

Engineering services for industrial enterprises



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Departments

Advantages of cooperation:

Engineering services

Specialists

Production

Own brand of shut-off and control valves

Turnkey automation

Working with foreign licensors

Biotechnology Department Projects

Aspects

• deep processing plants for wheat, corn

• deep processing plants for peas

• citric acid production plants

• beer production equipment

• distilleries

• microbial protein production from natural gas

Petrochemistry Department Projects

Aspects

- field development
- amine and alkaline gas purification
- evaporation plants
- resins and adhesives production units
- formaldehyde and UFC production units
- crystallization and scaling units
- naphthalene and benzene purification plants
- aniline production plants

Concluding part

Projects geography

We are trusted

Contacts

Company General Information

content



About the company

content

The Limited Liability Company “ZAVKOM-ENGINEERING” is your reliable EPC and EPC/M partner in the implementation of high-technology production facilities for the oil and gas chemical industry, biotechnology, and the food industry.

We provide a complete range of engineering services for the integrated implementation of high-technology and energy-efficient industrial units and equipment. We bear full legal responsibility.

- We are a member of the Chamber of Commerce and Industry of the Russian Federation
- We are included in the Register of Engineering Companies of the Russian Federation
- We are a licensor of technologies: naphthalene purification, resin production, evaporation units, production of sulfonated naphthalene plasticizers, formalin, and adhesive compositions
- We operate in the markets of the Russian Federation, the Commonwealth of Independent States, and the Arab Republic of Egypt
- We have our own office in the People's Republic of China (City of Shanghai)
- We have our own scientific and technical, engineering, and production facilities

200 +
person
TEAM

300 +
successful
PROJECTS

7 000 m² +
production
SITES



Today ZAVKOM-ENGINEERING is complex projects, many years of experience, energy-efficient technologies, high-quality equipment just in time



Structure

content



LLC «VIVAT»

founder

General Director: Sergey Nikolaevich Artyomov
(acting on the basis of the Charter)



LLC «ZAVKOM-ENGINEERING»



EPC and EPC/M partner for the implementation of high-technology production facilities

General Director: Yuri Gennadyevich Kombarov
(acting on the basis of the Charter)

zavkomgroup.com



JSC «ZAVKOM»



Machine-Building Plant «Komsomolets»

General Director: Sergey Vladimirovich Abrosimov
(acting on the basis of the Charter)

zavkom.com



Departments

content



Petrochemicals



Biotechnology





Advantages

content

EPSM-CONTRACTING

responsibility for deadlines, quality and production indicators of the facility

DOMESTIC PRODUCTION

high-quality and timely implementation of contracts without intermediaries

SUPPLIES TO INDUSTRY LEADERS

Gazprom, Sibur, Tatneft, Gazprom-Neft, Novatek

PROVEN QUALITY

QMS according to GOST R ISO 9001-2015 and Gazprom Service Station certificates 9001-2018

DEVELOPMENT AND SUPPLY OF APCS

production optimization, prevention of emergency situations, remote process management

PILOTTING TECHNOLOGIES

reliable testing of new technologies before implementation in real production

ALL FINANCIAL INSTRUMENTS

LG, LC, SBLIC, PB

fast and reliable contract conclusion

PRODUCTION OF SHUT-OFF AND CONTROL VALVES

in-house brand of shut-off and control valves



Advantages

wide range of engineering services

content

A complete range of engineering services for the petrochemical and biotechnological industries



When implementing contracts, the company is the only legally and financially responsible person to the Customer.

EPCM

PRE-PROJECT ENGINEERING

- Technological audit of facilities
- Development of general technical solutions
- Feasibility study

BASIC ENGINEERING

- Development of technical documentation
- Conducting tests on a pilot plant

DETAILED ENGINEERING

Development of documentation 3D modeling APCS

- Process calculations based on the developed
- Development of design documentation
In accordance with the law of Russian Federation Government of dated 16.02.2008 No 87 "On the composition of sections of design documentation and requirements for their content"
- Development of working documentation
- Development of design documentation
- Technical specifications
- Quality control plan for supplied installations, equipment
- Operating manual
- Support during state or non-state expert review of design documentation

EQUIPMENT PROCESSING

- Manufacturing and/or assembly
- Delivery to the Customer's site

FIELD ENGINEERING

- Author's supervision
- Installation supervision
- Commissioning
- Training of the Customer's personnel (operators)

SUPPORT

- Technical support of the Customer during the warranty and post-warranty periods



Advantages

more than 200 qualified employees on staff

content



Company structure

General Director
Biotechnology Department
Petroleum Chemistry Department
Production Department
Accounting Department
Legal Department
Purchasing Department
Marketing Department
Automation Department
APCS Department
Shut-off and control valves department
Supervision-installation activity and commissioning work department
Warehouse Department
Department for Operation Support





Advantages

more than 7,000 m² of production sites

content



- Capacitive equipment
- Heat exchange equipment
- Column equipment
- Reactor equipment
- Shut-off and control valves
- Control cabinets





Advantages

Own brand of shut-off and control valves

content



- Shut-off and control valves
- Shut-off valves
- Pneumatic valves
- Manual gate valve (wedge)
- Ball valves
- Butterfly disc valves
- Gate valves (gate valves)
- Check valves (gates)
- Mesh filters



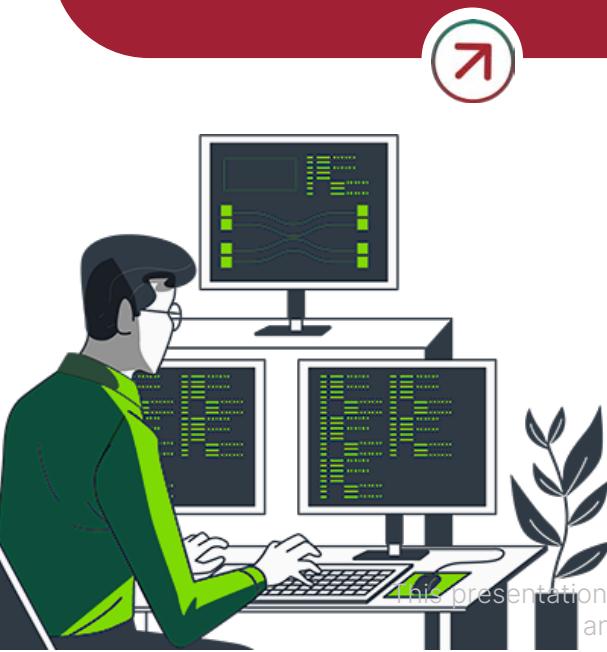


Advantages

Turnkey automated process control system

content

- Pre-project maintenance
- Automated process control system development
- Designing
- Manufacturing and implementation
- Installation and commissioning supervision
- Personnel training
- Support



SCADA-system

Automates control and management of technological processes in real time with its own library of Zavkom Control software.

ESD system

Emergency protection, which is the last line of defense that does not allow a person under any circumstances to perform actions that will lead to an emergency situation.

We reduce risks, improve product quality and eliminate accidents in production.



