MASLOV, E. H.

USSR/Engineering - Grinding wheels

Card   : 1/1

Authors   : Maslov, E. H., Dr. Tech. Sc., Prof.; Ignatov, B. A., Engineer

Title   : Dependence of the Durability of the Wheel on the Grinding System

Periodical   : Vest. Mash. 34, Ed. 6, 50 - 54, June 1954

Abstract   : An analysis is made of the results obtained from experiments with grind-
                ing wheels, which showed that the durability of such wheels depend on
                whether the feed is longitudinal or transverse, on the speed of the wheel
                and its diameter, and to a lesser extent on the diameter of the part be-
                ing machined and the hardness and grain of the wheel. These factors are
                taken up separately and interpreted. Tables; graphs.

Institution   : ...

Submitted   : ...

MASLOV, Ye.N., professor, doktor tekhnicheskikh nauk; redaktor; BALANDIN, A.F. inzhener, redaktor izdatel'stva; UVAROVA, A.F., tekhnicheskiy redaktor.

[Recent studies in metal cutting] Novye issledovaniia v oblasti obrabotki metallov rezaniem. Pod red.E.N.Maslova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1957. 77 p.

(MLRA 10:6)

1. Moscow. Moskovskiy inzhenerno-fizicheskiy institut. (Metal cutting)

MASLOV, YE. N

P. 2

PHASE I   BOOK EXPLOITATION   SOV/3918

Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii
    mashinostroyeniya

Osnovnyye voprosy vysokoproizvoditel'nogo shlifovaniya (Basic Problems in
    High-Productivity Grinding) Moscow, Mashgiz, 1960. 195 p. 3,000
    copies printed.

Ed. (title page): Ye. N. Maslov, Doctor of Technical Sciences, Professor;
    Ed. (inside book): A. T. Popov, Engineer; Tech. Ed.: V. D. El'kind;
    Managing Ed. for Literature on Metalworking and Instrument Construction
    (Mashgiz): V. V. Rzhavinskiy, Engineer.

PURPOSE: This book is intended for technical personnel in metal grinding.

COVERAGE: This collection of articles deals with problems of efficient
    grinding of metals, the theory of grinding, the mechanism of the cutting
    action of grains, chip formation, and the effect of certain factors on
    the productivity of the grinding process. Emphasis is also given to the
    automation of the grinding process. A number of articles deal with the
    grinding of carbides and titanium alloys. No personalities are mentioned.
    References follow each article.
Card 1/6

Basic Problems (Cont.) SOV/3918

TABLE OF CONTENTS:

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Basic Problems (Cont.   SOV/3918

The author discusses the relationships between the radii of curvature
and the angles of peaks and valleys of abrasive grains. Grain forms
were drawn in two projections by means of an RA-4 drawing apparatus
built into the system of an ordinary biological microscope. Magni-
fication of the microscope was adjusted to the grit size.

Lur'ye, G. B. [Professor]. The Theory of the Working Cycle in Cylindrical
Grinding as a Basis of High-Productivity Machining   87
     The article is a study of the grinding operation and its regularities.
Among the topics discussed are effect of processing factors on the
quality of grinding, changes in cutting action of a grinding wheel
over the wheel life and during operation, and the effect of wheel wear
on productivity.

Zheleznov, Ye. S. Principles of High-Productivity Grinding and Its
Automation   109
     The article deals with the principles of planning high-productivity
grinding and the incorporation of a system of automation into grinding
operations. Both subjects are discussed in connection with the re-
duction of cutting time, the achievement of process stability, and the

Card 3/6

Basic Problems (Cont.)   SOV/3918

improvement of the quality of the product.

Kondrat'yev, A. B. [Candidate of Technical Sciences, Docent]. Results
of Investigation and Experience of Introducing High-Speed Grinding of
Metals   121
    The investigation of high-speed grinding with porous grinding wheels
    is discussed. Advantages, wheel life, and surface roughness of this
    type of grinding operation are included. The author recommends the
    accelerated construction of grinders and wheels for speeds of 80-90
    m/sec.

Kedrov, S. M. [Candidate of Technical Sciences]. Results of an In-
vestigation of Centerless Grinding With Wide Grinding Wheels   131
    The author discusses the possibilities and advantages of intro-
    ducing centerless grinding with wide (800-900 mm) wheels into mass
    production. The results of experimental operations with this type
    of wheel at the LGPZ Plant are presented.

Sagalov, V. I. [Candidate of Technical Sciences]. Characteristic
Features of the Process of Grinding Carbides   144
    Such characteristic features of the grinding of carbides as the use of
    silicate-bonded wheels, the formation of powdered waste instead of

Card 4/6

Basic Problems (Cont).   SOV/ 918

chips, and the occurrence of intensive oxidation are discussed. The
relationships between temperature during grinding, pressure between
wheel and work, speed, and productivity are outlined. The author
suggests increasing productivity through higher speeds and more in-
tensive oxidation.

Sil'vestrov, V. D. [Candidate of Technical Sciences] Characteristic
Features of the Grinding of Titanium Alloys   153
    The author indicates the basic cause of low productivity in the
grinding of titanium alloys. He attributes low productivity to the
chemical affinity of titanium alloys to the materials of the grinding
wheel and the resulting excessive wear of the wheel. To increase
productivity [20-25 times], he recommends the use of special grinding
coolants. The compositions of the coolants proposed are presented.

Bagdasaryan Zh. A. [Candidate of Technical Sciences]. Cutting Action
of Grinding Wheels and [Mechanical] Work in Grinding   161
    The results of experimental work by the author are presented. The
work is based on a study of metal and abrasive waste products in
grinding. The effect of truing and dressing on wheel wear is de-
termined, and the coefficient ϵ is derived. This coefficient charac-
terizes the reduction of average grain dimensions in waste as
Card 5/6

Basic Problems (Cont.)   SOV/3918

compared with original grain dimensions. An analysis of mechanical
work (force $\times$ relative displacement of work and wheel surface) during
grinding is also presented.

Chestnov, A. L. [Candidate of Technical Sciences]. Finishing of
Sliding Surfaces   171
   The author discusses the regularities of the microfinishing process,
   a microfinishing attachment for a lathe, and the effect of finishing
   of a journal on the wear of the bushing.

Makhkamov, R. G. Some Problems of Flexible Grinding and Buffing With
Felt Wheels   189
   The author describes an experimental investigation of flexible
   grinding with felt wheels with bonded abrasive powder. The compo-
   sition of a paste for buffing is also described (73% chromium
   oxide, 23% stearin, and 4% oleic acid).

AVAILABLE: Library of Congress

Card 6/6   VK/pv/ec
                                                             8-26-60

MASLOV, Ye.N., doktor tekhn. nauk, prof.

[Technological processes for making magnetic drums] Tekhnologiia
proizvodstva magnitnogo barabana. Moskva, Gos. izd-vo lit-ry v
oblasti atomnoi nauki i tekhniki, 1961.   52 p.   (MIRA 14:11)
                    (Magnetic memory (Calculating machines))

MASLOV, Ye.N., doktor tekhn. nauk, prof., otv. red.; KOST'YAN, A.Ya.,
    red. izd-va; POLYAKOVA, T.V., tekhn. red.

[High-production grinding] Vysokoproizvoditel'noe shlifovanie.
Otv. red. E.N.Maslov, Moskva, Izd-vo Akad. nauk SSSR. 1962.
246 p.   (MIRA 15:4)

1. Akademiya nauk SSSR. Komissiya po tekhnologii mashino-
stroyeniya.
                    (Grinding and polishing)

KARATYGIN, A.M., kand. tekhn. nauk; KORSHUNOV, B.S., kand.
    tekhn. nauk; MASLOV, Ye.N., prof., doktor tekhn.
    nauk, retsenzent; ZAVOZIN, L.F., inzh., red.;
    IVANOVA, N.A., red.izdva; EL'KIND, V.D., tekhn. red.

