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Technologies of the chemical industry and the requirements for them

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Abstract: The qualitative parameters of the provision of services are evaluated on the basis of subjective parameters that depend on the consumer properties of passengers, and objective parameters that depend on existing service standards, as well as quantitative values based on retrospective data.

Key words: income, tariff, analysis, quality, car, model, methodology

Annotation: Technologies of the chemical industry and their requirements, technological reliability, continuity of work and ease of maintenance of technological order, low number of service workers, disconnection of equipment from the technological system, and its release are given information.

Key words: chemistry, industry, technology, mechanic, energy, heat engineering, builder, economist.

Introduction.
Engineers-technologists occupy a leading position in the establishment of new chemical production. They actively participate in all stages of the enterprise, that is, from determining the demand for one or another product to testing and mastering production. The work of an engineer-technologist is very responsible, which includes choosing the direction of laboratory research and the method of production, comparing different methods of obtaining a product according to the results of literature data and laboratory research, pilot or experimental - industrial devices. and assessment included. Determining the economic efficiency of any production is carried out on the basis of all technical and economic and technological calculations (expenditure coefficients for raw materials and sizes and quantities of energy and equipment, etc.) [1-5].
At the stage of designing an industrial object, an engineer, chemist, technologist, manages the work of many departments of the design institute, he provides preliminary data and prepares assignments for specialists in various fields - mechanics, energy, heat engineering, builders, economists, etc.

Result And Discussion.
In the chemical industry, a lot of equipment is used for different purposes. Chemical processes can be carried out with high technical and economic indicators only when the requirements for the equipment are fully met. The equipment used in the chemical industry should be extremely sophisticated and have high mechanical strength, and should not pollute the environment and be safe. The reliability of chemical industry equipment is characterized by their strength, long service life and hermeticity. Let's focus on the characteristics of the equipment.

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The durability of my equipment is inextricably linked with the requirements for its long service life and safe operation. But when the device is designed, a certain strength limit is determined, taking into account its weight and cost [6-10].

For some equipment, the main requirement is not strength, but its uniformity. For example, in accordance with the requirements for integrity, the integrity of the walls of containers and equipment, which are wrapped (lined) with large-sized cylindrical upper bodies working under external pressure, is considered.

The long service life of the equipment is one of its important indicators. For most types of equipment, the service life is set at 10-12 years, and this period is taken into account when allocating funds for depreciation. And the actual service life of my equipment (2 different service periods) is usually much higher than these figures.

Service life depends on many factors, including corrosion and erosion of equipment. Taking into account the spiritual wear and tear of the equipment, planning a long service life does not always lead to savings. In order to achieve higher economic indicators, it is appropriate to replace the equipment with new, more efficient and improved ones after a certain period of time.

Currently, the designers set the service life of some equipment at 6 years. But there is no need to shorten the service life of my equipment, which does not wear out, does not require frequent and expensive repairs.

The hermeticity of the equipment is an important requirement from the point of view of technical safety, industrial ecology, and labor protection, especially for equipment processing toxic, caustic, fire, and explosive substances [11-15]. It is necessary to prevent the entry of substances into the biological system that cause changes in its structure and function, that is, their spread to the environment. In order to prevent wastage of raw materials and products, it is impossible to put into operation a device that is not hermetically sealed.

The durability of the equipment is determined by the simplicity of its structure, small size, lightness, low consumption of rare materials, high coefficient of useful movement. It is important that sophistication ensures the technological accessibility of the device and its advantages in use.

Accessibility to technology means the simplicity of the form of the device, its cheapness, ease and convenience of making, assembling and restoring it.

The advantage of the device in use is understood as its repairability, technological reliability, safe operation of the process, ease of transportation and use [16-20].

The repairability of the equipment means its ability to prevent damage and failure, identify and eliminate damaged areas. This characteristic is evaluated by the ease and cheapness of disassembly and repair for repair and the ease of replacing damaged parts.

Technological reliability is continuity in work and the ease of maintaining technological order, a small number of service workers, control and measuring devices that ensure disconnection of the apparatus from the technological system, emptying it, cleaning it by blowing it with air or washing it with water and is characterized by the possibility of connecting the coiled pipes to each other [21-25].

Safety equipment is aimed at ensuring labor protection. It should be ensured that the device is sealed so that air does not enter, it works without noise and does not vibrate during the entire operation, it does not conduct excessive heat, does not leak liquid, and it is necessary to ensure that tests are carried out during its operation.

The ease of transportation of tools and equipment is characterized by the fact that they do not break during transportation. Devices intended for shipment by rail must meet the current standards of transportation in terms of size and other parameters. For example, devices with a maximum diameter of 3.25 meters and a length of 10.5 meters cannot be shipped by rail without separate agreements. Large-sized devices are shipped according to the special permission of the road authorities [26-30]. Oversized devices are transported in parts and assembled at the installation site.

Conclusion

In short, the general criteria describing the level of maturity of tools and equipment are their technical and economic indicators, and these indicators include its comparative performance, price, and the costs of using it. Comparative productivity shows the amount of product obtained per unit of time from 1 m3 volume or 1 kg weight of the device. The price of the device determines the amount of capital spent at the same time. Sometimes the price is high, but an advanced device can be more effective than a cheap one. The higher the

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relative performance of the device, the lower the operating costs and the product cost, which characterizes the level of perfection of the device and the entire technological process.

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