

CONTENTS

MECHANICAL AND THEORETICAL ENGINEERING

O. A. Mamaev, Yu. K. Mashkov, B. T. Gryaznov, A. A. Baibaratsky, R. I. Kosarenko. Investigation of polymer composite operating capacity and durability under accelerated aging conditions	5
V. S. Kushner, M. G. Storchak, A. A. Vorobyev, A. N. Zhavnerov, A. A. Krutko. Improved calculation of temperature at cutting process using thermo-mechanical approach	10
V. P. Rasshchupkin, G. S. Garibjan, V. I. Gurdin. Composite materials of aluminum alloys-to-steel systems	15
V. V. Korshunov, S. N. Bogachyov, R. G. Minnekhanov. Casting of high-manganese steel in coated casting molds	17
I. V. Zjuzko. Technological properties of rod mixes on the basis of organic cohehiven type 4GU	18
G. S. Garibyan, V. P. Raschpikin, V. V. Korshunov. Peculiarities of structure of aluminum alloy castings by crystallization in ultrasonic fields	20
G. N. Minnekhanov, O. A. Shuikin, R. G. Minnekhanov. The influence of modifying of carbonitride titanium by nano-particles on structure and property of hypoeutectic cast iron	22
D. S. Malgavko. Inverse modeling to foundry technology	26
V. G. Shtele, V. V. Gryaznov, V. V. Minenkov. Simulation of thick nuts press forming made o austenitic rust-resisting steels	27
M. V. Medvedev, I. V. Markechko, V. V. Novgorodtsev. Development of flange punching technology using computer simulation	32
I. V. Markechko, V. V. Gryznov, M. V. Medvedev, V. G. Shtele. Using universal crank-type presses for processing details of rod type with thickening	36
G. N. Minnekhanov, R. G. Minnekhanov, E. N. Eremin. Influence of modifying by nano-particles carbonitrid titanium on crystallization of heat resisted nickel alloy ЖС – 32	39
V. A. Sokolov, E. A. Bondarenko. Welding of polyethylene gas pipelines using fittings with imbedded heaters	43
G. I. Suprunov, B. E. Lopaev. Research of plasma coatings durability of details of soil-cultivating equipment and mixed fodder equipment at free abrasive friction	45
V. B. Masyagin, N. V. Volgina. General problem of formalization of transformation of technological information on the basis of revealing of informative link between the tables of coded data about detail and blank and elements of the constructive-technological code	48
F. N. Pritykin, A. I. Anishchenko. The generalized method of setting of geometric models of robot mechanisms for analysis and synthesis of small displacements by velocity vector	54
Yu. A. Burian, V. N. Sorokin, S. A. Korneyev, A. S. Bekshenev. To the problem of radial deformation definition in a thick-walled pipe	62
O. V. Chepurnoi, R. T. Faizullin. Optimal technological regulations for the multi-branch oil-pipe line	66
V. V. Lukyanchenko. Inflammability of alternative lowcetanes fuels with initiating additions for transport diesels	70
A. V. Titov. Ink flow modeling in the ink unit of printing presses	74
V. I. Kuznetsov. Operating process turbojet engine	79
I. V. Denisov, V. A. Mescheryakov. Modeling of program control system of jibcrane	81
A. E. Voronov. The analysis of dynamics of rotational drives of industrial machines	87
E. G. Kholkin, Z. N. Sokolovskiy. The engineering procedure for evaluation of critical laods in the plates of the trapezoidal slender section	92
S. V. Korneev, Zh. M. Ivankiv, R. V. Buravkin, I. I. Shirlin, N. V. Doroshenko, S. V. Doroshenko. Choice of materials for friction units working in a cold climate	96
S. V. Korneev, Zh. M. Ivankiv, R. V. Buravkin, I. I. Shirlin, N. V. Doroshenko, S. V. Doroshenko. The influence of low temperatures on the properties of materials and failure rate of mobile machines	99
V. V. Akimov, Y. K. Korzunin, A. F. Mischurov, V. V. Evstifeev, A. A. Aleksandrov. Analysis of heat-resistance of composed hard alloys with TiC-TiNi materials	103

