"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

32231
S/196/61/000/011/011/042
E194/E155

An investigation of heat exchange ...

of a sudden temperature difference in the layer near the wall, which has increasing effect on the rate of heat exchange because the molecular free path increases with increasing vacuum and with it the thickness of the layer near the wall. The relationships obtained can be used to calculate thermal conditions of thermistors operating in the upper layers of the atmosphere, in vacuum instruments and equipment.
4 literature references.

[Abstractor's note: Complete translation.]

Card 2/2

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

S/196/61/000/011/012/042
E194/E155

AUTHOR: Devoyno, A.N.

TITLE: Use of the electrical-thermal analogy method to study the process of heat transfer in rarefied gas

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika, no.11, 1961, 1, abstract 11G 6. (Tr. In-ta energ. AN BSSR, no.11, 1960, 40-50)

TEXT: The electrical thermal analogy method, which is described, is suitable for rapid calculations of temperature conditions of bodies in a rarefied gas atmosphere. To calculate heat exchange by this method it is necessary to establish the relationship between the temperature difference and pressure of individual resistances of the equivalent electrical circuit $R_m$, $R_k$, $R_{\lambda}$, $R\lambda_1$ and $R_2$, where each value respectively represents thermal resistance due to thermal conductivity, convection, radiation and resistance of the layers near the walls of both bodies participating in the heat-exchange process. As the resistances are non-linear it is necessary, in designing the

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Use of the electrical-thermal ...

electrical circuit, to construct the volt-ampere characteristics of each resistance. Then the circuit calculations, i.e. the determination of current and resistances (which correspond to determination of heat fluxes and temperature) are carried out by the graphical technique for circuits with mixed non-linear elements. The electrical-thermal analogy method is promising for calculations of transient heat exchange processes in rarefied gases.
6 literature references.

[Abstractor's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVOYNO, A. N., Cand Tech Sci -- "Study of h[illegible]xchange in a vacuum ~~vacuo~~ at temperatures of up to 250°C." Minsk, 1961. (Belorussian Polytech Inst im I. V. Stalin) (KL, 8-61, 242)



APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVOYNO, A.N.

Contemporary state of the problem of heat transfer in rarefield gases. Inzh.-fiz. zhur. no.2:119-130 F '61. (MIRA 14:4)

1. Institut energetiki AN BSSR, Minsk.
(Heat--Transmission)
(Gases, Kinetic theory of)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

88636

10.4100
11.9000

S/170/61/004/002/017/018
B019/B060

AUTHOR: Devoyno, A. N.

TITLE: The Present State of the Heat Exchange Problem in Rarefied Gases

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1961, Vol. 4, No. 2, pp. 119-130

TEXT: The results of recent studies in the field mentioned in the title are discussed and completed in part by the author's own findings. A paper by Kyte, Madden and Piret (Ref. 6) is first discussed, in which the heat exchange was studied with free convection in diluted atmosphere. Formulas are given for the heat exchange in the boundary layer of a sphere and a cylinder, and the temperature field of a vertically stretched wire is discussed. Results concerning the temperature variations around a heated wire are dealt with more closely. The empirical equations for the heat exchange of a sphere and a horizontal cylinder are given and the considerable practical importance attached to the calculation of the heat

Card 1/4

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exchange coefficient at pressures of up to 0.1 mm Hg is pointed out. The theoretical considerations made in the abovementioned paper are said to be insufficient. Experimental results obtained by the author regarding the temperature field at low pressures fit those supplied by the said paper. Fig. 3 illustrates the author's results for the variation of the heat exchange coefficient of a cylindrical body at low pressures. A report is then made on a paper by R. Pek, V. Fagen, and R. Verlarn (Ref. 2) which has dealt with a study of the heat exchange between parallel vertical plates at lower pressures. It has been shown in that paper that at low Grashof numbers the heat exchange coefficient does not depend on the temperature gradient nor on the plate distance. The present state of the studies of heat exchange with forced convection is discussed next. A paper by Stalder and Jukoff (Ref. 7) has dealt with heat transfer problems of bodies moving at high speed in the upper strata of the atmosphere. This paper is discussed at some length together with the calculation of the temperature of a plate moving at an altitude of 120 to 300 km at a speed of 0 - 11 km/sec. The absence of an experimental demonstration is said to be a major deficiency of that investigation.



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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

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The Present State of the Heat Exchange Problem in Rarefied Gases

S/170/61/004/002/017/018
B019/B060

Stalder, Goodwin, and Creager (Ref. 8) studied the heat exchange in a free high-speed molecular flow, and a result concerning the heat exchange of a plane plate in a flow with slippage is said to be of special interest. The use of boundary conditions for the slippage and the temperature jump, as given by Kennard (Ref. 11) is criticized in this connection. Improved boundary conditions have been set up by A. A. Pomerantsev (Ref. 1). It is stated in conclusion that further studies are required in the field concerned, particular importance being attached to the investigation of heat exchange in high-speed gases constituting free molecular flows. There are 5 figures and 11 references: 5 Soviet and 6 US.

ASSOCIATION: Institut energetiki AN BSSR, g. Minsk (Institute of Power Engineering of the AS BSSR, Minsk)

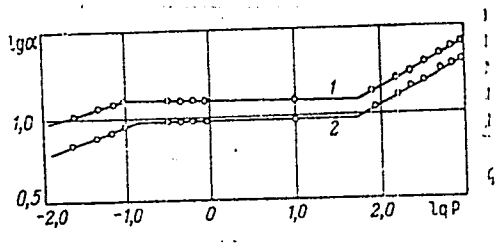
SUBMITTED: August 9, 1960

Card 3/4

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5






Legend to Fig. 3: The heat exchange coefficient as a function of pressure. 1) and 2): total heat exchange coefficient with and without taking account of the radiation component.

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23751

S/170/61/004/006/006/015
B129/B212

10.4100
11.9200

AUTHOR: Devoyno, A. N.

TITLE: Basic regularities of heat transfer with natural convection in a rarefied gas

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 4, no. 6, 1961, 70-77

TEXT: The author considers the problem of the heat transfer for a vertical plate located in a rarefied gas, which is in a viscous or molecular-viscous state. The theoretical results are compared with experimental data. According to the degree of rarefaction there are three types of gas states: The viscous, the molecular-viscous, and the molecular state. The ratio of the mean free path $\bar{\lambda}$ of a molecule to the dimensions of the container or to the body d located in the gas will determine the type of state. If the ratio $\bar{\lambda}/d$ is smaller than $4.6 \cdot 10^{-3}$ the state will be viscous, for $4.6 \cdot 10^{-3} < \bar{\lambda}/d < 1.5$ the state will be molecular-viscous, and

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Basic regularities of heat...