[Grinding and lapping metal-cutting tools] Zatochka i
dovodka rezhushchego instrumenta. Izd.2., perer. i
dop. Moskva, Mashgiz, 1963. 270 p.   (MIRA 16:12)
                (Metal-cutting tools)
            (Grinding and polishing)

L 38956-65   EPA(s)-2/EWT(m)/EPF(n)-2/EPA(w)-2/EWP(b)/EWP(e)   PaB-10/Pt-10/
ACCESSION NR: AP5008254 Pu-4   WH   8/0122/65/000/003/0059/0061

AUTHOR: Maslov, Ye. N. (Doctor of technical sciences, Professor).   50
                                                                             B
TITLE: Surface purity of mineral-ceramic specimens of high hardness after treatment

SOURCE: Vestnik mashinostroyeniya, no. 3, 1965, 59-61

TOPIC TAGS: surface hardness, surface roughness, ceramic, light reflection/ FESS U
2 photocell, I 8 galvanometer, 371M grinder, K360SM2K grinder, KZ abrasive

ABSTRACT: The surface smoothness of hard mineral-ceramics after grinding was

facing, decreasing sharply with an increase in surface porosity of the specimen.

Orig. art. has: 3 figures.

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: MM

NO REF SOV: 000   OTHER: 000

Card 1/1

9(2)

AUTHOR: Maslov, Ye.P.   SOV/115-59-9-24/37

TITLE: A Method of Extending the EMF Measuring Ranges by
              Direct Current Potentiometers

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 9, pp 43-44 (USSR)

ABSTRACT: The author suggests a differential method of measur-
              ing emf's of several volts by direct current poten-
              tiometers. The upper limit of direct current potenti-
              ometers is usually around 2 volts. One or several
              standard cells are connected in series with the emf
              to be measured, but with opposite polarity. Actual-
              ly, the difference between the emf to be measured
              and the standard cell(s) is determined, whereby the
              emf of the latter is known with great accuracy. Emf's
              of several volts may be measured with this method.
              However, it is not adviseable to connect a greater
              number of standard cells. The application of the
              differential method increases the relative accuracy
              of the measurements considerably compared to the
Card 1/2   reading accuracy of the instrument with which the

A Method of Extending the EMF Measuring Ranges by Direct Current   SOV/115-59-9-24/37
Potentiometers

difference is measured. Another advantage of this
method is that the working current for the potentio-
meter must not be increased which is very undesire-
able in many cases. When using a voltage divider,
the circuit of the voltage to be measured is closed
by a finite resistor and one of the advantages of
the compensation method is lost. The method suggest-
ed by the author, however, may be used without losing
the advantages of the compensation method. He de-
scribes briefly the measuring procedure which is
performed in the conventional sequence. There is 1
circuit diagram.

Card 2/2

30511
S/194/61/000/008/065/092
D201/D304

9,2586

AUTHORS: Sredniy, I.Ye. and Maslov, Ye.P.

TITLE: The theory of a multivibrator with a capacitance in
              the cathode circuit

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
              no. 8, 1961. 10, abstract 8 I76 (Tr. uchebn. in-tov
              svyazi. M-vo svyazi SSSR, 1960, v. 3, 45-50)

TEXT: The cathode coupled multivibrators nowadays take a
prominent place among the multivibrator circuits. The analysis is
given of the flip-flop type circuit differing by the presence of
parallel connected resistance and capacitance in the cathode cir-
cuits of both valves. The special feature of circuits of this type
is that the valves are cut-off in their cathode circuits. The cir-
cuit permits the oscillation frequency to be varied from a few cycles
to 100 kc/s and at small values of capacitances the oscillations are
nearly sinusoidal. The system is described by the equations of the

Card 1/2

30511

The theory of a multivibrator...

S/194/61/000/008/065/092
D201/D304

type

$$x'(1 - x^2) - 2\,\delta(\beta x + \frac{x^3}{3}) = 0.$$

This type of equation also describes the free oscillations in a dynatron multivibrator and in several other circuits the integration of the above equation is carried out by conversion into partial fractions, so that the free oscillation conditions, period, amplitude and shape of the oscillations are determined. The multivibrator generates nearly saw-tooth waveforms. 2 references. $\overline{/}$ Abstracter's note: Complete translation $\overline{/}$

Card 2/2

SREDNIY, I.Ye.; MASLOV, Ye.P.

One problem in the theory of self-oscillation. Izv.vys. ucheb.
zav.;radiofiz. 4 no.6:1138-1148 '61.   (MIRA 14:12)

1. Odesskiy elektrotekhnicheskiy institut svyazi.
              (Oscillations)

9.2580

S/105/62/000/006/002/002
E200/E435

AUTHOR: Maslov, Ye.P. (Odessa)

TITLE: Some problems in the theory of systems generating
             discontinuous oscillations

PERIODICAL: Elektrichestvo, no.6, 1962, 31-39

TEXT: Some of the mathematical devices for dealing with linear
and nonlinear circuits operating in the self-oscillatory mode are
studied: expansions in terms of the elementary discontinuous
functions $y = |x|$,   the step function $y = E_1(x)$ and the
periodic function of form $\Theta_1(x) = x - E_1(x)$ (Fig 3)
as well as expansions using modified Laguerre polynomials

$$L_n(t) = \frac{1}{n!} e^{\psi \Phi} \frac{d^n}{dt^n} \left[(\psi \Phi)^n e^{-\psi \bar{\Phi}} \right]$$

where the functions $\psi(g, \ell, t)$ and $\bar{\Phi}(g, \ell, t)$ are represented
by the graphs of Fig.4.   These, generally applicable, methods are
applied to several problems of investigating typical self-
oscillatory systems which are complicated in the sense that the
discontinuous self-oscillatory process arises from the presence in
Card 1/3

Some problems in the theory ...

S/105/62/000/006/002/002
E200/E435

the circuit of a nonlinear element whose characteristic is a function continuous together with all of its derivatives. The results obtained are illustrated by experimental data. The methods are used to determine the self oscillation parameters in systems described by first and second order differential equations. Circuits of vacuum tube oscillators, widely used in automatic control and pulse technology, are considered. There are 10 figures.

SUBMITTED: March 15, 1962

Card 2/2

MASLOV, Ye.P.

       Concerning the theory of a blocking oscillator. Radiotekhnika
       17 no.8:53-58 Ag '62.   (MIRA 15:7)

       1. Deystvitel'nyy chlen Nauchno-tekhnicheskogo obshchestva
       radiotekhniki i elektrosvyazi imeni Popova.
                (Oscillators, Electron-tube)

MASLOV, Ye.P. (Moskva)

Application of the theory of statistical solutions to problems of
the evaluation of the parameters of an object. Avtom. i telem.
24 no.10:1338-1350 O '63.   (MIRA 16:11)

L 19464-65 EWT(d)/EWP(1) Po-4/Pq-4/Pg-4/Pk-4/Pl-4 IJP(c)/ASDC(a)/ASP(a)-5/
ASD(s)/AFMDC/AFETR/RAEM(d)/ESD(dp) MLK/BC S/0000/64/000/000/0022/0032
ACCESSION NR: AT4047739

$\frac{40}{B+1}$

AUTHOR: Maslov, Ye. P.

TITLE: One method of evaluating plant parameters

SOURCE: AN SSSR. Institut avtomatiki i telemekhaniki. Teoriya i primeneniye avtomaticheskikh sistem (Theory and application of automatic systems).

SOURCE: AN SSSR, Institut avtomatiki i telemekhaniki.
avtomatlcheskikh sistem (Theory and application of automatic systems).
Moscow, Izd-vo Nauka, 1964, 22-32

TOPIC TAGS: automatic control, automatic control theory, optimal control
system

ABSTRACT: An adaptive automatic-control system which uses a computer for
calculating the plant characteristics is theoretically considered. A scheme for
determining the plant characteristics on the basis of its input and output signals is
shown in Enclosure 1. The system is time-quantized but not level-quantized; all
random values are regarded as statistically independent. The proximity between

random values are regarded as statistically independent. The proximity between the real and estimated parameter values is selected as an optimality criterion. A Bayes problem is considered for a single-input, single-output plant that has a

Card 1/3

L 19464-65

ACCESSION NR: AT4047739   0

memory. The form of the plant equation is supposed to be known; the optimum parameters of its transfer function are determined on the basis of its measured input and output signals. As the input and output information is fed to the computer via noisy channels, the theory of statistical decisions is used for estimating the parameters. Under these conditions, the optimum computer determines only a conditional probability density $p(\vec{\lambda}, \vec{y}, \vec{z})$, where λ, is the vector of parameters at the time moment s, y, and z, are the signal sequences produced by channels G and H, respectively. Two particular cases are considered: (1) Evaluation of the gain of an inertialess unit and (2) Evaluation of the time constant of an inertial unit. The cumbersome computations required are held as one drawback of the method. Orig. art. has: 7 figures and 44 formulas.