POWER ENGINEERING, ELECTRICAL ENGINEERING

V. N. Goryunov, A. A. Bubenchikov, S. S. Girshin, E. V. Petrova, A. A. Levchenko. The efficiency of self-bearing isolated wires in modern electrical power systems	106
A. G. Lyutarevich, A. A. Vyrva, S. Yu. Dolinger, D. S. Osipov, I. N. Chetverik. Estimation of additional power losses due to higher harmonics in elements of power system	109
P. V. Rysev, E. Yu. Sveshnikova, A. S. Nikishkin, D. V. Fedorov. Control of conditions of determined chaos in nonlinear electrical power systems	113
V. K. Fedorov, P. V. Rysev, E. Y. Sveshnikova, S. Yu. Pruss, D. V. Rysev. Occurrence and identification of chaotic modes in electrical power systems	117
V. A. Burchevsky, L. V. Vladimirov, V. A. Oschepkov, V. A. Surikov. Review of modes of neutral grounding in electric circuits 6-35 kV	122
V. N. Goryunov, M. Yu. Kletsel, A. S. Stinskiy, K. T. Shakhaev. Provision of reliability of centralized directional protection of joints in circuit 3/2	127
K. I. Nikitin, O. A. Sidorov, A. A. Vyrva, M. M. Sarychev. Possible directions of relay protection improvement	130
E. N. Eremin, A. V. Ded. Experimental research of influence of asymmetrical loading on electrical supply system	133
M. Ya. Kletsel, K. I. Nikitin, A. S. Stinskiy, M. T. Tokombayev. Relay with magnetically operated sealed switch with inverse time lag	139
V. A. Burchevsky, A. V. Schekochihin, V. V. Barskov, R. K. Romanovsky. The increase in operating efficiency of distribution networks 35 kV of oil-producing industry	142
A. V. Bubnov, T. A. Bubnova, P. A. Katrich. Servo synchronous-inphase electrical actuator for surveying-searching systems	147
A. G. Mikhailov, S. V. Terebilov. Calculation of heat transfer processes in chanber of a boiler	151
A. P. Popov, A. S. Tatevosyan. Digital method of the checking the loop of hysteresis in ferromagnetic materials	153

INSTRUMENT ENGINEERING, METROLOGY AND INFORMATION-MEASURING DEVICES AND SYSTEMS

V. I. Glukhov, Yu. E. Grebenshchikova. Classification of geometrical units on the basis of the operating purpose of material elements	158
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D. B. Martemjanov. The increasing of hydraulic unit reliability and operating life by authentic complex measuring of effective sizes of pass channels	162
V. I. Leun, A. V. Tignibidin. New principles of construction of active control devices for products of tool manufacture and mechanical engineering	165
V. I. Glukhov, S. N. Dolzhikov, M. N. Lakeenko. The impact of measurement of geometrical quantities on the reliability of motor-anchoring bearing units of locomotive traction motors	169
S. V. Biryukov, E. V. Timonina, R. R. Fayzullin. Theoretical substantiation of methods of measurement at the control of intensity of electric fields of anthropogenic nature	171
E. V. Timonina, S. V. Biryukov. The method of measurement of electric field intensity by alignment of two components with the third component being equal to zero	176

INFORMATION TECHNOLOGIES

V. I. Potapov. The models for optimization of control system of operating capacity recovering from neuron system failure	182
L. A. Denisova. The synthesis of control system with of an upsetting control with fuzzy logic-based correction	184
R. N. Bogatov. The use of double limitation for enhancing data compression ratio	191

RADIO ENGINEERING AND COMMUNICATION

I. V. Bogachkov, N. I. Gorlov. New problems of technical operation of the coupled fiber-optical networks	195
E. D. Bychkov, O. N. Kovalenko. The model of integration of traffic in multiservice network with various parameters of quality of service	198
V. E. Mitrokhin, E. D. Bychkov, O. N. Kovalenko. The influence of discipline of service of queues on parameters of quality of service of multiservice network	201
I. D. Zolotarev, E. M. Lobov. The research of the passage of phase-shift keyed signal with a rectangular elements envelope through a bandpass filter	205
I. D. Zolotarev, E. M. Lobov. The passage of the phase-shift keyed signal fragment with sine-liked elements envelope through a bandpass filter	208
V. A. Maistrenko, I. E. Komarov. The problem of selection of threshold in wavelet filtering	211

CHEMISTRY

V. A. Gorbunov, A. V. Myshlyavtsev, M. D. Myshlyavtseva, V. F. Fefelov. Simulation model of adsorption of unsaturated cyclic-hydrocarbons on reconstructed Si(001) – 2×1 surface	215
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SUMMARY

MECHANICAL AND THEORETICAL ENGINEERING

O. A. Mamaev, Yu. K. Mashkov, B. T. Gryaznov, A. A. Baibaratsky, R. I. Kosarenko. Investigation of polymer composite operating capacity and durability under accelerated aging conditions

Operating capacity and durability of a novel polymer composite based on polytetrafluoroethylene was experimentally examined. It is shown that after long-term soaking under conditions of high temperature and uniform pressure the material has saved its mechanical and tribotechnical properties. This fact allows applying the composite for reliability and durability enhancement of mechanical seals.