for $\bar{\lambda}/d > 1.5$ the state will be molecular. In a moving gas these states will correspond to : Continuous flow, flow with slip and molecular flow. In each of these state the heat transfer will differ by certain properties. For the molecular-viscous state the conditions which are valid for normal pressures cannot be applied to calculate the heat transfer. If the rarefaction is high enough in a molecular-viscous state it will be impossible to count on the presence of convection flows since here the velocities are insignificant. In such a case it will be sufficient to consider the heat transfer equation for solving the problem of the heat transfer. The equations of motion and continuity will be meaningless. A so-called "wall layer" will be formed at the boundary between gas and wall when in the molecular-viscous state. The thickness of this layer will be significant and equal to the mean free path of the molecules, and in it the gas will loose its viscous properties. The boundary layer however will be moved from the wall since it is separated from it by the wall layer; it might be considered as a natural insulation layer between gas and wall. Therefore, the effect of the wall on the rarefied gas will be decreased significantly. The problem of the analytical study of the heat

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Basic regularities of heat...

transfer with natural convection of a rarefied gas may be divided into three cases: 1) Heat transfer in the molecular-viscous state at high rarefactions if the velocities of motion of the gas are small and if the convection flows can be neglected. This problem is solved with the thermal conductivity equation by using the boundary conditions of the temperature discontinuity. 2) Heat transfer in a state as in 1) but with a lesser rarefaction of the gas, here, neither the convection flows nor the slip and the temperature discontinuity along the wall can be neglected. The equations of motion, continuity, and heat transfer have to be applied and the boundary conditions of the slip and the temperature discontinuity have also to be taken into account. 3) Heat transfer in the viscous state, i.e., the convection flows are significant but the temperature discontinuity and the slip along the wall are practically not present. This problem is solved with the same equations as that of 2) however with the use of the boundary conditions for "adhesion". On the basis of an analytical solution of the problem, the temperature fields of a heated vertical plate, were obtained for pressures ranging from one atmosphere to 0.01 mm Hg. The

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B/170/61/004/006/006/015
B129/B212

Basic regularities of heat...

temperature fields for analogous conditions are also found experimentally and compared with theoretical results. A. A. Pomerantsev, D. R. Kayt, A. D. Madden, E. L. Payret, R. Pek, V. Vagen and R. Verlayn are mentioned. There are 4 figures and 11 Soviet-bloc references.

ASSOCIATION: Institut energetiki AN BSSR (Institute of Power Engineering of the AS BSSR)

SUBMITTED: March 2, 1961

Card 4/4

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

34118
S/124/62/000/001/009/046
D237/D304

24.5200 (also 1498)

AUTHOR: Devoyno, A. N.

TITLE: Investigating heat exchange in vacuum

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 1, 1962, 19, abstract 1B126 (Tr. In-ta energ. AN BSSR, 1960, no. 11, 31-39)

TEXT: Processes of heat transfer in a rarefied gas at temperatures up to 250°C are investigated, and a thermistor is used as a working device. The aim of the experimental investigation was the determination of heat-exchange coefficients between semiconductor resistors and rarefied gas under various working conditions at various temperatures and at various degrees of rarefaction of gas. Heating electrodes, between which a device under test is placed, are inserted into the evacuated space under the bell-jar, and semiconductor devices are heated by d.c. current from a battery supply. Pressure under the bell-jar was varied

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Investigating heat exchange...

from 1 atm. down to $10^{-3}$ mm Hg. Temperatures of the thermistor and surrounding space were measured by means of thermocouples. A thermistor type TCT-0.5 (TST-0.5) was used as a working device (a cylinder of 18.5 mm in length and 7.7 mm in diameter), and its ends were thermally insulated so that only the side surface took part in heat exchange. From the known temperatures of the device and of the surrounding medium (at a distance of 150 mm from the surface), the amount of electric power dissipated on the thermistor, and its surface, the coefficient of heat transfer, can be determined for different gas pressures. The measured coefficient did not include the radiant component, which was calculated theoretically. A graph is given of values of the coefficient v. pressure at constant temperature. The coefficient decreases with decreasing pressure due to decrease of convective component. At 50 mm Hg., the convective component ceases to be significant, and the heat transfer coefficient remains constant down to 0.2 mm Hg. This is related to the fact that the thermal conductivity

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Investigating heat exchange...

coefficient is independent of pressure. At still lower pressures, the heat transfer coefficient decreases again as under these conditions the free path of the molecules and the size of the device are of the same order, and the thickness of the laminary layer increases together with the temperature discontinuity (thickness of the laminary layer is equal to free path). Temperature was measured at a definite distance from the surface (1 and 15 mm at 75°C = temp. of the device). On decrease of pressure down to ~ 100 mm Hg., the temperature remains constant; then it rises and reaches a maximum at p~10 - 1 mm Hg., after which it falls until at p~0.01 mm Hg. it reaches the values corresponding to normal pressure. The temperature rise is connected with the reaction between the molecules and the surface layer, while the fall of temperature is related to the influence of the laminary layer and temperature discontinuity. [Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

S/262/62/000/004/010/024
I014/I252

AUTHOR: Devoyno, A. N.

TITLE: Application of the electro-thermal analogy method for investigation of the heat transfer process in a rarefied gas

PERIODICAL: Referativnyy zhurnal, Silovyye ustanovki, no. 4, 1962, 37, abstract 42.4.239 "Tr. In-ta energ." AN BSSR", 1960, no. 11, 40–50

TEXT: The underlying principle of electro-thermal analogy method is that the thermal system, in which the heat exchange process is studied, is replaced by an equivalent electrical scheme, whose parameters vary depending on the working conditions of the thermal system. A table is given, in which the "body-rarefied gas", system considered in the investigation of heat exchange under vacuum, is replaced by an electrical scheme. For calculating the electrical scheme the characteristics of each resistance are plotted. An analytical expression was obtained for the volt-ampere characteristics contained in the equivalent system, by means of the heat transfer relationships in different regions of the body-rarefied gas system. The electro-thermal analogy method is promising in investigating non-stationary conditions of heat transfer in rarefied gases.

[Abstracter's note: Complete translation.]

Card 1/1

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

L 33035-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/T-2/EWP(k) EM
ACC NR: AP6024151 SOURCE CODE: UR/0201/66/000/001/0072/0081

AUTHOR: DeVoyno, G. N. 33 B

ORG: Belorussian Polytechnic Institute (Belorusskiy politekhnicheskiy institut)

TITLE: Torsion analysis of frames with allowance for elasticity of members

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 1, 1966, 72-81

TOPIC TAGS: torsion stress, vehicle component, unarmored vehicle, vehicle engineering, cyclic loading

ABSTRACT: In designing transport-vehicle frames (particularly dump-truck frames), apart from symmetric loading, which causes bending of the structural rods, allowance must also be made for antisymmetric loading, which causes torsion of the frame elements. The author states that a feature which distinguishes the torsion analysis suggested by him from that in the work of D. B. GEL'FGAT and V. A. OSHNOKOV is the fact that it takes into account the influence which the character of the connection of the cross pieces to the side members has on the rigidity of the sections of rods between members, as well as on the intensity of the stresses in the rods.
Dependences are derived which are usde to analyze the frame of the MAZ (Minskiy avtomobil'nyy zavod; vehicle made by the Minsk Motor Vehicle Plant)-503 for torsion. It was found that normal stress reaches a very high value on the

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ACC NR: AP6024151

comparatively short side-member. The author believes that the design of this frame member should be changed either by desisting from the practice of attaching the cross pieces to the flanges of the side members or by installing one cross piece instead of the existing two. The author suggests reducing the stress by attaching the 4th and 5th cross pieces as well as the rods of the second cross piece to the side-member walls instead of the flanges, even though this tends to reduce the overall rigidity of the frame. Orig. art. has: 5 figures, 16 formulas, and 7 tables. [JPRS]

SUB CODE: 13, 20 / SUBM DATE: 15Sep65 / ORIG REF: 003

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

ACC NR: AP6033068 (A) SOURCE CODE: UR/0201/66/000/003/0063/0073

AUTHOR: Devoyno, G. N.

