

TEST
REEL
TAAGER, A.

... in agriculture in the ...

... (Soviet Union) ... Vol. 12, No. 1, 1957. ...

... (Soviet Union) ... Vol. 12, No. 1, 1957. ...

TAMPER, A.

Impressions from an excursion to the agriculture schools of the Latvian SSR.
p.478

GAZ, WODA I TECHNIKA SANITARNA (Stowarzyszenie Naukowo-Techniczne Inzynierow i
Technikow Sanitarnych Ogrzewnictwa i Grownictwa) Warszawa, Poland
Vol.13, no.10, Oct. 1958

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.2, Feb. 1960

Uncl.

AAMISEPP, I.; EICHENBAUM, E.; HALLER, E.; HAARLI, T.; KILL, H.;
KIVI, V.; KOTRAS, H.; KOLJUS, H.; LEIVALEPICK, T.; LIIV, J.;
LÄNTS, L.; MÄLKSOO, A.; PEDAJA, T.; POONA, H.; RABALA, I.;
RUUGE, J.; SENSEL, H.; TOOMRE, K.; TUPITS, H.; TURL, S.;
TÕNISSON, H.; TÄÄGER, A.; VIIRAND, M.; VAHENCERN, K.; AMAR, A.,
red.

[Plant breeding] Taimakasvatuse. Tallinn, Eesti Raamat, 1964.
813 p. [In Estonian] (MI.A 18:1)

EPIK, I.P., doktor tekhn. nauk, prof.; TAAL', Kh.P., inzh. [Taal, H.]

Study of the volatilization of shale ash in a reducing medium
at high temperatures. Izv. vys. ucheb. zav.; energ. 7 no.6:70-75
Je '64

1. Tallinskiy politekhnicheskiy institut. Predstavlena kafedry
teploenergetiki.

1941

Department of Health and Human Services
Washington, D.C. 20492

Office of the Assistant Secretary for Health
(MDRA 17.11)

Public Health Service
Department of Health and Human Services

PROCESSES AND PROPERTIES INDEX

27

S

Problems Connected with Changing Over to Carbide Tools.
 E. Engström. *Chemoindustry*, 1959, vol. 31, Apr., pp. 67-68.
 May, pp. 80-83. (The Norwegian). Workshop experience
 with tungsten carbide tools is surveyed in Part I. In Part II
 the changing of carbide tools is described. If the matrix is
 not of a composition containing a weak carbon-carbonic solution
 is recommended as a workshop machine of the wheel is to be
 tested the standard for bond is that of 10 S 1.

METALLURGICAL LITERATURE CLASSIFICATION

E2

RUMANIA / General and Special Zoology. Insects.
Systematics and Faunistics.

P

Abs Jour : Ref Zhur - Biol., No. 10, 1958, No 44650

Author : Tabacaru, I.

Inst : "C. I. Parhon" University

Title : Contribution to the Study of the May-Fly Fauna
in the Suceava Region.

Orig Pub : An. Univ. "C. I. Parhon". Ser. stiint. natur.,
1956, No. 12, 155-162

Abstract : A list of 15 may-fly species is given. The
species *Pseudocloen hyslopterum* Bogosescu,
1951, is endemic to the fauna of Rumania.

Card 1/1

NEGREA, A.; BOTOSANEANU, L.; NEGREA, St. (Banat); TABACARU, I.; SERBAN, E.;
DANCAU, D.; AVRAM, S. (Cernisoara); DECU, A. (Oltenia); DECU, V.
(Oltenia); DUMITRESCU, M.; ORGHIDAN, T. (Cheile Virghisului);
TANASACHE, J.; GEORGESCU, M. (Dobrogea)

Contribution to the study of mollusks in Rumanian caves. Pt. 3.
Studii cerc biol anim 15 no.3:333-342 '63.

1. Comunicare prezentata de M.A. Ionescu, membru corespondent al
Academiei R.P.R.

TAFACARU, L.; NEGREA, S.

New species of cave Polydesmidae in Rumania. p. 127.

ANALELE SERIA STINTELOR NATURII. Bucuresti, Rumania. Vol. 7, no. 18, 1958.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 9, Sept., 1959.

Uncl.

L 6764-65 EWT(m) DIAAP/RAEM(a)/RAEM(t)

ACCESSION NR: AP4046417

S/0056/64/047/003/0970/0974

AUTHORS: Isayev, P. S.; Meshcheryakov, V. A.; Radutskiy, G. M.; 43
Tabachenko, A. N. 42

TITLE: Relativistic corrections to s- and p-waves of pi-N scatter-
ing 1/1

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 47,
no. 3, 1964, 970-974

TOPIC TAGS: pion nucleon scattering, relativistic correction,
pion pion interaction, elementary particle scattering, phase shift
correction, s wave, p wave

ABSTRACT: The authors calculate the relativistic corrections to
the s and p waves of pion nucleon scattering, which were treated by
some of the authors in earlier papers (Isayev and Meshcheryakov,
ZhETF v. 43, 1339, 1963; Isayev, V. I. Lend'yel', and Meshcheryakov,

Card 1/3

L 6764-65

ACCESSION NR: AP4046417

ZhETF v. 45, 294, 1963). The calculation shows that the relativistic corrections are small in the entire energy range under consideration. The $s^{(-)}$ wave of the pion-nucleon scattering is considered, with allowance for the relativistic corrections and with additional inclusion of the s-wave in the unitarity conditions. The p-wave correction is obtained from symmetry considerations, and that for a correct description of the $s^{(-)}$ and $p_{1/2}^{(-)}$ phase shifts of the pion nucleon scattering it is essential to take account of the pion pion interaction. If the small phase shifts of pion-nucleon scattering are determined experimentally in the energy region up to 300--400 MeV with increased accuracy, it will become possible to separate reliably the pion pion scattering and to determine its parameters (scattering length and position of the resonance). Orig. art. has: 1 figure and 7 formulas.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy
(Joint Institute of Nuclear Research)

Card 2/3

L 6764-65

ACCESSION NR: AP4046417

SUBMITTED: 21Mar64

SUB CODE: NP

NR REF SOV: 005

ENCL: 00

OTHER: 002

0

Card 3/3

1970-1971. The first part of the book is devoted to the study of the

effect of the distribution of pressure in a low speed engine with
a constant pressure field. The second part is devoted to the study of the

(MIRA, 1972)

0
1/2 KP

Electrical Engineering Abstracts
May 1954
Engineering.

1852. Graphical method of determining the current when applying a non-sinusoidal voltage to a circuit. Y. F. TABACHINSKII. *Elektrichestvo*, 1953, No. 11, 64-6. In Russian.

The current of the transient process in an electric circuit closed on an alternating voltage may be found by Duhamel's integral, the evaluation of which is, however, difficult if the functions are not integrable in a closed form, or not analytical. Graphical methods must then be used. The problem consists in finding an equivalent function to assure satisfactory approximation to the function under the integral sign and to render Fourier expansion superfluous. One of the possible methods is described and applied to a numerical example.

B. F. KRAUS

Leningrad Inst. Railway Transport in. Obraztsov

GRUSHEVSKIY, B.V., dotsent, kandidat tekhnicheskikh nauk; KONSTANTINOV, V.I., inzhener (Moscow); METELKIN, A.F.; LYUBIMOV, M.A.; ~~TABACHINSKIY, V.F.~~, dotsent, kandidat tekhnicheskikh nauk; ROZANOV, S.P., professor, doktor tekhnicheskikh nauk; LAVROY, V.M., dotsent, kandidat tekhnicheskikh nauk; BRON, O.B., professor, doktor tekhnicheskikh nauk (Leningrad).

The field as an aspect of matter. Elektrichestvo no.2:55-64 F'55.
(MLRA 8:2)

1. Donetskiiy industrial'nyy institut (for Grushevskiy).
2. Ivanovskiy energeticheskiy institut im. Lenina (for Metelkin and Lyubimov).
3. Kafedra teoreticheskikh osnov elektrotekhniki Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta (for Tabachinskiy).
4. Kafedra elektrooborudovaniya MIKhM (for Rozanov).
5. Moskovskiy elektrotekhnicheskiiy institut svyazi (for Lavrov).
(Electromagnetic theory)

TABACHINSKIY, V.F., kandidat tekhnicheskikh nauk, dotsent.

High-speed photoelectric counter. Sbor. LIIZHT no. 149:115-121
'55. (Counting devices) (MLRA 9:6)

TABACHINSKIY, V.F., kand.tekhn.nauk, dots.

