

Automation of quality control at oil factories (improvement of oil quality).

Asranov H.K,
Abdusalomov M.B

Andijan mechan building institut
Automation of mechanical engineering production
department assistant _

Email: mavlonbekabdusalomov3110@gmail.com

Email : habib19920827@gmail.com

Phone: +998913304669

Tojiboyev H. Sh . student

Andijan mechan building institut

Phone: +998994328267

Abstract: In this study, a model of automation of the quality control system of the organization of the construction of highly dangerous and technically complex objects was developed. The model uses the original and updated databases of general and special work logs, as well as the database of attestation-permitting documents and the established connections between them.

Key words: quality control, quality control automation, construction organization, project documents, working documents, dangerous and technically complex objects.

Enter

At a time when the economy is undergoing a radical change, the position of industry, which is the leading branch of the economy, occupies a special place in deepening the liberalization of the economy and, on this basis, ensuring the material and moral well-being of the members of the society. In the Address of the President of the Republic of Uzbekistan Sh. Mirziyoyev to the Oliy Majlis of the Republic of Uzbekistan on December 28, 2018, specific thoughts and ideas on the further development of the country's economy were defined, and the urgent problems raised, their nature and importance should be thoroughly analyzed. said In this regard, "the main goal of the development of Uzbekistan's industry is not only to strive to increase the growth rate in this sector of the economy, but also to develop priority industries and production by using the potential of rich natural resources, to form its modern structure, to increase the competitiveness of the country's industry in the foreign and domestic markets and "It is to form a set of measures to increase its effectiveness," he said.

This can be seen from the fact that as a result of structural changes in the economy, the share of industry in the composition of the gross domestic product is expected to increase from 35 percent in 2018 to 37 percent in 20192. In the process of development of industrial development strategy, the main focus is on structural changes, which are predicted together with macroeconomic indicators and structural shifts in industrial sectors.

The improvement of the structure of industry until 2030 is based on increasing the share of industry in GDP from 33.5 percent in 2017 to 40 percent in 2030, as is characteristic of the structure of GDP in developed countries. In order to achieve this goal, it should be said that today the work in this regard has been started in our country.

At the same time, these works require a completely new software complex approach to have a clear program for 2020, 2025, 2030 of deep processing of each prospective raw material and semi-finished product. In addition, the development strategy chosen by the leadership of our country is aimed at the production of competitive, export-oriented and import-substituting products with high added value, which is a stable and proportional growth of the industry and the modernization of production capacities, technical and envisages the development of its leading industries on the basis of technological upgrading. Construction of especially

dangerous and technically complex objects is an integral part of the economic development of our country. Hazardous and technically complex facilities include power plants that use hydroelectric power (HPP) as an energy source. In the construction of extremely dangerous and technically complex objects, the system of quality control of the organization of construction works is used to comply with the above requirements.

Work logs are a source of information for assessing the compliance of construction products with project documents, as well as with the requirements of technical regulations².

Currently, logs are traditional in the form of manual filling, which do not meet modern requirements for working with information. It gets complicated.

In the general and special logs of works, entries about the execution of works are made by the person who implements the construction and is responsible for the execution of the works. Records of the construction control of the person carrying out the construction are carried out by the authorized representative of the person carrying out the construction on the issues of construction control³.

The intensity of relevant work, the large number of construction participants (mainly foreign), the high percentage of specialized flows and the use of a large number of technological pipelines determine the specific characteristics of general log keeping. One of the features of the general work log is the separate registration for each set of work with different construction permits. If the object or launch complex consists of separate headers, then the general work log is entered separately for each header.

There are exemplary problems in keeping special journals, documents defining the performance of certain types of work.

The main disadvantages of keeping special journals:

- only one person works with the magazine at a time;
- the speed of data entry is limited by the speed of filling out the employee's journal;
- text readability depends on handwriting;
- manual filling due to the presence of typos and errors in manual data transmission, many alphanumeric characters in line numbers, equipment numbers, site names, etc.;
- lack of necessary space for entering information received late;
- the log is susceptible to damage due to mechanical stress or moisture;
- organization of temporary and permanent storage is required; there are no direct connections with other documents, there is no possibility to filter data;
- requires reading a large amount of information in search of the necessary information;
- no possibility to correct typos; There is no procedure for filling in information in case of omission.