ORG: Belorussian Polytechnic Institute (Belorusskiy politekhnicheskiy institut)

TITLE: Calculation of bearing structures for transportation machinery for limited wear endurance

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 3, 1966, 63-73

TOPIC TAGS: cyclic strength, fatigue strength, endurance test, wear resistance, transportation equipment/ 19KhGS steel

ABSTRACT: Wear endurance is defined as the ability of a material to withstand damage under time-varying stresses, and the limit of wear endurance is defined as the maximum number of cycles under which the material is not destroyed after a practically unlimited number of changes in stress. This article deals essentially with the maximum loads that can be applied when the machinery is not expected to last for an indefinite period, but only for a limited number of applications or for a limited period of time. To this purpose, several methods are discussed of converting from long-term endurance to short-term endurance on the basis of certain mathematical expressions for the wear endurance as a function of the number of cycles. Transformation coefficients are tabulated for the conversion from a number of cycles at one load to the number of cycles at another. Several variants of the calculations are given. Particular examples of various calculations are given for the wear endurance of the material for

Card 1/2

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

ACC NR: AP6033068

the side member of the frame of an automobile made of 19KhGS steel. Orig. art. has: 31 formulas, 4 tables, and 4 figures.

SUB CODE: 13/ SUBM DATE: 25Feb66/ ORIG REF: 005

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVOYNO, L.V.

Specific prevention of dysentery by total-antigen vaccines. Zhur.mikrobiol.epid. i immun. 30 no.4:23-27 Ap '59. (MIRA 12:6)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.

(DYSENTERY, BACILLARY, prev. & control, vacc. (Rus))

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVOYNO, L.V.

Studies on immunological changes in human subjects vaccinated with the IEM chemical combined and precipitated polyvaccine with special reference to dysentery antigens. Zhur.mikrobiol.epid.i immun. 30 no.7:10-14 Jl '59. (MIRA 12:11)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(DYSENTERY, BACILLARY - immunology)
(VACCINES)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVOYNO, L. V. Cand Med Sci -- (diss) "Effectiveness of antidysentery immunization with vaccines of complete antigens." Mos, 1959. 14 pp (Acad Med Sci USSR. Inst of Epidemiology and Microbiology im Honored Academician N. F. Gamaleya), 200 copies (KL, 44-59, 129)



APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

KORSHAKOVA, A.S.; BOLDYREV, T.Ye.; ALEKSANYAN, A.B.; SHATROV, I.I.; LEYTMAN, L.V.; FROLOV, V.I.; SEMINA, N.A.; DEVOYNO, L.V.; SIZINTSEVA, V.P.; BATURINA, L.M.; ABAKAROV, U.A.; GRINAVTSEVA, V.P.; MEDZHIDOV, V.; KORSHUNOVA, N.A.

Studies on the reactogenic properties of Gamaleia IEM polyvaccine. Zhur.mikrobiol.,epid.i immun. 30 no.11:37-41 N '59. (MIRA 13:3)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamaleĭ AMN SSSR.
(DYSENTERY BACILLARY immunol.)
(TYPHOID immunol.)
(PARATYPHOID FEVERS immunol.)
(TETANUS immunol.)
(VACCINATION)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

MESHALKIN, Ye.N.; FUKS, B.B.; STEFANOVICH, L.Ye.; SERGIYEVSKIY, V.S.; KONSTANTINOVA, I.V.; DEVOYNO, L.V.; MEDVEDEV, I.A.

Using proteinase-treated collagenous and elastic "carcasses" from heterologous material for vascular grafts. Izv. Sib. otd. AN SSSR no.5:129-132 '62. (MIRA 18:2)

1. Institut eksperimental'noy biologii i meditsiny Sibirskogo otdeleniya AN SSSR, Novosibirsk.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

FUKS, B.B.; KONSTANTINOVA, I.V.; STEFANOVICH, L.Ye.; DEVOYNO, L.V.; SERGIYEVSKIY, V.S.; FALK, I.G.; MODYAYEV, V.P.

Influence of some factors on the growth and differentiation of the connective tissue in the regeneration of the cornea, aorta, tendons and bones in biological frameworks. Dokl. AN SSSR 152 no.5:1260-1262 O '63. (MIRA 16:12)

1. Institut eksperimental'noy biologii i meditsiny Sibirskogo otdeleniya AN SSSR. Predstavleno akademikom N.N.Anichkovym.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

ACCESSION NR: AR4018343 S/0137/64/000/001/I121/I121

SOURCE: RZh. Metallurgiya, Abs. 1I784

AUTHOR: Alferova, N. S.; Devterov, V. M.; Fesenko, G. M.

TITLE: Heat-treatment of EI852 steel in the production of pipe

CITED SOURCE: Sb. Proiz-vo trub. Vy*p. 9, M., Metallurgizdat, 1963, 106-113

TOPIC TAGS: Steel processing, pipe-rolling, EI852 steel; heat treatment, structural conversion, steel hardness

TRANSLATION: For the purpose of determining the optimum schedule of heat-treating EI852 steel composed (in%) of C 0.10-0.15; Si 1.4-2.1; Cr 12-14, Mo 1.2-2.0, Mn less than 0.6, Ni less than 0.5, which is used extensively in the production of pipe, structural conversions and changes in the hardness of hot and cold-rolled pipe of this steel with hardening at 800-1,200° were studied. The critical point of EI852 steel, beginning with which, during heating, there takes place a partial conversion of ferrite-carbide mixture into austenite, equal to approximately 925 degrees. To obtain satisfactory plasticity in longitudinal and lateral directions, to remove percussion marks of hot-rolled Me and to form the structure of grainy

Card 1/2

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ACCESSION NR: AR4018343

perlite in the sections of products of conversion of austenite, for hot-rolled pipe of EI852 steel, it is recommended to use double heat-treatment according to the following schedule: heating from 1,000-1,050 degrees, with subsequent drawing at 800-820 degrees. It is recommended to use drawing at 800-830 degrees with a time interval of more than one hour as a form of intermediate heat treatment for cold-rolled pipe.