ASSOCIATION: none

SUBMITTED: 06Jun64   ENCL: 01
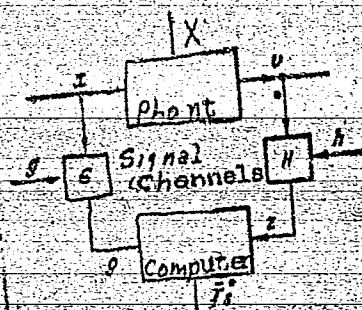
SUB CODE: IE   NO REF SOV: 007   OTHER: 008

Card 2/3

L 19464-65
ACCESSION NR: AT4047739

A scheme for determining plant characteristics on the basis of print input and output signals

Card 3/3

ACCESSION NR: AP4015305   S/0280/64/000/001/0175/0181

AUTHOR: Zhivoglyadov, V. P. (Moscow); Maslov, Ye. P. (Moscow)

TITLE: Problem of evaluating essential parameters of a plant

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 1, 1964, 175-181

TOPIC TAGS: automatic control, controlled plant, controlled plant parameters, controlled plant essential parameters, automatic control theory

ABSTRACT: The theory of statistical decisions is used to evaluate the essential parameters of a controlled plant with incomplete information about the input signals and the state of the plant. Input u and output x signals of the plant O (Enclosure 1), via channels G and H with noise g and h, are applied to a computer BY. The plant is inertial and is characterized by a vector of essential parameters $\bar{m}$; other unknown parameters are denoted by $\bar{\lambda}$. An algorithm of the computer $\Gamma_s = \delta [\bar{\gamma}_s - \bar{\gamma}_s (\bar{u}_s, \bar{y}_s)]$. is found in which the evaluation $\bar{\gamma}_s$ of the

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ACCESSION NR: AP4015305

essential-parameter vector corresponds to an optimality criterion; the latter is represented by a mathematical expectation of a loss function $W_s(s, \bar{\mu}, \bar{\gamma}_s)$. Here, u_s and y_s are input and output signals at the moment s, respectively. "In conclusion, the authors wish to thank A. A. Fel'dbaum for his attention and valuable advice." Orig. art. has: 4 figures and 42 formulas.

ASSOCIATION: none

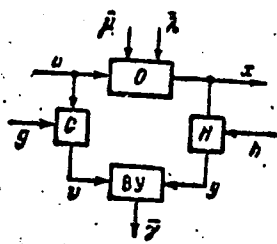SUBMITTED: 22May63   DATE ACQ: 12Mar64   ENCL: 01

SUB CODE: CG, IE   NO REF SOV: 005   OTHER: 000

Cord 2/3

ACCESSION NR: AP4015305

Evaluation of essential parameters of an auto-matically-controlled plant

Card 3/3

ACCESSION NR: AP4011320   S/0103/64/025/001/0073/0082

AUTHOR: Maslov, Ye. P. (Moscow)

TITLE: Assessing parameters of Markov-type plants

SOURCE: Avtomatika i telemekhanika, v. 25, no. 1, 1964, 73-82

TOPIC TAGS: automatic control, Markov plant automatic control, assessing automatic plant parameters, automatic plant parameters, Markov plant theory

ABSTRACT: The theory of statistical decisions is applied to a case when input and output plant signals are fed to a computer via channels having random additive noise. Methods developed in the theory of dual control of Markov-type plants are used to obtain formulas for risk and for optimum evaluation of parameters. The latter formula is valid for the case when the form of the plant equation is known and its coefficients represent a uniform Markov's chain. The evaluations are determined from the realizations of input and output signals of the plant. An

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ACCESSION NR: AP4011320

example which considers the evaluation of gain of an inertialess unit shows that in an optimum computer, the processes of storing information and degrading "obsolete" information take place. "The author wishes to thank A. A. Fel'dbaum for discussing the results of this work." Orig. art has: 3 figures and 52 formulas.

ASSOCIATION: none

SUBMITTED: 14Dec62   DATE ACQ: 14Feb64   ENCL: 00

SUB CODE: CG, IE   NO REF SOV: 003   OTHER: 001

Cord 2/2

L 16403-65   EWT(d)/EPF(n)-2/EWP(1)   Po-4/Pq-4/Fg-4/Pae-2/Pu-4/Pk-4/P1-4   IJP(c)/
ESD(dp)/AEDC(a)/SSD/ASD(a)-5/AFMDC/AFETR/AFTC(p)/RAEM(a) BC/WW

ACCESSION NR: AP4047575   S/0103/64/025/010/1442/1450

AUTHOR: Maslov, Ye. P. (Moscow)

TITLE: Statistical self-adaptive model. Part 1

SOURCE: Avtomatika i telemekhanika, v. 25, no. 10, 1964, 1442-1450

TOPIC TAGS: self-adaptive plant model, automatic control, automatic control
design, automatic control system, automatic control theory

ABSTRACT: A self-adaptive model of a plant is a controlled model whose
characteristics are determined by comparing its output signal with that of the
plant, with a subsequent minimization of the discrepancy between them. The
problem of synthesizing such a model is solved by using the theory of statistical
decisions; the theory of dual control is used in developing fundamental formulas.
The system is only time-quantized, no level-quantization is employed; all
variables are considered at discrete time moments $s = 1, 2, 3 \ldots$ In a Bayes-

Card 1/2

L 16403-65
ACCESSION NR: AP4047575

type problem, the input signal X and noise g and h are sequences of random quantities having constant distribution densities $q(h_s)$, $q_1(g_s)$, $q_2(x_s)$. A one-input one-output plant has a memory, and its operator is known; $V_s = F_0(s, \bar{\Lambda}, X_s)$, where Λ is the vector of random parameters and $X_s = (X_1, X_2, \ldots, X_s)$. The methods of combining the signal with noise in G and H channels are known and constant, the channels having no memory.   Orig. art. has: 1 figure and 55 formulas.

ASSOCIATION: none

SUBMITTED: 26Dec63   ENCL: 00

SUB CODE: IE   NO REF SOV: 005   OTHER: 000

Card 2/2

L 24708-65   EWT(d)   Po-4/Pq-4/Pg-4/Pk-4/Pl-4   AEDC(a)/SSD/ASD(a)-5/AFMDC/AFETR/
AFIC(p)/RAEM(a)/RAEM(d)/ESD(dp)/IJP(c)   BC

AUTHOR: Maslov, Ye. P. (Moscow)

TITLE: Statistical self-adaptive model. Part 2

TOPIC TAGS: self adaptive plant model, automatic control, automatic control
design, automatic control system, automatic control theory

ABSTRACT: Based on the theory set forth in Part 1 (see Abstract AP4047575), an
example of synthesizing an optimal self-adaptive model is worked out. No noise
in channel G and a determinate input signal X are assumed. With denotations
given in Enclosure 1, in the s-th clock cycle:

$$Z_s = V_s + h_s = \Lambda \sum_{i=1}^{s} X_i + V_0 + h_s$$

where Λ is a chance amplification factor and V_0 is the initial value of the
integrator output signal. Equations describing the optimal control of a plant are

Card 1/3

L 24708-65

ACCESSION NR: AP5001760

developed for the case when h is a sequence of independent random values with a constant distribution density and Λ is distributed according to the normal law. It is found that the optimal control of the model, without noise, is realized with an o.-rcontrol of λ (a true value of Λ); in the presence of noise, the overcontrol decreases and extends over a longer period. The model does not accumulate errors in the plant amplification factor; it is also only slightly sensitive to the mathematical-expectation error; also, it is less sensitive than open-loop systems to the error associated with β^2. Oscillograms of tuning the integrator in the presence of noise are presented. "In conclusion, the author wishes to thank A. A. Fel'dbaum for a statement of the problem and discussing the results." Orig. art. has 8 figures and 64 formulas.