Approximation method of calculating transients in nonlinear
circuits with induction-connection contours. Shor.LIIZHT
no.159:279-284 '58. (MIRA 12:2)
(Transients (Electricity)) (Diesel locomotives---Electric equipment)

TABACHINSKIY, V.F., kand.tekhn.nauk,dots,

Calculating transients in nonlinear circuits by the graphic
method of constructing a magnetic (electric) flux, magnetizing
force (electromotive force). Sbor.LIIZHT no. 161:91-101
'58. (MIRA 11:12)

(Transients (Electricity))

Shila

S/112/59/000/013/002/05
A002/A001

6.4800

Translation from: Referativnyy zhurnal. Elektrotehnika, 1959, No. 13, p. .
26196

AUTHOR: Tabachinskiy, V. F.

TITLE: An Engineering Method of Calculating the Skin Effect in Cylindrical
Magnetic Circuits²⁾ in the Presence of Pulse Processes

PERIODICAL: Sb. Leningr. in-ta inzh. zh.-d. transp., 1959, No. 161, pp. 102-113

TEXT: The magnetization curve is substituted by a step line. The original
tion of square induction waves in metal is discussed. The induction waves are
equal in magnitude to successive increments $\Delta E_1, \Delta E_2, \dots$ of the magnetization
curve and follow each other at time intervals $\Delta t_1, \Delta t_2, \dots$ etc. The depth of
wave penetration during the time $\Delta t_1, \Delta t_2, \dots$ etc (it is assumed that the
function $H(t)$ on the surface is known) is determined by the approximate integral
tion of an equation which is obtained by expressing the e. m. f. induced in the
layer by the penetration velocity of a wave, i. e. by the derivative of depth
with respect to time, and by writing the expression for the eddy current which

Card 1/2

84144

S/112/59/000/013/002/067
A002/A001

An Engineering Method of Calculating the Skin Effect in Cylindrical Magnetic Circuits in the Presence of Pulse Processes

is connected with an increase of the magnetic field intensity ΔH . Simultaneously, the eddy current losses are determined.

A. S. R.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

1962-1963, V. 1

PHASE I BOOK EXHIBITION 30V/4430

Leningrad. Institut Inzhenerov Shelenukorochnogo Transporta

Avtomatika, Telemekhanika i Svyaz' (Automation, Telemechanics, Communications) Moscow, Transzheifortizatsiya, 1960. 230 p.

(Series: Itsi, Zhornik, Vyp. 169) 1,000 copies printed.

General Ed.: V. N. Lisov, Professor; Ed.: G. I. Kurnikova, Engineer; Tech. Ed.: Ye. N. Bobrova.

PURPOSE: This book is intended for technical personnel and scientists engaged in the fields of automation, telemechanics, and communications.

COVERAGE: This collection of articles presents various methods of analysis and synthesis of electric circuits. New designs are outlined and ways of improving technical and economic indices of communication instruments investigated. The articles contain computations for individual types of communication and telemechanical systems. No personalities are mentioned. Some of the articles are accompanied by references.

Author: Ye. A. Engineer. Compilation of Scientific Articles. This book is a collection of the best approximations. The author solves the problem of defining the value of a function coefficient, which precisely the value of a function of a multiplier circuit, provided that in the function value frequency change the difference between the value and given value is small. There are 3 references, all in Russian.

Author: I. A. Graduate of Technical Sciences, Doctor, Synthesis of Linear Systems of Automatic Regulation. 76

Characteristics The author develops the method proposed by him for determining the optimal parameters of a linear system of regulation. The optimal parameters are determined by the method of minimizing the integral of the square of the error. The author also characterizes the method of parameter choice. The author concludes that the method is relatively simple and as it is in simple mathematical operations. There are 6 references, all in Russian.

Author: V. Z. Candidate of Technical Sciences, Doctor, Synthesis of Control Systems of Automatic Regulation. 93

The author shows an approach to the synthesis of control systems of automatic regulation. The author shows the method of minimizing the integral of the square of the error. The author also characterizes the method of parameter choice. The author concludes that the method is relatively simple and as it is in simple mathematical operations. There are 6 references, all in Russian.

The author shows an approach to the synthesis of control systems of automatic regulation. The author shows the method of minimizing the integral of the square of the error. The author also characterizes the method of parameter choice. The author concludes that the method is relatively simple and as it is in simple mathematical operations. There are 6 references, all in Russian.

TABACHINSKIY, V.F., kand. tekhn. nauk, dotsent

Use of the vector potential method in the calculation of
demagnetization coefficients of cylindrical permanent magnets.
Sbor. LIIZH no.169:93-103 '60. (MIRA 13:11)
(Magnets)

TABACHINSKIY, Y. E., kand. tekhn. nauk, dotsent; NOVIKOV, Mikhail Nikolayevich, aspirant; YARCHUK, Andrey Yakovlevich, assistant;
ZAV'YALOV, Valeriy Aleksandrovich, starshiy laborant

Experimental study of the electrical strength of the insulation of the rotor windings of electric traction motors. Izv. vys. ucheb. zav.; elektromekh. 3 no.9:147-148 '60. (MIRA 15:5)

1. Zaveduyushchiy kafedroy teoreticheskikh osnov elektrotehniki Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta. (for Tabachinskiy). 2. Kafedra elektricheskikh mashin Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta (for Novikov). 3. Kafedra teoreticheskikh osnov elektrotehniki Leningradskogo instituta inzhenerov zheleznodorozhnogo transporta (for Yarchuk). 4. Leningradskiy institut inzhenerov zheleznodorozhnogo transporta (for Zav'yalov).

(Electric railway motors)
(Electric insulators and insulation--Testing)

TABACHNIK, 1989

Engineering methods for calculating transients in
nonlinear electrical networks. Star. stud. LIIZM no.179:107-
115 1981. (MIRA 16:11)

FLORU, R.; TABACHIU, A.

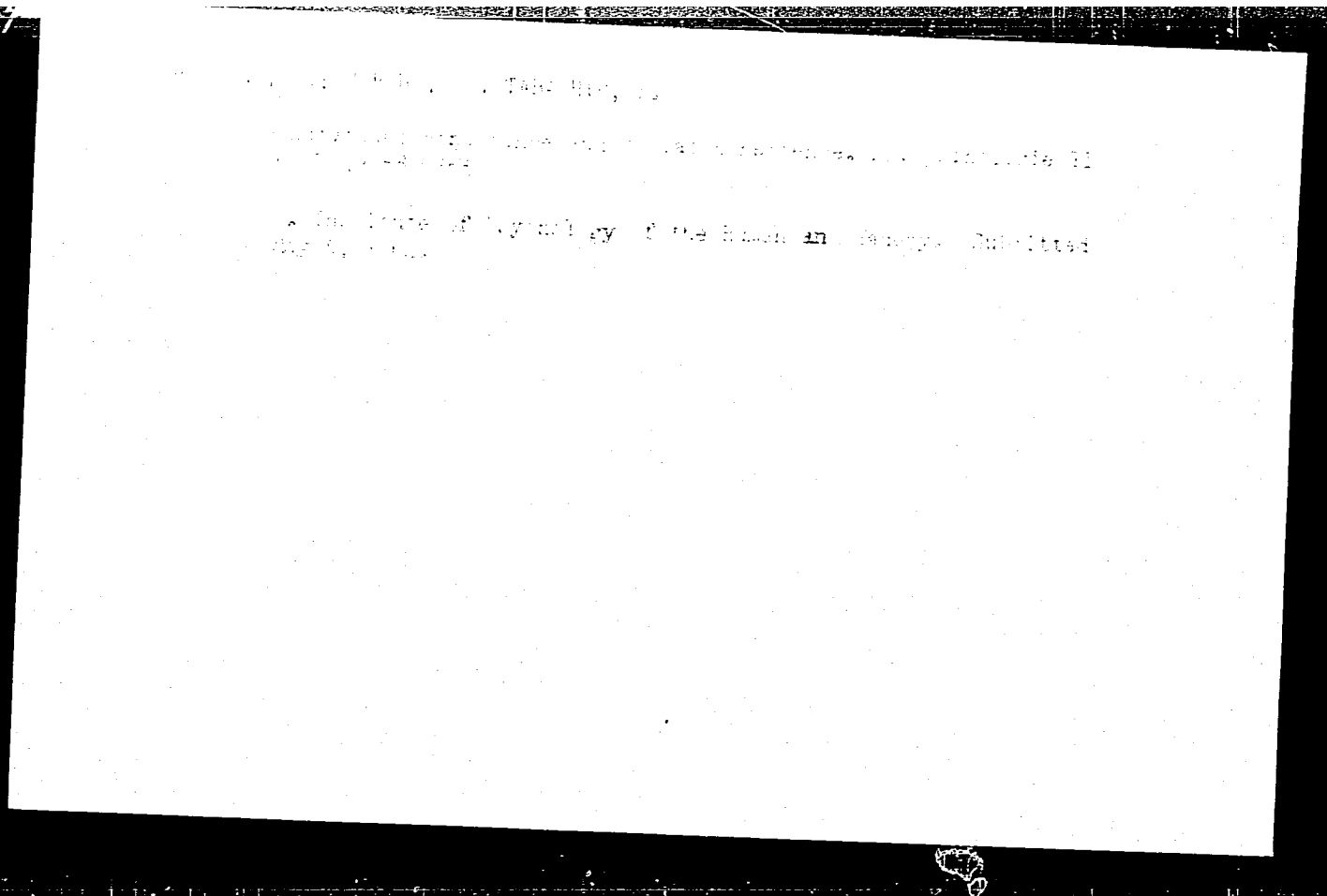
The Second Conference of Soviet Psychologists. Rev psihologie
9 no. 4: 583-587 '63.