SUB CODE: IE, MM ENCL: 00

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEV'YAKOVICH, G.M., kand. tekhn. nauk; MEL'NIK, D.M., kand. tekhn. nauk; NEDASHKOVSKIY, P.P., nauchnyy sotrudnik

Mechanization of track cleaning operations. Put' i put. khoz. 9 no.10:20-22 '65. (MIRA 18:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta Ministerstva putey soobshcheniya.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

L 00156-67 EWF(m)/EWP(e)/EWT(1) IJP(c) GW

ACC NR: AP6024187 SOURCE CODE: UR/0424/66/000/002/0011/0016

59
58
B

AUTHORS: Devyanin, Ye. A. (Moscow); Dem'yanovskiy, A. P. (Moscow)

ORG: none

TITLE: Determination of absolute angular velocity, distance to the center of attraction, and construction of the vertical by inertial means

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 2, 1966, 11-16

TOPIC TAGS: inertial guidance, algebraic equation, spacecraft motion, motion equation

ABSTRACT: A body of mass M is considered moving in the Newtonian field of an attracting center at $O_1$. The coordinate system $O\xi\eta\zeta$ is fixed with the body (the origin O is not necessarily the center of mass). The components of the absolute angular velocity vector $\vec{\omega}$ of the body along the coordinate axes are denoted by p, q, r and the direction cosines of the vector $\vec{\rho}$ $(O_1O)$ of length $\rho$ are x, y, z. Four triplets of newtonmeters oriented along the $\xi$, $\eta$, $\zeta$ axes are mounted at O and the points $l_1 = l\xi$, $l_2 = l\eta$, $l_3 = l\zeta$. Then

$$p^2 + k(1 - 3x^2) = a_1, \quad pq - 3kxy = b_1 \quad \text{(xyz, pqr, 123)},$$

where the symbol (xyz, pqr, 123) denotes cyclic permutation of the variables and

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L 00756-67

ACC NR: AP6024187

indices; $a_1$, $b_1$ (123) are the linear combinations of the newtonmeter readings; $k = \mu M / \rho^3$; and $\mu$ is the attraction constant. Detailed calculations are carried out to find the absolute angular velocity, distance to the attracting center, and the vertical from this system of algebraic equations. All the solutions obtained as a result of this procedure are investigated. The authors thank A. Yu. Ishlinskiy for useful comments. Orig. art. has: 98 equations and 1 figure.

SUB CODE: 20,22/ SUBM DATE: 06Apr65/ ORIG REF: 001

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

L 27509-66 EWT(d)/EEC(k)-2/FSS-2 BC

ACC NR: AP6011126 SOURCE CODE: UR/0424/66/000/001/0014/0019

AUTHORS: Andreyev, V. D. (Moscow); Devyanin, Ye. A. (Moscow); Dem'yanovskiy, A. P. (Moscow)

ORG: none

28 B

TITLE: The theory of inertial systems containing no gyroscopic sensing elements

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 1, 1966, 14-19

TOPIC TAGS: inertial navigation equipment, ordinary differential equation, error analysis, gravitational potential, Laplace equation

ABSTRACT: The possibility is investigated of using an inertial guidance system (Newtonometers) without the presence of gyroscopic sensing elements. For an object moving near the terrestrial surface, it is assumed that there exists a trihedron attached to a platform, denoted by $Ox_1x_2x_3$. To this trihedron are attached four triple-Newtonometers, the sensitive mass of one of which is at point O, and the others on the axes $x_1, x_2, x_3$. It is then shown that for a gravity potential satisfying the Laplace equation the complete information obtained from these Newtonometers (without gyroscopic sensitive elements) can be expressed by the group

$$n_1^0 = v_1^{\cdot} + \omega_2 v_3 - \omega_3 v_2 - \frac{\partial^2 V_0}{\partial x_1^2}$$

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3

The enhanced protection resulting from the use of the two agents is due not only to the difference in mechanism of action of the agents but to the fact that they provide differentiated protection of various systems. AET and AETP protected bone marrow and intestine equally, whereas 5-MOT protected only bone marrow. The synthesis of the compounds was carried out in the laboratories of Academician I. L. Knunyants (AETP), Professor N.N. Suvorov (5-MOT) and Candidate of Chemical Sciences V. M. Fe' ayev (AET). The author thanks them for making possible the preparations. Orig. art. has: 2 figures and 2 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 25Sep64 / ORIG REF: 017 / OTH REF: 009



APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

L 48801-65 EEO-2/EWT(d)/FBD/EEC(k)-2/EWA(d)/T-2/EEC(c)-2/EED-2/FSS-2 Pz-4/Po-4/
Pd-4/Pac-4/Pg-4/Pae-2/Pk-4/Pl-4 WR

ACCESSION NR: AP5007261 S/0280/65/000/001/0150/0157

AUTHOR: Devyanin, Ye. A. (Moscow)

TITLE: Equations of automatic tracking systems

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 1, 1965, 150-157

TOPIC TAGS: follower system, tracking

ABSTRACT: Conical-scanning automatic tracking systems which are used in measuring devices of optical followers and also in angular-tracking radars are considered. It is proven that, with symmetrical channels and a sinusoidal switching function of the synchronous detector, the set of differential equations with periodic coefficients is reducible by adopting a rotating-coordinate system. In the case of low scanning frequencies or high gains, the effects of input-device parameters and scanning frequency should be taken into account. Stability regions for a typical tracking system are described. Orig. art. has: 4 figures and 39 formulas.

Card 1/2

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

L 48801-65
ACCESSION NR: AP5007261

ASSOCIATION: none

SUBMITTED: 27Dec63 ENCL: 00 SUB CODE: DC, DP

NO REF SOV: 009 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

SATIN, P.D.; DEYANOV, D.

Postintubation syndrome. Eksper. khir. i anest. 9 no.5:80-82 S-O '64. (MIRA 18:11)

1. Institut skoroy pomoshchi imeni N.I.Pirogova (glavnyy vrach Khr. Zdravkov), Sofiya.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

STRIZHAK, V.I.; DEVYATISIL'NYY, V.I.; PODGAYEVSKIY, I.A.

Production of pipe in foreign countries for the petroleum industry. Met. i gornorud. prom. no.3:85-88 My-Je '63. (MIRA 17:1)

Ukrainskiy nauchno-issledovatel'skiy trubnyy institut.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

BRODSKIY, V.M.; DEVYATKINA, Z.T.

Experimental service station. Transp. i khran. nefti i nefteprod. no.11: 34-36 '64. (MIRA 18:1)

1. Spetsial'noye konstruktorskoye byuro "Transneft'avtomatika".

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKOV, Nikolay Dmitriyevich; PERESLENI, Aleksandr Aleksandrovich, dots.; IL'VOVSKAYA, N.M., ass., red.

[Industrial electric vacuum technology]Tekhnologiia elektrovakuumnogo proizvodstva. Moskva, Mosk. energeticheskii in-t, Pt.3., no.1. 1962. 49 p. (MIRA 16:4)

1. Chlen-korrespondent Akademii nauk SSSR (for Devyatkov).
(Electronic apparatus and appliances)
(Electron tubes)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYAKOVICH, Georgiy Ignat'yevich; SIMKHO, Kh.S., red.; KAYDALOVA, M.D., tekhn.red.

