
ABSTRACTS

TECHNICAL SCIENCES

Alimov V. I., Pushkina O. V. Decay diagram of supercooled austenite during sorbitizing in graphite of wire bar for thin high-strength wire // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The influence of the degree of preliminary cold deformation on the propensity to gaseous corrosion of the eutectoid steel wire with diameter of 2 mm during heating to the austenite area was studied. It has been established that the pre-cold deformation promotes the growth of activation energy of the gaseous corrosion process and increases the oxidation rate with temperature increasing. Hereditary influence of structural changes in the deformed dual phase steel on the propensity to oxidation during heating in the austenite area is shown with a shortened heating time. The possibility of adjusting the austenitizing parameters in the process of patenting wire rod in connection with the degree of materials deformation in order to reduce the loss of metal from dross is shown.

Zhiguts Yu. Yu. The particularity of synthesis thermite steel mark 35JI and its properties // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Nowadays the improvement of properties of materials is arrived mainly by the development of traditional technologies of production alloys and the thermal, chemical-thermal and other processing methods of use. However, their high power consumption, the need to comply with environmental regulations led to the need of the products where synthesized by the thermite process. The research of steel 35JI showed that the synthesized thermite material has high mechanical properties. The particularity of the chemical composition of thermite steel, physical properties and temperature of the critical points are identified. A separate research revealed changes in the mechanical properties of thermite steel 35JI at a temperature to 400 °C. The conducted work allowed to determine the composition of charge for the synthesis of thermite steel of 35JI, to develop the method of preparation of metallothermic mixture and synthesis of alloy. Given the advantages of thermite process a promising direction for further research metallothermic thermite welding of steel 35JI are indicated.

Lyutyy R. V., Guriya I. M., Keush D. V., Anisimova E. A. Determination of the optimal composition of core mixtures with new binders, which are formed by the interaction of phosphoric acid and inorganic salts of aluminum // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

This paper is devoted to the development of binder components for core mixtures, based on the interaction of phosphoric acid with inorganic salts of aluminum and strengthening directly in the hot box. As the aluminum-containing components in the mixtures used aluminum sludge, aluminum nitrate, aluminum hydrogen phosphate, aluminum sulphate. It is shown that the interaction of each of these compounds with an acid has an individual character. These features are used to achieve the maximum level properties of the mixture. The optimal mass ratio of the respective components and determine the modes of strengthening core mixtures was established. These high-quality castings of cast-iron, carbon and alloyed steel was obtained.

Prots L. A. Application of X-ray diffraction techniques for the evaluation of quality of treated surfaces for lithium tetraborate single crystals.// Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Possibilities for the application of X-ray diffraction techniques for the evaluation of treated surface quality for lithium tetraborate single crystal planes corresponding to (001) crystallographic planes at all technological stages of mechanical treatment are presented. Behaviour of dependences of diffraction peak halfwidths for two orders from $Cu K\beta$ radiation at X-ray diffraction scanning by $\theta/2\theta$ technique and rocking technique on the near-surface layer defects is analyzed. The rocking technique is shown to provide more information since it is more sensitive to the general state of damage of the single crystal near-surface layer at all stages of mechanical treatment. This is made possible due to the elaborated method of the single crystal quality check.

Fesenko M. A., Mogilatenko V. G., Kosyachkov V. A., Fesenko E. V. Technologies of production of the cast-iron foundings with differentiated structure and properties // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Offered and investigational method of production of the cast-iron foundings with differentiated structure and properties in their local parts or areas from one base melt with the use of the technology of treatment of liquid pig-iron inside the mold by modifiers, alloying compositions ligatures and other additives at the pouring moulds. The two-sided foundings are got from white hard wear-proof cast-iron in one part and more viscous grey cast-iron with a lamellar graphite or high-strength cast-iron with a spherical graphite in a revetment other part. This method is perspective for production of the cast-iron foundings of different nomenclature, workings in the conditions of unstressed-abrasive or shock-abrasive wear instead of the steel foundings, and also alloyed special steels and cast-irons, that allows considerably to shorten the expense of scarce and expensive alloying elements and cuts prime cost casting.