Keywords: polymer composite, operating capacity, aging, material.

V. S. Kushner, M. G. Storchak, A. A. Vorobyev, A. N. Zhavnerov, A. A. Krutko. Improved calculation of temperature at cutting process using thermo-mechanical approach

The problems of thermo-mechanical generalization of influence of cutting conditions on intensity of wear process and wear resistance of cutting tools are analyzed under heavy conditions of cutting, characteristic disks for processing water-wheel and restoration of a structure of railway wheels. Relation of the intensity of wear process with temperature form-inconvertible and to tangents by applying pressure on surfaces of a cutting wedge is established.

Keywords: cutting, thermo-mechanical approach, comparison of temperatures.

V. P. Rasshchupkin, G. S. Garibjan, V. I. Gurdin. Composite materials of aluminum alloys-to-steel systems

Parameters of technological processes of making of aluminum alloys with a powder wire and their influence on the properties of alloys of aluminum alloy-to-steel systems are analyzed.

Keywords: fibres with the high module, composite materials, sintering.

V. V. Korshunov, S. N. Bogachyov, R. G. Minnekhanov. Casting of high-manganese steel in coated casting molds

The experimental installation consisting of sand shooting machine equipped with 15 controlled discharge nozzles, mechanisms of elevation and mold holding devices, 2 semi-moldings with a horizontal surface for opening, 2 modeling heaters is made. The opportunity of making complex castings of «track» type from high-manganese steel in coated casting mold is analyzed.

Keywords: coated casting mold, sand shooter, track, high-manganese steel.

I. V. Zjuzko. Technological properties of rod mixes on the basis of organic cohehiven type 4GU

The results of research of technological properties of rod mixes on the basis of organic cohehiven type 4GU (Joint-Stock Company NPO «Industrial ecology») are obtained.

Keywords: rod mixes, organic coherent, technological properties.

G. S. Garibyan, V. P. Raschipkin, V. V. Korshunov. Peculiarities of structure of aluminum alloy castings by crystallization in ultrasonic fields

The technology of directed crystallization of aluminum alloy A5 in ultrasonic fields is fulfilled. It is established, both at flat and spherical front of crystallization the effect of increase of hardness of a castings in 3,3-3,5 times is provided.

Keywords: ultrasonic, front, crystallization, hardness, casting.

G. N. Minnekhanov, O. A. Shuikin, R. G. Minnekhanov. The influence of modifying of carbonitride titanium by nano-particles on structure and property of hypoeutectic cast iron

The influence of modifying of carbonitride titanium by nano-particles on structure and property of hypoeutectic cast iron is analyzed. It is obtained, that the modifying by nano-particles of carbonitride titanium results in the increase of durability of cast iron, alloyed by 1,5 % Ti. on 10–15 of %, increase in an arrow of a deflection on the basis of 300 mm to 8–10 mm and impact strength on samples without a cut in 1,6–2 times.

Keywords: hypoeutectic cast iron, modifying, nano-particles, carbonitride titanium

D. S. Malgavko. Inverse modeling to foundry technology

The described particularities of the systems of analysis and syntheses to foundry technology and the example of solution of the inverse heat problem are shown on base of the method of finite elements.

Keywords: modeling, technology, syntheses, analysis, CAD, FEM.

V. G. Shtele, V. V. Gryaznov, V. V. Minenkov. Simulation of thick nuts press forming made o austenitic rust-resisting steels

In the article the technique of analyses with use of simulation of thick nuts press forming made of rust-resisting alloys is stated. Relations allowing to estimate force and kinematical parameters of extrusion of the given spectrum of details are obtained.

Keywords: nut, simulation, press forming.

M. V. Medvedev, I. V. Markechko, V. V. Novgorodtsev. Development of flange punching technology using computer simulation

The scheme and methods of flange punching and also characteristics of die tools is under discussion in this paper. Technological process of flange punching is described.

Keywords: flange, equipment, technological process, simulation.

I. V. Markechko, V. V. Gryaznov, M. V. Medvedev, V. G. Shtele. Using universal crank-type presses for processing details of rod type with thickening

Descriptions of the technical solutions expanding technological opportunities of using universal single-acting presses for punching of rod details with thickenings are offered. Design features of the punching tool are considered. The technological forming processes are described. The results of work can be used for expansion of the standard products, stamped by vertical universal single-acting presses.

