

ANALYSIS OF SOFTPROM DELMIA AS PART OF PROCESS PLANNING AUTOMATION

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Modern production is difficult to imagine without the use of CAD for the design of the entire cycle of production processes. Among the many similar systems, Softprom DELMIA occupies a special place, which allows to significantly reduce the time for the development of technological documentation, the timing of the introduction of new design developments into production and increase its efficiency.

DELMIA provides a significant reduction in time for managing the production and operation processes of the product, as well as for planning and optimizing the resources required for this. This system allows you to plan a virtual production department, using the available industrial equipment, robots and operators, in which each parameter can be varied to obtain the most optimal configuration.

The main advantage of DELMIA is the ability to develop the technology of the product even in the process of its design. 3D modeling of technological processes in DELMIA allows you to reduce the cost of manufacturing labor-intensive products. It must be said that there is a relationship in the modeling and design of production processes. For example, when forming a simulation of a technological process, the sequence of its execution is mechanically designed. While investigating the technological process, recommendations are developed to improve the characteristics of the current technical equipment. The system also provides simulation of manual operations using the DELMIA Human Simulation module.

Visualization of technological operations of a product assembly is carried out using the DELMIA DPM Assembly module, which allows modeling the technological processes of assembly, analyzing the assemblability of the product, evaluating production resources, used equipment, tools and accessories, and calculating the time characteristics of technological operations of assembly.

As a result of the analysis, Softprom DELMIA visually demonstrated the main capabilities in the design of production processes, and also proved the feasibility of its use in the technological preparation of instrument manufacturing.