Shtihno A. P., Alimov V. I., Peredepiy I. A., Ermakov V. P. Effect of cooling parameters on the properties of mololnyh balls from steel 65G for ball mills // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Consider the effect of cooling parameters during thermal processing with separate heating using heat and rolling on the structure and properties of steel 65G used for the manufacture of mololnyh balls for ball mills . To determine the duration of cooling to autotempered Thermal calculation is made according to the method of numerical solution of differential equations of heat conduction. It is shown that the theoretical calculations are not always true , and require adjustments, ie experimental studies. Found that adjusting the duration of cooling can be controlled final structure and properties of steel.

Aliyeva L. I., Klimenko G. P., Martynov S. V, Goncharuk K. V. Computer simulation of power mode during combined extrusion rod parts// Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Extrusion the combined processes combine the advantages longitudinal and transverse extrusion. This method can obtain a more complex shape parts as compared to conventional stamping methods. The simulation process combined extrusion parts such as rod flange finite element method using the software QForm 2D. The aim of this study - the definition given extrusion pressure and disclosures in the combined extrusion matrices. According to the research, it was found that the deformation zone is focused on transition edges basic tools and deforming the upper half-matrix. Method for planning the experiment were obtained dependence of the reduced pressure extrusion mandrel and disclosure of the geometric parameters and the values obtained details of contact

friction. To verify picture of metal flow experiment was conducted with the applied coordinate grid. Characteristic distribution of material flow in the theoretical analysis corresponds to the simulations performed.

Zablocki V. K., Zhbankov I. G., Shvets A. A., Panov V. V. Broach blanks with inhomogeneous temperature field // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

In the manufacture of large parts such as shafts, forging ingots are used as a workpieces. The main forging operation to produce such parts and eliminate the defects of the cast structure of the workpiece is a broaching. Workpiece is heated to improve the ductility and reduced resistance to deformation. As a result of cooling during forging preform is cooled from the periphery to the center, which entails the formation of a time-varying non-uniform temperature distribution over its cross section. In this work the analyze the distribution of deformation in terms of forging during her broach with a uniform and non-uniform temperature fields, as well as an assessment of its axial stress state area were done. The recommendations that allows minimal uneven distribution of deformation in terms of forgings, as well as the most-developed axial zone of the workpiece also were given.

Zagoryansky V. G., Zagoryansky O. V. Modelling of layer thicknesses after rolling symmetric bimetallic packets based on the energy approach // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

When rolling bimetallic packages consisting of three layers (hard-soft-hard or soft-hard-soft) the task of finding the thickness of the layers after rolling occurs. Solution of the task is based on the energy method. Full power of deformation depends on the ratio of the thickness of layers in the package after rolling. The range of the thickness ratios is known. The thickness of the middle layer, actually received, is found from the condition of the minimum of the full power of rolling. The article gives the optimization model, which is implemented in Microsoft Excel. The thickness of the middle layer in the package after rolling is found by using Solver add-in.

Markov O. E. Deformed state during drawing of shortened ingots by dies with bevels // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

In this paper, a new process of forging short-ingots without upsetting by flat dies with bevels was proposed. The software based on the finite element method with using of an established equation of component stresses and strains was developed. Modelling of a forging process with using of the developed software has allowed to determined of strain distribution and forming of the workpiece during forging for new technology. Various angles of the dies bevels (equal to 10, 20 and 30 degrees) and the horizontal length of the dies were studied. At the dies bevel angles of 30° and the narrow deforming-edges there is an uniform distribution of the stain in the forging volume. Rational geometry of a tool for intensification of an elongation during forging shortened-ingots are truncated dies with the bevels angle 20–30° and the ratio $b/B = 0,5-0,3$. Experimental studies on lead samples confirm the results of finite element modelling.

