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STRUKTURE AND COMPOSITION OF INFORMATION BASIS OF AUTOMATED SYNTESIS OF THE ROBOTIC MECHANICAL ASSEMBLING TECHNOLOGIES

G. Vygovskyy, O. Gromovyy,V. Kyrylovych,I. Kryzhanivska

Zhytomyr State Technological University

Lack of information support for complexsolving ofthe tasks of the automated synthesis (AS) of robotic mechanical assembly technologies (RMAT) in flexible manufacturing cells (FMC) in machine- andinstrument engineering,which isbased on systems approach, has significantly affects on the duration and effectiveness of technological preparation ofrobotic mechanical assemblyproduction.

The purpose of this paper is disclosure of the structure, content and features of input data, which forms the information basis for the implementation of AS RMAT FMC in machine-andinstrument engineering FMC.

Input information is the result of the preceding stages of FMC design and synthesis technology in them.Thatinput information is considered as an information basis (base) that influences and determines the content, structure and parameters of intermediate and final information.All incoming information is seen as permanent, relatively constant and variable. There are disclosed the essence of these components of the input data, its origin and source location. There are defined the place of the author previously developed the informational models of suchin variant the components relatively a formulation of AS RMAT setting tasks on known technical basis FMC as grippers and manipulation system sof industrial robots, industrial robots as such, main and

additional productional equipment, devices of working position sand objects manipulation.

There dused scheme with the composition and the structure of the information basis clearly illustrates its components and the relationships between them.

The feature of the descriptions of information basis components is the theory of quaternions, the only meaningful units which make it possible in furtherto makethe systematic technological solutions in the formation of intermediate and final information AS RMAT.