ASSOCIATION: none

SUBMITTED: 26Dec63   ENCL: 01
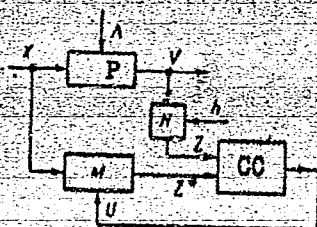
SUB CODE: IE   NO REF SOV: 004   OTHER: 000

Card 2/3

A control system using the
self-adaptive model

P - plant; CC - control computer; H - link feeding signal Z
(which is an additive noise h mixed with the plant output signal V)
to the CC.

Card 3/3

MASLOV, Yevgeniy Petrovich; KEREFOV, Kambulat Nauruzovich.
        Prinimala uchastiye KOTSYUBINSKAYA, V.D.; KAZMAKHOV,
        I.M., red.; KUANTOV, A.T., red.

        [Studies on the economic geography of the Kabardino-
        Balkar A.S.S.R.] Ocherki ekonomicheskoi geografii
        Kabardino-Balkarskoi ASSR. Nal'chik, Kabardino-
        Balkarskoe knizhnoe izd-vo, 1964.   232 p.
                                    (MIRA 18:10)

L 04893-67   EWP(k)/EWT(d)/EWP(h)/EWP(l)/EWP(v)   GD

ACC NR: AT6022687   SOURCE CODE: UR/0000/66/000/000/0183/0194

AUTHOR: Zhivoglyadov, V. P.; Maslov, Ye. P. $3/$

ORG: none 30

                                                                                 $B+1$

TITLE: On the synthesis of near-optimum dual-control systems

SOURCE: Moscow. Institut avtomatiki i telemekhaniki. Samoobuchayushchiyesya avtomaticheskiye sistemy (Self-instructing automatic systems). Moscow, Izd-vo Nauka, 1966, 183-194

TOPIC TAGS: optimal automatic control, automatic control theory, approximation method

ABSTRACT: The article deals with specific computational problems frequently encountered in the synthesis of practical dual-control systems. Several approximating methods are proposed for the synthesis of such systems having active information accumulation. A discrete-continuous system with quantizing in time is analyzed (level quantizing is omitted). The operator of the object, the loss function, as well as the probability densities of all random quantities are considered to be known, with all interference and random parameters regarded as statistically independent. Both communication channels are assumed to be subject to noise and to have no retentivity, with the driving effect reaching the control element over a communication channel free of interference. Five different approximation methods are described, along with several

Card   1/2

L 04893-67

ACC NR: AT6022687

examples of their application, and in a discussion of optimal and suboptimal control algor thms a concrete example is used to compare a control law determined by means of an approxi- tion method with an accurate computer-derived law. The methods proposed provide a realistic approach to the problem of analytically synthesizing dual-control systems in a wide variety of practically important cases, although the examples given are basically of an illustrative nature. A comparative analysis of the suitability of the methods for inertial and noninertial objects is presented. The author expresses his gratitude to A. A. Fel'dbaum for his discussion of the results of the work. Orig. art. has: 4 figures and 53 formulas.

SUB CODE: 09,12/   SUBM DATE: 02Mar66/   ORIG REF: 006/   OTH REF: 002

Card   2/2

L 07207-67   EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1)   GD

ACC NR: AT6022697   SOURCE CODE: UR/0000/66/000/000/0304/0311

AUTHOR: Maslov, Ye. P.

ORG: none

TITLE: On the theory of the optimum statistical self-adjusting model

SOURCE: Moscow. Institut avtomatiki i telemekhaniki. Samoobuchayushchiyesya avtomaticheskiye sistemy (Self-instructing automatic systems). Moscow, Izd-vo Nauka, 1966, 304-311

TOPIC TAGS: self organizing system, optimal automatic control, automatic control theory

ABSTRACT: This work uses the basic concepts of the theory of dual control to construct a self-adjusting model and determines its characteristics by comparing its output signal to the output signal of the plant, subsequently minimizing the disagreement criterion between these signals. The author in general studies a discrete-continuous system, examines the Bayes problem, has a plant characterized by vector A of a random variable, assumes that methods of combining signals in channels G and H are known and unchanged (the channels having no memory), and assumes that the operator of the model has been selected. Optimum signal is the one for which the complete risk (mathematical expectation of W) is minimum. Working with the generalized block diagram, the author solves the problem for the different variables (a series of rules for

Card 1/2

L 07207-67

ACC NR: AT6022697

solving must be found where R (risk) is r..imum).   Orig. art. has: 45 formulas and
4 figures.

SUB CODE: 09,12,14/   SUBM DATE: 02M .r66/   ORIG REF: 005

Card   2/2 11b

MASLOV, YEVGENIY PETROVICH

318 N/5
621.01
.M31

Krym (Crimea) Moskva, Geografgiz, 1951.
51 p. illus., map (Po Podnoy Strane)
Bibliographical footnotes.

AVS

USSR/Geophysics - Lakes, Balkhash   Jan/Feb 52

"Some Problems of Agricultural Taming of West Bal-
khash Region," Ye. P. Maslov, Inst of Geog, Acad Sci
USSR

"Iz Ak Nauk SSSR, Ser Geog" No 1, pp 49-52

Lake Balkhash is peculiar for its fresh water on
its west shores and saline water on its east shores.
The west shore is an important water supply since
the construction of railroads linking west Balkhash
to Karaganda. It is expected to be a source of
artificial irrigation, transforming desert sands
into fertile lands. New water wells are projected

205T51

USSR/Geophysics - Lakes, Balkhash   Jan/Feb 52
                              (Contd)

using drilling machines driven by wind. Creation
of gardens on desert sands will result from Sta-
lin's improvement of nature.

205T51

MASLOV, YE. P.

USSR/Geography - Caucasia   Mar/Apr '53

"Review of Natural Conditions of Northwest Caucasia and Methods for Rational Utilization of These Conditions in Agricultural Production," Ye. P. Maslov (reviewer)

"Iz Ak Nauk SSSR, Ser Geograf" No 2, pp 60-64

Discussion of works composed by a collection of scientific workers of the Caucasian and Black Sea expeditions, Council for the Study of Production Forces, Acad Sci USSR. Published by Acad Sci USSR Press, Moscow, 1950 - 1952. Divided into three parts: Part I. Foothills of the North Slopes of

Bol'shoy Kavkaz. Chief editor, Acad S. G. Strumilin, responsible editor, Prof Dr of Agric Sci V. D. Kislyakov, Moscow, 1950, 2,000 copies.

Part II. Black Sea Shore Line From the Abkhaz Borders to the Shepsa River Basin. Chief editor, Acad B.B. Polynov, responsible editor, Prof Dr of Agric Sci V.D. Kislyakov, Moscow, 1951, 2,000 copies.

Part III. Black Sea Shore Line From the Shepsa River Basin to the City of Novorossiysk. Chief editor, Acad B.B. Polynov, responsible editor, Prof Dr of Agric Sci V.D. Kislyakov, Moscow, 1952, 1,500 copies.

PA 246T53

246T53

246T53

MASLOV, YE. P.

Maslov, Ye. P.

318N/5
621.01
.M3

Krym; ekonomiko-geograficheskaya khara kteristika (Crimea; economic-geographic characteristic) Moskva, Gosgeolizdat, 1954.
175 p. Illus., Diagrs,, Maps, Tables.
"Literatura": P. 170-(172)
at head of title: Akademiya Nauk SSSR. Institut Georgrafii.

MASLOV, E.P.
USSR/Agriculture

Card   : 1/1

Authors   : Maslov, E. P., Cand. of Econom. Sc.

Title   : Northern Kazakhstan USSR

Periodical : Nauka i Zhizn', 6, 37 - 38, June 1954

Abstract   : A tourists notes on the agricultural possibilities of northern Kazakhstan,
              irrigation possibilities, cattle raising etc. Map of north Kazakhstan
              regions is included.

Institution : ....

Submitted : ....

MASLOV, E. P.

USSR/Agriculture

Card 1/1

Author   : Maslov, E. P., Cand. in Economic Sciences

Title   : Irrigation on the Ciscaucasian Steppes

Periodical : Nauka i Zhizn' 21/2, 31-32, Feb/1954

Abstract   : The Ciscaucasian Steppes lack moisture. For agriculture and stock
               raising irrigation was introduced and in 1935 main canals were dug
               drawing water from the Terek, Malka and Kuma rivers, furnishing water
               for 500 thousand hectares of land. The systems have been extended and
               a canal has been dug connecting the Kuban and Erolyk rivers. By such
               irrigation a dry region has been turned into a source of grain and meat.

