

Technology management

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Abstract

Purpose: *The purpose of the work was to attempt to develop a methodology for the technology management based on the literature study and experience of its own, including the formal requirements in existing standards of management, with particular attention to the specifics of heat treatment processes.*

Design/methodology/approach: *In the research concerning the solution of the posed problem required the semantic definition of the contemporary understood range of technology in the sphere of material implementation of the productive processes, so from the classical approach to the technology design as well as the statement of the problem in the context of the management aspects. The diagnosis of the problem and requirements for technological processes including the problems of heat treatment processes constitute the basis of the developed methodology in the technology management, regarding selected strategic and operational aspects. The solution of the task was based on formal dilemma of "hourglass" in the field of management whose purpose was to determine the optimal scope of the documentation for the technological process depending on the adopted criteria. The work concerns the analysis and research in the interdisciplinary field of materials science and management science.*

Findings: *The original author's achievement concerns the design of the methodology for the technology management that could be applied to various processes, not only - as it was*

presented in the work - for technological processes of heat treatment. There were gained valuable and original results concerning both cognitive and applicative sphere of the technology management.

Research limitations/implications: *Despite the interdisciplinary scope, research and analyses have been limited to the process of the technology management in the field of heat treatment processes, although they were regarded as special processes. It constitutes a limitation of research, including the resulting solution. Due to the specific of the problem it is difficult to estimate the economic impact of the implementation of the proposed solutions.*

Practical implications: *The practical application of the proposed solution is related to the increasing demand for the application of the technology management by economic operators in the production practice, but also the output of this study is further consideration and scientific development of the technology management concept.*

Originality/value: *Presented in this paper an original idea in the field of the technology management, including the methodology of the technology management developed an original approach the subject. There were indicated the priority factors in the technology management, concepts of the evaluation of the technology and the technology management model. It has been shown the validity of actions taken to determine the scientific technology management issues, including the merits of practical use in manufacturing processes.*

Keywords: *technology, management, technology management, process management, knowledge management, system, process, special process, heat treatment*

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