



**Engineering
for Industrial
Companies**

Company



ZAVKOM-ENGINEERING is a leading Russian engineering company.

Business area:

We supply :

- petrochemical
- biotechnological
- food industry facilities

and provide a full range of engineering services.

01
Petrochemical



02
Biotechnology



Company history



1933

1933, the history of our company began with the creation of the Tambov Plant "Komsomolets" named in honor of N. S. Artyomov.

2014

2014, ZAVKOM-ENGINEERING became a separate company, developing the new engineering directions based on the long-term experience of the machinery-building plant.

Today ZAVKOM-ENGINEERING is the reliable partner for the engineering with a foreign representative office and experience of the projects implementations around the world.

Company today



ZAVKOM-ENGINEERING is a heritage of almost 90 years' experience in engineering and production, combined with advanced existing technologies.

During several years, ZAVKOM-ENGINEERING has grown into the largest production and engineering company.

We are developing constantly, mastering modern activity areas, opening new sales markets and implementing projects of any complexity in Russia and in other countries.

Company Services



The ZAVKOM-ENGINEERING company provides a full range of engineering services in the petrochemical and biotechnological industries.



Preliminary design



Selection of a production licensor



Design of basic and detailed engineering



Process engineering



General engineering



Accompanying the expert examination of project design documentation



Delivery and installation of process equipment of local and foreign production



Design and delivery of Automated Process Control System



Installation supervision



Start-up works

During execution of a contract, the company is the only legally and financially responsible entity in front of the customer.

Cooperation with ZAVKOM JSC



Part of equipment for the execution of ZAVKOM-ENGINEERING's projects is produced at the facilities of the Komsomolets Plant (ZAVKOM JSC).

Long-term collaborative work allows:

- 01** to reduce the volume of the customer's investment costs by optimizing the price of process equipment,
- 02** to accelerate the projects execution by significantly reducing the time for design documents approval,
- 03** to conclude contracts for unique projects in the Russian and foreign markets.

Equipment types:

- Column equipment,
- Shell and tube heat exchangers,
- High-pressure reactors,
- Fermenters,
- Tanks.



Advantages of Company



ZAVKOM-ENGINEERING works under the EPCM contracts. It gives the customers maximum certainty in understanding the contractor's responsibility for time limits, quality and productivity.

- 01 Experience in working with the foreign licensors.
- 02 Technology adjustment on the pilot units.
- 03 Full package of the certificates and permits.
- 04 Joint venture with COFCO company.
- 05 Vast experience in the import and export of products.
- 06 Work with all financial instruments (LG, LC, SBLC, PB).



Cooperation with COFCO



Cooperation of ZAVKOM-ENGINEERING with the Chinese corporation COFCO provides new perspectives for the execution of unique projects.



COFCO is one of the 500 largest world companies



and top 1 at the list "top-100" of the food companies in China.

COFCOET-ZAVKOM is a joint venture established with the aim of transferring biotechnology to Russia, such as:

- Production of native and modified starches,
- Production of starch sugar, syrups, glucose-fructose syrups,
- Production of amino acids,
- Production of organic acids,
- Other products obtained by fermentation processes.



Uniqueness



ZAVKOM-ENGINEERING has a number of professional advantages allowing to remain highly competitive in the market.

01

Own production gives the high-quality and timely execution of the contracts without intermediaries.

02

Customized design of Automated Process Control System optimizes production, prevents emergencies and abnormal situations and organizes remote control of all processes.

03

Using of the pilot plants helps to work out new processes before implementing it into real production.



Our Partners



During realization of projects, ZAVKOM-ENGINEERING cooperates with the leading Russian and European engineering companies and equipment suppliers.

Some of them have been our constant partners for many years, maintain stability in the work process and provide professional development.



Petrochemical Department



ZAVKOM-ENGINEERING participates in the construction of oil, chemical and petrochemical industry facilities in the following areas:



Chemicals for woodworking



Gas treatment plants



Catalytic processes



Oil refining



Rectification plants



Special equipment



Evaporation plants



Creation of pilot plants

Biotechnology Department



ZAVKOM-ENGINEERING supplies facilities of food and biotechnological industry.



Breweries



Production of soft drinks



Distilleries



Production of kvass and juices



Alcohol plants, bioethanol production



Water treatment systems



Cognac distillery

Deep grain processing

ZAVKOM-ENGINEERING realize projects of high-tech enterprises for deep processing of wheat, corn and peas.

The technology of highest possible the extraction of valuable components from the constituents of the grain makes it possible to manufacture products with higher value added.

The products of deep processing technology:

- Lysine, Threonine and other Amino acids,
- Xanthan gum,
- Native and modified starch,
- Lactic acid / PLA,
- Feed yeast,
- Glucose-fructose syrups,
- Citric acid and other Organic acids,
- Gluten (vegetable protein),
- Enzymes.

Automated Process Control System



ZAVKOM-ENGINEERING installs an Automated Process Control System according to own developments, making industrial processes maximally convenient, reliable and safe.