Keywords: upset forging, sectional matrixes, wedge-like tool, rod with a head.

G. N. Minnekhanov, R. G. Minnekhanov, E. N. Eremin. Influence of modifying by nano-particles carbonitrid titanium on crystallization of heat resisted nickel alloy ЖС–32

Modifying influence by nano-particles carbonitride titanium on kinetics crystallization and structure founding from heat resisted nickel alloy ЖС–32 is investigated. It is obtained that modifying nano-particles allows to control formation of superfluous phases in structure founding's. The optimum structures of modifying complexes and modes of their preparation are defined.

Keywords: heat resisted nickel alloys, modifying, nano-particles, carbonitride titanium.

V. A. Sokolov, E. A. Bondarenko. Welding of polyethylene gas pipelines using fittings with imbedded heaters

The results of the research of the reasons of lower stability of quality of welding of polyethylene pipe with help of connecting details with embedded heaters were examined and some recommendation were suggested to improve quality of such welded joints which can be used in construction of gas pipelines.

Keywords: gas pipeline, fitting with embedded heater, welded joint, mechanical tests.

G. I. Suprunov, B. E. Lopaev. Research of plasma coatings durability of details of soil-cultivating equipment and mixed fodder equipment at free abrasive friction

The choice of the optimum structure of a strengthening covering for an arc plasma spraying of details of soil-cultivating equipment and mixed fodder equipment is carried out. For increase of its wear resistance it is offered to use a powder structure HX17CP4 + ФБХ6-2.

Key words: are plasma spraying, powder material, intermetallic compounds, self-fluxing alloys, durability, orifice gas.

V. B. Masyagin, N. V. Volgina. General problem of formalization of transformation of technological information on the basis of revealing of informative link between the tables of coded data about detail and blank and elements of the constructive-technological code

The task of excluding of complex, labour-consuming work of a designer at hand-operated coding of constructive-technological information and data transfer from the drawing and other documentation into the tables is considered.

Key words: constructive-technological code, tables of the coded items of information problem-oriented language, drawing, detail, preparation, technological process, model, automation.

F. N. Pritykin, A. I. Anishchenko. The generalized method of setting of geometric models of robot mechanisms for analysis and synthesis of small displacements by velocity vector

A generalized method of definition of a geometric model of unconfined kinematic chain manipulator mechanisms with the aim of the analysis and synthesis of small displacements. Actuators have a complex structure, an arbitrary number of degrees of freedom and arbitrary degree of physical redundancy in the construction of small displacements of the velocity vector.

Keywords: synthesis of small movements of robots, the geometric model of the kinematic chain robots, program modules adaptive motion control of robots.

Yu. A. Burian, V. N. Sorokin, S. A. Korneyev, A. S. Bekshenev. To the problem of radial deformation definition in a thick-walled pipe

In the article an experiment-calculated way of specification of effective value of the Young modulus of a material of a thick-walled pipe for the purpose of definition of radial deformation of a pipe under external pressure is considered.

Keywords: deformation, coefficient of elasticity, pressure, stress.

O. V. Chepurnoi, R. T. Faizullin. Optimal technological regulations for the multi-branch oil-pipe line

Developed algorithm for optimization of modes for multi-branch oil-pipe line is added to limitations on pressure and throttling control for operating pumps.

Keywords: oil-pipe line, optimization, pumps.

V. V. Lukyanchenko. Inflammability of alternative lowcetanes fuels with initiating additions for transport diesels

On the basis of realized theoretical and experimental investigations inflammability lowcetanes motor fuels for diesel engines to

submit a proposal new analytical dependences for calculations cetane number adopted fuels subject to additions step-up senses cetane number to standard senses.

Keywords: diesel engine, fuel, inflammability.

A. V. Titov. Ink flow modeling in the ink unit of printing presses

This article is devoted to the modeling of ink flow in the designed ink unit. The model is under construction on the basis of the ideal liquid motion theory. Pictures of stream lines of the considered flow are obtained and its analysis is carried out. A direction of the further research is calculation on the basis of the received results of pressure distribution.

Keywords: The inking unit, Stream lines, Newtonian liquid.

V. I. Kuznetsov. Operating process turbojet engine

The offered equation closes the mathematical model, describing operating process of turbojet engine. It is shown that full mathematical model allows to calculate all features of the turbojet engine and define the optimum laws of regulation.

Keywords: operaring process, TRDD, full mathematical model.

