# DEVELOPMENT OF OPERATIONAL-DISPATCHING SYSTEM BASED ON SCADA SYSTEM FOR MANAGING TECHNOLOGICAL PROCESSES IN AMMONIA PRODUCTION

Tashkent State Technical University named after Islam Karimov

2nd stage graduate students

Ubaydullayev Javahir Khamidullo og'li Kayumova Madinabonu Bahadirjan qizi Nazirov Nizamjon Nadir o'g'li

ABSTRACT: In this article, the development of an increase-dispatch system for managing technological processes in ammonia production based on the scada system, the main features of time automation systems, the change in the value of SCADA systems, the use of SCADA-technologies, the development of an information management system, complete information on cloaking, processing, transmission, storage, and reflection issues is presented.

KEY WORDS: SCADA, NETBIOS, PROFIBUS, CANBUS, LON, MODBUS, generation, levers, dispatcher.

ANNOTATSIYA: Mazkur maqolada ammonik ishlab chiqarishda texnologik jarayonlarni boshqarish scada tizimi asosida oshirish-dispatchilik tizimini ishlab chiqish, zamon avtomatlashtirish tizimlarining asosiy xususiyatlari, SCADA tizimlari oʻzgaruvchining qiymati oʻzgarishi, SCADA-texnologiyalarining qoʻllanilishi axborotni boshqarish tizimini ishlab chiqish, toʻplash, ishlov berish, uzatish, saqlash va aks ettirish masalalari haqida ma'lumotlar keltirilgan.

KALIT SO'ZLAR: SCADA, NETBIOS, PROFIBUS, CANBUS, LON, MODBUS, generatsiya, richaglar, dispetcher.

**АННОТАЦИЯ**: В данной статье рассматривается разработка повышающе-диспетчерской системы на базе Scada-системы управления технологическими процессами в производстве аммиака, основные особенности систем автоматизации рабочего времени, изменение

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значения SCADA-систем, применение SCADA-технологий., разработка системы управления информацией, представлена полная информация по вопросам маскировки, обработки, передачи, хранения и отражения.

**КЛЮЧЕВЫЕ СЛОВА:** SCADA, NETBIOS, PROFIBUS, CANBUS, LON, MODBUS, генерация, управление, диспетчер.

#### INTRODUCTION.

One of the main features of modern automation systems is their high level of integration. Control objects, execution mechanisms, information recording and processing equipment, operator workplaces, database, servers, etc. can be used in them at any time. It provides operation in standard network environments (ARCNET, ETHERNET, etc.) using standard protocols (NETBIOS, TCP/IP, etc.), and also supports the most popular network standards in the class of industrial interfaces (PROFIBUS, CANBUS, LON, MODBUS, etc.)) is desirable to provide power. In practice, all SCADA systems under consideration satisfy these requirements to one degree or another, the only difference being that the set of supported network interfaces is of course different. Built- in command languages, most SCADA systems, when the value of a variable changes, when a certain logical condition is met, by pressing a combination of keys, as well as a fragment (part) of a given frequency, relative to the entire application or some window, has high Visual Basic-like languages with built-in languages that allow generation of similar reactions to execution-related events.

#### REFERENCES AND METHODOLOGY.

SCADA (Supervisory Control And Data Acquisition ) is defined by the progress of development of concept control system and the results of scientific and technical progress. The use of SCADA-technologies makes it possible to achieve a high level of automation in solving issues of development, collection, processing, transmission, storage and reflection of the information management system .

#### RESULT AND DISCUSSION.

the friendliness of the human-machine interface (HMI/MMI) provided by the system, the accuracy and clarity of the information displayed on the screen, the convenience of the control "lever", the ease of use of the reports and the alarm system, etc. — the interaction of the dispatcher with the system increases the effectiveness of exposure and reduces critical errors in its management to zero.

noted that the rich concept of SCADA, which consists of the automated development of the main control systems, allows to solve a number of issues that are considered to be intractable for a long time: to reduce the duration of automation projects and the direct financial costs of their production.

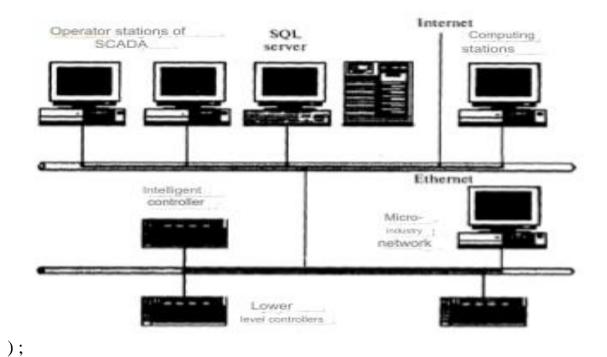
Currently, SCADA is the main and most promising method of automated control of complex dynamic systems (processes). Management of technological processes based on SCADA systems began in the 80s in advanced Western countries. Field of application: electricity and water supply, chemical, petrochemical and oil refining industry, railway transport, oil and gas transport, etc.

In Russia, the technological process relied on the experience of dispatch personnel. Therefore, the transition to control based on SCADA systems has become a little more difficult. In Russia, new information technologies, such as SCADA systems, are among such technologies, and the difficulties of mastering them include the lack of experience in their use and insufficient information about various SCADA systems.

dozen companies in the world actively engaged in the development and implementation of SCADA systems. Each SCADA system is a matter of "know-now" of the company, so the information about this or that system is not very extensive.

It is very important to solve the following issues when implementing modern dispatch management systems:

based on the requirements and characteristics of the technological process



staffing;

#### CONCLUSION.

In short, SCADA system selection is a difficult enough problem, similar to multi-criteria decision-making, which is complicated by the impossibility of quantifying a number of criteria due to lack of information.

in the development and use of control systems based on SCADA software is carried out in special courses of various companies, in training courses. Currently, subjects related to the study of SCADA systems have begun to be included in the curricula of a number of technical universities. However, there is no specific literature on SCADA systems , only some articles and advertising brochures.

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Many projects for a wide range of applications of automated control and management systems (NBT) are presented. They make it possible to distinguish a generalized scheme of implementation.

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