Advantages

many years' experience working with foreign licensors

content

more than 10 years of cooperation
with world technology leaders

competencies for the implementation
of joint projects

many years of experience in adapting
technologies to Russian production



Petrochemistry Department

Projects

Packaged modular equipment

Production units for industrial water from complex effluents

CO₂ purification units for industrial alcohol production

Salt concentrate evaporation units

Vacuum evaporation units for VOCs

Rectification units and vacuum evaporation units

Resin and UFC production plants

Resin production plants

Adhesive compositions production units

Formaldehyde and UFC production units

Caprolactam crystallization unit

Naphthalene production unit

Production of aniline and N-methylaniline

content

All projects



Aspects

content

PRODUCTION, PROCESSING, TRANSPORTATION OF OIL AND GAS

Packaged modular equipment

Integrated gas treatment plants

Amine and alkali gas purification units

Process water production units for a complex of thermal neutralization of liquid effluents

WATER TREATMENT AND EFFLUENT TREATMENT

Wastewater treatment units

Water treatment units

Wastewater treatment units

CONCENTRATION TECHNOLOGIES

Evaporation units

WOODWORKING CHEMISTRY

Formaldehyde resin production units

Adhesive compositions production units

RELEASE OF FINISHED BULK PRODUCTS

Crystallization and flaking units

CLEANING AND REGENERATION

Units for purification of naphthalene, benzene, etc.

Solvent recovery and mixture separation plants

SPECIAL EQUIPMENT

ANILINE PRODUCTION

All aspects

CATALYTIC SYNTHESIS

Formaldehyde and UFC production units



Projects

extraction, processing, transportation of oil and gas

PRODUCTION FIELDS DEVELOPMENT

2010

ГОД ОТКРЫТИЯ
«ГАЗПРОМОМ»

814,5

МЛРД КУБ.
ГАЗА

130

МЛН ТОНН ГАЗОВОГО
КОНДЕНСАТА

21
МЛРД КУБ. М ГАЗА
В ГОД - ПРОЕКТНАЯ
МОЩНОСТЬ

As part of the project for the
development of the Yuzhno-
Kirinskoye oil and gas
condensate field

content



Projects

extraction, processing,
transportation of oil and gas

content



Packaged modular equipment

LLC "RusGazShelf" for PJSC "Gazprom"

Implementation



Sakhalin Island

Open reference

Open the delivery video

As part of the project for
the development of the
Yuzhno-Kirinskoye oil and
gas condensate field

Scope of delivery

- Mega regeneration units, reflux tanks, degassing separator for liquid mixtures
- Blocks of buffer and emergency tanks
- Primary and low-temperature separator blocks

— development of working design documentation
— manufacturing and complete supply of equipment



MANUFACTURING AND SUPPLY
of packaged modular equipment from ZAVKOM-ENGINEERING
for Yuzhno-Kirinskoye oil/gas/condensate field





Download video

INTERGAZSERT

Successful certification experience of ZAVKOM-ENGINEERING

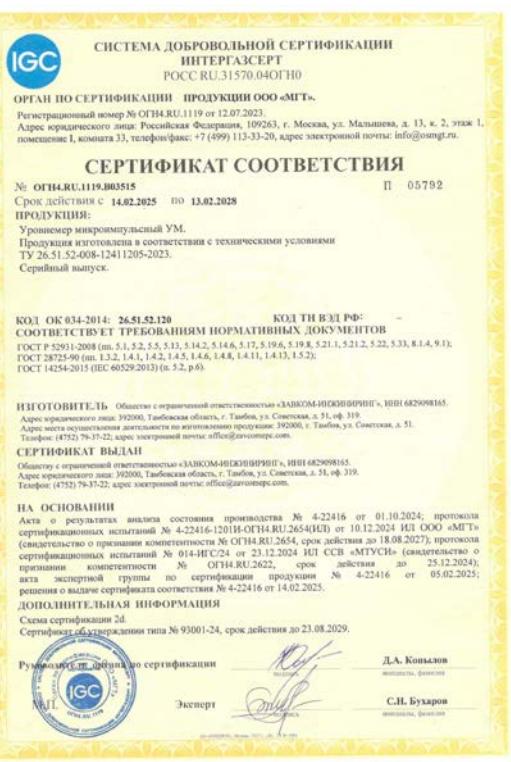




INTERGAZSERT

Voluntary Certification System

content



Gazprom Service Station Certificates

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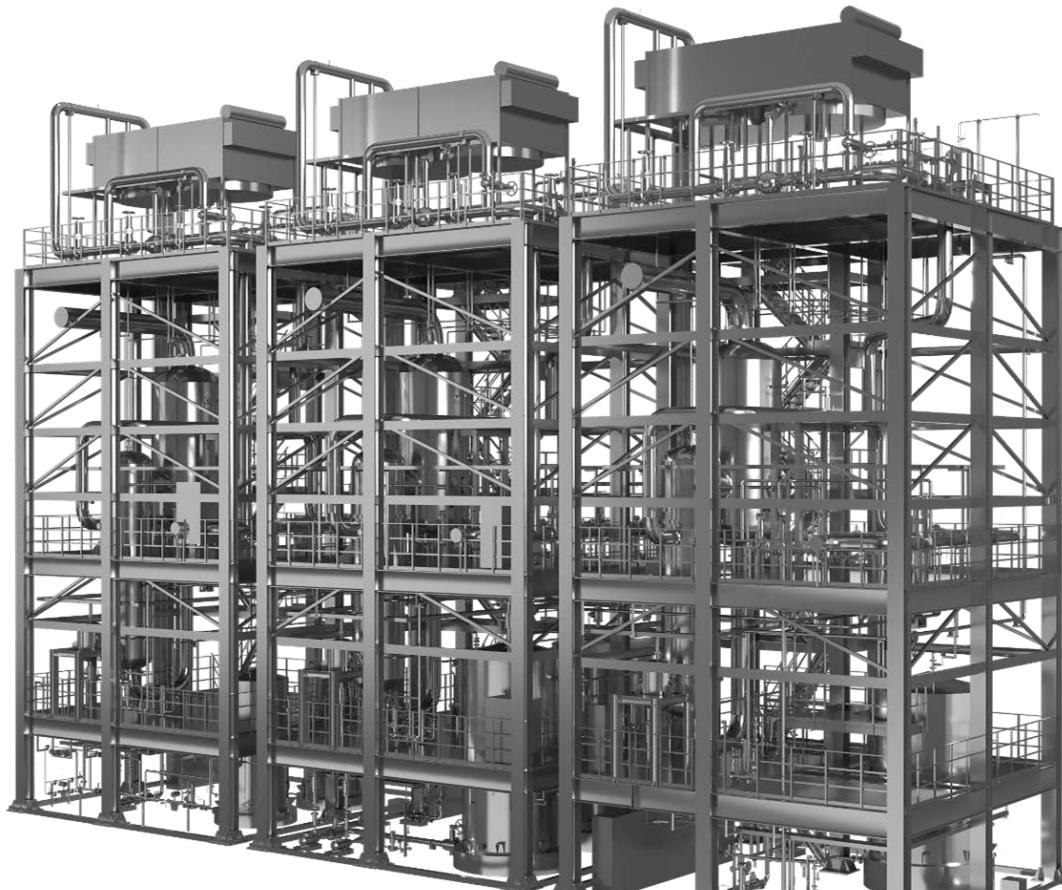




Projects

concentration technologies,
wastewater treatment

content



Process water production unit from complex effluents for a complex of thermal neutralization of liquid wastewater

Gazprom VNIIGAZ LLC

2025

As part of the project for the development of the Yuzhno-Kirinskoye oil and gas condensate field

Scope of delivery

- Development of working design documentation
- Complete supply of process equipment
- Development of automated process control systems

Learn more about the project

The unit is part of the technological complex for thermal disposal of wastewater of the project "Development of the Yuzhno-Kirinskoye Gas Condensate Field". It includes more than 40 units of large equipment with a total weight of >600 tons. It is designed and equipped taking into account the location in the coastal zone of a seismically active region.