[Railroad transportation] Zheleznodorozhnyi transport. Khabarovsk, Khabarovskoe knizhnoe izd-vo, 1959. 41 p. (MIRA 14:1)

1. Kommunisticheskaya partiya Sovetskogo Soyuza. Khabarovskiy krayevoy komitet. Otdel propagandy i agitatsii.
(Khabarovsk Territory--Railroads)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKOVICH, G. M.
Mekhanizatsiia rabot po tekushchemu soderzhaniiu puti. [Mechanization of routine maintenance tracks]. Pod red. G. V. Liders. Moskva, Gos. transp. zhel-dor. izd-vo, 1949. 271 p. illus. DLC: TF240.D45

SO: SOVIET TRANSPORTATION AND COMMUNICATIONS, A BIBLIOGRAPHY, Library of Congress Reference Department, Washington, 1952, Unclassified.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

BELOGORTSEV, Petr Grigor'yevich; DEV'YAKOVICH, G.M., inzh., retsenzent; SURODEYEV, V.P., inzh. red.; USENKO, L.A., tekhn. red.

[Dumper-type hopper cars; design, operation, repair] Khopper-dozatory; ustroistvo, ekspluatatsiia i remont. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1962. 78 p. (MIRA 15:3)
(Railroads--Freight cars) (Railroads--Track)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYANIN, Ye.A. (Moskva)

Properties of the first approximation equations of the averaging method. Prikl.mat. i mekh. 22 no.5:713-719 S-O '58.
(MIRA 11:11)

(Oscillations) (Differential equations)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEYANOV, V.Ya.

Characteristics of asthenic conditions in children and adolescents with rheumatic fever. Pediatriia 37 no.4:17-21 Ap '59.
(MIRA 12:6)

1. Iz detskoy kliniki (zav. - prof.G.Ye.Sukhareva) Nauchno-issledovatel'skogo instituta psikhiatrii (dir. - prof.V.M. Banshchikov) Ministerstva zdravookhraneniya RSFSR.

(RHEUMATIC FEVER, compl.
asthenic cond. in child. & adolescents (Rus))
(ASTHENIA, in inf. & child
in child. & adolescents with rheum. fever (Rus))

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYAT V, Boris Nikolayevich; I.Dikii, G [illegible], red.

[Theory of transient processes in technological devices from the standpoint of control objectives] Teoriia perekhodnykh protsessov v tekhnologicheskikh apparatakh s tochki zreniia zadach upravleniia. Novosibirsk, Red.-izd. otdel Sibirskogo otd-niia AN SSSR, 1964. 322 p. (MIR: 17:10)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

1. DEYAT, V. G.

2. USSR (600)

7. Floating Chuck for Reaming, Machine Tools and the Bit No. 11, Nov 52

9. Compilation of Information of the USSR Machine and Machine Tools Industry Contained in Soviet Publications. [redacted]

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

MAKEYEV, M.F., inzh.; DEVYATAYEV, M.P., Gerov Sovetskogo Soyuza

Rapid transportation of passengers on inland waterways and outlook for its growth. Rech. transp. 17 no. 7:11-13 Jl '58. (MIRA 11:8)

1. Kapitan teplokhoda "Raketa" (for Devyatayev).
(Inland water transportation)
(Motorships)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATEK, A. Yu.; NEVYADOMSKAYA, N. V.

Grasses

Special seed farm's work practice with grasses. Korm. baza 4, No. 2, 1953.

Monthly List of Russian Accessions, Library of Congress, June 1953. Uncl.

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

T 35985-66 EWT(1)

ACC NR: AP6008530 SOURCE CODE: UR/0280/66/000/001/0146/0153

43
B

AUTHOR: Devyaterikov, I. P. (Moscow)

ORG: none

TITLE: Correcting circuits in variable-parameter pulse systems

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika. no. 1, 1966, 146-153

TOPIC TAGS: automatic control design, circuit design, feedback amplifier

ABSTRACT: A great deal of attention is being paid to problems of the synthesis of pulse automatic systems. The problem is considered solved when such characteristics of the correcting circuit are found that the characteristics of the corrected system satisfy a specific quality criterion or minimize it. For stationary systems the sought characteristic is usually a transfer function. Another method is the use of the pulse characteristic of the system; this method is applicable to both stationary and nonstationary systems. The problem of the synthesis of nonstationary pulse systems is quite complicated, and there are no published works available on the subject. The present author proposes methods for finding the pulse characteristic of the correcting circuit according to a known desired pulse characteristic of the system and according to the pulse characteristic of the controlled plant. This characteristic may be found by solving either the variational problem, or the Wiener problem. Methods for finding the desired pulse characteristic are not studied. In order to

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

L 35985-66

ACC NR: AP6008530

Illustrate the method proposed, the author presents examples of the determination of equations of correcting circuits in a forward system and in a feedback system. The methods proposed in this article solve the problem of the synthesis of linear pulse systems with constant as well as with variable parameters. In conclusion, the author thanks Ya. Z. Tsypkina for statement of the problem and constant interest in the work. Orig. art. has: 5 figures and 9 formulas.

SUB CODE: 09 / SUBM DATE: 02Mar64 / ORIG REF: 004 / OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

ACC NR: AP7004245 SOURCE CODE: UR/0103/67/000/001/0122/0132

AUTHOR: Devyaterikov, I.P. (Moscow); Propoy, A.I. (Moscow); Tsypkin, Ya.Z. (Moscow)

ORG: none

TITLE: On recurrence algorithms for teaching pattern recognition

SOURCE: Avtomatika i telemekhanika, no. 1, 1967, 122-132

TOPIC TAGS: pattern recognition, learning system, stochastic PROCESS, approximation method, ~~teaching~~ algorithm, AUTOMATIC MACHINE TEACHING

ABSTRACT: It is pointed out that many articles have been published recently in which particular algorithms for teaching pattern recognition to automata and schemes for their realization have been proposed, but a more general approach to the solution of this kind of problems is necessary. A general approach to deriving recurrence algorithms for teaching pattern recognition to automata is presented, utilizing the results of Ya. L. Tsypkin (Avtomatiki i telemekhanika, v. 26, no. 11, 1965, 1947—1950). The separating function $Y = f(x)$ is approximated by a finite sum where $\{\phi v(x)\}$ are linearly independent functions and $C_v$ are unknown coefficients. The problem of determining the $f(x)$ is reduced to the minimization of a certain functional which is taken as the mathematical expectation of function $F(f(x)-f(x))$. Finally, the problem is reduced to the solution of a certain regression equation. Two algorithms for

Card 1/2 UDC: 62-50

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

ACC NR: AP7004245

$$\hat{f}(x) = \sum_{v=1}^{N} c_v \varphi_v(x) = c^T \varphi(x), \qquad (1)$$

solving this equation (in the deterministic case when the explicit form of the functional is known and in the probabilistic case when the mathematical expectation of the functional gradient is not known) are presented. The conditions under which the second algorithm is convergent are established. It is shown how particular algorithms derived by various authors can be obtained as particular cases of general algorithms. A comparative analysis of derived and known algorithms is made. A second approach in deriving a teaching algorithm based not on the approximation of a separating function, but on the approximation of its sign is considered. A general recurrence algorithm is derived and compared with the known algorithms developed by various authors. [LK]

SUB CODE: 12,09/SUBM DATE: 06Jul66/ ORIG REF: 011/ OTH REF: 009/
ATD PRESS: 5114

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

SOLUNINA, I.A.; SOROKINA, R.A.; DEVYATIN, V.A.