LABACIU, Anton; STERIADE, Stefana

Experimental studies on the instructive-educative possibilities
of different types of motion pictures. Rev. psihologie 10 no.1:
71-85 '64

TABACHIU, A.

"From the history of the knowledge about the brain" by V. Voiculescu, M. Steriade. Reviewed by A. Tabachiu, A. Rev. psihologie 10 no. 1: 88-90 '64.



PERSHIN, N.I.; ALEKSANDROV, V.I.; ILLERITSKIY, N.Ye.; TABACHKOV, I.F.;
BGL'SHAKOV, V.I.; KANAR', I.A.; YAS'KO, A.M.; KLYUKIN, A.P.;
POLYAKOV, V.S.; FILIPPOVA, N.A.; SMAGORINSKIY, B.S., red.;
IZHBOLDINA, S.I., tekhn. red.

[The millionth tractor; on the occasion of the 30th anniversary of the Stalingrad Tractor Plant (1930-1960)] Millionnyi traktor; k 30-letiu Stalingradskogo traktornogo zavoda (1930-1960). Stalingrad, Stalingradskoe knizhnoe izd-vo 1960. 94 p. (MIRA 16:9)

1. Stalingradskiy traktornyy zavod im. Dzerzhinskogo.
(Volgograd--Tractor industry)

TAPANEV, N.

"Experience in teaching telegraphic code."

So. Radio, Vol. 3, p. 58, 1952

TARASHKOV, N.

Morse Code

Teaching the Morse alphabet. Radio, 29, No. 3, 1952

Monthly List of Russian Acquisitions, Library of Congress, June 1952. Unclassified.

9(9)

307/107-58-12-17/55

AUTHORS:

Tabachkov, N. and Karpushenko, T.,
Instructors

TITLE:

"Field Day" 1958 ("Polevoy den" 1958 goda)

PERIODICAL:

Radio, 1958, Nr 12, p 14 (USSR)

ABSTRACT:

Results are given of the 1958 "Field Day" All-Union competitions for ultra-short-wave operators for the prize awarded by "Radio" magazine. The main prize was won by last year's winners, the Ufa DOSAAF Radio Club, followed by the radio clubs of Zaporozh'ye and Fergana. K. Kravets, B. Dobarin and N. Isanbayev were among the competitors.

ASSOCIATION:

Tsentral'nyy radioklub DOSAAF (Central
Radio Club of DOSAAF)

Card 1, 1

TABACHKOVA, Yu.N.

Using tagged atoms for investigating characteristics and properties of alfalfa during cultivation. Dokl. Akad. sel'khoz. 24 no. 9: 24-26 '59. (MIRA 13:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov imeni V.R. Vil'yamsa. Predstavlena akademikom M.A. Ol'shanskim. (Alfalfa) (Radioactive tracers)

TABACHKOVA, Yu. N.

Cand Agr Sci - (diss) "Evaluation of the effectiveness of procedures for raising hybrid alfalfa for acidic soils of the non-chernozem belt." Moscow, 1961. 14 pp; (All-Union Scientific Research Inst of Fodder imeni V. R. Vil'yams); 200 copies; price not given; (KL, 6-01 sup, 232)

TABACHNIK, Abram Isaakovich; TARASOV, V., red.; SALAKHUTDINOVA, A.,
tekhn. red.

[New pneumatic mechanisms in the manufacture of machinery]
Novye pnevmaticheskie mekhanizmy v mashinostroenii. Tashkent,
Gosizdat UzSSR, 1961. 69 p. (MIRA 16:6)
(Pneumatic tools)

TABACHNIK, A.I.

Determination of the force necessary for bending plate-type
beams. Izv. AN UzSSR Ser.tekh.nauk no.5:40-48 '61.

(MIRA 14:11)

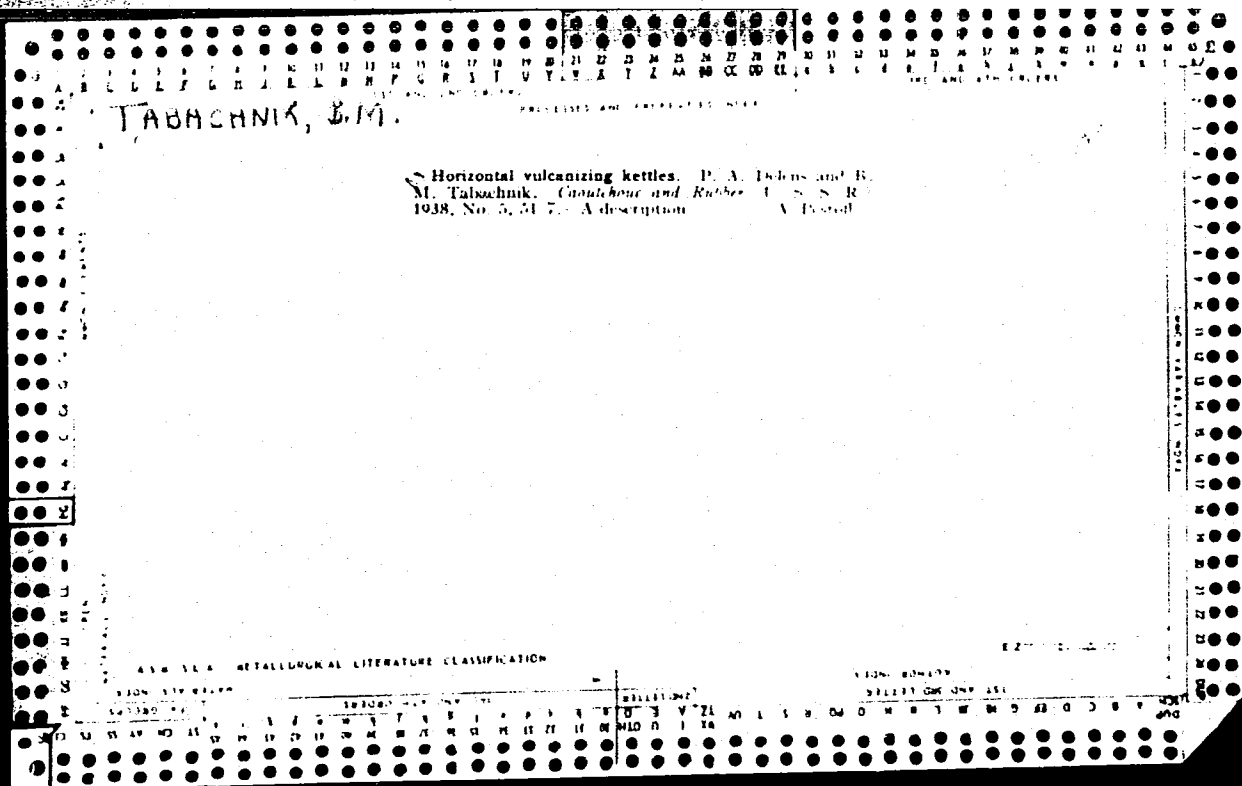
1. Institut matematiki imeni V.I.Romanovskogo AN UzSSR.
(Beams and girders)

TABACHNIK, B.I.

Inertia uteri. Akush. i gin. 32 no.4:37-40 J1-Ag '56. (MLR 9:11)

1. Iz Leypayskogo gorodskogo rodit'nogo doma (glavnyy vrach B.I. Tabachnik)

(LABOR, compl.
inertia uteri)



58/49T50

TAPACHNIK, B. Sh

USSR/Electricity
Motors, Induction
Electrical Machines

May-49

"Calculation of the Starting Characteristics of Double Squirrel-Cage Motors in Relative Units," B. Sh. Tapachnik, Engr, Laureate of Stalin Prize, Head of Elec Mech Ind, Min of Elec Ind G. I. Pertsov, Engr, Laureate of Stalin Prize, L. V. Zhivcovskiy, Engr, Electromech Plant, Min of Elec Ind, 5 pp

"Vest Elektro-Prom", Vol XX, No 5

Detailed technical treatment of starting

58/49T50

USSR/Electricity (Contd)

May 49

characteristics of double-cage induction motor. Calculates starting moment and currents for various ratios of effective resistance of outer rotor bars to inner ones and various ratios of rotor reactance to effective resistance of the slot part of the rotor winding. Gives three tables.

