



## PRODUCTION AND TECHNOLOGICAL PROCESSES IN CONSTRUCTION

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**Abstract:** The article presents ideas about the production process, its main elements, the characteristics of the production operation, the technological process, and the stages of the production process.

**Keywords:** Texnologiya, ishlab chiqarish, ishlab chiqarish jarayoni, mehnat predmetlari, mehnat vositalari

The production process is a process of continuous creation of material assets and production relations. The production process includes the following processes:

- all stages of receiving, storing and turning raw materials and materials into finished products;
- supply of production with all types of energy, preparation of equipment and technical control at each stage of production;
- product sorting, storage and shipping.

The production process consists of private processes. Depending on their place in production, private processes are divided into basic and non-basic processes. The main private processes are the processes related to changing the properties and appearance of the objects of work. Private non-main processes are processes that create the necessary conditions for the implementation of main processes.

During the production process, its main elements - people, equipment, and materials - move in relation to each other. At least one of these three elements must be in motion, otherwise industrial production will not take place. Which of the elements moves determines the type of production process.

In order to analyze and design production processes, it is necessary to express each of its stages with indicators of a single size. This dimension serves as the execution time of process parts. Processing or preparation for processing are simple parts of the process, the completed labor movement of the worker - receiving or the movement of machines - passing, serving. Interdependence of reception and transition constitutes production operations. Production operation is the main organizational unit of the process. The following features are characteristic of the production operation:

- organizational inseparability;
- technological diversity;
- immediacy of execution;
- unchanged composition of rhesus;
- resource consumption intensity.

Social production consists of the production of means of production and consumer goods. Each of these departments consists of many economic sectors, in which various means

of production and consumer goods are created. The superiority of the first section over the second section is an expression of the extended economic law of reproduction. Production is not only the production of goods, but also includes distribution, exchange and consumption. The development of production begins first of all with the change and improvement of labor tools. The development of production allows to regularly increase the well-being of all members of the society and develop it in every way.

In the evolution of human development, technological processes occur together. Because technological processes are related to the introduction of mechanisms into the daily life of mankind.

The production process means the sum of all processes performed to obtain a finished machine from materials and semi-finished products.

Technology (Greek: "techno" - craft, craftsman and "logos" - science, education)<sup>2</sup> - methods of turning materials into finished products.

Technology (Greek techne - art, skill, learning) is a system in which the methods of obtaining, processing and processing products are regulated in industry, construction, and industries; science dealing with the development, implementation and improvement of these methods. Each industry has its own technology: mining technology, engineering technology, construction technology, agricultural technology, etc.

Technology consists of conditions for changing the shape, size, and characteristics of materials, raw materials, or certain products used in industrial processes for product production.

The activities of production, transportation, storage, and control, which are part of the general industrial process, are also called technology. Due to the change of society, the concept of innovation technology is being introduced into various other fields of production, service, and education. Currently, the technology is divided into several types:

- front-line technology;
- waste-free technology;
- production and processing technology;
- international standard technology

A technological process is a process of changing and modifying certain stages of an element or item in the production process, which stages of production can be divided into separate stages in its activity. Usually, unit processes are represented by units of their execution by a separate worker. These units or operations pass intermediate jumps, which are stages of the technological part of the complete production process, between the operations of the step-by-step production of the product and the complete production cycle. Stage production is considered to be separate labor tools and technological. They should be the same.

The production process includes not only the main processes for obtaining parts and assembling the machine, but also auxiliary processes that ensure the execution of the main processes (for example, transportation of materials and parts, control, preparation of fixtures and tools, sharpening of tools).

The production process is divided into the following stages:

1. Preparation of parts zagotovka, casting, hammering, stamping or preliminary processing of rolled materials.

2. Mechanical processing of zagotovka on metal cutting machines to obtain a finished part of the required size and shape.
3. Assembling nodes and aggregates, that is, attaching individual details to nodes, nodes to aggregates, locksmith processing and transportation of details to the assembly place are performed in the conditions of individual production, mass and large series are not used. In these productions, when processing details on metal cutting machines, limit gauges are used, and interchangeability of details is achieved.
4. General assembly of the whole machine.
5. Setting up and testing the machine
6. Painting the car. Paintwork consists of several processes and is carried out at different stages of the technological process, for example, putty, primer, primary painting, machined detail painting and finishing painting of the whole machine.

The technological process means successive changes in the shape, size and material properties of metal and semi-finished products in order to obtain a detail or product. The main issues of technological processes are shown by the following cases.

1. The type of production and the organizational form of the technological process are determined for the mechanical processing of machine details.
2. Determining the batch size of parts to be produced (for serial production) and the preparation cycle for flow production.
3. Determination of the type and dimensions of the zagotovka
4. Development of a method and plan for mechanical processing of the surfaces of details (technological process, sequence indicated).
5. Determining the type and description of machine tools, tools, cutting and measuring tools, and determining the number for processing.
6. Determining the size of the machined surfaces of the details.
7. Determine the cutting mode for each process for the selected machine
8. Determination of the time standard for each process.
9. Determination of job qualifications
10. Determination of technical and economic indicators of the designed technological process.
11. Registration of technological process documents.

The technological process of processing individual details for serial and mass production is perfectly handled.

Depending on the level of technical support of production, technological operations are divided into the following types:

- manual operations, operations performed by hand using a simple or mechanized tool;
- operations performed by machine-hand, machines, but with the direct and continuous participation of workers;
- operations carried out with the help of machines, machines, with limited participation of workers;
- operations that take place automatically, without the participation of a worker or under his control;
- hardware, machine and automatic operations, operations performed in special aggregates.

Operations aimed at changing the property and appearance of the object being processed are called basic or technological operations. Technological operations are connected with each other using auxiliary operations. There are the following types of auxiliary operations:

- determination of compliance of the control-labor subject with the specified requirements;
- moving objects of transport and labor in the specified direction;
- service-creating the necessary conditions for the safety of people and the normal continuation of the production process.

Several operations are performed at some technological posts, such posts are called complex workplaces.

A group of basic and auxiliary operations interconnected by technological, technical or organizational conditions performed in a complex workplace is called an element process. The sum of element processes constitutes a special process. The output of the private process is the completed part of the production process. The process that ensures the production of a finished product or a semi-finished product is called a main or technologically specific process. Non-main private processes are divided into auxiliary and service processes. Auxiliary processes include such processes as mold making, equipment repair, building and structure repair, and various energy development and supply. Service processes include technical control, intra-plant transportation, warehouse processes.

The production process is the manifestation of the product necessary for human needs by mechanized or manual labor (monoculture). And the technological process is the development of the production process of human influence on nature

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