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ОКПО 00208953 ОГРН 1025201752597
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NEWSLETTER

RECORD-BREAKING CAPACITY OF THE NEW UNIT. PROPRIETARY UREA TECHNOLOGY. 2050 TPD – THE MAXIMUM OUTPUT CAPACITY FOR SUCH UNITS.



At the beginning of April 2019, NIIK and Novgorodsky GIAP have signed a contract on modernization of the sixth urea unit at Acron site (Veliky Novgorod, Russia) aimed at increasing capacity to 2050 TPD.

The basis of the process is the advanced stripping technology concept realized for the first time in the company's history and taking advantage of the cumulated revamping experience gained through several capacity-enhancement projects in India with 2500 TPD-capacity result.

The key benefits of the applied technology:

- lower project cost resulting from the applying of the commonly used urea grade steel material;
- increased efficiency of urea synthesis due to installation of a Set of Internal Devices designed by NIIK into the reactor;
- efficient use of raw materials and energy sources;
- meeting all modern environmental and safety standards®ulations.

NIIK makes optimum use of the available infrastructure. The new facility will be equipped with a new synthesis unit, parallel distillation line of improved design, up-to-date effluent treatment unit, evaporation unit with capacity 200 TPD and other facilities.

The unit under repair was initially designed using NIIK's urea production technology **URECON®2006** commissioned in November 2018. Professional competencies and exceptional knowledge demonstrated by the Contractor lead to superior performance of the project completed within a record time. It also benefited from the modern approach applied to equipment procurement, unit locating and effective construction management. During operation, the unit reached the maximum capacities and decision to increase the output of the sixth urea unit was made in order to address the need for processing the additional raw material made at the ammonia facility and shifting urea synthesis unit for lower pressure to unify compressor equipment.

The high level of NIIK's specialists noted by Acron's top management allowed the activities in modernization priority areas to continue.

"We are pleased that our long term partner Acron selected NIIK's ground-breaking technology thereby contributing to its future growth and development. It is a great and exciting milestone in NIIK's history. We use state-of-the-art resources relating to plant maintenance and operation, material engineering and process and corrosion researching to develop and refine our own technologies", Oleg Kostin, General Director of NIIK said.

The project documentation which will be developed with a constant exceptional quality will be presented by December 2019, detail design – by March 2020. The record short time became possible thanks to digitalization and the most advanced design&construction management approach implemented in the company. It will allow our customer to fulfill project objectives within the shortest of time and maximize its investment efficiency.



NIIK is a modern engineering company for more than 60 years implementing the advanced concepts and technologies for urea production, which is in one of the most popular fertilizer types in the world.