Institution : ....

Submitted   : ....

MASLOV, Ye.P., kandidat ekonomicheskikh nauk.

Northern Kazakhstan. Nauka i zhizn' 21 no.6:37-38 Je '54. (MLRA 7:6)
    (Kazakhstan--Agriculture) (Agriculture--Kazakhstan)

MASLOV, Ye.P.

Development of productive forces of the Northern Caucasus
during the sixth five-year plan. Izv.AN SSSR. Ser.geog.
no.5:35-45 S-O '56.   (MLRA 9:11)

1. Institut geografii Akademii nauk SSSR.
        (Caucasus, Northern--Economic policy)

MASLOV, Yevgeniy Petrovich; MIRONOV, M.G., redaktor; NOGINA, N.I., tekhni-cheskiy redaktor

[In the steppes and foothills of the Caucasus] V stepiakh i pred-gor'iakh Kavkaza. Moskva, Gos. izd-vo geogr. lit-ry, 1956. 149 p.
(MLRA 10:2)

(Caucasus, Northern--Physical geography)

Maslov, Ye. P.

265

PHASE I BOOK EXPLOITATION

Maslov, Ye. P. and Kerefov, K. N.

Ekonomiko-geograficheskiy ocherk Kabardino-Balkarii (Economic and Geographic
    Study of Kabardino-Balkariya) Moscow, Izd-vo AN SSSR, 1957. 173 p.
    3,000 copies printed.

Sponsoring Agency: Kabardino-Balkarskiy nauchno-issledovatel'skiy institut pri
    Sovete Ministrov Kabardino-Balkarskoy ASSR.

Resp. Ed.: Shcherbakov, D. I., Academician; Ed. of Publishing House:
    Khatskelevich, L. M.; Tech. Ed.: Pavlovskiy, A. A.

PURPOSE: The book is intended for general readers, and those interested in this
          region. In the text and title the region is referred to by its conven-
          tional name, Kabardino-Balkariya, or simply Kabarda (the full name is:
          Kabardino-Balkarskaya ASSR). The book was published to commemorate the
          400th anniversary of the annexation of this region by Russia.

Card 1/5

Economic and Geographic Study (Cont.)   265

COVERAGE: The book contains five chapters which cover the natural conditions,
            history, economy, population and geographical-economic regions of
            Kabardino-Balkariya. All statistical material is for the years 1955
            and 1956. The subchapter on industries is a thorough survey, but
            lacks production figures. The small republic (12,500 square kilometers;
            359,000 inhabitants) is today one of the 70 economic regions into
            which the RSFSR is divided. Its economic significance, according to
            the author, lies in the local nonferrous and rare ores, and especially
            in the Tyrny-Auz tungsten and molybdenum deposits. Some details on
            the facilities at Tyrny-Auz are given. There are also deposits of
            lead and zinc and to a lesser extent, nickel, arsenic, chrome and
            tin. Coal is mined in the region south of Bylym (between the Upper
            Baksan and the Upper Chegem) and building materials are quarried
            near Nal'chik. The republic is particularly rich in volcanic tuff.
            The Baksan Hydroelectric Power Plant on the Baksan River (north of
            Nal'chik) supplies part of its surplus power to Groznyy and feeds
            also the Kislovodsk-Mineral'nyye Vody electric railway.

Card 2/5

265

Economic and Geographic Stu.., (Cont.)

The subchapter on local transportation presents valuable data on the length of Kabarda's highways. The only large machine-building enterprise is at Nal'chik. It manufactures petroleum equipment, especially pumps. Food-processing establishments make up 68.6 percent of industry of the region. There are 29 maps illustrating the economic conditions of the republic. Of 28 photographs, only one shows an industrial object, viz., a general view of the Nal'chik Candy Factory. Economic conditions are further illustrated by statistical tables. There are 26 tables and 56 Soviet references.

Card 3/5

MASLOV, Ye.P.; otvetstvennyy red.; GOZULOV, A.I., otvetstvennyy red.;
RYAZANTSEV, S.N., otvetstvennyy red.; LYUBIMOV, I.M., red.;
GLEYKH, D.A., tekhn.red.; KUZNETSOV, N.S., red.kart.

[Northern Caucasus] Severnyi Kavkaz. Moskva, Gos.izd-vo geogr.
lit-ry, 1957. 507 p.   (MIRA 10:12)

1. Akademiya nauk SSSR. Institut geografii.
          (Caucasus, Northern--Geography, Economic)

MASLOV, Ye.P., kandidat geograficheskikh nauk.

Development of the productive capacity of Kazakhstan. Priroda 46
no.2:3-13 F '57.   (MLRA 10:3)

1. Institut geografii Akademii nauk SSSR, Moskva.
(Kazakhstan--Economic conditions)

MASLOV, Ye.P., kandidat geograficheskikh nauk (Moskva)

Important region in Ukraine ("Lower Dnieper region"; a study in
economic geography by A.A.Khizhniak. Reviewed by B.P. Maslov).
Priroda 46 no.3:119-120 Mr '57.   (MIRA 10:3)
              (Dnieper Valley--Economic geography)

              (Khizhniak, A. A.)

MASLOV, Yevgeniy Petrovich; RODIONOVA, F.A., red.; OVCHINNIKOVA,
V.I., red. kart; KOZLOVSKAYA, M.D., tekhn. red.

[The Northern Caucasus; study on the economic geography]
Severnyi Kavkaz; ekonomiko-geograficheskii ocherk. Posobie
dlia uchitelei. Moskva, Uchpedgiz, 1962. 126 p.
(MIRA 15:10)

(Caucasus, Northern—Economic geography)

MASLOV, Ye.P.

Problems of agricultural development in the North Caucasian
Economic Region. Izv.AN SSSR. Ser.geog. no.6:50-59 N-D '62.
(MIRA 15:12)

1. Institut geografii AN SSSR.
(Caucasus, Northern—Agriculture)

L 40241-66   EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1)   BC

ACC NR: AP6021402   SOURCE CODE: UR/0103/66/000/006/0204/0224

AUTHOR: Maslov, Ye. P. (Moscow, Voronezh); Osovskiy, L. M. (Moscow, Voronezh)

ORG: none

TITLE: Self-adaptive control systems with a model

SOURCE: Avtomatika i telemekhanika, no. 6, 1966, 204-224

TOPIC TAGS: self adaptive control, servomechanism system, stochastic process, automatic control theory

ABSTRACT: In this paper the authors discuss the basic problems encountered in the theory of self-adaptive control systems which incorporate a model for simulation. Also analyzed are various problems in the analysis and synthesis of these systems. A review is presented of 144 Soviet, U.S., British, German, French, Japanese and other works. Among the problems discussed are: the selection of the model structure, criteria to be used in the comparison of the actual object with the model, deterministic methods for the analysis and synthesis of systems having a linear plant (including the method of induced artificial perturbation of the model parameters), deterministic methods for nonlinear system analysis and synthesis, and statistical methods of model-inclusive system analysis and synthesis. The authors wish to express

Card 1/2   UDC: 62-506.1

L 40241-66

ACC NR: AP6021402

their gratitude to V. Yu. Rutkovskiy, whose comments greatly aided in improving this survey. Orig. art. has: 7 figures and 25 formulas.

SUB CODE: 09,13/   SUBM DATE: 14Nov65/   ORIG REF: 045/   OTH REF: 099

Card   2/2

MASLOV, YE. V.

PA 70T64

USSR/Medicine - Psychiatry, History   Mar/Apr 1948
    Medicine - Psychiatry, Progress

"Psychiatry in Turkmen SSR in the Thirty Years Since
the Great October Socialistic Revolution," Prof Ye.
V. Maslov, Honored Worker of Sci, 2$\frac{1}{2}$ pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Briefs history of psychiatry in Turkmen SSR. Sub-
mitted 2 Jan 1948.

