Integral Rate-of-Flow Characteristics of the Blading of Certain Nozzle Profiles

conventional rate of flow coefficient. Both characteristics depend only on the blading geometry, which is particularly convenient when it is required to express the results of tests on blading in terms of these characteristics. The experimental equipment that was used to make the tests has been fully described in a previous article by the same author in Teploenergetika, 1958, Nr 8. A number of turbine blades are assembled in a straight row and arrangements are made to guide the incoming flow of working substance. With this set-up blading arrangements can be altered very easily provided that the blade assembly is suitably designed. The operative part of the equipment, with blading, is shown in Fig 1. A number of detailed recommendations are made about experimental conditions. As will be seen from the graphs given in Fig 3, the amount by which the panel on which the blades are mounted overhangs the ends of the blades influences the rate of flow coefficient, and accordingly a suitable value of this overhang must be selected. The results of experimental determination of

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Integral Rate-of-Flow Characteristics of the Blading of Certain Nozzle Profiles

the rate-of-flow characteristics of blading with three types of nozzle profiles S-1, TN-2 and TN-2 (II) are then considered. The tests were made with Reynolds numbers of 3 or 4 x 10^5 and a Mach number of about 0.4. The experimental variables were: the blade pitch, the angle of blade installation, and the ratio of blade length to blade width. Graphs of the rate-of-flow characteristics are given in Fig 4. The abscissae are the ratios of the narrowest section between blades to the pitch at the outlet edge as functions of the angle of installation of the blades. It will be seen that the ratios have an important influence on the rate of flow through the blading. A good idea of the nature of the influence of blading arrangement and geometry on the flow characteristics is given by the graph plotted in Fig 5, from which it will be seen, as was to be expected, that the ratio of the narrowest section to the pitch at the exhaust edge is not a general parameter by which to characterise the flow rate of blading. The experimental results are discussed and formula (7) is derived for the conventional

Integral Rate-of-Flow Characteristics of the Blading of Certain Nozzle Profiles

rate-of-flow coefficient. Curves of the factor m entering into formula (7) as a function of the pitch ratio are given in Fig 6 for blade profiles S-1 and TN-2 (II) whilst curves of the conventional rate-of-flow coefficient calculated from formula (7) for the latter profile are given in Fig 7. This graph also includes experimental points, and it will be seen that agreement is satisfactory. The relationships so far described were obtained with a constant ratio of blade length to width for each type of blading, ranging from 1.5 to 1.8 for different types. Investigation of the influence of the relative length of blade on the values of the rate-of-discharge coefficient showed that the relationship is practically linear, as will be seen from the results plotted in Fig 8. It is then shown how the integral value of the outlet angle may be calculated from formula (8), which for practical purposes may be simplified to the form of expression (9). Graphs of outlet angles calculated by this formula for profile S-1 are plotted in Fig 9, which gives for comparison experimental values determined by the

pneumatic method and also angles calculated from simple blading arrangement geometry by formula (5). For pitch ratios of 0.7 to 0.8 and angles of installation of about 40°, the outlet angles determined by the integral method are greater than those determined pneomometrically by 1°, which corresponds to a reduction in discharge area of about 10%. This is the order of the difference of steam discharge rate that was observed in turbines type VR-25 of the Khar'kov Turbine Generator Works using blade profiles S-1. The procedure used to determine the rate of flow through blading is then considered, and graphs showing the relationship between the conventional rate-of-flow coefficient and the Reynolds number are plotted in Fig 10. It is concluded that the pneumatic method, which is based on investigation of flow structure, is useful in developing new types of profiles and sufficiently reliable for measurements of energy losses in blading. However, the poor reliability of the pneumatic method of determining outlet angles makes it

Integral Rate-of-Flow Characteristics of the Blading of Certain Nozzle Profiles

necessary to determine these angles by the integral method. The investigation described in this article indicates that hitherto the possibilities of the integral method have been underestimated.
There are 10 figures and 4 Soviet references.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut (Khar'kov Polytechnical Institute)

S/587/60/029/002/001/008
D262/D302

26.2122

AUTHORS: Fedorov, M. F. and Pogorelov, Yu. I.

TITLE: Investigating the efficiency of profile gratings used in diaphragms with narrow blades

SOURCE: Khar'kov. Politekhnicheskiy institut. Trudy. v.29, no. 2, 1960. Parovyye i gazovyye turbiny, 7-18

TEXT: A number of experiments was carried out with three different profiles of blades considered to be the most economical and known as С-1, ТН-2, Д (S-1, TN-2 and D). The results are recorded in form of graphs and analyzed. The graphs are: Efficiency - $\frac{b}{l}$ ratio, efficiency - $\frac{y_2}{b}$ ratio for various $\frac{l}{b}$ and $\frac{t}{b}$ ratios, efficiency - Reynold's number R_e, where (b - chord, l - height of blade, t - distance between blades, y_2 - distance from the trailing edge plane to the plane where measurements are taken). Efficiency curves for

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3 different types of diaphragms, 2 of which are of modern design with shorter chords, are also shown. The results indicate that nozzle efficiency can be improved by 1 - 2% by reducing the chord and maintaining the same height of the blade. Profile TN-2 appears to be most suitable for application in diaphragms with reduced chords. There are 8 figures and 6 references: 5 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: Carter, The Institution of Mechanical Engineers, Proceedings, 1948, no. 41.

Card 2/2

32015
S/587/60/029/002/002/008
D262/D302

26.2120

AUTHOR: Fedorov, M. F.