Sakhalin Island

Open reference



Projects

amine and alkaline gas treatment



GAS TREATMENT

content



Projects

amine and alkaline gas treatment

content



CO₂ purification unit for industrial alcohol production complex

Confidential Client

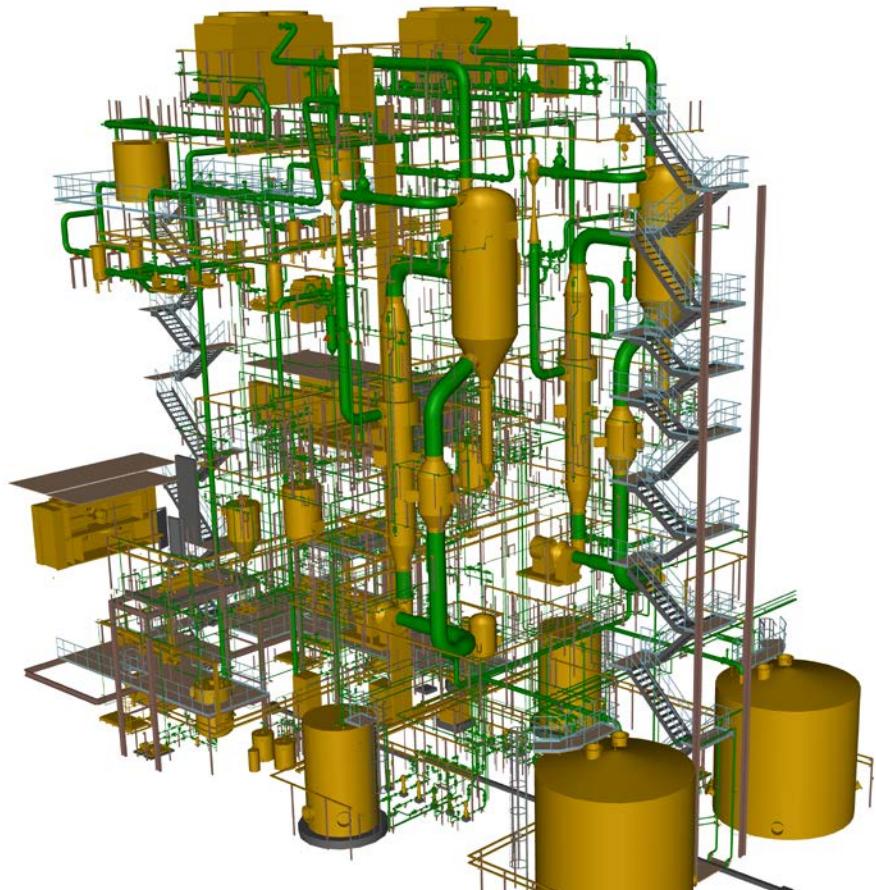
Implementation

Open reference



EVAPORATION UNITS

content



Evaporation unit

Technotex LLC

Implementation



Krasnodar region

Open reference

Open the acceptance video



Download video

EQUIPMENT SUPPLY
for installation from ZAVKOM-ENGINEERING for Ilsky Oil Refinery





Salt concentrate evaporation units

LLC "ASP-AQUA", LLC "NPF EITEK" for Federal State Unitary Enterprise "FEO"

2023



Leningrad region

[Open reference](#)

[Open installation process video](#)

[Open 3D video](#)

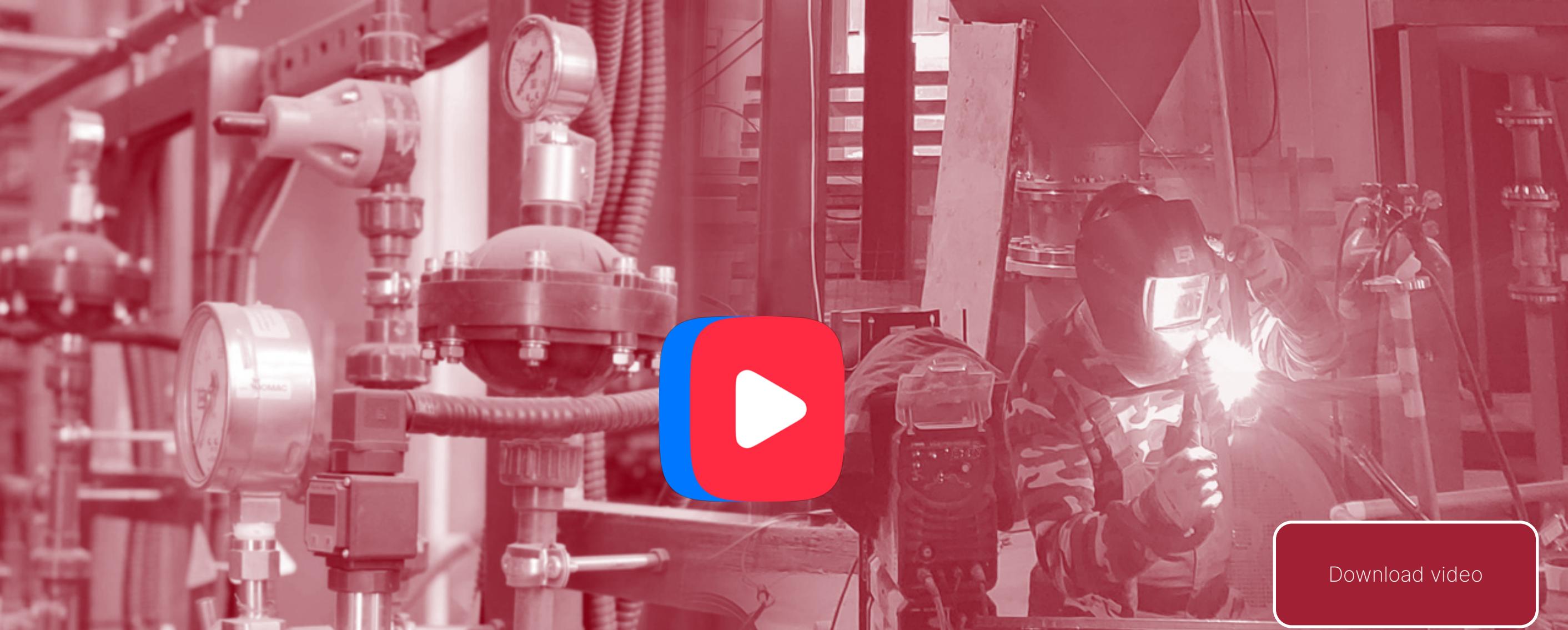


Download video

EVAPORATION PLANTS WITH MVR TECHNOLOGY

operating principles from ZAVKOM-ENGINEERING





Download video

INSTALLATION

of vacuum evaporation units for utilization of salt concentrates





Projects

concentration technologies

content



**Reverse Osmosis Concentrate Polishing Unit within the Framework of Remediation of Accumulated Environmental Damage at JSC «Baikal Pulp and Paper Mill»
Federal State Unitary Enterprise "Federal Environmental Operator"**

