

**SLUDGE THE TECHNOLOGY FOR OBTAINING UREA IN THE AMMONIA  
PRODUCTION WORKSHOP. PRODUCTION CAPACITY  
(Then it is given)\_thousand m3 / year.)**

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**Annotation:** According to the environmental and energy efficiency of special, cutting-edge, and contemporary technologies utilized in the technological stages of the complex, the production of ammonia and urea is the most recent in the world. The facility generates 577.5 thousand tons of urea and 660 thousand tons of ammonia annually. Ammonia will be used to produce 330 thousand tons of fresh urea and 330 thousand tons of ammonium nitrate that is currently on hand. Using the technology described in this article, urea can be obtained for the manufacturing of ammonia. Feedback is provided, and it is maintained that the production capacity of 3,000 m3 per year.

**Keywords:** ammonia, urea, modern technologies, project, production, workshops, projects.

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## **INTRODUCTION**

1 trillion 428 billion soums worth of commodity goods will be generated when the project is fully operational, increasing the chemical network by 9.5%. The budget receives 600 billion soums in year revenue from it, and it also exports extra goods worth 58.0 million dollars. The 1964-built, morally obsolete, and highly energy-intensive "Navoiyazot" ammonia manufacturing workshops are no longer in operation as a result of the project's implementation. Uzbekistan's agriculture has all of the urea it needs. It permits timely application of urea mineral fertilizer, up to an additional 100–150 kilos per acre during agrotechnical periods, to grain and cotton dressing. In addition, it is planned to export products to the countries of Central Asia, Afghanistan, Turkey, Ukraine and Georgia.

## **MATERIALS AND METHODS**

Urea, mochevina,  $(\text{NH}_2)_2\text{SO}$  - urea acid amide, a substance obtained synthetically, well soluble in water, alcohol, liquid ammonia, sulfite anhydride. The liquefaction temperature is  $132.7^\circ$ . The most concentrated physiological sour, solid nitrogen fertilizer with a nitrogen content of 46%. It does not pull too wet. It is developed as a granular for use in the form of nitrogen fertilizer. Granular urea does not get into a fist during storage. Urea is converted into

ammonium carbonate, which plants absorb under the influence of microorganisms in the soil. In terms of effectiveness, ammonium is equivalent to nitrate, sometimes from samaralirouq.K.ni can be used on all different soils and on all agricultural crops. Watering affects the yield of vegetable crops, potatoes, sugar beets better than ammonium nitrate before planting in farming (at 20-25% of the annual norm of nitrogen) and at the initial feeding.

Currently, the world's chemical industry is sharply developing the production of nitrogen fertilizers. Among them, the demand for urea, which belongs to the class of nitrogen - containing acids, is growing day by day. This is due to the fact that urea is used in industry as a raw material in the preparation of adhesives and other products, as a mineral nitrogen fertilizer in agriculture, including in private farms and farms, as well as as an additional feed in animal husbandry. Urea is a nitrogen fertilizer with a high concentration, the nitrogen content in the product for sale is at least 46.2%, and the nitrogen contained in urea is in the form of an amide, preventing the accumulation of "nitrates" in plants, washing out of the soil during rain, has a beneficial effect not only on increasing the fertility of the crop, but also it also increases the sugar, fat, ascorbic acid content and other indicators in the seed. Urea is well soluble in water. As the temperature increases, its solubility increases.

When combined with simple hydrocarbons and their derivatives, urea generates complex molecules. When heated in the presence of alkali, urea combines with formaldehyde to produce a number of high-molecular compounds that are utilized in industry to make plastics. Based on the intended use, two brands of urea are produced. Urea of the "A" and "B" brands are used in industry, agriculture, and retail trade, respectively. The following steps should be included in the urea synthesis process:

1. urea synthesis of ammonia and dioxide carbon; 2) extraction of non-urea-converted components from its aqueous solution and their return to the cycle or use in other industries;
2. obtaining commercial urea from an aqueous solution of urea.

## **RESULT AND DISCUSSION**

The consistency of the pressure supplied by the control valve located at the solution exit from the reactor is one of the most significant indicators of the normal operation of the synthesis column. In most circumstances, maintaining a steady fluid level is just as crucial as maintaining a constant pressure and temperature. An abrupt rise in temperature is seen in the upper part of the washing column if the liquid level is disturbed. This causes the washing of ammonia from carbon dioxide to degrade, which can then result in the formation of carbon ammonium salts in capacitor leads and suspend the device. When combined with simple hydrocarbons and their derivatives, urea generates complex molecules. Urea reacts with formaldehyde when heated in the presence of alkali to form a variety of high-molecular products used in industry for the production of plastics.

***In conclusion,*** A major violation of the technological regime results from a sudden change in the liquid level in the separators of distillation units. Regular and precise analytical management of urea production is crucial because it serves as an indicator that enables staff to pinpoint the root cause of any indicator violations, in addition to validating the normal course of the technological process. Launching and configuring a basic technological mode require careful analytical control.

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