

Shchekinoazot. Universal

Shchekinoazot has commissioned its new cutting-edge Methanol-450/Ammonia-135 co-production complex and modern wastewater treatment facilities. Sulphuric acid and perfumery-quality dimethyl ether production units will be next.

Svetlana KUZNETSOVA
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This day was eagerly anticipated by each and all Shchekinoazot's employees, as well as by its partners and all those who worked with the company on these two construction projects.

This was also important to the inhabitants of the settlement Pervomayskiy: thanks to Shchekinoazot, they receive jobs and social welfare, as the district's budget has been largely funded by the company's tax contributions.

And, finally, to the students of all the institutions that Shchekinoazot has supported as its social partners. The enterprise has been a pioneer of the chemical industry, so it would not be an exaggeration to call the commissioning of the new production facilities an event of a global scale.

LEADER OF THE RUSSIAN CHEMICAL INDUSTRY

The history of the company will consider September 7, 2018 to be the day when projects of an unprecedented scale began. No one doubts that Shchekinoazot has created its own universe. The numbers speak for themselves: since 2005 Shchekinoazot has invested more than \$882 million in its production under the company's development strategy. It has a huge impact on the social and economic activities of the region.

It came as no surprise that the commissioning ceremony was attended by more than 300 distinguished guests, including our foreign partners from Japan, China, Denmark, the USA and other countries, and heads of federal and regional authorities.

They all drew particular attention to the amazing performance of the talented and committed Shchekinoazot team led by the company's president, Boris Sokol.

Speaking at the opening ceremony of the methanol and ammonia co-production facility, Igor Shchegolev, Presidential Plenipotentiary Envoy to the Central Federal District, noted that the Tula Region has proved important for the Russian economy by displaying sustainable industrial performance. And Shchekinoazot's role in this can hardly be exaggerated.



Igor Shchegolev

"The company that gathered us here today is certainly unique", said Igor Shchegolev. "It is one of the leading Russian companies in the chemical industry and has more than 60 years of history. The Board has preserved and developed the scientific and production potential and become a leader in the industrial chemistry. The company covers the needs of the domestic



"Let's go!" One press of the button, and the methanol and ammonia production facility was launched

Methanol and ammonia production complex

methanol
450
thousands tonnes per year

ammonia
135
thousands tonnes per year

amount of investment
18.5
bln RUB

Perfumery-quality dimethyl ether

20
thousands tonnes per year

amount of investment
21.2
mln EUR

market and produces chemicals for export, while creating new jobs in the region and expanding the tax base. With advanced equipment and a skilled workforce, it is a cutting-edge company that builds mutually beneficial business relationships with its foreign partners."

Victor Evtukhov, Deputy Minister of Industry and Trade of the Russian Federation called Shchekinoazot the leading Russian company and one of the global leaders in the chemical industry.



Victor Evtukhov

"The company has had an enormous impact on the development of the domestic chemical industry and fuelled the active growth of, among other things, the agricultural sector. Here we have a

team of skilled workers with great potential and an amazing production base with advanced modern equipment", Mr Evtukhov added.

Alexey Dyumin, Governor of the Tula Region, also expressed his gratitude to the personnel and management of Shchekinoazot and wished them success in the future.

He added that the commissioning of the new production facilities is part of the bigger development agenda that the company has been pursuing for more than 13 years. So far more than 15 investment projects have been launched.



Alexey Dyumin

"By building new production facilities and creating new workplaces, the enterprise has an enormous impact on the region's economy. Today we are commissioning its methanol and am-

monia co-production complex. More challenges lie ahead. We are going to create more workplaces equipped with cutting-edge technological means. The commissioning of new production facilities not only means the development of the enterprise, but it also strengthens the positions of the Russian chemical industry on the international market. The products that you create enjoy a high level of demand not only in Russia, but also in many other countries", said Alexey Dyumin.

NOTHING IS IMPOSSIBLE!

It is quite significant that the enterprise's success has been acknowledged at such a high level. However, it is important to remember that only hard work, responsibility and commitment to persist make success possible.

Boris Sokol, President of Shchekinoazot, emphasised this point in his address. It was very open, emotional and sincere and resonated with the audience.



Boris Sokol

"I know for sure: our team is capable of any tasks — the most complex, non-standard and large-scale ones! I strongly believe that all dreams are bound to become true. All you need to do is to use the word "goal" instead of "dream", "task" instead of "wish" and "actions" instead of "aspirations". And you have to work hard! I am very proud of our team! The team of the award-winning company that today, as in the past, in the culmination years of the Shchekino economic experiment, continues to support the region's industrial development, sets the rhythm and the highest work standards and shows how sustainable modern technologies should be introduced and applied in produc-

tion. And I am very proud to be a part of it! Please remember that the power of the team is in each and every one of its members. And the power of a member is in the team. Today is but further proof of this fact."

TWO STEPS AHEAD

The new methanol and ammonia co-production complex is the biggest of all commissioned by Shchekinoazot so far. With advanced combined production of methanol and ammonia, the company consumes less raw materials and energy and also reduces its environmental footprint, while more than doubling its annual production. Today, Shchekinoazot is taking its place among the leaders of Russian methanol production, but it is two steps ahead of them, technologically speaking.

Oleg Makarov, Deputy General Director and Project Manager, told us about all the challenges that the company overcame to commission the new production facility.

The preparation alone for construction of only methanol and ammonia co-production complex required taking down all the decommissioned workshops of the previous production facility.

"To prepare the would-be construction site, we took away more than 7,000 tonnes of reinforced concrete and dismantled more than 12,000 tonnes of metal structures. After that we started research and preparation of the project documentation", explains Oleg Makarov.