Markova M. A., Semenov V. M., Tagan L. V. Investigation of the technological process forging large rolling shafts without operation upsetting // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The influence of upsetting operation on strain distribution in the forgings body was investigated. Changing of upsetting operation to drawing short ingots by application of special mechanical modes of forging was proposed. A rational process of the forging large shafts was developed. The study based on the finite element method. Temperature range of modeling the process of forging was 1200–800°C, the material – steel 45Cr3Mo1V. The number of grid points – 10000, the number

of elements – 3200, Poisson's ratio – 0.49. Strain state of the workpiece during the forging of two options with upsetting and without upsetting were investigated. It was established that the use of upsetting for of sufficient magnitude of forging ratio not required. Uniform distribution of strains that provide requested of forging ratio can be achieved through forging shortened ingots by convex die. As a result, approximately 25 % of the increased productivity of the process of forging large shafts, the amount of heating from below from 8 to 6. The new energy-efficient process of forging large shafts without upsetting of the shortened ingots designed using finite-element program.

Popivnenko L. V., Eremkin E. A., Bochanov P. A., Mironenko E. V. Advanced methods for manufacturing multi-layer plain bearings and filters by pressing of powder materials in closed molds // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Advanced new methods for producing multi-layer parts such as plain bearings and filters in closed molds are considered in the article. The use of the described technology for pressing of multi-layer makes it possible to simplify and reduce the cost of the technological cycle of their production. At the same technology for producing multi-layer parts in closed molds provides for the possibility to control the thickness, volume porosity and pore sizes in pressed layers. This is achieved due to the design features of dies of closed molds, and also by the application the special devices, using for charging powder materials. Considered technological methods are simple and can be implemented in any type of production.

Rozov Y. G., Steblyuk V. I., Sidorenko Y. M., Shkarluta D. B. Dynamic interaction between bullet and the inner surface of bullet's enter hole of the burrel with rectangular rifling// Scientific Herald of the DSEA. – 2013. – № 2 (12E).

In calculating the barrels of small arms on the strength by the traditional methods solve the problem with a static loading of barrel the maximum pressure of powder gases, while influence other force factors are considered choice of the safety factor and corrected according to the results of experiments. However, a more informative approach to the calculation of the strength of the barrel is a method of numerical simulation of the dynamic interaction between the bullet and the inner surface of the barrel, which is based on giving the bullet a certain value of start acceleration. Such method on example of barrel of a gun "Makarov" with rectangular rifling, are considered in this paper. The question of the influence initial acceleration of bullet on the kinematic parameters of its motion along the barrel bore at the locality of bullet's enter hole and the stress-strain state of the contacting elements, are investigated.

Royanov V. A., Bobikov V. I., Zakharova I. V., Bobikov A. I. Semenov V. P. Improvement of the composition charge of a powder wire for causing coating electro arc metallization using pulsating air - spraying// Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Results of researches of technological properties of coverings executed by arc metallization by powder wires with advanced composition are provided. The developed powder wires provided the coverings, differing high properties with use of a pulsating air-spraying stream, due to application more the active components in furnace charge. It provides the best coupling of an evaporated covering with a basis and reduces quantity of oxide-coated interlayers on boundaries. There are presented the results of metallographic investigation sprayed coatings, the impact of the air-spraying on the structure. Optimum frequencies of pulsations are offered is air – spraying stream.

Kovalevsky S. V., Starodubsev I. N. Classification technique ecombined methods of processing machinery parts.// Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The paper analyzes the main advantages of the combined methods of treatment of the ir significant. impaction the improvement of product quality, productivity, and hence, competitiveness.

Classifier as proposed by the combined methods of processing machinery parts. Designed classifier can be included in its database of more than 10,000 of the combined methods of treatment. The data basis designed in such a way that the methods that are currently not known, may be further introduced into the classifier. Classifier can encode each of the methods of combination treatment, which makes it easy to navigate a large number of methods. Classifier has no restrictions on any factors, and individual methods. The ability to choose the optimal method for specifically defined condition and the detail so of its production capabilities in today's engine environment.

Medvedev V. S., Chepel A. L. Autonomous drive for machine-tool companion fixtures. // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The questions of application of cognitive models for design of machine-tool companion fixtures are considered. The developed cognitive model allows taking into account influence of technical, organizational and operating factors on drive designs. Gravimetric coefficients of connections were introduced into the model that defined the influence degree of different factors on drive designs. As a result, a number of autonomous drive designs were worked out. One of hydraulic autonomous drive designs was chosen for research. Studies of technical descriptions of the developed drive were conducted. Permissible oil loss amounts were defined at that a drive keeps its capacity

Melentiev R. Y. Determination of the thermal conductivity of polymer composites // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The paper considers the possibility of investigation of thermal conductivity in two-component systems of the type of polymeric composite materials with continuous fibrous filler. The author suggests a method of investigation of thermal processes in complex anisotropic bodies. Created and step-described computer model of the thermal field of structural phases of polymer composite material in an elementary volume. By isothermal analysis of temperature gradation of a two-part body. In the modeling process, factors that influence on the thermal conductivity and the formation of the thermal field. The obtained results are compared with the known analytical solutions of the subject matter.