In connection with the listed shortcomings, there is currently a need to improve the control system of production processes. In the considered automation model, sorting of data in special work logs is more detailed than in a general work log, data is organized according to semantic properties and entered in the corresponding column with a name that defines the order and content. input data. This type of information presentation is convenient for perception and analysis. Section 3 of the general work journal "Information on the performance of works during the construction, reconstruction, capital repair of the capital construction facility" is the main section reflecting the progress of the work.

In Uzbekistan, the oil industry is considered one of the leading branches of the food industry. The food industry produced in the country accounts for about 40% of the total product volume. Since the development of the oil industry in the Republic of Uzbekistan is related to the growth of cotton production, oil plants are built on lands close to raw materials and are located in all regions of the republic (except Navoi region). In the modern oil industry of Uzbekistan, there are 21 enterprises with the capacity to process 3.5 million tons of seeds and other oilseeds per year (2001). the largest enterprises: "Yangiyol Oil-Oil", "Kattakurgan Oil-Oil", "Bukhara

¹ B ajburin AH Inzhenerno-stroitel'nyj zhurnal. 2010. No. 3. pp. 24-26.

² Copa NV, Karpushkin AS Ekonomika stroitel'stva i prirodopol'zovaniya. 2020. No. 4 (77). pp. 56-65. DOI 10.37279/2519-44532020-4-56-65.

³ Evtushenko DE, Kolokolov ME, Pacuk OV Proizvodstvennyj menedzhment: theory, methodology, practice: sbornik materialov XII Mezhdunarodnoj nauchno-prakticheskoy konferencii, g. Novosibirsk, February 15, 2018. Ministerstvo obrazovaniya i nauki Rossijskoj Federacii, FGBOU VO "Novosibirskij gosudarstvennyj tekhnicheskij universitet", department of production management and economic energy; pod obshchej redakciej kandida ekonomicheskikh nauk SS Chernova. Novosibirsk: Izd-vo CRNS, 2018. 157 p.

Oil Extraction", "Karshi Oil Extraction", "Kokon Oil-Oil", "Fergana Oil-Oil", "Andijan Oil-Oil", "Asaka Extraction", "Uchkurgon Oil Extraction", "Namangan Oil Extraction", "Tashmargyog" (Tashkent city), "Surkhan Uzukhotsanoat" (Denov city), "Guliston Oil Extraction", "Kogon Oil Extraction", "Urganch Oil-Oy", "Koson Oil Extraction", "Khojailimoy", "Yoggar" (Beruni city, Republic of Karakalpakstan), "Chimboymoy" joint-stock companies.

A total of 227,000 tons of vegetable oil were produced at the enterprises (2000). Oil from the seeds of various plants and oilseeds has been practiced in Central Asia since ancient times. The oil is mainly obtained from juvozpatsha. Cotton seed, sesame, flax, mahsar, groundnut, grains and others were used as raw materials. As a result of the construction of the railway and the improvement of communication with foreign markets in Turkestan, the oil industry has also developed. In Uzbekistan, the first factory with a hydraulic press for extracting oil from cotton seeds was launched in Kokan in 1884, and in 1896 an oil factory was built in the city of Kattakorgan (Samarkand region). In 1913-14, there were 30 oil factories and 57,000 tons of vegetable oil were produced. After the October coup, the government of the Soviets, like all industrial enterprises, nationalized the oil factories, and the factories stopped working. In 1922, only 2 oil factories were operating. Since the 1930s, in connection with the expansion of cotton fields and the increase in cotton production, the oil industry has made significant progress in Uzbekistan. In 1929-33, 1,612,000 tons of seeds were processed and 247,300 tons of plants were grown. oil is prepared. In 1971-75, about 11 million tons of seeds were processed and 1549.6 thousand tons of vegetable oil was prepared. In the 1930s, the Kokan and Kattakorgan oil-oil combines with the current capacity of 810-950 t/day of seed, and in 1980, the Koson and Guliston oil extraction plants with a capacity of 1200 t/day of seed were built and put into operation. dropped. As a result of the development of the oil industry, new types of products began to be prepared. First, only unrefined (black) cottonseed oil was prepared, then the oil was refined and high-quality refined oils were produced, salomas, glycerin, fatty acids, margarine, mayonnaise used for food and technology. , the production of soaps, synthetic detergents, various varnishes, and dyes was mastered. The oil industry operates on a zero-waste scheme.