Implementation



Irkutsk Region

Open 3D video

Open reference



Reverse osmosis concentrate polishing unit with a capacity of 900 kg/h

LLC «ASP AQUA» for Federal State Unitary Enterprise
«Federal Environmental Operator»

Implementation



Irkutsk Region

Open reference



Vacuum evaporation unit for VOCs
JSC Voronezhsintezkauchuk
(PJSC SIBUR Holding)

2019

Scope of delivery

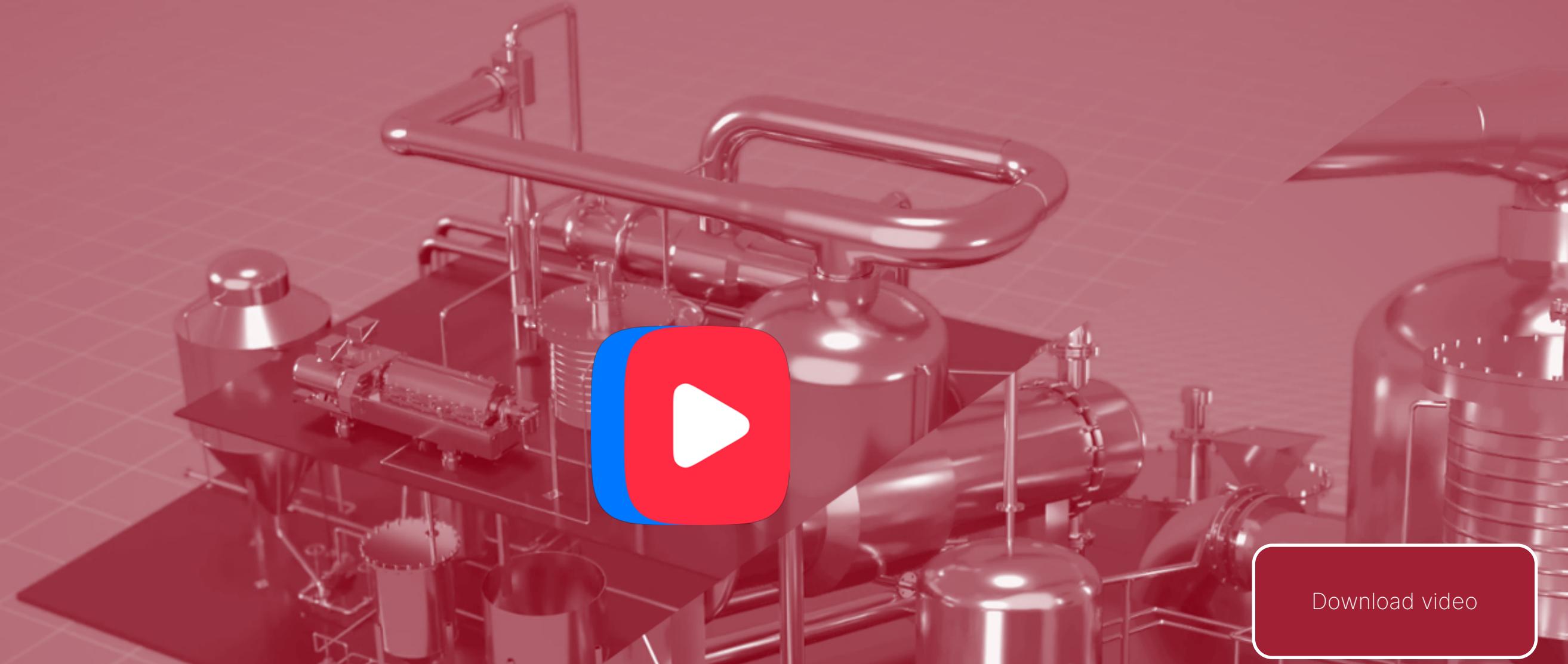
- Development of design and working documentation
- Complete supply of process equipment:
 - vacuum evaporation unit
 - lithium salt drying unit
 - lithium salt packaging unit in equipment bags
- Development of automated process control systems
- Installation supervision
- Commissioning
- Personal training



Voronezh region

[Open reference](#)

[Open 3D video](#)



VACUUM EVAPORATION UNIT operating principles from ZAVKOM-ENGINEERING





Rectification plant and vacuum evaporation plant
Geropharm LLC

2017



Leningrad region

[Open reference](#)



Projects

woodworking chemicals

RESINS

content



Projects

woodworking chemicals

content



Formaldehyde, resins and polynaphthalene sulfonate production Plant

Suez Methanol Derivatives,
Egyptian Maintenance Company

Implementation



Egypt

Open reference



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Projects

woodworking chemicals

content



Resin production Units

Shattdekor LLC

2017

2021

Scope of delivery

- Development of design and working documentation
- Complete supply of process equipment:
 - resin production unit
 - raw material and reagent storage warehouse
 - finished product storage warehouse
- Development of automated process control systems
- Installation supervision
- Commissioning
- Personal training



[Open reference 2017](#)

[Open reference 2021](#)

[Open 3D video](#)



Download video

RESIN PRODUCTION INSTALLATION

operating principles from ZAVKOM-ENGINEERING





Projects

woodworking chemicals

content



Adhesive Compositions Production Unit
Synergy LLC

2024

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Scope of delivery

- Process Design
- Complete supply of technological equipment
- Development of automated process control systems
- Installation supervision
- Commissioning

Learn more about the project

The unit was implemented within the framework of the project "Construction of a plywood production facility and a thermal power plant using wood raw materials". At the final stage, the company's specialists also provided technical support for the work of: the glue kitchen in terms of completing installation work; on piping water pipelines; on piping urea glue supply pipelines to the presses; on installing shut-off and control valves; on connecting valves; on piping the refrigeration machine; on installing fans.



Sverdlovsk region

Open reference



Projects

catalytic synthesis



FORMALIN AND UFC

content



Formaldehyde and UFC production units
Confidential Client

2024

Scope of delivery

- Development of design documentation
- Development of working documentation
- Manufacturing and assembly of main process equipment
- Development of automated process control systems
- Installation supervision
- Commissioning

