

EXPERIMENTAL PATTERN OF COMPLEX EROSION PROCESSING BY INTRODUCING THE ELECTROLYTE THROUGH THE TRANSFER OBJECT

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For achieving the experimental pattern of complex erosion process, where the electrolyte shall be introduced through the tool electrode, systemic theory is used. In this sense, one shall analyze: system belonging to a superior system, a broader one, the dependence between the sizes defining various subsystems, unity and complexity, modelling criteria, industrial production elements inclusion into de system.

The mathematic pattern is established in order to comply with the functional connections and constitutive elements of the physical pattern. Based on the results obtained from preliminary researches the behaviour of the real pattern can be estimated. Consequently, the first stage in achieving the mathematic modelling of the complex erosion technological process by introducing the electrolyte through the tool electrode is that of designing the experimental pattern which includes both physical subassemblies and informational flows between them.

The experimental pattern allows, based on an experimental research program the qualitative and quantitative determination of functional dependences between the input variables of the process and the general function of the system, which transform inputs into outputs.

The parameters defining the pattern have to be established in order to represent the system they refer to, on condition it is simple enough to be used.

The complex erosion dimensional processing procedure belongs to the field of non-conventional technologies and is approached as a technological action system, revealing the input elements, which are the process parameters, as well as output elements consisting of individual or global performance indicators.

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