Nechvoloda L. V. The use of information technologies for the automation of management of technical re-equipment of machine building enterprise // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

In the process of technical re-equipment of machine-building enterprise as an important factor influencing the quality of this process is the integrated use of information technologies. In this article the tasks of information support and directions of use of information technologies at the enterprise are suggested to shape depending on the level of innovation activity of the concrete enterprise. More in detail are reviewed the General requirements to the capabilities of the software complex to support decision-making on the development of fixed assets. Presents the model of management of technical re-equipment of machine building enterprise, and also shows the class diagram for automation of process of decision-making.

Oleynik S. Yu. The study on the cutting conditions of grinding on the oscillations of elements of the technological system of diamond-abrasive machining of thin-walled shells of the glass-ceramic // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The results of research of low-frequency vibrations of grinding wheel and part thin-walled shells of glass-ceramic are presented. Vibrations during the diamond grinding are reason of waviness of surface after machining. The modal was developed to predict final waviness of surface from grinding parameters and dynamic behavior of detail parts of technological system

of grinding. Significant influence on the value of the longitudinal surface waviness on the operation of diamond-abrasive machining has contour speed. In this paper the calculation of summary amplitude of the oscillation of the relative elements of the technological system for two feeds which depend of the rotation frequency of the workpiece is presented.

Onischuk S. G. Directed formation properties of parts Heavy Engineering Industry // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The article examines the increasing durability of machine parts taking into account the life cycle of the product. The use of combined treatment methods allows to form the workpiece surface properties such as roughness, hardening, residual stresses. Given the technological heredity can determine the redistribution of residual stresses throughout the process with the application of graph theory. Built-chart of the formation of residual stresses and strains in the processing of the walls of the housing parts. The effect of electro-mechanical modes of processing on the state of the surface layer of the treated housing part. The mathematical models to determine the residual stress and strain in view of technological heredity. Inheritance coefficients determined by least squares. The use of electro-mechanical milling on the draft stage reduces the residual strain by 15–20%.

Pinahin I. A., Kovalevskiy S. V., Chernigovskiy V. A. Increasing resistance of cemented carbide cutting tools by volume pulse laser hardening // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Presented a method to volume pulsed laser hardening (VPLH). Given application prospects VPLH comparison with the known methods using a laser hardening. It is shown that the new method of laser hardening can improve the properties of hard alloys on the local volume due to a single laser pulse due to the occurrence and the passage of the shock wave in the material. Indicated that the optimization of VPLH (effective irradiation energy, pulse width, beam diameter, of the laser irradiation distance from the cutting edge up) produced by X-ray diffraction analysis through the use of modes of hardening, in which there was the greatest increase in the degree of imperfection of the sample structure. The results of field tests cemented carbide cutting tools for resistance plants in Russia and Ukraine and calculated values of the parameters affecting the efficiency of processing (coefficient of variation of resistance, gamma-percent resistance).

Polishchuk V. A., Nikolaiev O. L. Determination of parameters of the spring elements with shape memory effect during thermo-mechanical impacts // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Influence of the heat and mechanical treatment on the reversible change of shape on the cylindrical compression springs with the shape memory effect under the cyclic change of temperatures during the intervals of martensite transformation is investigated. The dependences and the mode of preliminary heat treatment and subsequent thermopower cycling, providing stabilization characteristics of spring thermosensitive elements and the formation of the memory effects of the optimized parameters for a given geometric characteristics of the springs. Established dependences allow calculation and design of cyclic action thermoactuating drives for process systems.

