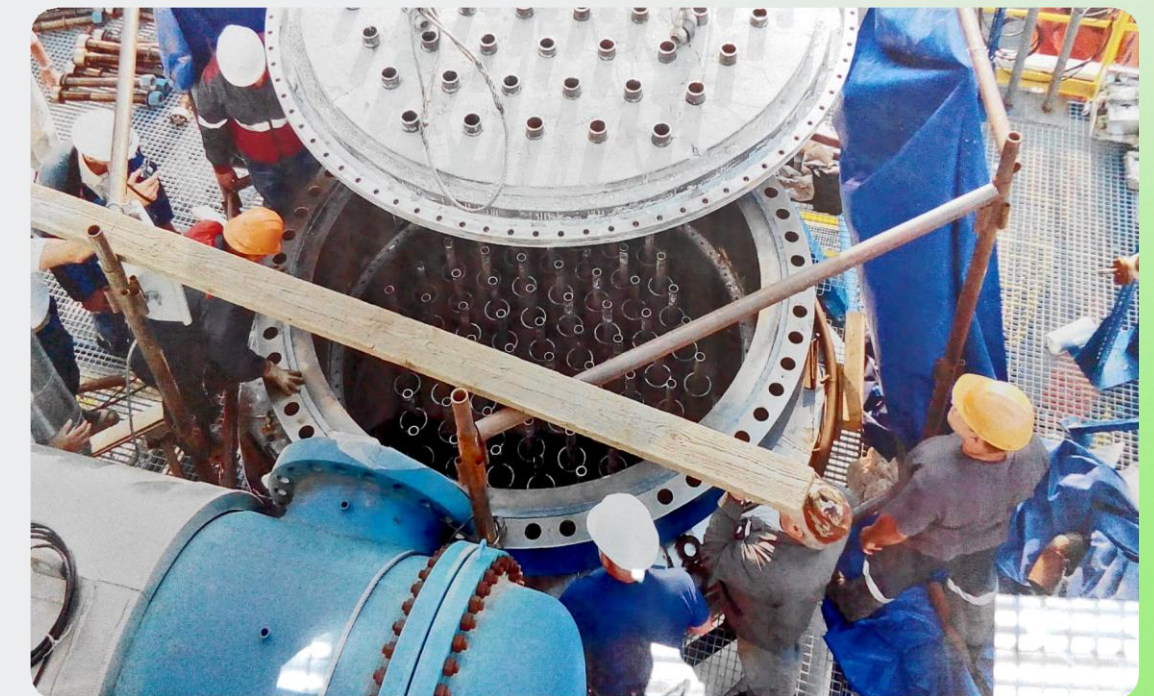
Our technical service team is trained by the product manufacturers and provides the whole cycle of technical support of the supplied products:

1

Selection of analogs of Western catalysts and adsorbents, including assistance in laboratory testing of catalyst and adsorbent samples on the customer's raw materials.

2

Support of loading, activation and commissioning of catalytic systems.



3

Monitoring of catalyst and adsorbent performance.

4

Assistance in the optimization and troubleshooting of catalytic and adsorption process technologies.

5

Sample analysis and recommendations on the feasibility of catalyst regeneration and reuse.



REAGENTS



Specialists of the reagents department pay significant attention to the development and implementation of modern chemical reagents that increase the efficiency of oil extraction and refining.

Supplied Reagents:

- Packages of reagent for chemical-technical protection of primary oil processing equipment from corrosion;
- Reagents for protecting equipment in secondary oil refining processes;
- Packages of reagents for reducing coke formation for tar visbreaking units;
- Reagents for processing industrial water;
- Adaptive gel for increasing oil recovery of wells and limiting water inflow.

The priority direction of our company is engineering and service support of supplied reagents: 24/7 technical support, commissioning, quarterly and annual reports, personnel training, optimization and other services.

The reagents are used at most large factories in Russia and the CIS countries.



RAW MATERIALS FOR POLYMER INDUSTRY

The Polymer Raw Materials Division provides the introduction and supply of a variety of raw materials and additives for polymer production, serving both primary polymer manufacturers and downstream processors.

Volume of polymer additives supplied in 2025:

2 400 _T

EXPERTISE

Extensive industry experience

Dozens of successfully delivered large-scale chemical supply projects.

Deep market knowledge

We stay abreast of current trends and understand the nuances of working with both producers and consumers.

