FEATURES INTELLECTUALIZATION OF COMPUTER-INTEGRATED MANUFACTURING BASED ON THE MULTIDIMENSIONAL FUZZY CONTROLLER

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Production involving computer-integrated technology solves the problem of obtaining effective as modern agricultural business through automation hardware and by improving the exploitation of biotechnological systems to improve the performance of biological objects. Methodology defines a hierarchy of three interrelated management using computer technology which is installed between information exchange:

- First level - a means of local automation for process control,

- The second level - synchronized system solutions for operational control production,

- The third level - strategic, analytic is involving information technology resources to manage production.

Purpose - to identify the characteristics of computer-integrated agricultural production of biological filling and installation characteristics variables multidimensional fuzzy controllers with position-information system method.

In terms of the impact on multifactor technical facilities to biological content justified the use of information systems-based method of semantic information model. General principles of the semantic conversion characteristics variables multidimensional fuzzy controller is as follows:

- Cognitive structuring for biotechnical system implemented by impact factors and biological states for filling a priori defined field changes characteristics;

- Phasing factors, regardless of their origin, performed on the basis of biological homeostasis decomposition phase content and relevant semantic analysis;

- Knowledge Base precedent multidimensional fuzzy controller obtained as a result of the transformation absolute frequency characteristics macroparameters states in binary values the importance of factors on a scale procedure;

- Linguistic terms and associated fuzzy sets are defined using triangular membership functions.