Ramazanov S., Sokolova Ya., Azarenko N., Greshnoy D. The transfer function of a hydraulic drive with variable displacement. // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The article is devoted to the development of reliable mathematical models of business processes in engineering equipment drives. In this paper, a mathematical model of the dynamic characteristics of the power of automatic electro-hydraulic variable displacement is developed. The mathematical model can be used to evaluate and select options of elements and actuators, to predict its

static and dynamic characteristics. The block diagram of the control signal is showed. A transfer function for the output drive shaft rotation angle signal to motor control signal (tilt cylinder or washer) is received.

Samoshkina S. P. Ways of solving the urgent problems to improve service jobs machinists mechanical repair shops and metallurgical industries // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The analysis of the organization and maintenance of jobs in terms of the individual machine operators and maintenance of production in the Dnipropetrovsk region. An analysis of the works of scientists working in the field of improvement jobs. Shows the classification of augmented elements of the organization and maintenance jobs. The complex of measures on maintenance of the workplace with a schema maintenance machinist job in the repair of production. The most important element in the organization of work is to improve the planning, organization and maintenance workers. For effective functioning of modern production needs a clear organization of the workplace.

Tkachenko E. V., Gladysheva O. V., Mishura L. V. Functional approach for structuring of the machining process // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Is justified the application of the functional approach in structuring of the process steps and processes of machining parts heavy machinery. The question of choice ground of optimum complex criterion of machining technological operation is considered. It takes into account influence on efficiency of technological operation of the determined and stochastic factors. The form of optimum complex criterion founded on the additive furl of separate criteria of supplied by weighed coefficients is offered. The requirements offered to the choice of complex criterion are grounded.

Fedot'eva L. P. Study of the honing machine of drives in finishing treatment sleeves of multipliers hydrocutting equipment // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Identified the main causes of failure of cavities sleeve multiplier: deformation, corrosion, wear or damage to individual components, leading to excessive leakage of the working fluid. Responsible operation in the manufacture of shells multipliers, which directly affect the performance and durability of both the sleeve and the entire multiplier is honing operation. Analyzed the causes of uneven angle set matches traces honing head. The results of the modeling process of honing (directional abrasive grain) when the average angular velocity of rotation of the spindle. Due to the kinematic chain of transmission elements, and which do not give a guarantee accurate reproduction of programmed path excludes quality honing processing at multipliers and the surface of the liner, thus reducing their operating life under severe operating conditions. Promising option for a constructive solution to this problem is the use of the control system with feedback for accurate reproduction of the law of motion of the abrasive particles.

Belevtsov L. V., Gudkova E. Yu., Limarenko V. V. Automated control system for process of cooling of shop of the chemical company // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The necessity of creation of an automated control system of a process of ventilation of productive workshop is reasonable , its structure is exposed. The existent systems of an automated control system of ventilation are considered, their defects are distinguished. Description of the system Experion PKS, its function boxes is given. Practical realization of an automated control system of the process of ventilation in the system Experion PKS is shown. Diagrams of different states of the developed automated control system are provided by cooling process. The change of basic descriptions of functioning of the worked out an automated control system is shown in a dynamics.

Varnavsky A. Using a neural network to improve the efficiency correction of functional state of the operator // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The work is aimed at preventing occupational diseases and improving the quality of human activity operator. Offered during working hours to carry out the dynamic correction of the operator through the use of visual and auditory stimuli and binaural beats. Moreover, the beginning and ending of corrective actions and their frequency is set by the neural network, the input parameters which served bioelectric signals operator. Implementation of the proposed method will improve the efficiency of correction of a human operator, and advance quickly to prevent its exhaustion before he reaches a state that does not allow him to qualitatively carry out its functions.

Dorokhov N. Shvachunov A. Investigation of the state sheave block system when lifting a load at the time of termination of the rope // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Effective is to equip the crane surge drum, leveling device which should ensure a reduction in the calculated dynamic loads arising from failure of the rope, to values that ensure a secure hold cargo. Accuracy of magnitude dynamic loads affect not only the reliability of the surge drum, but also on the dimensions and metal circulating assembly drum that ultimately affects the metal content and the crane trolley as a whole. Described by a mathematical model to investigate the dynamic processes occurring in the cargo hold in the surge drum hoisting machines with a winch mounted on a steel structure, mass and stiffness which has an impact on these processes. Therefore, in order to prevent the load falls on loss of the rope bridge crane when fitted with its surge drum is necessary to provide reduction of dynamic loads on the metal structure.