I. V. Denisov, V. A. Mescheryakov. Modeling of program control system of jibcrane

The experiment based on the rules of jibcrane control algorithm is carried out. The results of the load motion modeling are presented; the programed and experimental trajectories of the load are compared.

Keywords: simulation, program control, jibcrane.

A. E. Voronov. The analysis of dynamics of rotational drives of industrial machines

The article is devoted to dynamic processes in drives of machines technologically where operating bodies are driven by individual electric motors.

Keywords: dynamics, drives, individual electric motors, printing device.

E. G. Kholkin, Z. N. Sokolovskiy. The engineering procedure for evaluation of critical loads in the plates of the trapezoidal slender section

This article presents the generalized results of the theoretical and numerical investigations of the local stability in the lamellar elements of the trapezoidal sections. As a result, the analytical dependences, to carry out calculations of the critical stress in the lamellar elements of the compressed section and in the section in tot, have been achieved.

Keywords: plate, stability, trapezoidal section.

S. V. Korneev, Zh. M. Ivankiv, R. V. Buravkin, I. I. Shirlin, N. V. Doroshenko, S. V. Doroshenko. Choice of materials for friction units working in a cold climate

When machines operate at low temperatures it leads to water condensation in gear oils. The presence of water in oils leads to changes in the anti-wear properties, reduction of operation life and growth of machines failure cases.

Keywords: low temperatures, water, oils lubricant.

S. V. Korneev, Zh. M. Ivankiv, R. V. Buravkin, I. I. Shirlin, N. V. Doroshenko, S. V. Doroshenko. The influence of low temperatures on the properties of materials and failure rate of mobile machines

When machines operate at low temperatures it leads to water condensation in gear oils. The presence of water in oils leads to changes in the anti-wear properties, reduction of operation life and growth of machines failure cases.

Keywords: low temperatures, water, oils lubricant.

V. V. Akimov, Y. K. Korzunin, A. F. Mischurov, V. V. Evstifeev, A. A. Aleksandrov. Analysis of heat-resistance of composed hard alloys with TiC-TiNi materials

In this article research work with heat-resistant hard-alloy materials TiC-TiNi in high-temperature environment (1000-1200°C) is described. Using as binder the TiNi phase alloy increases heat-resistance and high-temperature strength of non-tungsten hard alloys in comparison with VK3M, T3OK4, KNT-16, TN-20 alloys.

Keywords: heat-resistance, oxidation, hard-alloy composite material, mass change

POWER ENGINEERING, ELECTRICAL ENGINEERING

V. N. Goryunov, A. A. Bubenchikov, S. S. Girshin, E. V. Petrova, A. A. Levchenko. The efficiency of self-bearing isolated wires in modern electrical power systems

In the article problems of the efficiency of self-bearing isolated wires (SIW) in electropower systems is considered. The advantages of SIW in comparison with not isolated wires are shown. Classification and isolation of SIW is considered. Innovations and usefulness of SIW in electrical power systems is proved.

Keywords: SIW, advantages, classification, isolation polyethylene.

A. G. Lyutarevich, A. A. Vyrva, S. Yu. Dolinger, D. S. Osipov, I. N. Chetverik. Estimation of additional power losses due to higher harmonics in elements of power system

The article is devoted to estimation of additional power losses in basic elements of power systems from the higher harmonics of current and voltage. In the article analysis is done by the methods of definition of power losses from the higher harmonics becomes. In the conclusion the algorithm of work of the program evaluating size of losses from the higher harmonics, and its possibilities is produced.

Keywords: power losses from the higher harmonics, the program for calculation of losses from the higher harmonics.

P. V. Rysev, E. Yu. Sveshnikova, A. S. Nikishkin, D. V. Fedorov. Control of conditions of determined chaos in nonlinear electrical power systems

The origin of the random conditions because of the presence of global random dynamics of electro power systems is revealed. Random conditions exist as additional operating conditions in electrical power systems even under steady operating conditions.

Keywords: determined chaos, control of random oscillations, a nonlinear electro power system.

V. K. Fedorov, P. V. Rysev, E. Y. Sveshnikova, S. Yu. Pruss, D. V. Rysev. Occurrence and identification of chaotic modes in electrical power systems

With the help of numerical model operation chaotic modes of the electrical power systems because of the presence of chaotic dynamics of electrical power systems are determined. Chaotic modes may exist as additional states in electrical power systems even when inconvertible modes of functioning take place.

Keywords: determined chaos, stability power systems.