Learn more about the project

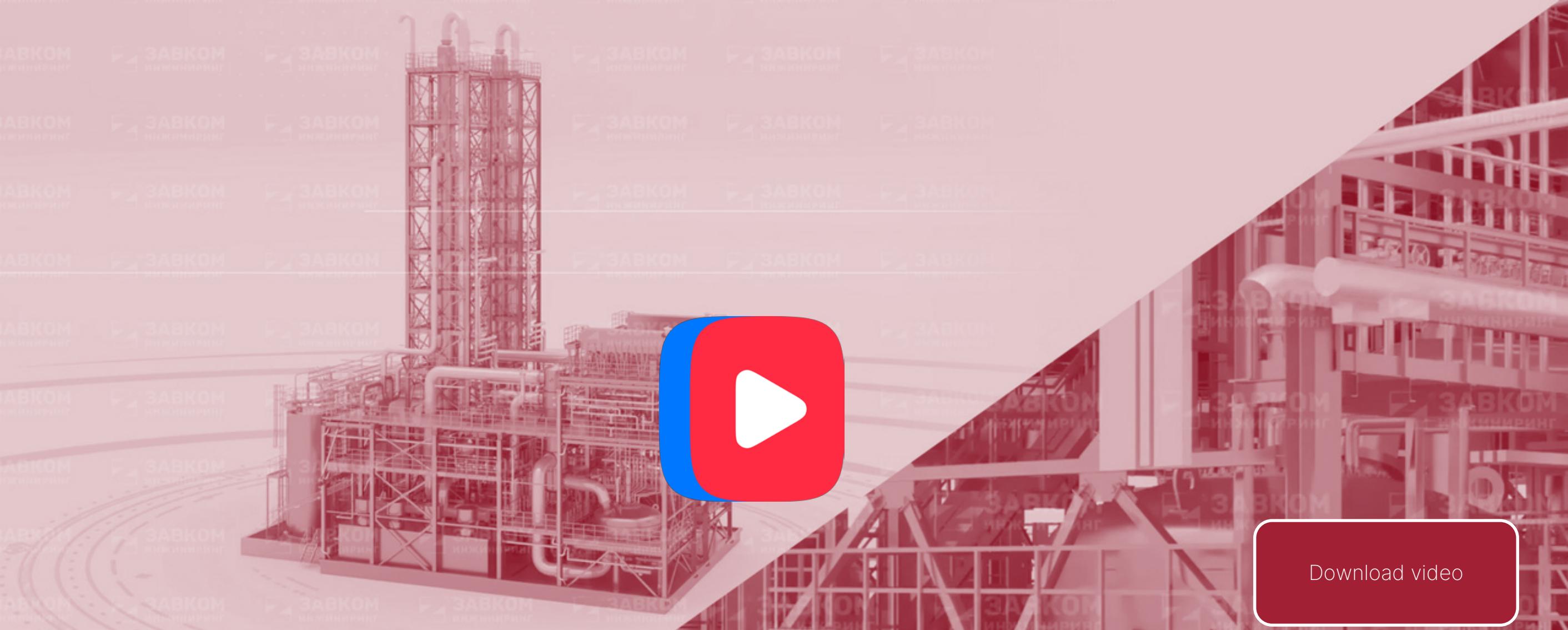
Production at the plant is organized as a continuous technological process. The main advantage is the ability to produce both formalin and UFC-85 of various grades on one process line, spending a minimum amount of time to switch from one aqueous solution to another.



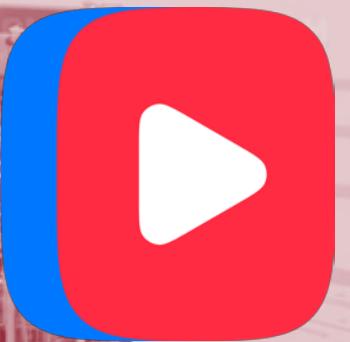
Tula region

[Open reference](#)

[Open 3D video](#)



FORMALIN AND UFC PRODUCTION operating principles from ZAVKOM-ENGINEERING



Download video





Projects

release of finished bulk products



CRYSTALLIZATION AND FLAKING

content



Projects

release of finished bulk products

content



**Caprolactam crystallization plant
60000 t/y**
JSC Shchokinoazot

2020



Tula region

[Open reference](#)



Projects

Purification and regeneration



PURIFICATION OF NAPHTHALENE, BENZENE

content



Projects

purification and regeneration

content



Naphthalene production plant

JSC MMK

2018



Chelyabinsk region

Open reference

Scope of delivery

- Development of technology for obtaining naphthalene from naphthalene-containing fraction
- Development of design and working documentation
- Complete supply of process equipment:
 - naphthalene rectification unit
 - raw material storage warehouse
 - finished product storage warehouse
 - naphthalene flake production unit
- Development of automated process control systems
- Installation supervision, commissioning works
- Personal training

Learn more about the project

The unit enables the production of commercial naphthalene in liquid and solid form with a concentration of at least 97.5%. Emissions into the atmosphere are excluded. Increases production volumes (up to +15,000 t/year).



Projects

aniline production plants



ANILINE

content



Projects

aniline production

content



Production of aniline and N-methylaniline



Scope of delivery

- Development of design documentation
- Development of working documentation
- Manufacturing and assembly of main process equipment
- Development of automated process control systems
- Installation supervision
- Commissioning

Learn more about the project

Aniline is one of the most important amines. It is used in the production of dyes, medicines, resins, as rubber vulcanization accelerators, and as a black dye in itself. Its derivative, methyl orange, is used as an indicator for acid-base titration.

We provide a full range of engineering services for the implementation of equipment and installations for the production of aniline.

Biotechnology Department Projects

Deep processing plants for wheat

Deep processing plants for peas

Pilot installations

Citric acid production plants

Boiling house (brewery)

Beer fermentation departments

Distilleries

Microbial protein production plants from natural gas

content

All projects



Aspects

content

DEEP PROCESSING

Wheat

Corn

Peas

MICROBIAL PROTEIN PRODUCTION
FROM NATURAL GAS

PRODUCTION OF AMINO ACIDS AND
ORGANIC ACIDS

FEED YEAST PRODUCTION

ENZYME PRODUCTION

BREWERIES

Boilhouse (brewery)

Pure yeast culture departments

Fermentation departments

CCT departments

SIP washing stations

Refrigeration and compressor shop tanks

Pure yeast culture departments

Fermentation departments

Forfas department

CO₂ collection and storage tanks

DISTILLERS

ALCOHOL PRODUCTION

PROCESSING OF POST-ALCHOLIC
DISTILLERY

DRYING UNITS

EVAPORATION UNITS

WATER TREATMENT SYSTEMS

All aspects



Projects

deep processing of wheat, corn, peas



WHEAT DEEP PROCESSING

content



Projects

wheat deep processing

content



Wheat Deep Processing Plant

wheat gluten

ethyl alcohol food

lysine sulfate

feed additives DDGS

JSC AminoSib

2017

Scope of delivery

- Project documentation
- Passing expertise
- Complete supply of process equipment
- Installation works
- Development of automated process control systems
- Commissioning works
- Personal training
- Warranty and post-warranty service