Vegetable oil is obtained by pressing and extraction, followed by purification and deodorization. Oil production from sunflower pistachios and mahsar seeds was started in some enterprises in the following years. In order to fully utilize production capacities and increase the variety of products produced, soybeans are not imported. Soybean meal resulting from their processing is a nutritious feed for livestock and poultry. In the production of valuable types of edible oils, grains and seeds of fruit and vegetable crops, which are the waste of canning factories, are used. The types of vegetable oil produced are increasing.

"Ko'qon oil-oil" joint-stock company produces oil-oil products from fruit and vegetable seeds, including peaches, apricots, grapes, almonds, watermelons, melons, tomatoes and other seeds. it is used in great demand in the food industry. Since the second half of the 90s, new technologies for the production, processing, packaging of oil products in convenient containers for consumption and storage have been adopted on a large scale. Margarine products are produced in "Tashmargyog" joint stock company (annual production capacity is 22.4 thousand tons). In the city of Bukhara, a modern joint enterprise of Uzbekistan-Israel "BuxTel" producing mayonnaise was established. Kirsovun and atirsovun are produced in 10 enterprises in the network - in the cities of Fergana, Yangiyol, Andijan, Urganch, Kattakorgan, Keles (gross annual capacity is 103.7 thousand tons). Since 1996, the production of fatty acids (palmitic and oleic acids) on the basis of seed soap stock has been started in the "Urganchyog" joint-stock company in order to provide high-quality raw materials to soap production enterprises in the republic. Automation of technological processes, equipment of foreign companies' equipment are being continued in network enterprises. In technical re-equipment of enterprises, "Krupp", "SKET" (Germany), "Alfalaval" (Sweden), " John Brown", "Carver", "Crown" (USA), "Mossoni", "Bollistra" (Italy), Cooperation with Polish, Ukrainian, and Russian companies is showing good results. Since 1996, direct foreign investments have been attracted to the oil industry. As a result, 9 joint ventures were established and are operating in the network.

Summary

In short, the existing deficiencies in the issues of regulatory-legal, organizational-economic, financial-credit, resource-efficient agrotechnology, technological, information-analytical mechanisms of processing and their solution for the further development of oilseed cultivation and processing network in our Republic. processed

materials are included, mainly new directions in solving strategic problems in the field of the oil industry complex, experimental results are reflected.

List of used literature:

1. Halimova UH Vegetable oil production technology. Teacher publisher . 1982 Page 246.
2. Y. Kadirov , D. Ravshanov , A. Roziboyev . " Plant oils work release technology ". Textbook . " Cholpon ", Tashkent, 2014, 320 p.
3. Y. Kadirov , A. Roziboyev . " Plant oils work release from the science of technology laboratory works according to methodical instruction . Study manual . T. 2013. 46 p.
4. P. Ilhamdjonov , QPSerkayev , ABYolchiyev . " Fat is oil products work release equipment and equipment " Training manual . Tashkent " Noshir " 2013. 320 pages.
5. Nazirova RM, Sulaymanov ON, Usmanov NB// Village economy _ products storage warehouses and technologies // O'tutorial guide . Premier Publishing s.r.o. Vienna- 2020. 128 pages.
6. 6.S. A. Nagornov , D.S. Dvoretzky, S.V. Romantsova, V.P. Tarov . "Tehnika i tekhnologii proizvodstva i pererabotki rastitelnykh masel" uchebnoe posobie. — Tambov: Izd-vo GOU VPO TGTU, 2010. - 96 p.
7. shcherbakov V.G., Lobanov V.G. Biochemistry and commodity production of maslichnogo syrya. - M.: Kolos, 2012. 292 p.