58/49T50

Электровозы, работающие на переменном токе, инвертор.

Electric locomotives operating on alternating current at industrial frequency. Vest. elektromash. 2001:15-24 S. 199. (1974 1978)

... Glavelektromashinnoy Ministerstva elektrotekhnicheskoy promyshlennosti.
(Electric locomotives)

TABACHNIK, G.

"Khimofoto" factory forgot about mechanization. Sov. foto 20
no. 12:31 D '60. (MIRA 14:1)
(Photographic chemicals)

TABACHNIK, G.; Telezhnikov, B.

Physicists and lyric. Tekh.mol. 23 no.7:8-9, 22, 26, 30 '60.
(MIRA 13:8)

(Students)

(Poetry)

AUTHOR: Tabachnik, L.S. (Engineer) SOV/110-58-10-9/24

TITLE: The characteristics and power of electric motors for combination coal-cutters. (Kharakteristiki i moshchnosti elektrodvigatelye gornykh kombaynov)

PERIODICAL: Vestnik Elektropromyshlennosti, 1958, No.10. pp. 32-33 (USSR)

ABSTRACT: The combination machines cut and break down coal and load it on to conveyors. Motors used to drive these machines have numerous small peak loads and must have adequate starting and maximum torques. The dimensions of motors are often limited, particularly in respect of diameter. Technical characteristics of motors for coal-cutting machines and mining combines are tabulated. There is a tendency to increase the power and torque characteristics of motors for mining combines. The power required for a rate of travel of 1 m per minute may range from 30 to 135 kW, depending on the nature of the coal. A number of motors of at least four different frame sizes will accordingly be required. In mining power-supply systems the voltage drop is often considerable. The maximum torque of the motors should preferably not be less than three times full-load torque. In general, natural circulation cooling without air blast is inadequate and by using blast at a speed of 10 m/sec the motor output can be increased

Card 1/2

The characteristics and power of electric motors for combination coal-cutters. SOV/110-58-10-9/24

by 45-65%. Still more effective cooling is required; it may be possible to use water, which would greatly reduce the weight of the necessary motors. 660-volt supply should be used for the motors wherever possible. There is 1 table.

SUBMITTED August 9, 1957.

1. Electric motors--Power
2. Electric motors--Specifications
3. Electric motors--Performance
4. Electric motors--Cooling
5. Coal--Processing

Card 2/2

IADN 101: 101

Technological charts, Gruzia, av. 23 no. 5:23 My '65. (MIRA 12:7)

1. Nachal'nik Vinnitskikh linnykh ekspluatatsionno-remontnykh masterskikh.

TABACHNIK, V.M.

CK Delphini. Astron. teir. no.141:8 S '53.

(MIRA 7:7)

1. Odesskaya astronomicheskaya observatoriya.
(Stars, Variable)

TABACHNIK, V.M. (Odessa)

Photographic and photovisual brightness curves of V 478 Cygni.
Astron. tsirk. no. 167:21 F '56. (MLRA 9:9)
(Stars, Variable)

TABACHNIK, V.M. (Odessa)

KZP 4658 = S 4780. Astron. žbirk. no.167:22 F 56. (MLRA 9:9)
(Stars, Variable)

1. M. S. ...

... electronic computers in determining the orbital elements
of eclipsing binaries (total and annular eclipses). *Astron.*
zh. 42 no. 3:590-594 My-Je 165.

(MIRA 18:5)

2. Odeskij pedagogicheskiy institut im. K.D. Ushinskogo i Odeskij
akademicheskyy universitet im. I.I. Mechnikova.

TABACHNIK, V.P.; FRIDMAN, L.A.

Maximum dynamic differential permeability of highly permeable alloys.
Fiz. met. i metallov, 17 no.2:217-222 F '64. (MIRA 17:2)

L. Institut Fiziki metallov AN SSSR.

5(1), 25(5)

AUTHORS:

Lyutringauzer, G. F., Tabachnik, Ye. B. SOV/64-58-7-13/18

TITLE:

Automatic Control of the Concentration of a Bichromate Solution in a Two-Unit Evaporating Apparatus (Avtomaticheskoye regulirovaniye kontsentratsii bikhromatnogo rastvora v dvukhkorpusnoy vyparnoy batareye)

PERIODICAL:

Khimicheskaya promyshlennost', 1958, Nr 7, pp 438 - 440 (USSR)

ABSTRACT:

At the end of 1956 the Sverdlovskiy filial NIIkhimmash (Sverdlovsk Branch of the NIIkhimmash) devised, in cooperation with S. I. Golub, V. M. Bekirash, N. D. Isakov, N. M. Kushov, P. S. Tagil'tsev and Z. Akhmetov, an automatic control of the concentration of sodium bichromate solutions. The scientists worked with a separation of sodium sulfate crystals in a two-unit counterflow evaporating apparatus with forced circulation. The heating surface was 110 m^2 , the concentration of the solution increased from 430 to 740 g/l. The diagram shows a control scheme consisting of a measuring device, an isostatic regulation of the type IR-250, an operational mechanism of the type (W/125) and a control valve. According to a proposal by N. A. Ushatinskiy the

Card 1/2

Automatic Control of the Concentration of a
Bichromate Solution in a Two-Unit Evaporating
Apparatus

SOV/64-58-7-13/18

concentration of the $\text{Na}_2\text{Cr}_2\text{O}_7$ in the finished product was determined according to the temperature depression. The boiling point of the solution is definitely to a high degree dependent on its concentration. Two thermometers are used for the measurements, one in the circulation tube and the other in the vapor tube. Besides, a somehow modified automatic electron bridge EMP-12C was used for the direct determination of the temperature difference between the two thermometers. The rheostat cell of the bridge is connected to the rheostat cell of the operational mechanism by way of the control (RR-130). The industrial experiments demonstrated that the accuracy was increased to the 6-fold by changing over to the automatic control. There are 5 figures and 3 references, 2 of which are Soviet.

Card 2/2

ТАУРАЧНИК, Ю.Т.

Reclaiming and manufacture of brake lining from scrap and worn-out linings M. I. Pobytkov, E. I. Labahtuk and L. P. Shevyreva. *Caoutchouc and Rubber* (U. S. S. R.) 1938, No. 5, 67-71. The worn-out brake lining and scrap were converted on a special combing machine to fluff fiber-like material. The fiber-like mass was mixed with an aq. soln of bakelite of 6.8" Ringier viscosity, made into a standard form and size, dried in the air for 3 days, pressed in a hot press at 450 kg./sq. cm. and polished. In a second method, the fiber-like mass was mixed with an aq. dispersion (dry solids 80%, sp. gr. 1.225) of synthetic Na-butadiene rubber in such a way that the dry solid contents in the dispersion was reduced to 30%. S was added to the mix to increase the hardness of the brake lining. The mass was mixed thoroughly and the dispersion was coagulated by the addn. of a weak soln. of Al salt to a weak acid reaction. Then the mass was dried at 105° for 24 hrs., pressed in the cold at 450 kg./sq. cm., vulcanized and polished. The brake lining thus produced had hardness: Brinnell 22.2 (1st method) and 12.8 (2nd method); coeff. of friction at 120° 0.312 and 0.422; at 250° 0.071 and 0.0572; absorption at 20° in 4 hrs. of machine oil 0.22 and 1.9%, of water 0.73 and 0.75%.

13

ASM 31 A METALLURGICAL LITERATURE CLASSIFICATION

ELYAKHMAN, L.; TABACHNIKAS, B.

Calculating productivity of labor from the net production index.

Biul. nauch. inform.: trud i zar. plata no.7:55-62 '59.

(MIRA 12:10)

(Labor productivity)

TABACHNIKAS, Boris Izrailevich; AZAROV, E.K., red.; LEVONEVSKAYA,
L.G., tekhn.red.

[Labor productivity and its measurement] Proizvoditel'nost'
truda i ee izmerenie. Leningrad, Lenizdat, 1960. 36 p.
(MIRA 14:4)

(Labor productivity)

88275

11.3400

11.3110

S/170/61/004/001/017/020
B019/B056

AUTHORS: Kazavchinskiy, Ya. Z., Tabachnikov, A. G.

