

Productivity and Structural Design of Manufacturing Systems

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Abstract : Productivity of the manufacturing systems depends on technological processes, a technical data of machines and a structure of systems. Technology is presented by the machining mode and data, a technical data presents reliability parameters and auxiliary time for discrete production processes. The term structure of manufacturing systems includes the number of serial and parallel production machines and links between them. Structures of manufacturing systems depend on the complexity of technological processes. Mathematical models of productivity rate for manufacturing systems are important attributes that enable to define best structure by criterion of a productivity rate. These models are important tool in evaluation of the economical efficiency for production systems.

Keywords : productivity, structure, manufacturing systems, structural design

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