Determination of 3-methyl-2-penten-4-yn-1-ol in the presence of 3-methyl-1-penten-4-yn-3-ol. Med.prom. 15 no.5:60-61 My '61. (MIRA 14:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminyy institut. (PENTENYNOL).

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATISIL'NAYA, F.I., agronom po zashchite rasteniy (Pereshchepinskiy rayon, Dnepropetrovskoy oblasti); FILIPPOV, N.A.

On demonstration farms. Zashch. rast. ot vred. i bol. 7 no.1:36 '62. (MIRA 15:6)

1. Zaveduyushchiy otdelom zashchity rasteniy Moldavskogo instituta oroshayemogo zemledeliya i ovoshchevodstva, Tiraspol', Moldavskoy SSR (for Filippov).
(Plants, Protection of)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

KORNEV, N.A., kand. tekhn. nauk; KUDRYAVTSEV, A.A., kand. tekhn. nauk; LITVIN, I.S., inzh.; SVYATITSIL'NYY, G.I., inzh.

Keramzit concrete wall panels 12 m. long. Prom. stroi. 41 no.8:33-37 Ag '64. (MIRA 17:11)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

PLYATSKOVSKIY, O.A., kand.tekhn.nauk; Prinimali uchastiye: OSLON, N.D.; NODEV, E.O.; DEVYATISIL'NYY, V.I.; SULTINSKIKH, A.N.; SHANIN, P.K.; KUKARSKIKH, V.I.; RAKHNOVETSKIY, L.Y.; DUYEV, V.N.

New technological processes used in rolling 102-170 mm. diameter pipes of stainless steel 1Kh18N9T. Biul.nauch.-tekh.inform.VNITI no.4/5:24-30 '58. (MIRA 15:1)

(Pipe mills)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

S/137/62/000/003/092/191
A006/A101

AUTHORS: Fomichev, I.A., Devyatisil'nyy, V.I.

TITLE: A method of determining the forward-flow in pipe rolling on a pilger mill

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 30, abstract 3D167 (V sb. "Proiz-vo trub", no. 4, Khar'kov, Metallurgizdat, 1961, 50 - 62)

TEXT: The magnitude of the coefficient of forward-flow during the rolling of a pipe blank with the font cone of pilger mill rolls (striking block) is more expediently determined by a method which is based on measuring the speed of roll--back of the blank by the rolls and their angular velocity, than by the conventional method of prick-punching the rolls. The magnitude of the coefficient of forward-flow with the polishing section can be determined both by measuring the speed of roll-back of the blank by the rolls and their angular velocity, and by means of prick-punching the rolls. To calculate approximately the magnitude of the coefficient of forward-flow during rolling of the blank with the front cone

Card 1/2

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A method of determining.....

of the rolls, a method can be recommended which utilizes the results of measuring the wall thickness of the pilger mill head.

K. Ursova

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

FOMICHEV, I.A., doktor tekhn. nauk; [illegible], V.I., inzh.

Device for determining the optimal amount of feed in the pilgrim rolling of pipe. Prom. stal no.12:38-39 '64.

(MIRA 17:12)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

USSR/Cultivated Plants - Grains. M.

Abs Jour : Ref Zhur - Biol., No 4, 1958, 15498

Author : N.F. Bogach, Ye.M. Devyatisil'nyy

Inst : -

Title : An Attempt at the Two-Stage Harvesting of Grain Crops in Kolkhozes of the Kotovskaya Machine and Tractor Station Zone.
(Opyt razdel'noy uborki zernovykh kul'tur v kolkhozakh zony Kotovskoy MTS).

Orig Pub : Vestn. s. - kh. nauki, 1957, No 5, 27-30

Abstract : No abstract.

Card 1/1

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

ZALEVSKIY, A., agronom; DEVYATISIL'NYY, Ye., ekonomist

Efficient method for the mechanized cultivation of sugar beets. Nauka i pered.op.v sel'khoz. 9 no.9:9-11 S '59. (MIRA 13:2)

1. Opornyy punkt Vsesoyuznogo nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva pri Kotovskoy remontno-tekhnicheskoy stantsii.
(Sugar beets)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

ZALEVSKIY, Anatoliy Vasil'yevich, kand. sel'khoz. nauk; DEVYATISIL'NYY Yevgeniy Nikolayevich, agronom-ekonomist; PANIN, N.S., red.

[Economics of the efficient use of machinery on collective farms] Ekonomika ratsional'nogo ispol'zovaniia tekhniki v kolkhozakh. Moskva, Ekonomika, 1964. 141 p. (MIRA 17:5)

1. Nauchnyy sotrudnik TSentral'nogo ekonomicheskogo nauchno-issledovatel'skogo instituta pri Gosplane RSFSR (for Zalevskiy).

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATIVA, L.N.; TER-KARAPETYAN, A.Z.

Readers' conference. Zhur.mikrobiol.epid.i immun. 30 no.8:157-158 Ag '59. (MIRA 12:11)
(BACTERIOLOGY, MEDICAL--PERIODICALS)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, D. G.

"Second Intra-Province Conference of Physicians Specializing in Hygiene and Public Health," Gig. i San., No.8, 1952

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, D. G.

"The Effect of Open Burning of Natural Gas at Industrial Installations on the Health of Workers." Cand Med Sci, L'vov Medical Inst, L'vov, 1954. (RZhKhim, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, D.G.

Incomplete combustion of natural gas in four-burner stoves manufactured by the Leningrad Gas Appliance Factory. Gig. i san. no.7:39-40 Jl '54. (MLRA 7:8)

1. Iz kafedry obshchey gigiyeny L'vovskogo meditsinskogo instituta.
(GASES,
*illuminating gas, incomplete combustion of natural gas in stoves)

APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5"

"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, D.G., kandidat meditsinskikh nauk

Microclimatic conditions in bathrooms with gas water heaters. Vrach.delo no.2:199-200 F'56. (MLRA 9:7)

1. Kafedra obshchey gigiyeny (zaveduyushchiy V.Z.Martynyuk) L'vovskogo meditsinskogo instituta
(BATHROOMS)

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DEVYATKA, D.G., kandidat meditsinskikh nauk

Practical studies in school hygiene in a pedagogical institute.
Gig. i san. 21 no.9:54-56 S '56. (MLRA 9:10)

1. Iz L'vovskogo pedagogicheskogo instituta
(TEACHERS, educ.
practical study on school hygiene in teachers' colleges
in Russia)

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DEVYATKA, D.G., kandidat meditsinskikh nauk

Hygienic evaluation of gas water heaters. Gig. i san. 21 no.11: 67-69 N '56. (MLRA 10:2)

1. Iz kafedry obshchey gigiyeny L'vovskogo meditsinskogo instituta.
(HYGIENE
of gas water heaters)
(HOUSING
hygienic aspects of gas water heaters)