Goal of Automated Process Control System:

- Ensuring the uninterrupted operation of production.
- Accurate and correct technological process controlling free of human factor.

Emergency Shutdown System is a separate subsystem that creates additional emergency protection when performing especially dangerous technological processes.

ESD system helps to exclude:

01

emergency situations

02

equipment damage

03

work-related injuries of employees

Functions of Automated Process Control System

The design and installation of an Automated Process Control System by ZAVKOM-ENGINEERING makes technological processes fully automated.



Collecting information about process parameters and equipment status.



Assessment of the equipment status.



Forming and giving signals of the light and acoustic alarms.



Maintaining a real-time database.



Visualizing information for the operational staff in the convenient form.



Forming shift and daily reports.



Archiving information about process flow status , disfunctions of the technology regulations, occurrence of emergency situations.



Internet of Things



ZAVKOM-ENGINEERING provides the most modern services in the field of technology.

The development of Automated Process Control System with the consideration to the industrial Internet of Things (IoT) is a new direction in industrial automation. The advantage of this technology is the convenience and transparency of data, energy saving and ease of use.

New capabilities of the Automated Process Control System:

- Analysis of a process flow status in real time,
- Visualization of the current processes in a convenient form,
- Localization of critical points,
- Advance preparation for units servicing,
- Exclusion of the idle time for technical reasons.

The integration of IoT into the Automated Process Control System allows to analyze all data using artificial intelligence and the latest cloud technologies, making the production process clearer and more convenient.



Geography of projects

The geography of the cities where we have successfully realized our contractual obligations extends far beyond the borders of Russia.



Completed projects



Naphthalene Rectification Plant MMK Magnitogorsk, 2018



Scope of Work

- Develop of the technology for producing naphthalene from naphthalene-containing fraction.
- Develop of the design and detailed documentation.
- Complex supply of the process equipment:
 - Naphthalene rectification unit,
 - Raw material storage warehouse,
 - Storage warehouse for finished products,
 - Flaked naphthalene recovery unit.
- Installation supervision.
- Commissioning works.
- Training.

Completed projects



Rectification unit and vacuum evaporator GEROPHARM

St. Petersburg, 2017



Scope of Work

- General design of a plant for production of pharmaceutical substances.
- Develop of the design and detailed documentation.
- Complex supply of the process equipment:
 - Solvent rectification units,
 - Solvent storage warehouse,
 - Peptide solution vacuum evaporator.
- Installation work.
- Commissioning works.
- Training.

Completed projects



Vacuum-evaporator unit for local treatment facilities VORONEZH SİNTEZKAUCHUK

Voronezh, 2020



Scope of Work

- Develop of the design and detailed documentation.
- Complex supply of the technological equipment:
 - Vacuum-evaporator,
 - Lithium salt drying unit,
 - Lithium salt packaging unit.
- Installation supervision.
- Commissioning works.
- Training.

Completed projects



Urea-formaldehyde and melamine-urea-formaldehyde resin producing plant with a capacity of 20,000 tons per year
SCHATTECOR

Tyumen, 2015



Scope of Work

- Develop of design and detailed documentation.
- Complex supply of the process equipment:
 - Resin production plant,
 - Warehouse for storage of raw materials and reagents,
 - Storage warehouse for finished products.
- Installation supervision.
- Commissioning works.
- Training.

Completed projects



Wheat deep processing plant AMINOSIB

Ishim, the Tyumen Region, 2018



Scope of Work

- General design.
- Complex supply of the process equipment.
- Installation works.
- Commissioning works.
- Training.

Completed projects



Plant for the production of enzyme preparations AGROFERMENT

the Tambov Region, 2014



Scope of Work

- General design.
- Complex supply of the process equipment.
- Installation works.
- Commissioning works.
- Training.

Completed projects



Distillery PREMIUM UZBEKISTAN

Tashkent, 2020



Scope of Work

- Technological design.
- Complex supply of the process equipment.
- Installation works.
- Commissioning works.

Completed projects



Pea protein isolate production line
Customer: confidential information
Skolkovo, 2021



Scope of Work

- Technological design.
- Complex supply of the process equipment.
- Installation works.
- Commissioning works.
- Training.

Completed projects



Beer fermentation tank MOSCOW BREWING COMPANY

Mytishchi, 2016

Scope of Work

- Technological design.
- Supply of the process equipment.
- Installation supervision.
- Commissioning works.



Documents and licences





www.zavkomgroup.com

Head Office

Address: off 319, 51 Sovetskaya Street, Tambov, 392000 Russian Federation.

Tel: +74752793722

E-mail: office@zavkomepc.com

Representative Office in PR China

COFCOET-ZAVKOM (Wuxi) International Biochemical Technology Co., Ltd.

Address: 2nd Floor, 186 Huihe Road, Binhu District, Wuxi, Jiangsu, 214035, PR China.

Permanent Representative to PR China

(inquiries in Russian, Chinese and English)

Tel: +8613810181318

Mob: +8613301631318

Email: matveev@zavkomepc.com

