

Scherbakov S.A., Koulgeiko M.P. Solution of Technological and Analysis Problems when Setting a Blank on a Plane and Two Pins

The method of interrelated analyses has been proposed enabling to define within two analysis cycles maximum the composition of the surfaces that can be machined with required accuracy and the size of pins providing both loose fit of the blank and basing error within allowable values for the surfaces to be machined, when the blank is set in devices with basing pattern including a plane and two holes.

Vereschaguin M.N., Kiriliuk S.I., Tseluev N.Y., Goranski G.G. The Conditions of Forming an Amorphous Structure in Iron Based Alloys

The conditions of forming amorphous structure and thermal stability of iron based amorphous alloys of metal-metalloid type have been studied. It is shown that amorphous phase is being formed at critical speed of melt quenching that can be evaluated from the standpoint of the theory of homogeneous crystallization. Amorphization ability and thermal stability of iron-based amorphous alloys increase during going over from binary to multi component systems, if alloying component increases the number and the strength of interatomic links between alloy components. For compound alloys of the Fe-Ni-Co-Mo-Cr-B-Si and Fe-Al-P-C systems the Temperature-Time Change diagrams have been built, enabling to predict the thickness of quick quenched products having amorphous structure.

Govor G.A., Dobrianski V.M. Magnetically Soft Materials Based on Isolated Iron Particles

The results of frequency response study of magnetic induction and magnetic permeability of composite magnetically-soft materials based on water atomized iron powders are presented in the paper.

Poddenezhny E.N., Boiko A.A., Alexeyenko A.A., Kovalenko D.L., Kravchenko I.P. Forming Thin Film Multi Component Structures by a Sol-Gel Method

Colloid chemical features of film-forming solutions have been studied in the paper, and also the structure and spectral characteristics of silica multi-component coatings, produced by spin-coating technique. It has been established that adding salts $\text{Co}(\text{NO}_3)_3$ and $\text{Mn}(\text{NO}_3)_2$ at concentrations above 10 mass % with boric acid (1,0 mass %) for creating film-forming solutions leads to their viscosity increase and time stability decrease. This effect is confirmed by rheograms of mature sols and half-colloid solutions on «shift velocity – dynamic viscosity» coordinates. It has been shown that silica structures, containing cobalt, manganese and iron ions are most promising functional coatings for glass lenses.

Vereschaguin M.N., Ostricov O.M. Applying Alternating Dislocation Walls Model for Modeling Stressed State for Shear Strips in Amorphous Materials

A dislocation model of the shear strip in amorphous material is proposed. A distinction of the model consists in the use of alternating dislocation walls. The fields of stress for the shear strip have been calculated.

Stepanenko D.A. Trends of Change in the Structure of Purchase and Sale of Agricultural Products and Raw Material in Consumer's Cooperation.

Consumer's cooperation of the Republic of Belarus is an important infra-structural element of agro-industrial complex. The dynamics of agricultural product output for the period of 1995-2001 in the Gomel Region of the Republic of Belarus has been considered in the paper, and the trends of change in the assortment structure in the purchase and sale of agricultural products and raw material by purchasing enterprises of consumer's cooperation in the Gomel Region have been revealed. Research results are aimed at the use of marketing instruments

(segmentation and positioning) when forming optimum assortment structure of the purchase turnover.

Pavlov A.M. The System of Profit Sharing as a Method of Forming Common Interests of Different Social Groups at the Enterprise

Conceptual principles of the mechanism of implementing the profit sharing system are considered in the paper. The system is intended for forming common interests of different social groups at the enterprise and also for the rise of the enterprise employees' interest in the direct increase of the results of financial performance of the economic entity and creating extra financial resources allocated to innovation development of the enterprise.

Nekhrst O.A. The Assessment of Adaptability Retrospective Level of Metallurgical Enterprises of the Republic of Belarus

The authors interpretation of the nature of adaptability as an enterprise characteristic is presented in the paper, for the first time the definition of the respective economic category is given, the forms of enterprise adaptability are considered, basically new methods of assessing its retrospective level are presented, based on estimating the rate of achievement of activity goals set by the enterprise.

The methods proposed have been approbated at metallurgical enterprises of the Republic of Belarus. The results obtained enable to make a conclusion about unsatisfactory adaptability level of the enterprises studied, that has an unfavorable effect on their performance efficiency on the market.

Kolesnikova I.I. Enterprise Cost Formation

The definition «enterprise cost» should be approached applying the system and evolution approach where an economic entity is considered as an open system. The cost of enterprise as an economic and social system develops spirally. Studying the factors forming the enterprise cost and their relationships enables to take such decisions and measures, that result in ensuring required enterprise cost for a long period of time or its increase.

Korneenko O.V. Job Market in the City of Gomel: Movement, Specific Features and Regulation Measures

Turning to the study of unemployment in Gomel is stipulated first of all by the idea having become customary in the last few years that this problem is not pressing.

Specific features of the job market in Gomel in 1998-2002 were relatively smooth dynamics of the processes taking place there, stability of its main trends and rather low and stabilized unemployment rate recorded.

At the same time job market pressure after rather long relative stability period began to increase. This tendency became settled. It is preconditioned mainly by the increase of manpower and measures taken by the employers for optimizing the number of employees having entailed spare manpower dismissal.

Ugolev S.N., Drozd S.S. The Method of Determining the Dependence of Employee's Income on the Educational Level in the Republic of Belarus

In this paper an attempt has been made to analyze and evaluate the present state of the investment activity in the professional education in the Republic of Belarus on the basis of static and dynamic industry «professional portfolios». The study of this kind is also necessary to reveal the possibility to use an average wage as an indicator of the industry qualification capacity. As the calculations show (of integral correlation value), the increase of the industry employees' educational level is in no way connected with the following return on investment in professional development.. Their structure (profession «portfolio») is unpractical, that is shown

by an average wage increase and the dynamics of return on the investments in human factor. That is why a basic point in defining optimum investment policy of human power development in the Republic of Belarus is centralized and market regulation of the correspondence of the structure of such investments to the dynamics of structural shifts in the economy.

Mitrofanova G.V. Raising Audit Significance as the Method of System Control

The paper reveals the problems concerning the rise of audit efficiency in managing modern enterprise on the basis of further improving the system of control relations. The description of the control as one of managerial functions is given, the interrelation of the control and independent audit is considered from the point of view of their most rational combination. The method of conducting audit proposed provides more details of its nature and the field of application and is aimed at enhancing the efficiency of financial-administrative performance of the enterprise.

Kurochka N.A. Imitation Modeling the Influence of Intangible Assets on the Change of Product Competitive Ability

An imitation model of the change of the product competitive ability and enterprise performance efficiency after introducing an intangible assets object in economy turnover is presented in the paper. The model proposed enables to study actual process of bringing the intangible assets object into economy turnover and on the basis of worked out system of coefficients for the description of the process under study to conduct multiversion calculations in order to find out economically optimum trajectory of the enterprise performance.

Dragoun N.P. The Evaluation of the Intensity of Competitive Activity of the Enterprise as a Factor of Its Competitive Power

The author's interpretation of the «intensity of competitive activity» is presented in the paper, which is considered as a factor of the enterprise competitive power. The analysis of current methods of competition intensity evaluation has been conducted, a fundamentally new method of its direct evaluation has been presented, based on the analysis of the intensity of application of its methods by the participants of competition.

The methods proposed have been approbated at metallurgical enterprises of the Republic of Belarus. The results obtained enable to make a conclusion about the importance of the intensity of competitive activity of competitors in the same industry and customers as the factors of their resulting competitive power.