And this was only the tip of the iceberg. The amount of paper work was huge. A government expert review was passed, a building permit obtained and bank financing guarantee approved.

A Volgograd company was chosen to become the general contractor for the construction of new workshops and facilities of the future plant. Throughout

scale of the projects

different stages of implementation, it engaged around 24 other subcontractors.

Four years later, the site has transformed. Now it has production facilities, outdoor units and equipment in place. Moreover, new railway carriages have been purchased for transportation of the newly produced methanol.

"We have overcome all the challenges of the 2014 crisis and those linked to the situation on the international market. It was not easy. But you can't expect otherwise. It is not easy to take decisions and hold to one's commitments, but the result is worth the effort", said Oleg Makarov while trying to hide his excitement.

"Everything that we once dreamt of has now become reality! We see these amazing buildings, shining in the sun, pointing higher, just like Shchekinoazot is. But only 3-4 years ago, there was nothing here but a deserted site and decommissioned workshops. Hardly anyone can achieve the same pace of industrial construction!", commented Boris Sokol.

MODERN WASTEWATER TREATMENT FACILITIES

The new production facilities and further development of the company require proper infrastructure. It is also important to ensure modernisation of the production facility and its transition to modern energy-saving and sustainable technologies. That's why our company is particularly proud of its modern wastewater treatment units.

With advanced technology that keeps up with the best available solutions in terms of water treatment quality and energy consumption, the company reduced the load on the current industrial waste water treatment facilities, significantly reduced abstraction of river water and now discharges less into the water bodies.

Implementing this project will also allow the company to save money, reduce its environmental impact, increase its profit and, as such, its tax payments to the budget.

The combined treatment facilities were commissioned ahead of the schedule. During preparation of the site, the builders drained the swamp and paved the driveways. Commissioning works began in early July.

"Environmental protection that Russia sees as one of its priorities has long become the main consideration of the Shchekinoazot development strategy and tactics. Chemical industry professions want to introduce new clean technologies, to reduce the amount of waste, to ensure high-level processing of raw materials, and benefit from the advanced technological solutions", says Valery Ordynets, Deputy CTO on industrial and ecological safety of Shchekinoazot, Head of the Project.

"LET'S GO!"

Facing an exceptional amount of work and huge challenges, all people at Shchekinoazot have put all their efforts in this project. And again, the



Central control station of the methanol and ammonia co-production complex

company proved that it can achieve its goals and knows how to soar to new heights.

That why for the festive event at the commissioning day it chose the motto: Pushing the Boundaries! Somehow, it resembled a space launch: from brand new unit with their metal surface shining in the sky to the distinctive red push-button.

Victor Evtukhov, Alexey Dyumin, Boris Sokol and Igor Shchegolev (pictured) pushed it together during the opening ceremony of the new Methanol-450/Ammonia-135 co-production complex.

Boris Sokol thanked the Governor of the region for assistance in implementing the projects. He also thanked the federal authorities, the Ministry of Industry and Trade of Russia, the Ministry of Industry and Fuel and Energy Complex of the Tula region and the business and financial partners. And he urged the staff not to slow down the pace of work and to keep up the spirit for creating and developing the enterprise.

THIRD METHANOL

After the button, all four leading representatives laid a symbolic stone at the foundation of the future Methanol-500 production facility.

The investment project has a number of technical and economic advantages in comparison with the technologies of methanol production already existing in Russia. It also fully conforms with the concept of the long-term social and economic development of Russia until 2020, approved by the Government of the Russian Federation.

Today, the development of the M-500 Basic Project has been completed, the economic feasibility study of construction investments has been completed, the Environmental Impact Assessment has been developed, the development of a package of Project documentation for the Main State Expertise and for obtaining a Construction Permit has been completed. Public hearings have been held, and a permit has been obtained from the Shchekino district municipal administration. The future construction site is being prepared, tenders are in progress for the supply of the main process equipment, and detailed engineering design is under way.

Commissioning of the new production facility is planned for Q2 of 2022.

NEAR FUTURE

The company continues its successful development. Two new production facilities are to be opened in the near future.

The construction of a new perfumery-quality dimethyl ether production facility (JV with PCC SE) holds a special place among other investment projects of the company. Shchekinoazot is the first Russian producer of perfumery-quality dimethyl ether. The production of dimethyl ether that enjoys a huge demand for various applications is a novelty in Russia. The project of perfume-quality dimethyl ether is being implemented as part of an import substitution programme. After the Shchekino product is tested, Russian cosmetic aerosols will reach a new level of quality!

Shchekinoazot also plans to soon open SK-200, a new sulphuric acid production facility. The new plant will use advanced sulphuric-acid production technology that is really effective in terms of both automated process control and ecology. There will be a two-stage gas-cleaning unit with an electrostatic precipitator. Sulphuric acid, which is a raw material for the production of caprolactam, will allow the company to completely switch to the product that will be produced here on the industrial site of the enterprise, which is economically profitable.

Moreover, the company ensured the scalability of its production allowing it to keep pace with the growing demand.

The opening ceremony of the new Shchekinoazot production facilities was followed by a tour around the enterprise for the governor of the region and federal authorities: they saw new water treatment units, liquid ammonia depot and central control station of the methanol/ammonia production facility.

On Sunday, the company held a festive event for all the habitants of the settlement Pervomayskiy as well as its personnel who shared this important moment of the company's history.

The history that is bound to turn into future success, as Shchekinoazot continues to create new projects, implement and rethink them again and again. It never stops developing.



Sulphuric acid

200
thousands
tonnes
per year

amount of
investment
2
bln RUB

Modern
treatment
facilities

24,120
m³ per day

amount of
investment
800
mln RUB

Methanol
and ammonia
production
facility looks
impressive