V. A. Burchevsky, L. V. Vladimirov, V. A. Oschepkov, V. A. Surikov. Review of modes of neutral grounding in electric circuits 6-35 kV

This article is considered possible operation modes of neutral in circuits 6-35 kV, given basic advantages and drawbacks of every mode. The choice of a resistor for grounding of the neutral is considered.

Keywords: operation regime of neutral, line-to-ground short circuit.

V. N. Goryunov, M. Yu. Kletsel, A. S. Stinskiy, K. T. Shakhiev. Provision of reliability of centralized directional protection of joints in circuit 3/2

It is offered to reveal short circuits in buses, and prevent excessive protection operations by single phase-to-ground failure in scheme 3/2 executing checking of the currents and their directions using logic algebra. It is shown how to check operability of relays and leads.

Keywords: algorithm of functioning of the centralized protection.

K. I. Nikitin, O. A. Sidorov, A. A. Vyrva, M. M. Sarychev. Possible directions of relay protection improvement

On the basis of the analysis of requirements of relay protection of electrical power systems perspective directions of improvement of its algorithms are offered. Such improvement is possible with use of modern microcontrollers and programmed logical structures.

Keywords: relay protection, selectivity, speed, sensitivity, adaptive algorithms.

E. N. Eremin, A. V. Ded. Experimental research of influence of asymmetrical loading on electrical supply system

In the article the problem of influence of asymmetrical loading on electrical supply system is considered. The results of the experimental research of quality indicators of electrical energy in systems of electrical supply for consumers with variable and asymmetrical loading are given.

Keywords: asymmetrical load, power quality

M. Ya. Kletsel, K. I. Nikitin, A. S. Stinskiy, M. T. Tokombayev. Relay with magnetically operated sealed switch with inverse time lag

The relay with magnetically operated sealed switch and current dependent time delay that does not use transformers of the current is offered. It is shown that measurement of time between the moment of closing and opening of contacts of magnetically operated sealed switch located under phase of electrical installation defining the current in the phase. The relay working on programmed logical integral scheme is considered.

Keywords: relay on programmed logic integral scheme.

V. A. Burchevsky, A. V. Schekochihin, V. V. Barskov, R. K. Romanovsky. The increase in operating efficiency of distribution networks 35 kV of oil-producing industry

This article covers the question of decrease in active power loss by means of choosing of optimal place for sectioning distribution of electric networks 35 kV. The example of calculation for a fragment of real circuitry is considered in this article.

Keywords: distribution network, power loss, loss of energy.

A. V. Bubnov, T. A. Bubnova, P. A. Katrich. Servo synchronous-inphase electrical actuator for surveying-searching systems

In the article an opportunity of the operation of the synchronous-inphase electrical actuator in transient modes without releasing the control loop under assignment of signal changing has been analyzed. The method of the electrical actuator control has been offered and the algorithm of the frequency setting block operation has been developed, that increases the quality of control.

Keywords: synchronous-inphase electric drive, electrical actuator with phase lock, frequency setting block, phase lock.

A. G. Mikhailov, S. V. Terebilov. Calculation of heat transfer processes in chamber of a boiler

The task of heat transfer in fire chamber of a boiler is solved burning gaseous fuel. The ratio between heat transfer by radiation and heat transfer by convection is determined.

Key words: burning, fire chamber, heat exchange, radiation, heat transfer.

A. P. Popov, A. S. Tatevosyan. Digital method of the checking the loop of hysteresis in ferromagnetic materials

In the work it is offered digital method of the research of magnetic characteristic's material including both traditional alloys on the base of compounds of iron (for example, electrical technical steel), and perspective of using nano-materials on the base amorphous iron. It is offered software application and technical implementation of measuring-computing complex, as well as results of the experimental investigation of the loop of hysteresis exercised sample. Using the digital method it is allowed to raise accuracy of the measurement of the characteristic's magnetic material.

Keywords: measuring-computing complex, software "Hysteresis", USB-oscilloscope, development virtual laboratory equipment in LabView.

INSTRUMENT ENGINEERING, METROLOGY AND INFORMATION-MEASURING DEVICES AND SYSTEMS

V. I. Glukhov, Yu. E. Grebenshchikova. Classification of geometrical units on the basis of the operating purpose of material elements

The solution of a increasing problem of accuracy of mechanical and instrument engineering on the basis of introduction of classification of new geometrical units — linear and angular coordinates constructive elements of details, with the subsequent standardization system of tolerances for its standardization within engineering specifications is offered.

Keywords: coordinating size, device detail, classification of geometrical values, accuracy.