Import substitution without quality loss

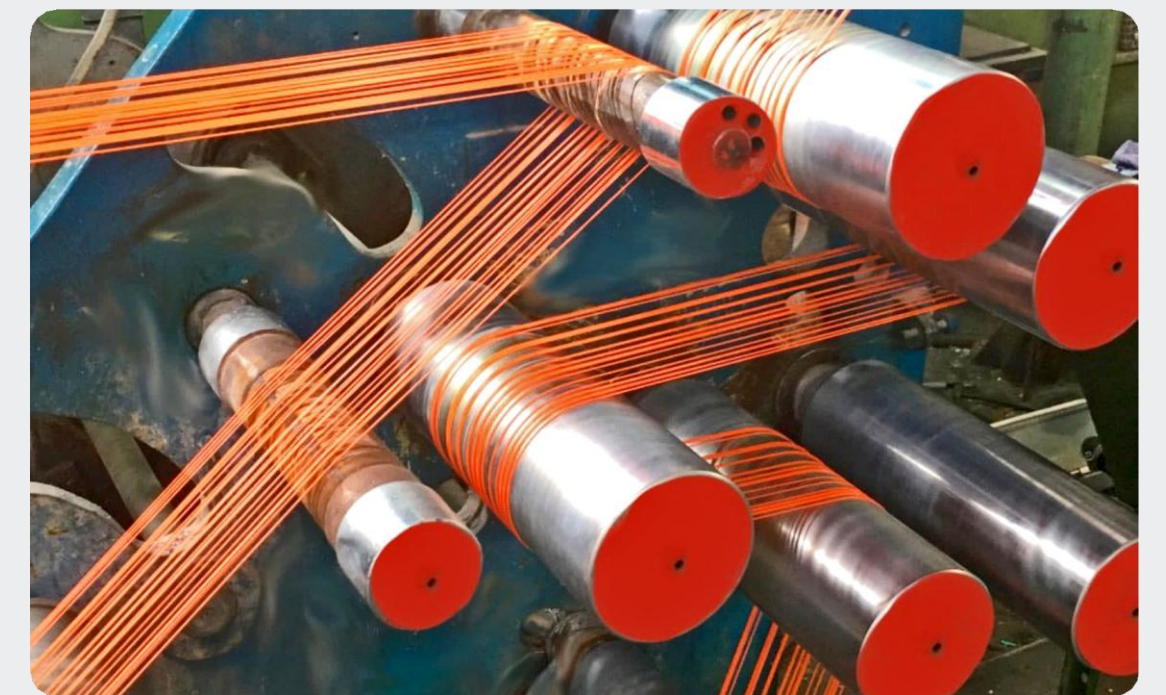
We supply direct alternatives to materials previously provided by BASF, CRODA, SONGWON, Nouryon, and others.

Safety and reliability

Reliable supply of bulk liquid cargoes fully compliant with all regulations.

MAIN PRODUCTS

- Stabilizers/antioxidants (phenolic, phosphite, thioethers).
- Customer Specific Blends (CSB)
- Peroxides/polymerization initiators
- Co-catalysts/aluminum alkyls (TEAL, TNHAL, DEAC, EASCH, DEAL, TIBAL)
- Donors for polymerization
- Metal stearates
- Hexene-1
- Hexane
- Isopentane
- Nucleators
- Antistatics
- Anti-block/slip additives
- Bleaching agents for polymers
- Additives for synthetic fiber production
- Hydrotalcite/halogen neutralizer



TECHNOLOGICAL EQUIPMENT FOR PETROCHEMICAL AND REFINING INDUSTRY

The oil and gas equipment division provides selection, upgrading, and supply of equipment for oil refining and chemical industry enterprises.

Equipment Supply

- Compressors;
- Pumps ;
- Spare parts for turbines and compressors;
- Static Equipment: columns, reactors, separators, heat exchangers;
- Valves and shut-off and regulating fittings;
- Membrane Technologies for Plants;
- Quench-evaporator units for pyrolysis furnaces in the production of ethylene and polypropylene

Benefits of Partnering with AVK

- 1 Independent selection from a wide range of suppliers
- 2 We thoroughly qualify each supplier
- 3 We take into account service expertise in industrial chemistry (catalysts, adsorbents, reagents, etc.)



LABORATORY EQUIPMENT



Our specialists, each with 10+ years of laboratory experience, will help you select and source the right laboratory equipment.

Equipment Types

- **General laboratory equipment:** (water and sand baths, flask heaters, aqua-distillers, laboratory furniture, samplers, extractors, etc.).
- **Analyzers of oil and oil products** (elemental analyzers, chromatographs, spectrophotometers, colorimeters, density meters, moisture meters, viscometers, gas analyzers, etc.).
- **Testing equipment** (temperature control equipment, testing of materials, cements and drilling muds, determination of flash point, low-temperature properties of fuels and oil products, determination of fractional composition, etc.)
- **Equipment for analyzing core properties** (core testing, sawing of samples)

SERVICES

- ✓ Sourcing and delivery of laboratory equipment
- ✓ Commissioning and certification
- ✓ Service maintenance (guaranteed, post-guaranteed)
- ✓ Consumables and spare parts supply



Mining chemicals



The Mining Chemicals division provides mining and mineral processing facilities with high-performance chemical reagents and offers comprehensive technical support, including the participation of AVK specialists in laboratory testing and pilot-scale trials.

MAIN PRODUCTS

- **Flotation reagents (collectors and depressants)**
(reagents used for the selective recovery of valuable components and the suppression of unwanted mineral flotation).
- **Cyanides and cyanide substitutes**
(specialty chemicals for efficient gold and silver recovery).
- **Activated carbon**
(adsorbent for gold and silver recovery from pregnant leach solutions obtained through cyanide leaching).
- **Hypochlorites**
(oxidizing agents for the detoxification of cyanide-containing wastewater and process water treatment at mineral processing plants).
- **Flocculants**
(reagents for intensifying slurry thickening and clarification, tailings treatment, wastewater treatment, and water conditioning).

SERVICES

- 1 We select reagents tailored to the client's individual process requirements.
- 2 We participate in laboratory testing and pilot-scale trials.
- 3 We fulfill our commitments and ensure uninterrupted supply chains thanks to AVK's strong financial standing.



DIGITALIZATION OF INDUSTRY



In order to increase the efficiency, security and sustainability of customers' businesses, the Industrial Digitalization division develops, implements and supports different software solutions.

Digitalization areas:

- APCS (Automated Process Control System)
- Implement data analytics, automation, and digital platforms to make informed decisions and quickly adapt to market changes.
- **Environmental monitoring systems** — emissions analysis and automated reports for compliance with ESG standards
- ERP — the whole enterprise management system
- BPMS is an enterprise business process management system
- CRM — customer relationship management system
- HRM — personnel management system





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