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DEVYATKA, D.G., kandidat meditsinskikh nauk

Etiological role of carbon monoxide in the development of hypotension. Terap.arkh. 28 no.7:29-32 '56. (MLRA 10:1)

1. Iz kafedry obshchey gigiyeny (zav. - prof. V.Z.Martynyuk) L'vovskogo meditsinskogo instituta.

(HYPOTENSION, etiol. and pathogen.
carbon monoxide pois.)
(CARBON MONOXIDE, pois.
causing hypotension)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, D.G., kandidat meditsinskikh nauk (L'vov)

Methods for preventing chronic carbon monoxide poisoning in apartments with natural gas heating. Fel'd. i akush. 22 no.2:45-48 F '57 (MLRA 10:5)

(CARBON MONOXIDE--TOXICOLOGY)

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DEVYATKA, D.G., kand.med.nauk

History of the study of carbon monoxide poisoning. Vrach.delo no.3:321-322 Mr'58 (MIRA 11:5)

1. Kafedra obshchey gigiyeny (zav. - prof. V.Z. Martynyuk) L'vovskogo meditsinskogo instituta.
(CARBON MONXIDE--PHYSIOLOGICAL EFFECT)

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DEVYATKA, D.G., kand.med.nauk

Effect of kitchen ventilation on the combusion products of natural gas in the air. Vrach.delo no.10:1093-1095 O '58 (MIRA 11:11)

1. Kafedra obshchey gigiyeny (zav. - prof. V.Z. Martynyuk) L'vovskogo meditsinskogo instituta.
(CARBON MONOXIDE)
(KITCHENS--VENTILATION)

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DEVYATKA, D.G. (L'vov)

Effectiveness of the action of exhaust ventilation canals in kitchens with gas service. Vod.i san.tekh. no.7:16-17 Jl '59. (MIRA 12:9)

(Kitchens)
(Dwellings--Heating and ventilation)

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DEVYATKA, D.G., kand.med.nauk

Characteristics of natural ultraviolet radiation in Lvov. Vrach.delo no.10:1069-1070 O '59. (MIRA 13:2)

1. Kafedra obshchey gigiyeny (zaveduyushchiy - prof. V.Z. Marynyuk) L'vovskogo meditsinskogo instituta.
(LVOV--ULTRAVIOLET RAYS)

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DEVYATKA, D.G., kand.med.nauk; ZAL'F, Z.G.

Observations on the organization of medical sanitary service at a boarding school. Pediatriia 37 no.1:73-76 Ja '59.
(MIRA 12:1)

1. Iz L'vovskogo meditsinskogo instituta i shkoly-internata No.1 g. L'vova.

(SANITATION
med. samit. serv. in boarding school (Rus))
(SCHOOLS
boarding school, med. sanit. serv. (Rus))

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DENYATKA, D.G., kand.med.nauk

Pollution of the air of living quarters by carbon monoxide as a result of burning natural gas. Gig.i san. 25 no.1:90 Ja '60. (MIRA 13:5)

1. Iz kafedry obshchey gigiyeny L'vovskogo meditsinskogo instituta.

(AIR POLLUTION)

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DEVYATKA, D.G., kand.med.nauk

Data on the characteristics of natural ultraviolet radiation in Lvov. Vrach. delo no. 1:102-104 '61. (MIRA 14:4)

1. Kafedra obshchey gigiyeny (zav. - prof. V.Z. Martynyuk) L'vovskogo meditsinskogo instituta.
(LVOV--ULTRAVIOLET RAYS)

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DEVYATKA, D.G., kand.med.nauk

Routine method for studying the loss of natural ultraviolet radiation and the size of these losses in Lvov. Gig. i san. 26 no.4:50-53 Ap '61. (MIRA 15:5)

1. Iz kafedry obshchey gigiyeny L'vovskogo meditsinskogo instituta.
(LVOV--ULTRAVIOLET RAYS)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, D.G.

Hygienic characteristics of ultraviolet irradiation in Lvov according to data for 1959. Gig.i san. 26 no.12:87 D '61.
(MIRA 15:9)

1. Iz L'vovskogo gosudarstvennogo meditsinskogo instituta.
(LVOV--ULTRAVIOLET RAYS)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, D.G., dotsent (Vinnitsa)

*Increase in hygiene training for graduates of medical institutes.*
Sov. zdrav. 22 no.7:18-19'63 (MIRA 16:12)

1. Iz kafedry obshchey gigiyeny Vinnitskogo meditinskogo instituta imeni N.I.Pirogova (dir. - dotsent S.I.Korkhov).

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DEVYATKA, D.G.; ALYCHEVA, I.S.

Role of natural ultraviolet radiation in increasing the immunobiological reactivity of the body. Zhur. mikrobiol., epid. i immun. 40 no.10:43-46 O '63. (MIRA 17:6)

1. Iz Vinnitskogo meditsinskogo instituta i L'vovskogo meditsinskogo instituta.

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKA, Ye.A.; CHUMLYAKOVA, N.K.

Climatic characteristics of the principal districts of Eastern Siberia. Stroi. v raion. Vost. Sib. i Krain. Sev. no.2:81-92 '62. (MIRA 18:7)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATYKH, G.G.; KRIVARKIN, V.M.; ZORIN, A.D.

Kinetics of the thermal decomposition of monosilane, arsine, and monosilane with arsine admixture. Zhur. neorg. khim. 10 no.7:1528-1533 Jl '65. (MIRA 18:8)

1. Gor'kovskiy gosudarstvennyy universitet imeni N.I. Lobachevskogo.

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DEVYATKIN I.

AZELITSKIY, I.; DEVYATKIN, A.

Three generations. Grazdh. av. 14 no.10:28-30 O '57. (MIRA 10:12)
(Aeronautics, Commercial)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKIN, A. (g.Leningrad)

Will and mastery. Kryl.rod. 11 no.7:9-10 Jl '60. (MIRA 13:7)
(Airplanes--Models)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKIN, A., kand. sel'skokhoz. nauk; BUSEV, G., kand. sel'skokhoz. nauk

Urea increases the protein content of feed. Nauka i pered. op. v sel'khoz. 9 no.4:48-49 Ap '59. (MIRA 12:6)

1. Vsesoyuznyy institut zhivotnovodstva.
(Urea) (Cattle--Feeding and feeding stuffs)

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DEVYATKIN, A.

Always in search. Kryl. rod. 13 no.3:17 Mr '62. (MIRA 18:5)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKIN, A. I. ~~Boe~~ Cand Agr Sci -- (diss) "Fattening of ~~the~~ young cattle with ~~the~~ ~~maize~~ corn silage ~~silo.~~" Mos, 1957. 16pp 21 cm. (All-Union Scientific Research Inst of ~~Cattle-Breeding. Section~~ Animal Husbandry Department of Feeding of Agricultural Animals), 110 copies

(KL, 21-57, 104)



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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKIN, Anatoliy Ivanovich; BENYUMOV, O.M., red.; SAVCHENKO, Ye.V., tekhn.red.