D. B. Martemjanov. The increasing of hydraulic unit reliability and operating life by authentic complex measuring of effective sizes of pass channels

This article concerns the problem of reliability of measuring in the parts of hydraulic units. It is offered the authentic complex measuring of the effective size of pass channels by the method, which increases the reliability and operating life of hydraulic unit parts.

Keywords: complex channel sizes, reliability, operating life.

V. I. Leun, A. V. Tignibidin. New principles of construction of active control devices for products of tool manufacture and mechanical engineering

The main scientific and technical novelty of the principles of construction of active control devices developed by the authors is that in grinding the converter of the measuring device is established directly on a controlled and processed detail and in its case the microdrive gear (piezo drive, the electric drive or another) for conveyance of a measuring rod under the set program is settled down. It allows to bring almost to naught a difference of instrument readings at static and dynamic measurements of geometrical parameters of details with smooth and faltering surfaces.

Keywords: active control device, measuring device, primary converters, grinders, metal-cutting tool, details with faltering surfaces of mechanical engineering.

V. I. Glukhov, S. N. Dolzhikov, M. N. Lakeenko. The impact of measurement of geometrical quantities on the reliability of motor-anchoring bearing units of locomotive traction motors

This article examines the impact of measurement of geometrical quantities on the reliability of motor-bearing anchoring sites locomotive traction motors. We consider the geometrical model of the landing cylindrical shaft necks under the anchor roller bearing inner ring. Two schemes of measurement error are calculated.

Keywords: reliability, geometric model, the measurement scheme, the cut, oval.

S. V. Biryukov, E. V. Timonina, R. R. Fayzullin. Theoretical substantiation of methods of measurement at the control of intensity of electric fields of anthropogenic nature

In the work the theoretical research which have allowed using uniform background to co-ordinate methods earlier developed by the authors of measurement of intensity of electric field by three-co-ordinate electroinduction spherical gauges are resulted and reveal necessary conditions for creation a new method and its formulation.

Keywords: field, of electric, of intensity, gauges, measurement, control, method.

E. V. Timonina, S. V. Biryukov. The method of measurement of electric field intensity by alignment of two components with the third component being equal to zero

In the article the description of a new method of measurement of intensity of an electric field is produced by the three-co-ordinate electroinduction spherical sensors, allowing to take measurements in a wide spatial range with raised accuracy and sensitivity.

Keywords: electric field, intensity, spherical sensor, error, method.

INFORMATION TECHNOLOGIES

V. I. Potapov. The models for optimization of control system of operating capacity recovering from neuron system failure

Three probability models of periodical control of recovering operations and a number of sets controlling every stage of neural artificial network parameters providing optimization of coefficient of readiness of neuron system are given.

Keywords: models, optimization, control system, neuron system.

L. A. Denisova. The synthesis of control system with of an upsetting control with fuzzy logic-based correction

The pulse automatic control system with a fuzzy logic-based correction of an upsetting control was developed. The method for elimination of steady-state error with adaptive factor correction of the upset is suggested. The results of synthesis are tested in MATLAB/Simulink.

Keywords: pulse automatic control system, a time-varying technical object, a steady-state error, a correction of an upsetting control, an adaptive factor correction, a fuzzy logic.

R. N. Bogatov. The use of double limitation for enhancing data compression ratio

The article describes a new method of suffix tree path compression and double limitation of depth. This method was used in the Hipp v0. 5819 compressor developed by the author. It helps, on the one hand, considerably reduce memory usage, and, on the other, to gain some new statistics, which assists for enhancing the data compression ratio. The greatest effect is achieved when files with large repeating parts are processed.

Keywords: lossless data compression, suffix tree, context modeling, path compression, compressor, archiver.

RADIO ENGINEERING AND COMMUNICATION

I. V. Bogachkov, N. I. Gorlov. New problems of technical operation of the coupled fiber-optical networks

The building principles of the modern monitoring systems of the coupled fiber-optical networks are viewed in this article, problems of their technical operation are analyzed, the devices for their effective diagnostics are described.

Keywords: system of monitoring, an optical fiber, reflectometry, the check, diagnostics.

E. D. Bychkov, O. N. Kovalenko. The model of integration of traffic in multiservice network with various parameters of quality of service

In the work the technique of estimation of the status of the bunch of channels of a multiservice network is offered at integration speech, video of traffic and the traffic of packages of the data on the basis of a strategy with mobile border. The numerical characteristics of indicators of quality of the service are resulted, received on the basis of the developed algorithms.