TITLE: Equation of State for a Stoichiometric Nitrogen - Hydrogen Mixture

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1961, Vol. 4, No. 1, pp. 116-119

TEXT: For the setting up the equation of state of this mixture, all experimental data at present known in connection with the thermal properties of the mixture ($3H_2 + N_2$) (Refs. 1-4), were used. The authors used the

following representation for the equation of state: $PV = \alpha_0 + \alpha_1\theta + \beta\psi$

where α_0 , α_1 , and β are elementary functions of the density ω ,

$\theta = T(^{\circ}K)/100$ and ψ is an elementary function which monotonically decreases with temperature. On the basis of the experimental data, the following relations are found:

$$\psi = 10^{-0.0133\theta^3}$$

Card 1/4

Equation of State for a Stoichiometric
Nitrogen - Hydrogen Mixture

88275

S/170/61/004/001/017/020
B019/B056

$$\alpha_0 = -0.43696 \cdot 10^{-3} \omega + 0.38723 \cdot 10^{-6} \omega^2 + 4.20581 \cdot 10^{-12} \omega^4$$

$$\alpha_1 = 0.36593 + 0.37496 \cdot 10^{-3} \omega + 0.28155 \cdot 10^{-6} \omega^2 - 0.40823 \cdot 10^{-12} \omega^4$$

$$\beta = 0.17759 \cdot 10^{-3} \omega + 0.07722 \cdot 10^{-6} \omega^2 - 2.60625 \cdot 10^{-12} \omega^4$$

In Table 1, a comparison between the values calculated by the above formula and the experimental data by Michels and Wassenaar (Ref. 3) is made. There are 2 figures, 2 tables, and 6 references: 3 Soviet and 3 US.

ASSOCIATION: Institut inzhenerov morskogo flota, g. Odessa (Institute for Naval Engineers, Odessa)

SUBMITTED: June 14, 1960

Legend to Table 1: Comparison between the calculated values for PV with the experimental values: a) Calculated. b) Experiment. c) Deviation.
1) Average deviation in %. 2) Maximum deviation.

Card 2/4

KAZAVCHINSKIY, Ya.Z.; TABACHNIKOV, A.G.

Equation of the state for mixtures of imperfect gases. Izv.
vys. ucheb. zav.; neft' i gaz 5 no.7:77-82 '62.

(MIRA 16:7)

1. Odesskiy institut inzhenerov morskogo flota.
(Gas, Natural)

TABACHNIKOV, A.G.

Calculating thermodynamic properties of real gases at high temperatures. Inzh.-fiz.zhur. 5 no.9:25-32 S '62. (MIRA 15:8)

1. Institut inzhenerov morskogo flota, Odessa.
(Thermodynamics) (Nitrogen)

KESSEL'MAN, P.M.; TABACHNIKOV, A.G.

Determining the equilibrium constant for the reaction of ammonia dissociation over wide temperature and pressure ranges. Inzh. -fiz. zhur. 5 no.10:19-25 0 '62. (MIRA 15:12)

1. Institut inzhenerov morskogo flota, Odessa.
(Chemical equilibrium) (Ammonia)

... .., A.G.

... ..
... .., Division of, Tech.-P.
... ..

1.
(Gases at high temperatures--)
(Equation of state)
(... ..)

KESSEL'MAN, P.M.; TABACHNIKOV, A.G.

Determining the equilibrium constant of the reaction of ammonia dissociation over a wide range of temperatures and pressures.

Part 2. Inzh.-fiz. zhur. 6 no.8:78-81 Ag '63. (MIRA 16:10)

1. Institut inzhenerov morskogo flota, Odessa.

L 3647-66 EWT(m)/EPF(c)/EWP(t)/EWP(b) IJP(c) JD/JW

ACCESSION NR: AP5022387

UR/0170/65/009/003/0332/0336

536.71

AUTHOR: Tabachnikov, A. G. ; Serdyuk, L. S.

21
20
B

TITLE: The equation of state of nitric oxide in the temperature interval 190-2000 K at densities of 0-20 kmol/m³

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 9, no. 3, 1965, 332-336

TOPIC TAGS: thermodynamic state equation, nitric oxide, nitrogen 21

ABSTRACT: The article uses existing experimental P, V, T data from the literature to derive an equation of state in the following form:

$$PV = RT + B' \gamma + C' \gamma^2 + D' \gamma^3 + E' \gamma^4. \quad (2)$$

Experimental data were extended by extrapolation up to a value of gamma (density) equal to 20 kmol/m³. The parameters of the critical state of nitric oxide were assumed as follows: T_k (critical temperature) equal to 180.15K; P_k (critical

Card 1/2

L 3647-66
ACCESSION NR: AP5022387

pressure) equal to 64.8×10^5 newtons/m². As a material for comparison the authors selected nitrogen, for which equations of state valid over a wide temperature range are available. The article presents a curve showing the relationship of the densities of nitric oxide and nitrogen at identical reduced temperatures and pressures. By the method of least squares, and using a value of the second virial coefficient calculated on the basis of the most recent values of the parameters of the potential, an equation of state is derived which is valid in the temperature range 190-10,000 K. A check of the validity of the equation obtained, in the pressure range of $0-1000 \times 10^5$ newtons/m² for which experimental data for nitrogen are available, showed that the scatter did not exceed 0.7%. Orig. art. has: 6 formulas and 4 figures

ASSOCIATION: Institut inzhenerov morskogo flota, g. Odessa (Naval Engineering Institute, Odessa)

SUBMITTED: 00
NR REF SOV: 005

ENCL: 00
OTHER: 005

SUB CODE: TD, IC


Card 2/2

ACC NR: AT7000962

SOURCE CODE: UR/0006/66/000/000/0120/0126

AUTHOR: Trykalo, A. L.; Tabachnikov, A. G.

ORG: Odessa Institute of Naval Engineers (Odesskiy Institut Inzhenerov Morskogo Flota)

TITLE: Vapor pressures of liquid hydrogen peroxide and deuterium peroxide

SOURCE: AN UkrSSR. Teplofizicheskiye svoystva veshchestv (Thermophysical properties of materials). Kiev, Izd-vo Naukova dumka, 1966, 120-126

TOPIC TAGS: hydrogen peroxide, deuterium peroxide, vapor pressure, *DEUTERIUM*
(*deuterium*)

ABSTRACT: The first half of the article briefly reviews the work previously done on the calculations of the vapor pressure of hydrogen peroxide. Calculations of the saturated vapor pressure of liquid H_2O_2 and liquid D_2O_2 in this work were made using a new method. In this method it is assumed that for polar substances, the molecules of which have an identical dipole moment, the universal relationship $\tau_g = \phi(\pi_g)$ holds, where τ_g is the reduced temperature and π_g is the reduced pressure. The verification of this assumption and the tabulation of $\tau_g = \phi(\pi_g, \mu)$ was carried out on the basis of the analysis of the vapor pressure curves for 26 polar substances. The generalization

Card 1/2

ACC NR: AT7000962

of the vapor pressure curves for H_2O_2 , obtained by the Chebyshev approximation, has the form

$$\lg \pi = -\frac{4,432737}{\tau} + 7,636328 - 5,287567\tau + 2,083976\tau^2.$$

Since the dipole moments of H_2O_2 and D_2O_2 are approximately the same, the above generalized equation was also used for the representation of the saturated vapor pressure curve for D_2O_2 . The article gives the comparison tables for the experimentally measured values of the saturated vapor pressures of H_2O_2 and D_2O_2 with those calculated by the previously proposed and the newly derived equations. Orig. art. has: 3 tables.

SUB CODE: 07/ SUBM DATE: 04Mar65/ ORIG REF: 002/ OTH REF: 014

Card 2/2

АВАНЗОВ, П.А., инж.; БУСОВАЦКИЙ, М.Ю., инж.; СИМЧЕНСКИЙ, В.В., инж.;
ТАБАСХИТОВ, Г.А., инж.

Some problems of the terminology of the windings of electrical
machines. Elektrotehnika 35 no.1:28-29 N '64.

(MIRA 18:6)

BOYTSOVA, Ye.P.; VOYEVODOVA, Ye.M.; ZAUER, V.V.; KOL'TSOVA, T.T.;
KRUCHININA, N.V.; MARTYNOVA, Z.I.; PANOVA, L.A.; POKROVSKAYA,
I.M.; ROMANOVSKAYA, G.M.; SEDOVA, M.A.; STEL'MAK, N.K.;
TABACHNIKOVA, I.P.

[Atlas of lower Cretaceous spore and pollen complexes of some
regions of the U.S.S.R.] Atlas nizhnemelovykh sporovo-pyl'tsevykh
kompleksov nekotorykh raionov SSSR. Moskva, Nedra, 1964. 551 p.
(Leningrad, Vsesoiuznyi geologicheskii institut. Trudy, vol.124)
(MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskii insti-
tut (for Boytsova, Kol'tsova, Kruchinina, Panova, Pokrovskaya,
Romanovskaya, Sedova, Stel'mak, Tabachnikova). 2. Ural'skoye
geologicheskoye upravleniye (for Martynova). 3. Severo-Vostoch-
noye geologicheskoye upravleniye (for Voyevodova). 4. Lenin-
gradskiy filial Vsesoyuznogo ordena Lenina proyektno-izyskatel'-
skogo i nauchno-issledovatel'skogo instituta im. Z.Ya. Zhuka
(for Zauer).