Fedorov M. M., Kutkovoy I. P. Balance of capacities in chains with the inductive and connected coils // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The algorithm drawing up balance of capacities in branched chains with the inductive and connected coils is offered. Features of transfer of electromagnetic power of odes of one coil to another are considered at the consecutive, parallel and mixed turning on of the inductive and connected coils irrespective of a type of their inclusion. The given theoretical material is confirmed by concrete examples. By introduction in one of branches at parallel connection of the inductive and connected coils, an example, allowing to change the direction of a stream of the given electromagnetic power is reviewed. Using Lonzheven's theorem, the balance of capacities for arbitrary electrical circuit with inductive coupled elements is made.

Shelekhova O. G. Slip induction motor at different parameters of input voltage unbalance // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The asymmetry of the power supply is one of the most significant damage to the induction motor (IM). According to experimental studies, which are presented in the literature, up to 45 % failure rate of induction motors due to the symmetry breaking voltages at their terminals. One of the diagnostic parameters used in the protection devices of IM-thermal transition gruzok is slipping. According to the study, analytical glide depending on the parameters of input voltage unbalance. Justified a more intensive growth in the current single-ended supply voltage and geometry while reducing sequence voltage. The results of the study can be used to develop algorithms protection devices induction motors against thermal overload.

ECONOMIC SCIENCES

Get'man I. A., Berezhnaya K. S. Development of the system of automation of workplace of accountant // Scientific Herald of the DSEA. . – 2013. – № 2 (12E).

Held design automation workstation accountant city hospital. Proposed information model automation workstation accountant city hospital. The basics of information systems in budget organizations. Conducted functional simulation process automation workstation accountant. The system of automation of workplace of accountant of city hospital is realized in a programming of Borland Delphi environment. The offered system of automation of workplace of accountant of city hospital allows to produce the calculation of ettlings, bonuses, and also payments of on assignment charges and maternity leave. Functional capabilities developed by the author for the implementation of software automation workstation accountant of the city hospital, which allows you to automate the process of calculating accounting transactions, report output and transfer them into the application Microsoft Office MS Excel. Perspective directions of researches are set, namely introduction of software product in a city hospital.

Dorofeyeva A. A., Igoshina M. E. Analysis of the types of organizational behavior of personnel in enterprises // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The features of the organizational behavior of staff in the workplace. Identified the need to analyze varieties of organizational behavior. The study specified the main types of organizational behavior of their personnel. The main identified functional and dysfunctional types of organizational behavior. To manage the organizational behavior of staff in enterprises and the development of the required standards of organizational behavior of employees proposed the use of the priority provisions of the reflexive, behavioral sciences, administrative methodological approaches and theories of motivation. To improve the efficiency of enterprises is proposed to form and develop the staff functional form of behavior.

Krikunenko E. U., Kazarceva E. A. Objective the design of processes of automation of account of book-keeping operations // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The key aspects of records accounting transactions states-financed organization are considered. The analysis of specific work in the accounting department of the city hospital, workflow, accounting processes is held. The main elements of accounting processes are considered. Actuality of automation of accounting transactions is based. The object-oriented modeling to automate the accounting transactions, which formalized the structure of the relevant department and for further development of the product with all the features of the accountant in the budgetary institutions is implemented. The presented object-oriented model of automation of account of book-keeping operations of city hospital allows to define the structure of book-keeping department, dokumentooborot, processes are differentiated necessary for the account of book-keeping operations of budgetary establishment. Perspective directions of research are set.

Miroshnichenko E. V. The estimation of effectiveness of constituents of the system of quality of activity of enterprises of market of educational services // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

One of terms of successful work be - what organization, in particular university, there is the lead through of monitoring, measuring of processes and analysis of results of activity. How world practice quality of educational favour shows, it is possible to provide and estimate at functioning in educational establishments of QMS on the basis of requirements of international standards of ISO 9001:2008, IWA 2:2003, national analogue of which there is the standard of Ukraine of DSTU-P IWA 2:2009. Theoretical, methodical and informative principles are in-process represented for the

estimation of effectiveness of constituents of the system of quality of activity of enterprises of market of educational services. On the basis of expert method the calculation of weighing coefficients is conducted on the example of DonNTU, that allows to carry out the estimation of effectiveness QMS and to do its rich interpretation in content.