Open reference

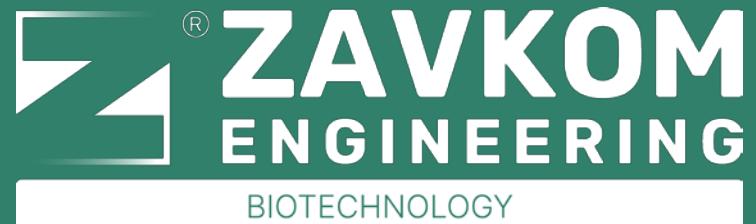


Tyumen region

Video



WHEAT DEEP PROCESSING PLANT





Projects

wheat deep processing

content



Wheat Deep Processing Plant

wheat gluten

lysine monohydrochloride

lysine sulfate

biodegradable plastic

lactic acid

feed additives

JSC Sibagro

2022

Scope of delivery

- Basic engineering



Krasnoyarsk region

Open a reference



Projects

deep processing of wheat, corn, and peas



PEAS DEEP PROCESSING

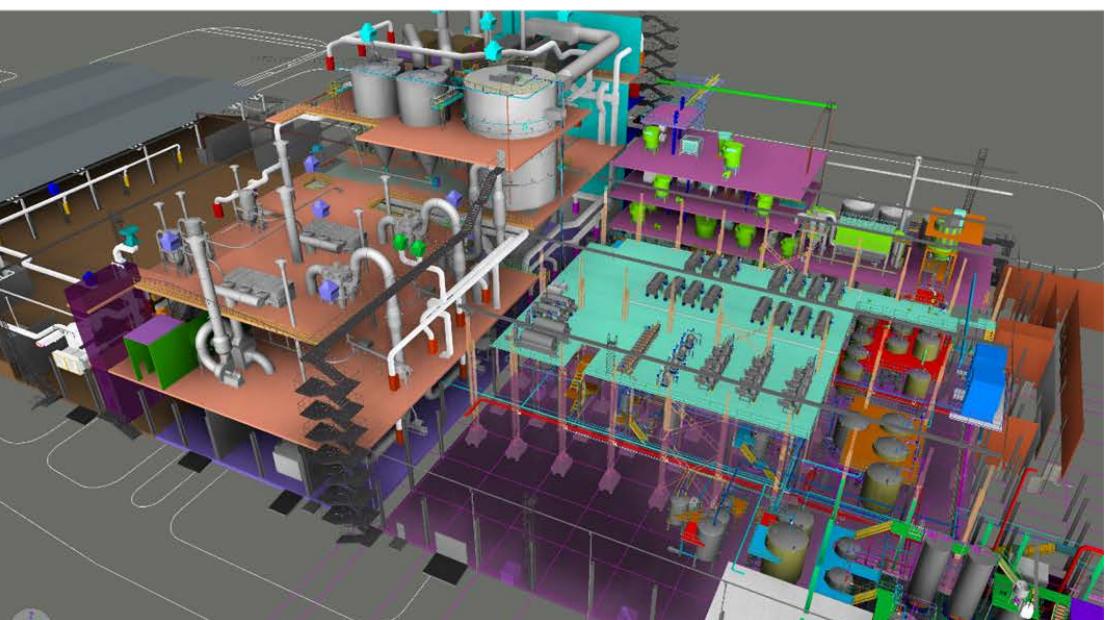
content



Projects

peas deep processing

content



Peas deep processing plant

pea starch

pea protein isolate

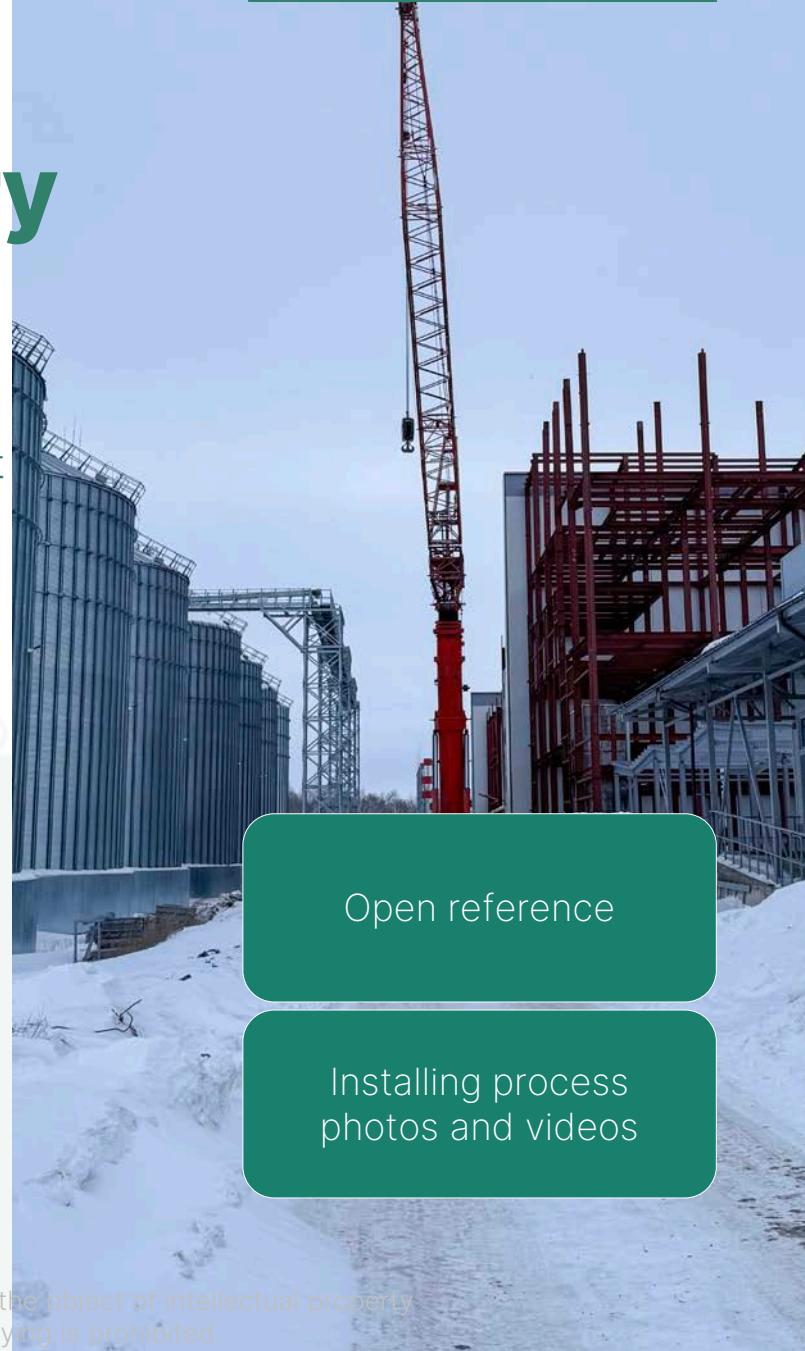
fibers

Confidential Client

Implementation



Tyumen region



Open reference

Installing process
photos and videos



Projects

peas deep processing

content



Pilot plant for pea processing

pea protein isolate

fibers

JSC "Uralkhim"

2021

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Scope of delivery

- Project documentation
- Complete supply of process equipment
- Development of automated process control systems
- Installation works
- Commissioning works
- Personal training
- Warranty and post-warranty service