Keywords: multiservice network, quality of service, mobile border.

V. E. Mitrokhin, E. D. Bychkov, O. N. Kovalenko. The influence of discipline of service of queues on parameters of quality of service of multiservice network

At construction of multiservice communication networks of one of the main tasks is granting of demanded quality of service to various kinds of the traffic. To solve the given problem it is possible to use classification of arriving streams and flexible distribution of resources between queues. In mathematical models of the most widespread ways of division of throughput of the channel between competing streams – PQ and CBWFQ for system of mass service M/M/N:n are offered.

Keywords: algorithms of a traffic control, priority service.

I. D. Zolotarev, E. M. Lobov. The research of the passage of phase-shift keyed signal with a rectangular elements envelope through a bandpass filter

At the current work the influence of transients in selective channels of radioelectronic devices to the part of the PSK signal is researched. The formula of fast invert Laplace transform (FILT) without simplification and asymptotic is used for the research. It is shown that measurement of phase of the output PSK signal is possible despite of significant deformation of an envelop of the output signal when selective channel bandwidth is decreased for 1. 5-3 times from optimum.

Keywords: phase-shift keyed signal, transient, selective channel, selective filter.

I. D. Zolotarev, E. M. Lobov. The passage of the phase-shift keyed signal fragment with sine-liked elements envelope through a bandpass filter

At the current work the influence of transients in selective channel to the part of PSK signal with sine-liked envelope of elements is researched. The formula of fast invert Laplace transform (FILT) without simplification and asymptotic is used.

It is supposed that using a sine-liked envelope for PSK signal elements will reduce the transient influence to the phase of the output signal. However, as follows from researches are done, the sequence elements envelope shape changing from rectangular to sine-liked is relatively weakly affects on band-pass filter output PSK signals' parameters, which is new important result for radioelectronic systems development.

Keywords: phase-shift keyed signal, sine-liked envelope, transient, bandpass filter, selective channel.

V. A. Maistrenko, I. E. Komarov. The problem of selection of threshold in wavelet filtering

In this article solving problem of choice of the most suitable threshold from a well-known class, at a wavelet-filtration of vibration acceleration signal.

Keywords: wavelet, threshold, filtering, vibration, spectrum, vibration.

CHEMISTRY

V.A. Gorbunov, A.V. Myshlyavtsev, M.D. Myshlyavtseva, V.F.Fefelov. Simulation model of adsorption of unsaturated cyclic-hydrocarbons on reconstructed Si(001)–2×1 surface.

The simulation model of adsorption of unsaturated cyclic-hydrocarbons on reconstructed Si(001) – 2×1 surface is presented. The model is analyzed by Monte Carlo technique in case of 1,4-cyclohexadiene adsorption on reconstructed Si(001) – 2×1 surface. The phenomenon of nonmonotonic changing of surface coverage [Herald of Omsk Science – 2007 - №2(56) – P.19-24] as function of chemical potential is discussed through its dependence on phase behavior of the adlayer.

Keywords: adsorption, Monte Carlo technique, self-assembled monolayer, phase transition, 1,4-cyclohexadien, Si(001).

Уважаемые коллеги!

**ПРИГЛАШАЕМ ВАС ПРИНЯТЬ УЧАСТИЕ
В VII МЕЖДУНАРОДНОЙ НАУЧНО-ТЕХНИЧЕСКОЙ
КОНФЕРЕНЦИИ «ДИНАМИКА СИСТЕМ,
МЕХАНИЗМОВ И МАШИН»,**

которая будет проходить 10-12 ноября 2009 года в Омском государственном техническом университете. Планируемая конференция вошла в число аккредитованных мероприятий, на которых в дальнейшем будут отбираться участники Программы «У.М.Н.И.К.» («Участник молодежного научно-инновационного конкурса»). Информация о Программе «У.М.Н.И.К.» на сайте <http://www.fasie.ru>.

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- Подсекция Терминология как средство передачи информации. Динамика систем описания и преподавания иностранных языков
- Подсекция Библиотека в системе информационного обеспечения образования и науки

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К открытию конференции планируется издать сборник материалов конференции, в который будут включены статьи авторов, оформленные строго в соответствии с прилагаемыми требованиями и при наличии оплаты оргвзноса.

ПРЕДСТАВЛЕНИЕ ДОКЛАДОВ

Желающие принять участие в работе конференции должны в срок до 10 июня 2009 года направить следующие материалы:

- заявку на участие в конференции (образец прилагается);
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- копию финансового документа об оплате оргвзноса.

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