[How to organize pasture and stall fattening of cattle] Kak organizovat' nagul i otkorm skota. Moskva, Izd-vo "Znanie," 1959. 31 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, Sel'skoe khoziaistvo, no.8) (MIRA 12:8)

(Beef cattle--Feeding and feeds)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKIN, A.I.; POLYAKOV, V.P.

Making PKZh prestressed reinforced panels [Suggested by A.I. Deviatkin and others.] Rats. i izobr. predl. v stroi. no.6: 4-7 '58. (MIRA 11:10)
(Concrete slabs)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

MODYANOV, Aleksey Vladimirovich, doktor sel'skokhoz.nauk; DEVYATKIN, Anatoliy Ivanovich, kand.sel'skokhoz.nauk; SELEZNEV, N.G., red.; PULIN, L.I., tekhn.red.

[Using synthetic urea in stockbreeding] Ispol'zovanie sinteticheskoi mocheviny v zhivotnovodstve. Tula, Tul'skoe knizhnoe izd-vo, 1960. 60 p. (MIRA 14:1)
(Urea) (Cattle--Feeding and feeds)
(Sheep--Feeding and feeds)

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

DEVYATKIN, Anatoliy Ivanovich, kand. sel'khoz. nauk; TOMME, M.F., prof., red.; NECHIPORUK, L.P., red.; GUREVICH, M.M., tekhn. red.

[Using straw in livestock farming; preparation and feeding] Ispol'zovanie solomy v zhivotnovodstve; podgotovka i skarmlivanie. Pod red. M.F.Tomme. Moskva, Sel'khozizdat,1962. 78 p. (MIRA 15:10)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. V.I.Lenina (for Tomme).
(Straw as feed)

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PEYVE, Ya.V.; PETERBURGSKIY, A.V., doktor sel'khoz. nauk, prof.; GAR, K.A., kand. sel'khoz. nauk; GOLYSHIN, N.M., kand. biol. nauk; KOROTKIKH, G.I., kand. sel'khoz. nauk; CHESALIN, G.A., kand.sel'khoz.nauk; RAKITIN, Yu.V., doktor biol. nauk; ZEZYULINSKIY, V.M., kand. sel'khoz.nauk; DEVYATKIN, A.I., kand. sel'khoz. nauk; VENEDIKTOV, A.M., kand.sel'khoz. nauk; TARANOV, M.G., kand. biol. nauk; BORISOVA, L.G.; BEREZNIKOV, V.V., kand. tekhn.nauk; KONDRATENKO, R.V., st. nauchn.sotr.; BORISOV, F.B., st. nauchn.sotr.

[Chemistry in agriculture] Khimiia v sel'skom khoziaistve. Moskva, Kolos, 1964. 381 p. (MIRA 17:9)

1. Chlen-korrespondent AN SSSR (for Peyve). 2. Nachal'nik laboratorii Nauchno-issledovatel'skogo instituta plastmass (for Borisova). 3. Nauchno-issledovatel'skiy institut plastmass (for Kondratenko, Borisov).

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SOV/124-59-8-8862

Translation from: Referativnyy zhurnal, Mekhanika, 1959, Nr 8, p 79 (USSR)

AUTHORS: Kudryashov, L.I., Devyatkin, B.A.

TITLE: On the Possibility of Applying the Conditions of a Uniform Helical Motion to the Investigation of the Nonisothermic Motion of a Gas Under Laminar Conditions in Horizontal Pipes of Circular Cross Section

PERIODICAL: Sb. nauchn. tr. Kuybyshevsk. industr. in-ta, 1957, Nr 7, pp 61 - 73

ABSTRACT: The authors attempt to study the nonisothermic motion of a gas in pipes by application of a model of uniform helical motion. The special case of the motion of a baroclinic viscous gas is discussed, when the condition

$$\frac{1}{\rho}\,\mathrm{grad}\,p = -\,\mathrm{grad}\left(\frac{1}{2}\,v^2 + \Pi\right) - \nu\,\mathrm{rot}\,(f\,v)$$

is fulfilled for the entire flow and the vectors v and rot v satisfy the condition: rot v = f v. The authors repeat here

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

SOV/124-59-8-8862

On the Possibility of Applying the Conditions of a Uniform Helical Motion to the Investigation of the Nonisothermic Motion of a Gas Under Laminar Conditions in Horizontal Pipes of Circular Cross Section

without reference the results obtained by B.A. Fyshkin (Nauchn. zap. MIMI, 1948, Vol 17). An other result of the article pertains to heat exchange within a pipe. Herein the flow is assumed as being pure axial.
Remark of the reviewer: There are incorrect formulations and mathematical errors in this article.

V.I. Merkulov

Card 2/2

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"APPROVED FOR RELEASE: 06/12/2000 CIA-RDP86-00513R000410310007-5

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D218/D304

26.5200

AUTHORS: Kudryashev, L. I., Professor, Doctor of Technical Sciences, and Devyatkin, B. A., Docent, Candidate of Technical Sciences

TITLE: The use of integral relations in determining coefficients of resistance and convective heat transfer for a confined medium

SOURCE: Kuybyshev. Industrial'nyy institut. Sbornik nauchnykh trudov, no. 8, 1959. Teplotekhnika; voprosy teorii, rascheta i proyektiravaniya, 67-82

TEXT: The paper begins with a discussion of the resistance and heat transfer in a tube of circular cross-section under the conditions of hydrodynamic and thermal stabilization and laminar flow. It is assumed that the liquid is incompressible and all the physical constants are independent of temperature. The hydrodynamic problem can be solved first and the heat-transfer problem second. Both solutions are known; the first was obtained by Stokes and the second by Lo-

Card 1/5

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The use of integral ...

rentz, Academician L. S. Leybenzon and others. The authors attempt to solve the two problems with the aid of integral relations and obtained well-known formulae. The problem considered next is that of heat transfer under conditions of thermal stabilization. Considerations analogous to those described above lead to a dimensionless integral relation which can be used to determine the heat transfer coefficient. The distribution of the excess temperature is then sought in the form of a power series in $r_1$ and this is shown to give Nu = 6. The next problem is that of resistance and heat transfer under the conditions of stabilized turbulent motion in a tube of circular cross-section. The corresponding equations can be set up if it is assumed that the average motion of the liquid is axially symmetric (with respect to the longitudinal axis of the tube). The dimensionless integral relations for this case are deduced and a well known result is obtained for $C_f$. For a universal logarithmic velocity profile



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The use of integral ...

$$\frac{1}{\sqrt{C_f}} = 2 \cdot \lg(Re\sqrt{C_f}) + 0.8 \qquad (53)$$

is obtained. The fundamental relation of the hydrodynamic theory of heat transfer $Nu = C_f Pe/8$ is deduced as a special case. The above relation holds provided the effect of the boundary layer on the heat transfer coefficient is neglected. This means that a correcting coefficient $\underline{K}$ must be introduced into

$$Nu = \frac{C_f}{8} Pe \qquad (67)$$

to allow for this discrepancy, i.e.

$$Nu = \frac{C_f}{8} \cdot Pe \cdot K \qquad (68)$$

Card 3/5

X

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