70T64

USSR/Medicine - Hospitals - Activities Mar/Apr 49
Medicine - Hospitals - Organization

"Scientific Research Work of the L'vov Hospital for Mental Diseases for 1948," Prof Maslov, Pres, L'vov Soc of Neuropathologists and Psychiatrists, Hon Worker of Sci, 1 p

"Nevropatol i Psikhiat" No 2

Chair for Psychiatry, L'vov Med Inst, was combined with the Repub Hosp for Mental Diseases and took over administration of the medical board. Chair for Psychiatry also has jurisdiction over several other L'vov neuropsychiatric dispensaries. Lists reports of various

61/49T56

USSR/Medicine - Hospitals - Activities Mar/Apr 49 (Contd)

scientific conferences and organizations, gives an account of candidates' dissertations, etc. Submitted 17 Jan 49.

PA 61/49T56

MASLOV, Ye.V. (PROF.)

61/49T56

MASLOV, Ye.V.

Pathogenesis of some somatogenic psychic disorders in the light of
I.P.Pavlov's teaching on the higher nervous activity. Fiziol.zhur.
[Ukr.] 2 no.4:91-95 Jl-Ag '56.
(MLRA 9:10)

1. L'vivs'kiy medichniy institut, psikhiatrichna klinika.
(PSYCHOLOGY, PATHOLOGICAL)

MASLOV, Ye.V., professor (L'vov)

Role of the cerebral cortex and the vegetative nervous system in the pathogenesis of neuroses. Vrach.delo no.2:135-137 F '57. (MLRA 10:6)
(NEUROSES) (CEREBRAL CORTEX)
(NERVOUS SYSTEM, SYMPATHETIC)

MASLOV, Ye.V. (L'vov)

Role of somatic diseases in the pathogenesis of neuroses. Trudy
Gos. nauch. issl. psikhonevr. inst. 29:215-226 '63.

(MIRA 17:2,

ACCESSION NR: AR4039241   S/0269/64/000/004/0073/0073

SOURCE: Ref. zh. Astronomiya, Abs. 4.51.490

AUTHOR: Maslov, Ye. V.

TITLE: The problem of the height and intensity of explosion of the Tunguska meteorite

CITED SOURCE: Tr. Tomskogo otd. Geogr. o-va SSSR, Betatron. labor. Tomskogo med. in-ta, v. 5, 1963, 105-112

TOPIC TAGS: meteorite, Tunguska meteorite, atmospheric shock wave, nuclear explosion

TRANSLATION: The flattening of the forest at the site of explosion of the Tunguska meteorite was caused by the horizontal component of a shock wave forming as a result of superposing of the incident and reflected waves. Data on nuclear explosions make it possible to determine the excess pressure Δp as a function of distance to the center of the explosion and the angle of

Card 1/2

ACCESSION NR: AR4039241

incidence of the wave. The function $\Delta p = f(r)$, where r is distance from the epicenter, has the parameters: h -- height of the center and W -- energy. It first increases and then decreases. The forest flattening begins at $r_1 = 3$ km and ends at $r_2 = 15$ km. These boundaries correspond to 50% flattening, for which it would be necessary to have $\Delta p = 0.2$ kg/cm^2. Hence: $h = 7.4 \pm 0.7$ km; $W = 5.0 \pm 2.5$ megatons. If it is assumed, in accordance with K. P. Florenskiy's data, that $r_1 = 4$ km and $r_2 = 25$ km, then $h = 11.7$ km, $W = 23$ megatons. The computations also are confirmed by a rough estimate, indicating that the height of the aerial explosion was equal to the radius of maximum destruction. I. Zotkin.

DATE ACQ: 12May64   SUB CODE: AS   ENCL: 00

Card 2/2

PHASE I BOOK EXPLOITATION   852

Maslov, Yuvenaliy Aleksandrovich

Vozdushno-elektrodugovaya rezka metallov (Compressed-air Arc Cutting
    of Metals) Moscow, Mashgiz, 1957. 38 p. (Series: Obmen tekhnicheskim
    opytom) 8,000 copies printed.

Reviewer: Torshilov, V.M., Engineer; Ed.: Galaktionov, A.T., Candidate
    of Technical Sciences; Tech. Ed.: Sarafannikova, G.A.; Executive
    Ed. (Ural-Siberian Division of Mashgiz): Bezukladnikov, M.A.,
    Engineer.

PURPOSE: The booklet is intended for welders and foremen engaged in
    electric arc and gas cutting of metals.

COVERAGE: The author discusses the compressed-air arc cutting
    process noting its advantages over other methods of cutting. The

Card 1/3

Compressed-air Arc Cutting of Metals   852

compressed-air arc cutting process is used principally for
gouging and cutting steel and bronze parts. It may also be used
to remove defective weld sections, to cut off rivet heads, to
remove risers and gates from castings and to perform other
cleaning and dressing operations. With the cooperation of
welder G.A. Savelkov, the author designed two types of cutting
torches for the compressed-air arc cutting process. There are
three Soviet references.

TABLE OF CONTENTS:

Card 2/3

AVAILABLE: Library of Congress (TJ1191.M3)

Card 3/3

GO/jmr
12-8-58

135-5-10/14

SUBJECT: USSR/Welding

AUTHOR: Maslov Yu. A., Engineer

TITLE: Air-Arc Metal Cutting. (Vozdushno - dugovaya rezka metallov).

PERIODICAL: "Svarochnoye Proizvodstvo", 1957, # 5, pp 26-27 (USSR).

ABSTRACT: At one of the machinebuilding plants in the Urals the author has
            developed a new cutter for carbon arc cutting which applies
            compressed air to blow out the metal which melts in the process.
            The cutter   construction and the technology practiced are des-
            cribed in full detail. Cutting is achieved with the same clean
            lines and speed as with oxygen cutting devices. The article
            contains two tables and two photographs.

ASSOCIATION: Not stated.

PRESENTED BY:

SUBMITTED:

AVAILABLE: At the Library of Congress.

Card 1/1

MIKHAYLOV, G.P.; MASLOV, Yu.A.; FOFONOV, A.A.; GALAKTIONOV, A.T.;
    BOBKOV,Ye.I.; NIKONOV, I.P.; DENISOV, Yu.A.; SHAPKOV, B.K.;
    SHATOV, K.Ya.; MIKHAYLOV, S.I.; PETUNIN, I.V.; KHOVANETS, V.K.;
    KOCHEVA, G.I.; LABUTINA, E.A.

In memory of A. I. Akhun; an obituary. Svar.proizv. no.12:46 D '57.
                                                            (MIRA 11:1)

1.Sotrudniki Kafedry "Oborudovaniye i tekhnologiya svarochnogo
proizvodstva" Ural'skogo politekhnicheskogo instituta imeni
S.D. Kirova.

                (Akhun, Aleksandr Il'ich, d. 1957)

MASLOV, Yu. A. (Engr.)

"Air-Arc Metal Cutting."

paper presented at the Sverdlovsk Reginnal Conference on Gas-Flame Metal Working
and Electric-Gas Processes, Sverdlovsk, 14-16 May 1958, Sponsored by VNIIAtogen.

P::SE I   BOOK EXPLOITATION   SOV/3913

Maslov, Yuvenaliy Aleksandrovich

Svarochnoye proizvodstvo (Welding) Moscow, Mashgiz, 1959. 328 p.
   21,000 copies printed.

Reviewers: S.I. Mikhaylov, Candidate of Technical Sciences, and
   L.K. Filonov, Engineer; Ed.: Yu.A. Denisov, Engineer; Exec. Ed.
   (Ural-Siberian Division, Mashgiz): A.V. Kaletina, Engineer; Tech.
   Ed.: N.A. Dugina.

PURPOSE: This book is intended for students of machinery tekhnikums
   not specializing in welding, and technical personnel in welding.

COVERAGE: This book contains information on manual and automatic arc
   welding, resistance and gas welding, and cutting. Historical data
   and techniques of welding of steels, cast iron, and nonferrous
   metals are presented. Also discussed are strains and stresses
   occurring during welding, electric and gas-flame welding equipment,
   quality control, engineering and economic bases of welding processes,

Card 1/13

Welding

SOV/3913

and safety engineering. No personalities are mentioned. There are 14 references, all Soviet.

