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ABSTRACT

MATERIALS SCIENCE RESEARCH AND DEVELOPMENT

SOME CONSIDERATIONS ON THE SOURCES OF THE PULSATING FLOW REGIME IN THE INDUSTRIAL COMBUSTION CHAMBERS

Tudor PRISECARU, Dorin STANCIU, Cristina CIOBANU, Sorin Alexandru ENE

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Key words: pulsating flow regime, industrial combustion chambers.

Abstract: *This paper examines the sources of the pulsating burning regime occurring in the industrial combustion chambers. Identifying the external and internal excitation sources of fireplace pressure oscillations, the paper offers some solution for investigating and eliminating the unstable combustion process by acting separately on every possible known cause.*

EXPERIMENTAL VERIFICATION BY THERMAL ANALYSIS OF THE "3D_Sim" SOFTWARE FOR CASTINGS SOLIDIFICATION SIMULATION

Ioan CIOBANU, Mihai CHIȘAMERA, Sorin Ioan MUNTEANU, Aurel CRIȘAN, Vlad MONESCU

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Key words: 3D_Sim, software, casting, eutectic alloys, solidification.

Abstract: *The authors of this paper realized at „TRANSILVANIA” University of Brasov, a software for 3D solidification simulation for castings of eutectic alloys. The paper presents some results of the experimental researches done by the*

authors in order to verify this software. To verify the software there were compared the solidification time for a casting, experimentally determined by thermal analysis with the solidification time obtained by solidification simulation for the same casting. The study shows that the „3D_Sim” software leads to similar results as experimental ones. The solidification time obtained by simulation is a little bigger than that experimentally determined. This deviation can be explained by the errors induced by the thermocouples presence inside the mould in the experimental research as well as by the fact that the software doesn't simulate flowing and cooling inside the gating system.

VERIFYING A SOFTWARE FOR THE 3D SIMULATION OF CAST IRON PARTS SOLIDIFICATION

Ioan CIOBANU, Ionel Cincă LUPINCA, Sorin Ioan MUNTEANU, Aurel CRIȘAN, Vlad MONESCU

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Key words: 3D simulation, eutectic alloys, cast iron.

Abstract: *At the „TRANSILVANIA” University of Brasov, the authors of this paper realized a software for 3D simulation of eutectic alloys cast parts solidification. The research made by the authors is presented in order to verify the accuracy of the results obtained with the help of the software presented. The results obtained at the simulation of parts solidification were compared to the results*

obtained from the use of a software, recognized at an international level. The

study showed that the two software show similar results.

ECONOMICAL MANAGEMENT

THE MODERN ACCOUNTING AND THE REQUIREMENTS OF IFRS.

IFRS 7 FINANCIAL INSTRUMENTS

Vasile BLEOTU, Catalin DAN

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Key words: financial instruments, assets, debts, options, IAS/IFRS.

Abstract: *The definition provided in the standards for the financial instruments contains as key-elements the notions of financial assets and debts. A first classification of the financial instruments consists in their grouping in financial assets and debts. These terms are widely used both in the financial literature and in the accounting one.*

REQUEST OF THE EUROPEAN DEVELOPMENT AND

GLOBALIZATION: THE PAYMENT BASED ON SHARES (IFRS 2)

Vasile BLEOTU, Catalin DAN

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Key words: balance sheet, opening IFRS, previous GAAP, shares, financial instruments, fair value.

Abstract: *The share-based payment represents, for sure, a challenge for the business world in Romania and will certainly gain ground. The initial acknowledgement is made in compliance with the rules provided in the General Frame for drawing up and presentation of the financial positions. In case that the payment is effected before the reception of the goods or services, the entity will acknowledge an advance payment granted. Depending on the manner in which the settlement will be done, the entity will*

acknowledge in counter-trade of the received goods or services either an increase of capital, or a debt. The problem of accounting the share options, especially those issued for the executive staff and for other employees of a company, in direct compensation for their efforts, has been disputed for a long time .

THE ACCOUNTING LAW FROM THEORY TO PRACTICE – OR FROM THE GLOBALIZATION TO CRISIS

Nelu ANGHEL

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Key words: accounting law, globalization, owner's equity, costs, IAS/IFRS.

Abstract: *The leap into the globalization era is not possible without remarkable progress in the generalization of some rules and norms accepted by the accountants in different countries. The relevance of the accounting information in the knowledge of the company's patrimonial situation is not only a problem of economic theory, but also of accounting law. Beyond the norms regarding the meaning threshold and the axioms of the economic sciences there appear aspects of contractual nature. The most accurate, systematized and representative data can be obtained only from accounting. The managers and members of the Board will want to obtain by this means as much information as possible, sometimes exceeding the natural capacity of the bookkeeping. For such situations, the accounting law as border discipline will have a word to say.*