Moscow region

Open reference

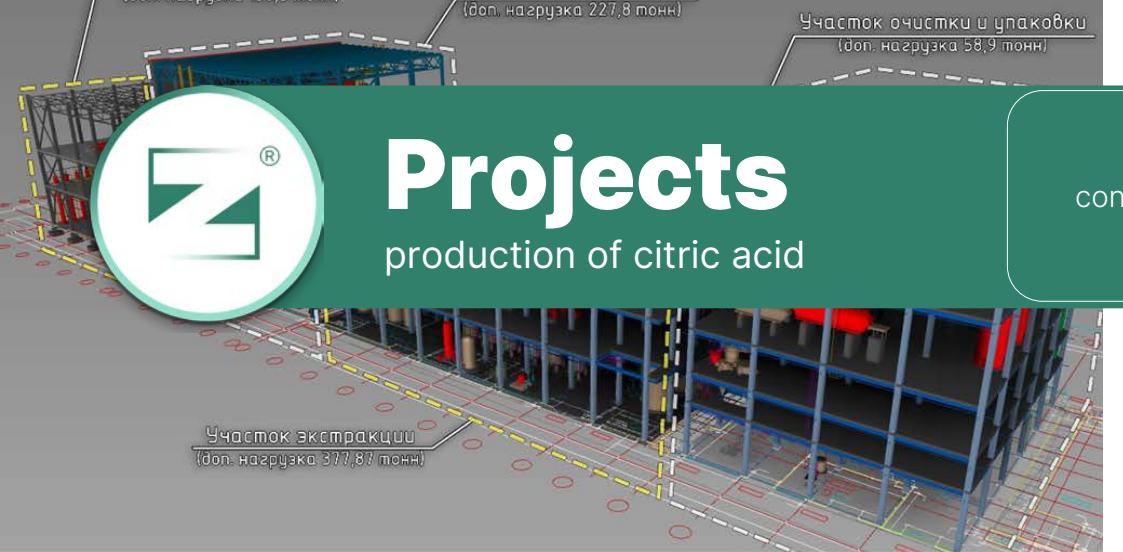


Projects
citric acid production

ZAVKOM
ENGINEERING
BIOTECHNOLOGY

AMINO ACIDS, ORGANIC ACIDS

content



Projects

production of citric acid

content



Citric acid production plant

citric acid

feed additives

ORGANIC ACIDS LLC

Implementation



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Scope of delivery

- Design and working documentation
- Passing expertise
- Assembly of fermenter tanks $V_{geom}=475 \text{ m}^3$ in the design position
- Installation works



Tula region

Open reference

Installation process
photos



Projects

brewhouses, beer fermentation departments

BREWERIES



content



Projects

breweries equipment

content



Boiling house (brewery)
LLC "Brewery Ryugen"

Implementation

Scope of delivery

- Equipment supply
- Development of automated process control systems
- Commissioning works



Voronezh region

Open reference

Video



Download video

BOILING HOUSE (BREWERY) operating principles from ZAVKOM-ENGINEERING





Projects

breweries equipment

content



Beer fermentation department

JSC "Moscow Brewing Company"

2016

Scope of delivery

- Supply of process equipment
- Development of automated process control systems
- Process design
- Installation supervision
- Commissioning



Moscow region



Projects

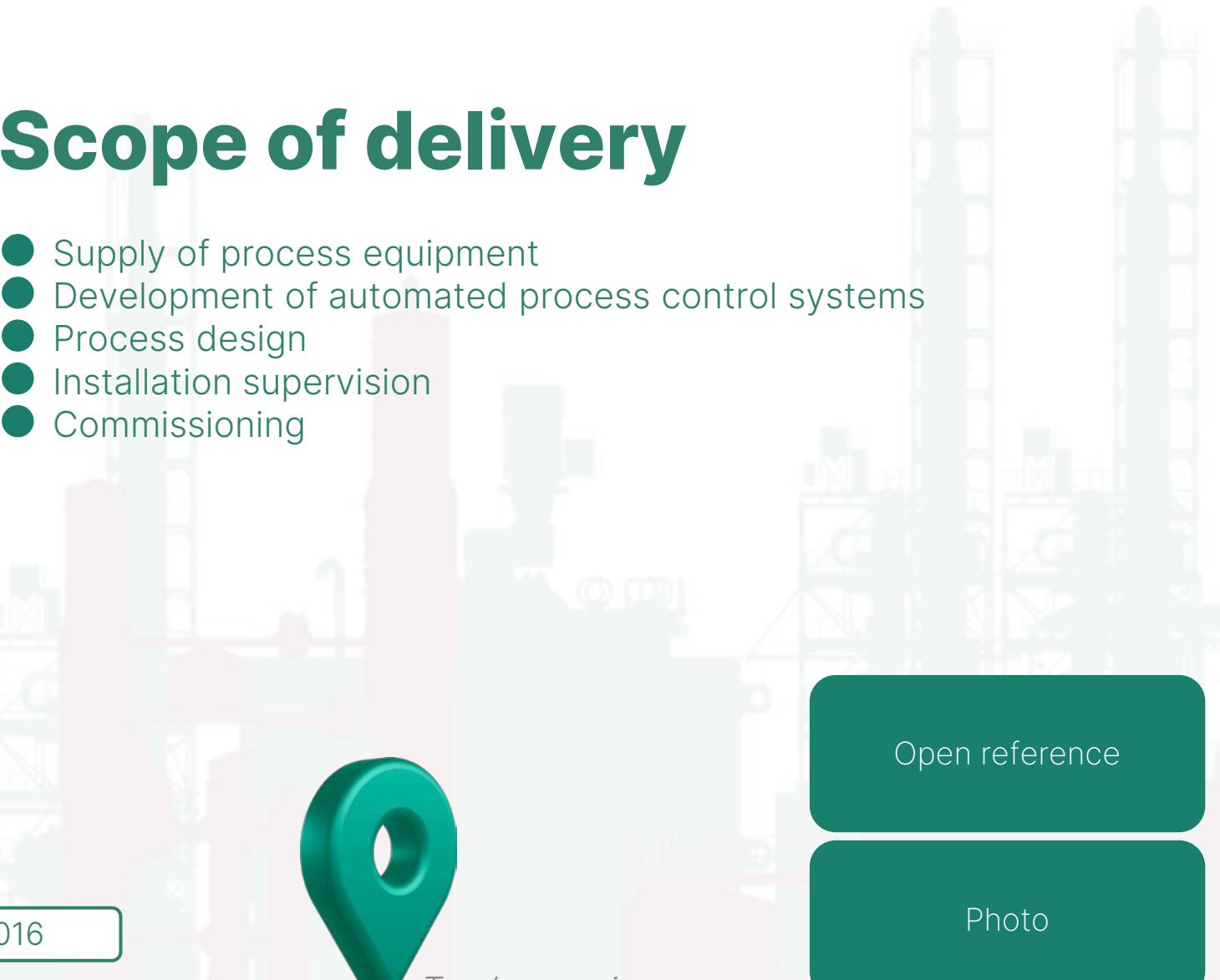
breweries equipment

content



Beer fermentation department
OJSC "Morshansky Brewery"

2016



Tambov region

[Open reference](#)

[Photo](#)



Projects

equipment for the alcoholic beverages production



DISTILLERIES

content



Projects

distilleries

content



Distillery

JSC "Uzbekistan Premium"