TABLE OF CONTENTS:

Card 2/13

GALAKTIONOV, A.T.; DENISOV, Yu.A.; KOPYTOV, G.T.; MASLOV, Yu.A.; NIKONOV,
I.P.; PETUNIN, I.V.;   KOCHEVA , G.N.; KUZNETSOV, A.P.; LELEKO,
N.M.; RAZIKOV, M.I.; SPESHKOV, V.V.; STEPANOV, B.V., STEPANOV,
V.V., kand. tekhn. nauk; SHELOMOV, B.Ye.; YUNYSHEV, G.P.; YES'KOV,
K.A., dots., retsenzent; BAKSHI, O.A., dots., retsenzent; BEREZKIN,
P.N., dots., retsenzent; PATSKEVICH, I.R.,dots., retsentzent;
RUDAKOV, A.S., dots., retsenzent; FIZHBEYN, N.B., inzh., retsen-
zent; KHRUSTALEV, L.Ya., inzh., retsenzent; KRUTIKHOVSKIY, V.G.,
inzh., red. BOBROV, Ye.I., kand. tekhn. nauk, red. DUGINA, N.A.,
tekhn. red.

[Welding handbook] Spravochnik rabochego-svarshchika. Pod red.
V.V.Stepanova. Moskva, gos. nauchno-tekhnizd-vo mashinostroit.
lit-ry, 1960. 640 p.   (MIRA 14:6)
                    (Welding)

PHASE I BOOK EXPLOITATION   SOV/5998

Maslov, Yuvenaliy Aleksandrovich, and Vladislav Dmitriyevich Gorozhanin

Avtomaticheskaya svarka tonkolistovoy vysokoprochnoy stali (Automatic Welding of High-Strength Sheet Steel) Moscow, Mashgiz, 1961. 38 p. 8500 copies printed.

Resp. Ed.: L. A. Malanicheva, Engineer; Tech. Ed.: N. A. Dugina.

PURPOSE: This booklet is intended for engineers, technicians, and skilled weldors engaged in welding alloy steel sheets.

COVERAGE: Experience gained by industry in the automatic welding of 30KhGSA a 25KhSNVFA alloy steel sheets is described. Information is given on the technology, equipment, and accessories used in the welding of these steels. The welding of tubes and tanks with 1 to 2 mm-thick walls made from 1Kh18N9G steel and used in aggressive media under pressures up to 200 atm. is also described. No personalities are mentioned. There are 6 references, all Soviet.
Card 1/

MASLOV, Yuvenaliy Aleksandrovich; FRIDKIS, Z.I., retsenzent; BOGOSLAVETS, N.P., tekhn.red.

[Air and electric-arc metal cutting] Vozdushno-elektrodugovaia rezka metallov. Moskva, Mashgiz, 1962. 103 p.

(MIRA 15:5)

(Electric metal cutting)

NIKONOV, I.F.; STEPANOV, V.V.; MASLOV, Yu.A.

Second edition of the book by A.A. Chekan "Welding at low tem-
peratures". Avtom. svar. 17 no.6:94 Je '64   (MIRA 18:1)

VAVILOV, A.F.; VOINOV, V.P.; VOLKOV, Yu.V. , kand. tekhn. nauk, retsenzent; MASLOV, Yu.A., inzh., retsenzent;

[Friction welding] Svarka treniem. Moskva, Izd-vo "Mashinostroenie," 1964. 153 p. (MIRA 17:6)

DOROFEYEV, A.N.; MUYZENNEK, Yu.A., inzh., retsenzent; MASLOV,
    Yu.A., inzh., red.

    [Calculating the strength of spot-welded joints] Raschet
    prochnosti svarnykh tochechnykh soedinenii. Moskva, Izd-
    vo "Mashinostroenie," 1964. 138 p.   (MIRA 17:8)

MASLOV, Yu.A., inzh.; MILYUTIN, V.S., inzh.

Technical and economic characteristics of air-electric arc
planing with lamellar electrodes. Svar. proizv. no.9:17-19
S '65.   (MIRA 18:9)

1. Ural'skiy politekhnicheskiy institut im. S.M.Kirova.

PINEVICH, V. V.; VERZILIN, N. N.; MASLOV, Yu. I.

Effect of different nitrogen sources on growth and mass accumulation
in Chlorella pyrenoidosa. Vest.LGU 16 no.9:16-25 '61.

(MIRA 14:5)

(Algae—Cultures and culture media)
(Plants, Effect of nitrogen on)

MASLOV, Yu.N.

Thermal calculation of a high-speed gas engine. Trudy SADI
no.16 pt.1:180-196 '59. (MIRA 13:11)
(Gas and oil engines)

BUTOVSKIY, G.K., kand.tekhn.nauk, dotsent; MASLOV, Yu.N., assistent

Graphoanalytic method for investigating the performance of an internal combustion engine by means of indicator diagrams. Izv.vys. ucheb.zav.; mashinostr. no.3:118-128 '60.   (MIRA 14:3)

1. Saratovskiy avtomobil'no-dorozhnyy institut.
            (Gas and oil engines—Testing)

MASLOV, Yu. N.

Cand Tech Sci - (diss) "Study of basic indicator indices of trans-
port engine operating on gas." Saratov, 1961. 20 pp with diagrams;
(Ministry of Higher and Secondary Specialist Education RSFSR, Mos-
cow Motor Vehicle and Road Inst); 150 copies; price not given; (KL,
5-61 sup, 191)

MASLOV, Yu.N., inzh.

Changes in the strength of the metal screens of papermaking machines
occurring during their operation. Trudy LTITSBP no.11:49-53 '62.
                                                      (MIRA 16:10)

ACCESSION NR: AT4017650   S/3021/62/000/209/0021/0032

AUTHOR: Maslov, Yu. N.

TITLE: The most general equations of analytical dynamics

SOURCE: Tashkent. Universitet. Nauchny*ye trudy*, no. 209, 1962.
Matematicheskiye nauki (Mathematical sciences), no. 23. Mekhanika (Mechanics),
21-32

TOPIC TAGS: mechanics, analytical dynamics, holonomic system, generalized
coordinate, constraint, motion equation

ABSTRACT: A large amount of literature exists on questions in nonlinear, non-
holonomic mechanics. This paper starts with a review of the most important
articles on the subject. The author then first considers a mechanical system
whose position is determined by the n generalized coordinates $q_1, \dots, q_n$ and
which is subject to the m nonholonomic constraints $f_\mu = 0$ which may be of the
first or second order and need not necessarily be linear in the derivatives.
He obtains the most general equations of analytic dynamics for constraints of
this type. Next, a more general type of constraint is considered:

$$f_\mu\left(q_i, \dot{q}_i, \dots, q_i^{(\nu)}, t\right) = 0, \quad q_i^{(\nu)} = \frac{d^{\nu} q_i}{dt^{\nu}}.$$

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ACCESSION NR: AT4017650

where the k_μ are certain integers; again, the most general equations of analytic dynamics are obtained. An illustrative example ends the paper. Orig. art. has: 29 formulas.

ASSOCIATION: Tashkentskiy Universitet(Tashkent University)

SUBMITTED: 00   DATE ACQ: 23Mar64   ENCL: 00

SUB CODE: ME   NO. REF SOV: 005   OTHER: 007

Card 2/2

MASLOV, Yu.N., kand.tekhn.nauk; SYCHEV, V.P., kand.tekhn.nauk

Establishing characteristics for the adjustment of carburation systems of engines with spark ignition. Izv.vys.ucheb.zav.; mashinostr. no.7: 101-106 '64. (MIRA 17:10)

1. Saratovskiy politekhnicheskiy institut.

MASLOV, Yu.N.

Investigating the wear of the metal screens of papermaking machines at high speeds. Trudy LTI TSBP no.13:112-120 '64.

(MIRA 18:2)

L 6316-66   EWT(d)   IJP(c)

ACC NR: AT5027503   SOURCE CODE: UR/3021/64/000/242/0031/0036

AUTHOR: Maslov, Yu. N.