GORBENKO, V.L.; TABACHNIKOV, I.Z.; KACHER, V.A.; ROMANOV, G.P.

A holding fixture for honing oscillating workpieces. Stan. i
instr. 26 no.5:28 My '55. (MIRA 8:8)
(Grinding and polishing)

TIMCHUK, Aleksandr Ivanovich; TABACHNIKOV, Izrail' Zus'yevich; BONDAR', M.,
redaktor; SAL'NIKOV, G., vedushchiy redaktor; NOVIK, A., tekhnicheskii
redaktor

[Pneumatic and hydraulic machine-tool attachments] Pnevmaticheskie
i gidravlicheskie stanochnye prispobleniia. Kiev, Gos. izd-vo
tekhn. lit-ry USSR, 1957. 225 p. (MLRA 10:4)
(Machine tools--Attachments)

ТАБАЧНИКОВ 17

PHASE I BOOK EXPLOITATION

SOV/4752

Fel'dman, Il'ya Iosifovich, Izrail' Zos'yevich Tabachnikov, and Mikhail Abramovich Dymshits

Modernizatsiya kuznechno-pressovogo oborudovaniya (Modernization of Die-Forging Equipment) Moscow, Mashgiz, 1960. 375 p. Errata slip inserted. 7,000 copies printed.

Reviewer: I.P. Tartakovskiy, Candidate of Technical Sciences, Docent;
Eds.: M.D. Sur and M.S. Soroka; Chief. Ed. (Southern Division, Mashgiz):
V.K. Serdyuk, Engineer.

PURPOSE: This book is intended for processing and mechanical engineers, and for designers working on the modernization and operation of die-forging equipment. It may also be used by students in schools of higher education for their diploma projects.

COVERAGE: The authors discuss the problems of modernization of die-forging machines. The advantages and shortcomings of some component parts of the machines are analyzed and rational utilization of the machines is discussed. Problems of extending

Card 1/5

Modernization of Die-Forging Equipment

SOV/4752

the life of subassemblies and component parts are covered. Fundamental considerations which are necessary for the solution of modernization problems and specific calculations and examples obtained from the advanced experience in this field are reported. I.I. Fel'dman, Docent, Candidate of Technical Sciences, wrote Chs. I and II; Engineer I.Z. Tabachnikov wrote Ch. III, and in part, IV; and Engineer M.A. Dymshits wrote Ch.V. and part of Ch. IV. There are 72 references: 68 Soviet, 2 German, and 2 English.

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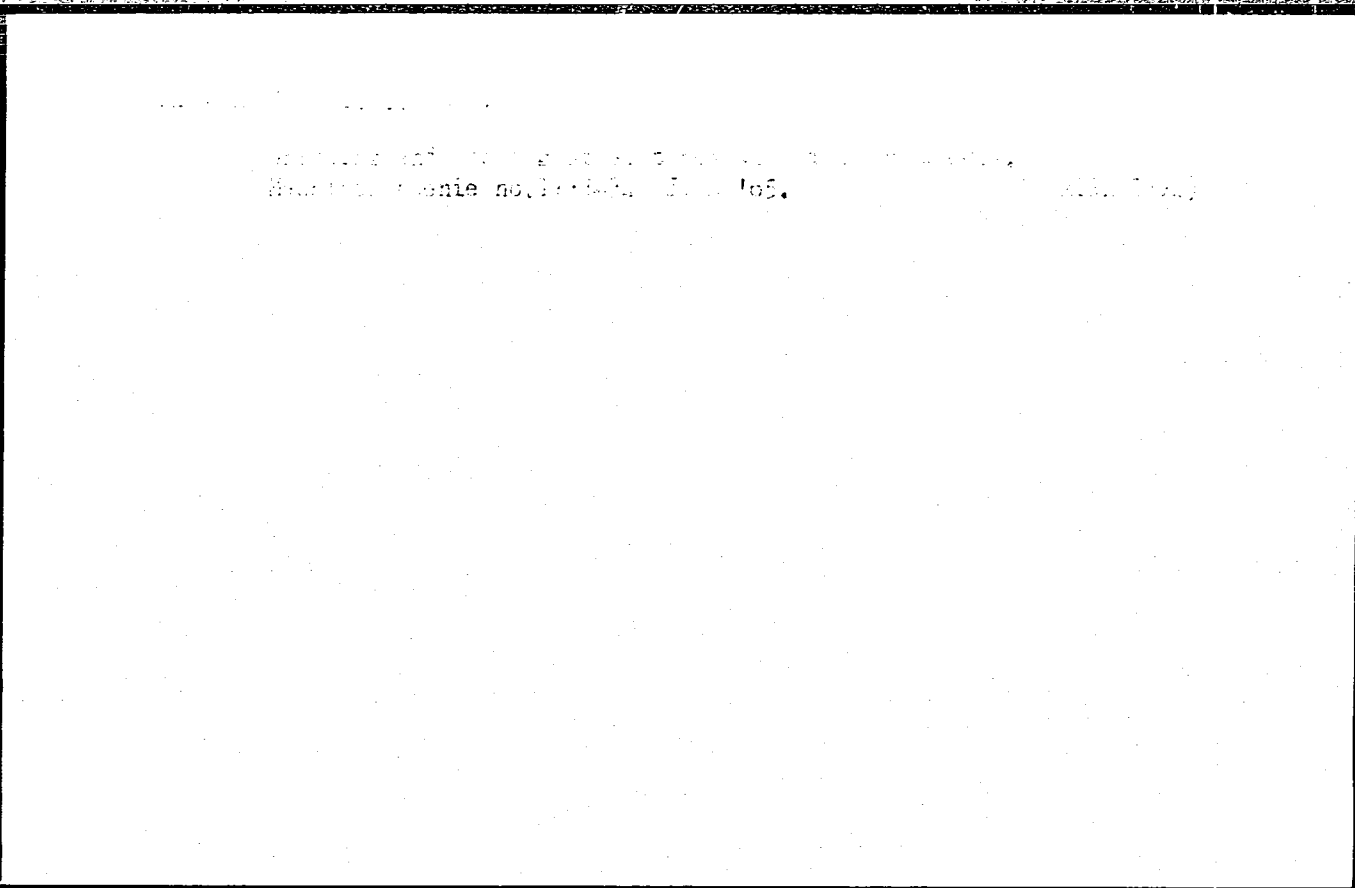
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Ch. I. Hammers	6
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Mechanism of steam (air) distribution	8
Design improvements for steam distribution in forging steam hammers	10
Modernization of the steam distribution in hammers with a divided steam admission	20
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Card 2/5

... ..

We indicate activity habits in cases. Test. protivovozd. obor.
... .. (MIRA 15:10)

(Russia)



TARACHNIKOV, L.

The unit method of repair is an important means of improving the technical condition of automobiles. Avt. transp. 33 no.5: 18-19 My '55. (MLRA 8:8)

1. Glavnyy inzhener 1-y avtobazy "Soyuztorgtrans"
(Motor trucks--Repairing)

AL'TSHULER, Z.Ye., inzh.; BASTUNSKIY, M.A., inzh.; BERSTEL', V.N., inzh.;
 BIRENBERG, I.E., inzh.; BOGOPOLSKIY, B.Kh., inzh.; BUKHARIN, S.I.,
 inzh.; GERSHTEYN, B.G., inzh.; GHINSHPUH, L.V., inzh.; DRAYYER, G.I.,
 inzh.; DIMERSHTEYN, A.G., inzh.; ZLATOPOL'SKIY, D.S., inzh.; KLABYUK,
 A.V., inzh.; KOZIN, Yu.V., inzh.; LEVITIN, I.P., inzh.; MEL'NIKOV,
 L.F., inzh.; MEL'KUMOV, L.G., inzh.; NADEL', M.B., inzh.; PAVLOV,
 N.A., inzh.; PASLEN, D.A., inzh.; PMSIN, B.Ya., inzh.; PYATKOVSKIY,
 P.I., inzh.; RAZNOSCHIKOV, D.V., inzh.; ROZENOTER, G.Ya., inzh.;
 ROZENBERG, R.L., inzh.; ROYTENBERG, N.L., inzh.; RYABINSKIY, Ya.I.,
 inzh.; SYPCHENKO, I.I., inzh.; TABACHLIKOV, L.D., inzh.; FEL'DMAN,
 E.S., inzh.; SHTRAKHMAN, G.Ya., inzh.; SHTERENGAS, N.S., inzh.;
 LEVITIN, I.P., otvetstvennyy red.; STEL'MAKH, A.M., red.izd-va;
 BEKKER, O.G., tekhn.red.