2020



Tashkent

Open reference



Projects

Microbial protein production units from natural gas



MICROBIAL PROTEIN

content



Projects

Microbial protein production units from natural gas

content



Microbial protein production units from natural gas

GIPROBIOSYNTHESIS LLC

Implementation

Scope of delivery

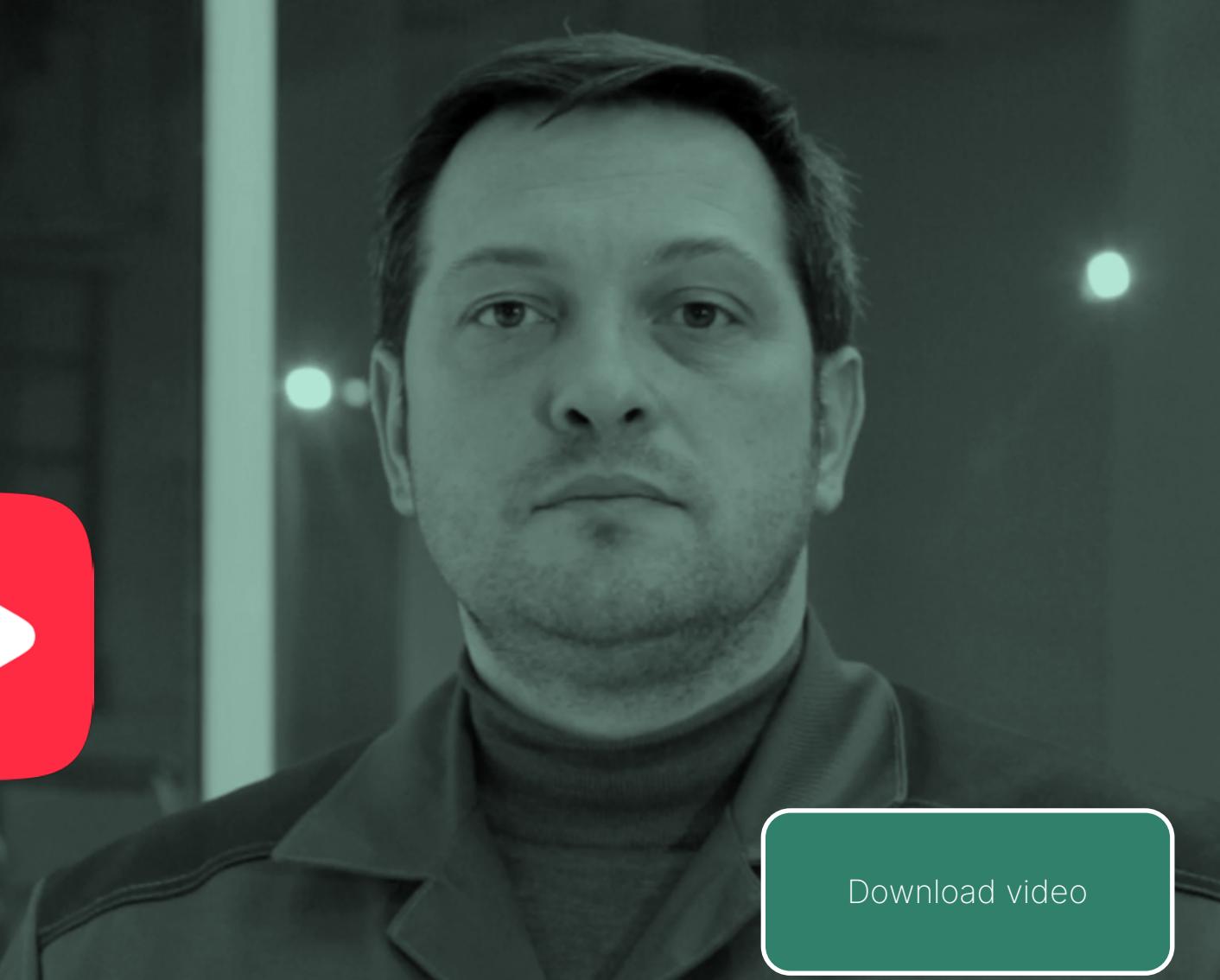
- Development of working design documentation
- Complete supply of process equipment
- Development of automated process control systems
- Installation works
- Commissioning works
- Personal training



Moscow region

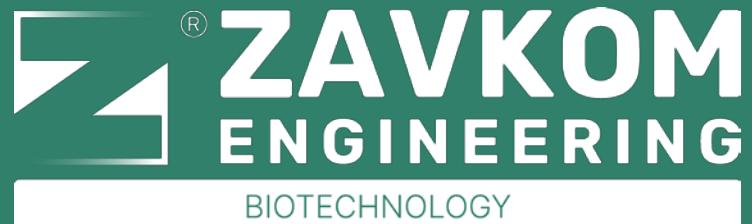
Open reference

Customer's video feedback



REVIEWS OF OUR CLIENTS

LLC "GIPROBIOSINTEZ"



Final part

content



Projects geography

content





We are trusted

content

PJSC Gazprom
JSC Gazpromneft ONPZ
LLC Gazprom VNIIGAZ
PJSC Tatneft
PJSC Sibur Holding
JSC Aminosib
PJSC Transneft
LLC ORGANIC ACIDS
JSC Sibagro
LLC VZK
JSC URALCHEM
LLC PLANT_SPACE
LLC PREMIUM UZBEKISTAN
JSC Voronezhsintezkauchuk
LLC Tekhnokord
PJSC MMK
LLC Geropharm
LLC YARko Group
CJSC Moscow Brewing Company
LLC Shattdekor
LLC Agroferment
JSC Tatspiritprom
JSC Alviz
LLC SAMSON-MED
LLC NOVATEK - Ust-Luga
LLC GIPROBIOSINTEZ
State Corporation Rosatom
LLC ASP AQUA
LLC EITEK
LLC ZapSibNeftekhim
JSC Gambrinus

LLC Spirt Bal Buram
Federal State-Funded Educational Institution TSTU
LLC Tekhnoteks
LLC Titan-Agro
LLC Donskie Biotekhnologii
Egyptian Maintenance Company
LLC M Sintez
LLC RusGazShelf
CJSC Murom
LLC Synergy
LLC Metadynea
LLC SZSP
SEZ Uzlovaya
LLC Staraya Krepost
LLC Ganja Sharab-2
CJSC ATRUS
PJSC Bryntsalov-A
LLC Zhivaya Klassika
JSC Shchekinoazot
LLC Rusagro-Tambov
Suez Methanol Derivatives Company
LLC Afanasy Private Brewery"
LLC Bravo-Premium
JSC Zhirovoy Kombinat
JSC Pivzavod-Marksovsky
Allnex Belgorod LLC
LLC Pavlovsky DOK
LLC Zavod Sintanolov
LLC Avesto Gurukh
LLC SPEM
LLC Carlsberg Azerbaijan

LLC Zauralskie Napitki
OOO NIKA-PETROTEK
LLC Khadyzhensky Brewery
LLC Vasileostrovskaya Brewery
JV LLC AFSAR COMPANY LTD
LLC Zlatoust Sugar Refinery
JSC Znamensky Sugar Refinery
LLC HANSEN BREWERY
JSC Olkhovatsky Sugar Refinery
PJSC Pigment
CJSC Arkhangelsk Plywood Plant
LLC IFOTOP
LLC ETB KAT
CJSC Premix Plant No. 1
LLC Pereleshinsky Sugar Refinery
JSC PDK Apsheronsk
JSC Zhigulevsky Brewery
JSC Yeletsky sugar plant
LLC First Stavropol Agro-processing Corporation
LLC CORPORATION AZERI
CJSC Tbilisi Sugar Plant
LLC TBK
LLC NPP ZARYA
LLC Vostochny Alliance
LLC Lus Astkh
LLC Khvoyninsky Brewery
LLC Bekovsky Sugar Plant
LLC Sukhumsky Brewery
LLC Ryugen Brewery
LLC StatusAqua
JSC AFZ

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