

Management of tools in digital manufacturing - A case study

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Abstract: Rapid changes in the market, with additional requirements for personalization of products, create new needs for great flexibility in manufacturing management, but on a new basis. The answer to all these challenges is the Industry 4.0 model. Digital manufacturing is the basis for Industry 4.0, and it has the following dimensions: (i) is based on the application of advanced digitally oriented technologies, (ii) smart products are increasingly being developed and marketed, the characteristics of which meet unexpected customer requirements, and (iii) smart supply chain (procurement of raw materials and delivery of finished products). In this concept, there is a two-way exchange of information in collaborative manufacturing, and their exchange through digital platforms for smart manufacturing. Tool management in this model is part of this platform and this concept, and is extremely important for manufacturing organizations. Therefore, this paper presents a developed model of a digital factory with a detailed presentation of the model for management tools in workshop, as part of the ERP and MES modules.

Keywords: digital manufacturing, tools management, ERP, MES

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