[Overall mechanization and automatization of production processes in
 the coal industry] Kompleksnaya mekhanizatsiya i avtomatizatsiya
 proizvodstvennykh protsessov v ugol'noi promyshlennosti. Pod red.
 I.U.V.Kozina i dr. Moskva, Ugletekhizdat, 1957. 82 p. (MIRA 11:3)

1. Gosudarstvennyy proyektno-konstruktorskiy institut. 2. Institut
 Giprougleavtomatizatsiya i Tekhnicheskogo Upravleniya Ministerstva
 ugol'noy promyshlennosti (for all except: Levitin, Stel'makh,
 Bekker)

(Automatic control) (Coal mining machinery)

100-7-5/11

AUTHORS: Bukharin, B.I., Tabachnikov, I.D. and S. Terent'ev, N.S.,
Engineers

TITLE: Tubular Tower Crane BTK-5/8 (Bastennyi trubchatyy kran
BTK-5/8)

PERIODICAL: Mekhanizatsiya Stroitel'stva, 1957, Vol.14, No.7,
p. 17 - 18 (USSR)

ABSTRACT: The Collective of the Planning and Construction Institute of Giprougleavtomatizatsiya (Kollektivnyy proyektirovannyi konstruktorskiy institut) has constructed a new tower crane -TK-5/8 for hoisting large panels and large blocks of building units (Fig.1). The construction of the crane is based on the construction of the cranes BTK-3C and BTK-100. Specifications of the new crane are given. The 30 m high, tubular mast is fixed to a turntable; an arm is hinged to the top of the mast. The crane mechanism is at the level of the turntable; this positioning helps to lower the centre of gravity of the crane. The crane rests on a tripod structure which is seated on rails. The turning radius can thus be restricted to 1 m. The load transmitted onto the tripod is determined more accurately. It is, however, necessary to increase the base of the crane by approximately 30% which entails increased requirements of rail track. A hook is fixed to the mobile carriage to facilitate the positioning of the

card 1/3

Tubular Tower Crane BTK-5/8

100-7-5/11

required loads. The arm of the crane can be raised and the hook carriage locked (fixed) when exceptionally large-sized loads are handled. The arm is raised by means of a winch, the latter being provided with a special drum. The BTK-5/8 crane shows the following advantages: 1) The weight of the tubular mast is 25% lower than of masts used at present; 2) It can be moved to any part of the circumference of the building, and to any location on the building site without further dismantling and reassembly; 3) The crane mechanism includes safety devices which limit extreme positioning and extreme loads. These limits are: for a 5-ton load: horizontal arm and height limit of 18-30 m; for an 8-ton load: 3 - 18 m; a 5-ton load when the arm is elevated. The tripod gantry terminates in a circular base, i.e. the turntable of the mast. The legs form an equilateral triangle, each side being 9.238 m long. The leg supports are made of steel plates (thickness 12 mm). The turntable has a serrated ring round the circular base. The mast consists of tubes sections which are 720 x 12 mm, 1 020 x 10 mm and 920 x 10 mm long, the top being 820 x 10 mm. The 36.9 m long arm is assembled from 5 sections. At the top of the turntable are: the transmissions for the hook carriage and for hoisting the arm and the operator's

Card 2/3

Tubular Tower Crane BK-5/E

100-9-5/11

cabin. The counterbalance is under the platform. The system of cables and pulleys (Fig.3) was designed by Engineer Yu.I. Krichevskiy. The crane is assembled with the aid of a 5-ton capacity lorry actuated crane (Fig.4). This crane was constructed in the Yasinovatskiy Machine Building Factory (Yasinovatskiy mashinostroitel'nyy zavod). 14 cranes have so far been constructed and are used on building constructions in open-cast coal mining in Donbass, the Urals, etc. There are 4 figures.

AVAILABLE: Library of Congress

Card 3/E

1. Cranes-Design

ON 11.11.1985 g. KVV, U.D.

Organization of BSSn roller bit boring machines. Ser. zhur. no.9:
31.12.85 S 165. (MIRA 18:9)

1. Gosudarstvennyy proyektno-konstruktorskiy i nauchno-issledovatel'skiy
institit Giprougleavtomatizatsiya, Moskva.

L 26160-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/T/EWP(1)/EWP(v) DJ

ACC NR: AP6006351

(A)

SOURCE CODE: UR/0413/66/000/002/0085/0085

AUTHORS: Tabachnikov, L. D.; Bugoslavskiy, Yu. K.; Kozin, Yu. V.; Grinshpan, L. V.; Silbstein, V. S.

ORG: none

27
B

TITLE: Device for automatic balancing of a hydraulic boom crane. Class 35, No. 178073

14

14

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1966, 85

TOPIC TAGS: crane, construction equipment, hydraulic system

ABSTRACT: This Author Certificate describes a device for automatic balancing of a hydraulic boom crane. The device contains a counterweight which is movable, depending upon variation of loading. The counterweight is controlled by a pressure hydrocylinder which is linked with cylinder relays set on working elements of the crane. The cylinder relays measure the load and overturn moments. In the trunk line linking the relays with the pressure hydrocylinder of the counterweight there is a distributor valve giving reverse contact for counterweight control with obstruction of the working mechanisms of the crane in case of imbalance (see Fig.1).

Card 1/2

UDC: 621.873.327-755²

L 26160-66
ACC NR: AP6006351

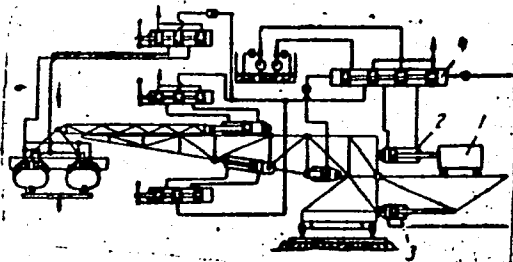


Fig. 1. 1 - counterweight; 2 - pressure hydrocylinder; 3 - cylinder relays; 4 - distributor valve.

Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 04Sep63

Card 2/2 *cl*

Табачников, Л.Я., кандидат технических наук.

Determining pressure drops in a blow-through exhaust system of a two-
cycle engine. Vest.mash. 33 no.4:7-13 Ap '53. (MLRA 6:5)
(Gas and oil engines)

124-1957-2-1830

Translation from Referativnyy zhurnal. Mekhanika, 1957, Nr 2, p 53 (USSR)

AUTHOR Tabachnikov, L Ya

TITLE Determination of the Perturbation Function Set up by the Exhaust Gases of a Two-stroke Internal-combustion Engine (Opredeleniye voznushchayushchey funktsii, sozdavayemoy vypusknyimi gazami dvukhtaktnogo dvigatelya vnutrennego sgoraniya)

PERIODICAL Tr Tallinsk politekhn in-ta, 1953, Vol A, Nr 47, pp 3-16

ABSTRACT An examination of the phenomena occurring in the exhaust pipes of a two-stroke engine. Concepts are provided which permit the determination not only of the character of the perturbation produced by the exhaust gases, but also of the numerical values of the harmonic components of that perturbation. The Author concludes that once the values of the harmonic perturbation coefficients are known, the investigation of the forced oscillation of the gases in the exhaust pipe of a two-stroke engine can be performed. The results of this investigation will permit an exact evaluation of the scavenging of the engine, as well as a correct design of an exhaust system, and will help to perfect the calculations for a gas turbine that operates on the pulsating flow of the engine exhaust gases. V.I. Kirsanov

Card 1/1

Exhaust gases--properties

124-1957-2-1820

Translation from Referativnyy zhurnal. Mekhanika. 1957. No 2. p 32 (USSR)

AUTHOR Tabachnikov, L Ya

TITLE On an Investigation of Pressure Oscillations in the Exhaust Systems of Two-stroke Engines Equipped With Exhaust Gas Turbines (K voprosu issledovaniya kolebaniy davleniy v vypusknykh sistemakh dvukhtaknykh dvigateley s gazovoy turbinoy na kontse)

PERIODICAL Tr Tallinsk politekhn in-ta. 1953. Vol A. Nr 47. pp 17-45

ABSTRACT An approximate method is given for determining the amplitudes and phases of pressure oscillations at any point of exhaust pipe lines terminating in an exhaust gas turbine (with due consideration of the compressibility of the gas). Based on work previously done, the Author replaces the gas turbine with an equivalent diaphragm, as regards other small drag items in the pipeline.

1 Exhaust systems--Pressure 2 Exhaust systems V.I. Kissanov
--oscillation 3 Exhaust systems--Analysis 4 Approximate computation

Card 1/1

SOV/124-58-1-502

Translation from: Referativnyy zhurnal Mekhanika, 1958, Nr 1, p 61 (USSR)

AUTHOR: Tabachnikov, L. Ya.

