INFORMATION SUPPORT OF THE PLANNING SYSTEM OF PRODUCTION RELEASE FOR THE ENTERPRISE WITH THE FLOW-BASED METHOD OF ORGANIZING PRODUCTION BASED ON CLEARING-MODEL

Pihnastyi O.M., Lazarets A.I.
National Technical University «Kharkiv Polytechnic Institute», Kharkiv

Model of strategic development of the enterprise is determined by the demand for the releasing product. Industrial enterprise has access to a limited set of technological resources during the production cycle. It produces a limited number of products per unit of time, determined by production capacity [1].

The existence of monotonous objects of planning and organising production for the solution of which had been applying different models or their combinations had led to an idea about creating single optimisation theory of production systems with the flow-based method of organization production, for the construction of which Graves S.C.[2], Karmarkar U.S.[3] had offered to use throughput $[\chi]_{CL}$ of the production system, the size of work in progress W and duration of the production cycle T_d as a basic state parameters [4,5]. To describe the behaviour of the parameters of the system Kramarkar U.S. introduced the equation of state that specifies the relationship between the throughput and the size of work in progress, called clearing-function 3]. Clearing-function sets a fixed boundary of production release, offering instant production capacity build-up.

The report details the application of the clearing-function to solve the problem of optimisation of reducing production costs and increasing its vintage.

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