ORG: Tashkent State University im. V. I. Lenin (Tashkentskiy gosudarstvennyy universitet)

TITLE: Integration of equations of motion of nonconservative systems

SOURCE: Tashkent. Universitet. Nauchnyye trudy, no. 242, 1964. Voprosy analiticheskoy mekhaniki i podzemnoy gidravliki (Problems in analytical mechanics and underground hydraulics), 31-36

TOPIC TAGS: differential equation, mechanics

ABSTRACT: The author considers

$$\dot{q}_\mu = B_{\mu\lambda}' \dot{q}_\lambda \qquad (1)$$

or

$$f_\mu (t, q_1) = 0 \qquad (2)$$

describing connections in a holonomic nonconservative system, whose equations of motion in excess coordinates have the form

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ACC NR: AT5027503

$$q_i = \frac{\partial H}{\partial p_i}, \quad \dot{p}_i = -E_i(H) + a_{\mu i}\frac{\partial H}{\partial p_\mu}, \quad \left(\frac{\partial H}{\partial p_0} = 1\right). \quad (3)$$

Here the usual summation convention is observed (repeated indices, etc) where $H(t, q_i, p_i) = p_i q_i - L$ is a Hamilton function, $L(t, q_i, \dot{q}_i)$ is the function obtained by eliminating $\dot{q}_\mu$ with the help of (1) from the system's kinetic potential; $p_i = \frac{\partial L}{\partial \dot{q}_i}$ are the generalized impulses, E_k denotes the operator of M. F. Shul'gin:

$$E_k() = \frac{\partial}{\partial q_k} + B_{\kappa\rho}\frac{\partial}{\partial q_\rho}, \quad (4)$$

and the coefficients $a_{\rho\kappa}(q_i, t)$ have the structure

$$a_{\rho\kappa} = E_k(a_\rho) - E_\rho(a_k), \quad (a_0 = 0), \quad (5)$$

He considers a case in which these equations can be integrated by using methods analogous to the classical methods of Hamilton-Jacoby, Poisson, etc. Orig. art. has: 20 formulas.

SUB CODE: MA, ME/ SUBM DATE: none/ ORIG REF: 001

Card 2/2

L 31049-66

ACC NR: AR5028207	SOURCE CODE: UR/0044/65/000/008/B033/B033

AUTHOR: Maslov, Yu. N.

TITLE: Non-holonomic systems with non-linear relationship

SOURCE: Ref. zh. Matematika, Abs. 8B185

REF SOURCE: Nauchn. tr. Tashkentsk. un-t, vyp. 242, 1964, 37-47

TOPIC TAGS: nonlinear automatic control, mathematic method, second order equation

ABSTRACT: Some examples of materialization of mechanical systems with nonholonomic relationship, non-linear and higher than first order, are discussed. The relationships are presented by "conditioned" equations, containing, besides the coordinates which serves for determination of the system's configuration, also additional coordinates and their derivatives. The following examples were analyzed: (1) a solid moving along a rod, which has a roller with the sharp edge rolling on the surface, (2) an example having a relationship to automatic control of acceleration of material particle, etc. In these examples the non-linear nonholonomic relationship is of the second order.   [A. Galanov]

SUB CODE: 12/ SUBM DATE: none

Card 1/1 pla)   UDC: 517.933

L 47156-66   EWT(1)   IJP(c)

AEC NR: AP6000695   SOURCE CODE: UR/0124/65/000/009/A007/A007

54

AUTHOR: Maslov, Yu. N.

B

TITLE: Integration of the equations of motion of nonconservative systems.

SOURCE: Ref. zh. Mekhanika, Abs. 9A55

REF SOURCE: Nauchn. tr. Tashkentsk. un-t, vyp. 242, 1964, 31-36

TOPIC TAGS: Hamilton Jacobi equation, magnetic field, charged particle, mechanics,
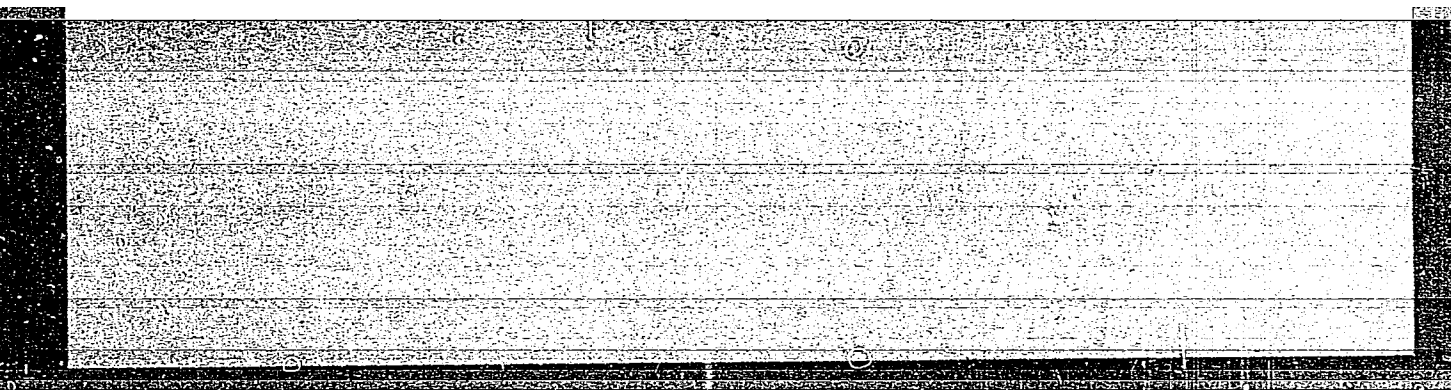motion equation

ABSTRACT: A case is investigated where the equations of motion of a nonconservative
(holonomic) mechanical system are integrated by means of a method analogous to the
method of Hamilton-Jacobi. The equations of motion in intrinsic coordinates are
written in canonical form. It is shown that in the given case there exists a theorem
similar to the Hamilton-Jacobi theorem. As an example the motion of a heavy
electrically charged particle in a magnetic field moving along the surface of a smooth
cylinder with a horisontal axis is considered. A. G. Galanov /Translation of
abstract/

SUB CODE: 20

Card 1/1

Maslov, Yu. P.

ol-1-6/lo

AUTHORS: Maslov, P. G.   and   Maslov, Yu. P.

TITLE: On the Possibility of Prediction of Vibrational Spectra
of some Compounds from the Known Spectra of Other Compounds.
(O vozmozhnosti predskazaniya kolebatel'nykh spektrov
odnikh soyedineniy po izvestnym spektram drugikh).

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.1, pp.38-53.
(USSR)

ABSTRACT: Formulae of halogen derivatives of methane can be obtained
as combinations of chemical formulae of other methane
derivatives, e.g. $CHXY_2 = 0.5(CHY_3 + CHX_2)$, where
X, Y, are halogens. Knowing vibrational spectra (v.s.)
for molecules CHY_3 and $CHXY_2$ and averaging their
frequencies, one can obtain a good approximation to the
v.s. of $CHYX_2$.   Table 1 gives frequencies of v.s. of
halogen derivatives of methane calculated in this way.
These calculated values are compared with experimental
ones and are found to be in good agreement.   Tables 2,
4, 5, 6, 7, 9 and 10 give values of vibration frequencies
calculated in this way for methane halides, ethane halogen

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On the Possibility of Prediction of Vibrational Spectra of some
Compounds from the Known Spectra of Other Compounds.

derivatives, trimethylene halides, halogenated ethylenes,
ethylene halides, certain simple molecules like SeF_6,
$GeCl_4$ and other compounds.   Tables 3, 8 and 12 give
vibrational thermodynamic functions calculated from
vibration frequencies both obtained experimentally and
determined in the way indicated above.   From the
results obtained the authors conclude that v.s. frequencies
of the molecules discussed are approximately additive.
This also applies to their intensities and polarizations.
The spectra calculated by averaging are thermodynamically
almost equivalent to the true spectra.   In the majority
of cases the spectra calculated by averaging have
frequencies which are nearly identical with those
calculated using the theory of molecular vibrations,
and are close to the experimental values.   The method
proposed in this paper can be applied to frequency
harmonics as well.   There are 12 tables, and 18

Card 2/3   references, 3 of which are Slavic.

51-1-6/18

On the Possibility of Prediction of Vibrational Spectra of some
Compounds from the Known Spectra of Other Compounds.
ASSOCIATION: Leningrad Military Mechanical Institute, Department of
Physics.   (Leningrad voyenno-mekhanicheskiy institut,
Kafedra fiziki.)

SUBMITTED: December 25, 1956.

AVAILABLE:

Card 3/3