ABSTRACTS

VIRTUAL AND DIGITAL TRANSFORMATION AND GENERAL PRODUCTION ENVIRONMENTAL STRUCTURES
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Abstract: The future of intelligent manufacturing systems will be the era of Smart technologies coupled with complex automation, robotics and artificial intelligence. Already today, virtualization and the digital transformation of manufacturing systems, the pursuit of applying Industry 4.0 elements, and the industrial Internet platforms are becoming a presence. The advent of virtual and digital technology and breakthrough projection technologies to deliver a comprehensive, tailor-made manufacturing environment delivers a number of generally proclaimed benefits in terms of productivity, flexibility, production quality, including absolute responsiveness to meeting diverse and increasing customer demands for product performance . The benefits of designing production system structures as virtual models and then digitizing them are well known and, together with flexibility, meet the growing demands of customers. Any such qualitative change in the production environment entails a 'knowledge burden' on the designers of such production structures. They must be created on the basis of best practices, knowledge and knowledge that apply methods, procedures, tools, techniques and models of construction improvement and contraction, respectively. transformation (restructuring) of the production environment.