

Acta Tecnología - International Scientific Journal

ABSTRACTS

## ABSTRACTS

## SIMULATION OF AIR FLOW RATE AT POINT OF CONTACT WITH A STREAM OF MELTED POLYMERIC MATERIAL

(pages 1-4)

### Vladislav Sviatskii

Department of Technology of mechanical engineering and instrument making of Votkinsk Branch of Kalashnikov Izhevsk State Technical University, Russia, svlad-2000@yandex.ru

### **Boris Sentyakov**

Department of Technology of mechanical engineering and instrument making of Votkinsk Branch of Kalashnikov Izhevsk State Technical University, Russia, sentyakov@inbox.ru

### Michael Sviatskii

Department of Technology of mechanical engineering and instrument making of Votkinsk Branch of Kalashnikov Izhevsk State Technical University, Russia, SM\_406lab@rambler.ru

Keywords: PET-fiber, extrusive blowing method, air flow, elementary fibers

*Abstract:* This paper presents the research of interaction of air flow and melted material in production of fibrous materials. Correlations for calculation of air flow rate in different cross sections of a stream are acquired. The developed method of calculation of air flow rate at point of contact with stream of the melted polymeric material can be used in construction of blow heads models with a slot nozzle in production of fibrous products from different polymeric materials.



ABSTRACTS

# IMPACT OF IMPLEMENTATION AND USE OF BUSINESS INTELLIGENCE ON COST REDUCING IN CONSTRUCTION PROJECT MANAGEMENT

(pages 5-11)

## Tomáš Mandičák

Technical University of Košice, Faculty of Civil Engineering, Department of Construction Technology and Management, Vysokoškolska 4, 042 00 Košice, tomas.mandicak@tuke.sk

## Annamária Behúnová

Technical University of Košice, Faculty of Manufacturing Technologies, Department of Manufacturing Management, Bayerova 1, 080 01 Prešov, annamaria.behunova@tuke.sk

## Peter Mesároš

Technical University of Košice, Faculty of Civil Engineering, Department of Construction Technology and Management, Vysokoškolska 4, 042 00 Košice, peter.mesaros@tuke.sk

*Keywords:* implementation and use of Business Intelligence, cost reducing, construction project management *Abstract:* Last years period is characterized as a period of dynamic progress and expanding use and implementation of information communication and knowledge technology generally. Data and information requirements in the knowledge society heads grow every day. The competitive environment is forcing companies to make quick and effective decisions on a daily basis. The increasing amount of data and information promotes greater selection and requirements for use relevant data to support of decision making in the management and coordination of enterprises and projects in each area. The exploitation of advanced technologies to support management in many enterprises is a priority and one of the main steps and procedures to successfully manage enterprises and projects. Business intelligence is one of the possible solutions for decision support. Article discusses issue of implementation and use of Business intelligence in Slovak construction industry from various point of view. The main objective of this article is to confirm impact of implementation and use of Business Intelligence on cost reducing in construction project management. Enterprise size, enterprise owner, participant of construction project and SK NACE classification present important factors for selection of research groups.

# TYPOLOGY OF MANUFACTURING FLEXIBILITY IN THE ENGINEERING INDUSTRY: A REVIEW

(pages 13-16)

## Lucia Knapčíková

Technical University of Košice, Faculty of Manufacturing Technologies with a seat in Prešov, Bayerova 1, 080 01, Prešov, Slovakia, lucia.knapcikova@tuke.sk

## Jozef Husár

Technical University of Košice, Faculty of Manufacturing Technologies with a seat in Prešov, Bayerova 1, 080 01, Prešov, Slovakia, jozef.husar@tuke.sk

Keywords: manufacturing, flexibility, industry

*Abstract:* Classification of manufacturrring flexibility represents a risk for the company as face this challenge. Reactions to these changes, based on late responses market leading executives to flexible manufacturing. In other words, flexibility is the ability to cope with change and insecurity by configuration of system elements within target-oriented way to maintain stable performance in the context of changing conditions.