Mykhaylychenko N. M. Budgeting as a tool for advanced control // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The paper conducted a feasibility study of budgeting as a tool for advanced control and proved its basic principles. Developed a generalized model of budgeting and budgetary control reflects the sequence of steps in the development of various functional budgets, and also reveals the relationship that combine budgets and sources of information from different circuits observations to be used in the process of compilation. Plans are developed in a monthly section and sectional centers of responsibility. Control in the early stages is recommended at least once a month, then it will be possible to predict in advance whether budgets are made at the end of the reporting period and, if necessary, develop corrective actions.

Samuylov V. O. Resource management in innovative business // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Proposed the use of economic-mathematical methods and the method of peer review to ensure the management of innovation processes in enterprises in the conditions of market relations at the level of strategic planning. Developed an optimization model of planning the allocation of resources between projects in the innovation activities of enterprises that measure all the resources devoted to the introduction of an innovative product in the enterprise and enabling enterprises to the use of financial resources. In developing a general model selection decisions sked that the process of finding a rational decision based on the adaptation to constantly changing environmental factors.

Tkach I., Slobodianyuk S. Creation of a modern model of the government management of economy // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The article represents the overview of the most common approaches for government management of the economy. It describes the objective reasons of the necessity for government management of the economy in these conditions. World practice has shown the disadvantages of excessive state intervention in the economy (state-monopoly regulation in the economy), in accordance with experience, it describes the principles of the system of government management of the economy. The article presents the analysis of the global experience of government management of the economy, it is determined that the effectiveness of government economic policy, ceteris paribus, the higher the profit higher state than most of GDP is redistributed by the state, the greater the role played by the state in the economy sector. The public sector plays an important role in the structural policy of the state. State creates new objects or expands and reconstructs old in those areas, areas or regions where private capital flows is not enough, therefore an important tool of government management of the economy is the state order. The article presents the analysis of models for the analysis of trends in the economy of Ukraine.

Turlakova S. S. The herd behavior as a result of display of irrationality in the process of making decision agents in economic systems // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

Research of displays of irrationality is conducted in the process of making decision agents in the economic systems. It is selected, that irrationality, related to incompetence, unwillingness to ground decisions, the insufficient being informed of economic agents is by reason of possible

display of herd behavior in the process of making decision in the economic systems. The examples of displays of herd instinct are considered in the economic systems and author determination of herd behavior of agents is given in the economic systems. Perspective directions of researches are set in the study of herd behavior of management agents in the economic systems.

Fomichenko I. P., Pichadzhi Y. K. Corporate system of marketing in integrated structures// Scientific Herald of the DSEA. – 2013. – № 2 (12E).

The content of corporate marketing system in integrated functioning structures and their functioning features on the present-day conditions. The attention is focused on the coordination of market activities, for the reason this is exactly what provides full implementation of the management process of the business organisation integrated forms development . Proposed to develop and expand the «portfolio» potential opportunities. Formation of corporate marketing system serves mainly to maintain strategic marketing decisions related to the development and formation of core competencies. In addition , the implementation of decision-making procedures in organizational management systems require special information - analytical , organizational and technical support. This is especially important for strategic marketing tasks , which possess a large high level of responsibility and risk.

Shevchenko N. Yu., Ostankova L. A. Forming of optimum sale strategy of enterprise in the conditions of vagueness ise // Scientific Herald of the DSEA. – 2013. – № 2 (12E).

It is certain that forming of sale strategy is promoted by efficiency and competitiveness of enterprise. The ekonomiko-mathematical model of choice of optimum strategy of sale products is developed. The methods of choice of optimum alternative are used in the conditions of vagueness and risk. The set of possible strategies of sale products is offered. Segmenting of market is executed. The method of unidimensional scaling of economic indicators is used for normalization of the compared sizes. The choice of optimum alternative is executed in the conditions of situation of many criteria. The example of choice of optimum strategy of sale is resulted on the example of point-of-sale enterprise.