TITLE: Investigation of the Gasdynamic Processes Occurring in the Exhaust Pipes of Two-stroke Engines With Exhaust-gas Driven Turbosuperchargers (Issledovaniye gazodinamicheskikh protsessov v vypusknykh truboprovodakh dvukhtaknykh dvigateley s gazoturbinnym nadduvom)

PERIODICAL: V sb.: Povysheniye moshchnosti dvigateley s osplamneniyem ot szhatiya. Moscow, Mashgiz, 1954 pp 103-122

ABSTRACT: For the purpose of the analytical investigation of the gasdynamic processes in the exhaust systems of multicylinder internal combustion engines the author proposes the use of a dynamic analogy between the longitudinal oscillations of the gases in an exhaust system and the torsional oscillation of mechanical systems. The derivation of a differential equation for the oscillation comprises an examination of an equivalent mechanical system with distributed masses. In the investigation performed here an analogy is used wherein the torsional moments of the mechanical system stand for the displacements of the gases in the exhaust system, while the angular amplitudes represent

Card 1/2

SDV/124 58-1-502

Investigation of the Gasdynamic Processes Occurring (cont.)

the pressures. The author determines the natural frequencies of the gases that occupy the various exhaust pipes for single cylinder as well as multicylinder engines. Experimental investigations of the natural frequencies of gases occupying various types of exhaust systems essentially confirm the results of the calculations.

B. D. Zaloga

Card 2/2

PETROVSKIY, Nikolay Viktorovich. Prinimeli uchastiye: KAMKIN, S.V., kand. tekhn.nauk; NESTERENKO, N.V., aspirant; OVSIANNIKOV, M.K., kand. tekhn.nauk. EPEL'MAN, T.Ye., dotsent, kand.tekhn.nauk, retsenzent; ROLINSKIY, V.Yu., dotsent, kand.tekhn.nauk, retsenzent; TABACHNIKOV, L.Ya., dotsent, kand.tekhn.nauk, retsenzent; ERINCHEK, A.M., dotsent, kand.tekhn.nauk, retsenzent; GRIBANOV, V.I., kand.tekhn.nauk, nauchnyy red.; APTEKMAN, M.A., red.; FRUMKIN, P.S., tekhn.red.

[Special problems in the theory of marine diesel engines] Spetsial'nye voprosy teorii sudovykh dizel'ei. Leningrad, GOS.soiuznoe izd-vo sudostroit.promyshl., 1960. 311 p. (MIRA 13:10)
(Marine diesel engines)

TABACHNIKOV, L.Ya.

Utilization of the vibration energy of a pulsating turbine of an
internal combustion engine. TRUDY TSNIDI no.39:39-55 '60.

(MIRA 15:8)

(Gas turbines) (Diesel engines)

S/114/62/000/004/003/008
114/2554

AUTHOR: Tabachnikov, L.Ya., Candidate of Technical Sciences,
Docent

TITLE: Utilization of variable pressure exhaust gases for
driving superchargers applied to internal combustion
engines

PERIODICAL: *Energomashinostroyeniye*, No. 4, 1962, 17-20

REMARKS: The difficulties encountered with turbo-driven superchargers during starting and at partial load are well-known, and the author describes attempts to utilize the cyclic fluctuations of pressure to increase the power output of the exhaust gas driven impulse turbine. The work done by gas in passing through a turbine is an integral function of the square of the speed of the gas and of the mass flow. The notion "impulse coefficient" is introduced, which is defined as the ratio of the total work done by the gas over a period of time to the average work assuming average speed of flow. It can be expressed as follows in terms of the flow function ϕ and period of pressure oscillations ϕ_0 measured in degrees of crankshaft angle
Card 1/3

Utilisation of variable pressure ... C/114/02/000/004/003/008
E114/E554

$$\bar{\Phi}_3 = \frac{f_{\pi} \cdot 1}{f_{\pi} \cdot T} \cdot \frac{\int_0^{\varphi_0} \varphi^3 p_T \frac{2+k}{k} d\varphi}{\int_0^{\varphi_0} \varphi p_T \frac{2+k}{k} d\varphi} \quad (8)$$

where $\bar{\Phi}_3$ - impulse coefficient,
 p_T and $p_{T.cp}$ - instantaneous and mean inlet pressures,
 φ and φ_{cp} - instantaneous and mean values of flow function,
 f_{π} and $f_{\pi T}$ - equivalent cross-sectional area replacing the impulse turbine at variable and at constant inlet pressures,
 k - gas constant.

Alternatively, if the pressure oscillations are known in the form of a graph, the impulse coefficient can be calculated from:
 Card 2/5

Utilisation of variable pressure ... S/114/62/000/004/003/008
E114/E554

$$\phi_5 = \frac{r_{3.1}}{r_{3.2}} \cdot \frac{\sum_{i=1}^n \phi_i^2 P_i}{n \phi_{cp}^2 P_{cp}} \quad (9)$$

where n = number of sectors i of equal length into which one period of oscillation has been divided and suffix i denotes the average value of a quantity in a sector. The impulse coefficient depends on the wave-form of the oscillations before the turbine. Oscillations of four-stroke engine are shown experimentally to be sinusoidal and if the ducts between the engine and the turbine are short, the number of pressure peaks will correspond to the number of cylinders connected to the manifold. Impulse coefficients are plotted against amplitudes of oscillation in a four-stroke engine, and equivalent turbine cross-sectional areas are shown for variable and constant inlet

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Utilisation of variable pressure ... 8/114/32/000/004/003/008
5114/5554

pressure. This latter tends to unity as the pressure increases. In a short exhaust duct of a three cylinder two-stroke engine, the pressure increases nearly sinusoidally in the first phase, falls, and in the second phase remains virtually at a constant minimum until the next cylinder exhausts. Therefore, the impulse coefficient is nearly unity, considerably less than for four-stroke engines. A graph relating impulse coefficient to mean pressure before the turbine for various amplitudes of oscillation, indicates the superiority of a turbine designed for variable exhaust pressure from a two-stroke engine, over a turbine working at constant, minimum pressure. Correct phase relationship is needed to ensure minimum pressure at the beginning of the exhaust stroke and a high pressure at scavenging. Often, unbalance can be reduced by lowering the air pressure rather than by increasing the power output of the turbine by utilising greater amplitudes of oscillation. The experiment demonstrated the possibility of utilising a free turbine-driven super-charger in conjunction with a high-speed two-stroke engine for conditions from idling to full load without a mechanical link between the engine and the turbine.

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Cyclic fluctuations of pressure (speed) of the exhaust gases increase the amount of energy fed into the impulse turbine. Efficiency is increased and the system becomes useful at super-charger pressures between 1.8 and 2.0 kg/cm². The utility of this system increases as the mean pressure before the turbine decreases. The oscillations of pressure in the exhaust manifold improve scavenging of the engine. There are 5 figures.

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TABACHNIKOV, L.Ya., kand.techn.nauk, dotsent

Determination of the efficiency of a gas turbine supercharger operating
on the pulsating exhaust gases of an internal combustion engine. *Energoo-*
mashinostroenie 9 no.12:21-24, B 1973. (MIRA 17:1)

L-21036-66 EMI(m)/I RI/ME SOURCE CODE: UR/0114/65/000/010/0046/0047
 ACC NR: AP60114459

AUTHOR: Tabachnikov, L. Ya. (Candidate of technical sciences)

ORG: none

TITLE: Coordinating and scientific-engineering conference for the perfection of the operating cycle and efficiency improvement of diesel engines

SOURCE: Energomashinostroyeniye, no. 10, 1965, 46-47

TOPIC TAGS: mechanical engineering conference, diesel engine, digital computer, combustion chamber test, mathematic model

ABSTRACT: The conference devoted to topics stated in the title was held at the Tsentral'nyy Nauchno-Issledovatel'skiy Dizel'nyy Institut (Central Scientific-Research Diesel Institute) in Leningrad and was attended by representatives of factories, scientific-research and pedagogical institutes from numerous cities of the Soviet Union. The 25 papers contributed, and the numerous reports covered the current status of Soviet diesel-engine production, the current attempts to improve engine operation and efficiency (by studying the production of the mixture, combustion chamber aerodynamics), the mathematical modeling of the working process using digital computers (which can supply the operating characteristics of the cylinders, intake ducts, and turbocompressor as a function of the crankshaft angle), the influence

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of temperature and overpressure on diesel operation, the special problems of two-cycle machines, and the improvements in the efficiency of two opposed-piston engines by improvements in lubricant/supply piping. The article gives one-sentence summaries of the various papers and the names and affiliations of 26 authors. [JPRS]

SUB CODE: 21, 13 / SUBM DATE: none

Card 2/2 *U/R*

TABAGNIKOV, M. Ya. (Dushanbe)

Man must live. Zdorov'ye 9 no. 3:32 Nr 163.

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(MOTION PICTURES IN HEALTH EDUCATION)