TITLE: Investigating the flow characteristics in the gratings

SOURCE: Khar'kov. Politekhnicheskiy institut. Trudy. v. 29, no. 2, 1960. Parovyye i gazovyye turbiny, 19-37

TEXT: An integral method of investigating flow characteristics in the blade cascade is discussed. The following characteristic functions are introduced:

$$X = \mu \sin\alpha = \frac{G\sqrt{T_{o_1}}}{mq\, p_{o_1} ntl} \qquad (4)$$

and

$$\mu^* = \frac{Xt}{a} \qquad (5)$$

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Investigating the flow ...

($\mu = \frac{G}{G_t}$, G is the quantity of working medium actually passing through the cascade and G_t the quantity which would pass through it in an isentropic expansion process; T_{o_1} and p_{o_1} = pressure and temperature of full braking at the inlet, m = 0.3965, $q = f\left(\frac{p_2}{p_{o_1}}\right)$, n = number of channels in the cascade, t and l = pitch and height of blades respectively, α = stream outlet angle = arc sin $\frac{a}{t}$, a = size of the channel at the narrowest section, C = chord, β_b = angle between the chord and a line parallel to the axis of the cascade). A typical experimental installation of the cascade is described in detail and methods of eliminating distortions at the border of the cascade by introducing compensating ducts are analyzed. Results of the experiments with 3 typical nozzle profiles (T-1, TH-2, TH-2(11)

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Investigating the flow ...

(S-1, TN-2, TN-2(11)) at $R_e = 3 - 4 \times 10^5$ and M = 0.4 are recorded in form of graphs showing variation of μ^* for different values of the geometrical parameters; $\frac{t}{b}$, $\frac{a}{t}$, $\frac{l}{b}$ and β_b, and also variation of $\alpha^* = \text{arc sin } \frac{X}{\sqrt{\eta}}$ (angular characteristic), where η is the cascade efficiency, for different values of $\frac{t}{b}$. The results are analyzed and compared with those obtained by different methods. It is concluded that by this method more accurate values for effective outlet angles can be obtained. There are 15 figures and 7 references: 6 Soviet-bloc and 1 non-Soviet-bloc. The reference to the English-language publication reads as follows: D. G. Ainley, "Performance of axial flow turbines", Proc. J. Mech. E., 1948, no. 41.

Card 3/3

41976
S/262/62/000/017/001/003
I007/I207

AUTHORS: Fedorov, M.F., and Garkusha, A.V.

TITLE: Investigation of the flow pattern in the gap between the blade rows, and energy losses in the turbine stage nozzles at varying chord sizes of stator blades

PERIODICAL: Referativny zhurnal, otdel'nyy vypusk. 42. Silovyye ustanovki, no. 17, 1962, 23, abstract 4217161 ("Tr. Khar'kovsk. politekhn. in-ta" 1961, 180-191)

TEXT: Investigations were carried out on a single stage air-turbine with a rotor diameter D_{mean} = 475 mm, nozzle blade length l = 25 mm and with the following stage parameters: l/b = 1.2; 1.22 ; 0.61 and 0.305; t/b = 0.758; α_1 = 11°31'; F_{bl}/F_{noz} = 1.48 and 1.78 with M_{os} = 0.36 and Re = bc_1/ν = 5.8; 2.9 and 1.45. 10^5. Here

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b and t = chord and pitch of stator blades; α_1 = flow divergence-angle; F = area of blade and nozzle opening cross-section. The magnitude $\delta_3 = \Delta_3/b$ of the closed section of the gap between the blade rows, was also changed during the investigations. The profile of nozzle (stator) blades was C-1, of rotor blades T-1-25-21. The ratio u/c_0 (peripheral to isentropic velocity) corresponded to the maximum stage-efficiency. As shown by the investigation results, the static pressure p_1 at the external radius of each chord, somewhat increases with the increase of δ_3. $\longleftrightarrow$. The curves $\Delta c_1 = \int_0^r \frac{dc_{1u}}{r} dr$ calculated according to the actual values of c_{1u} and $\int_0^r \frac{dc_{1u}}{r} dr$ only slightly depend on b $\longleftrightarrow$ and δ_3. The pressure gradient, measured along the radius increases with the chord size, and with $l/b = 0.305$ approaches $\int \frac{dc_{1u}}{r} rdl$. The discrepancy

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between the predicted and measured values of the pressure gradient may be explained by the appearance of radial acceleration due to flow twisting. The magnitude of ρ_1 at the blade root almost does not depend on the value of b. The degree of peripheric reaction in the stages with narrow stator blades is smaller than in the case of broad blades. The flow divergence angle α_1 in the flow core and at all values of l/b, ξ_3 and F_{bl}/F_{noz} is close to 11° which is in good agreement with data on flow about a flat cascade. At the disc periphery and with a stage with l/b = 1.22, the angle α_1 decreases by 2-3° whereas with a l/b ratio = 0.305, it increases by 1-1.5°. At a l/b ratio = 0.61, the angle α_1 appears to be distributed over the radius as in the case of straight-blade cascades. In all cases, the value α_1 sharply drops at the surfaces that

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limit the flow. The axial component C_{1z} decreases almost over the whole blade length with the increase in δ_3, and particularly sharp at all values of l/b and δ_3 for cylindrical walls. Despite the favorable cascade geometry for the stall from the stator-blade roots, the flow about them turned out to be laminar. The graphs for the square of velocity coefficient $\varphi^2 = f(r)$ are asymmetrical, and almost do not depend on the degree of reaction and stage sealing. The nozzle efficiency φ^2_{av} ⟷ calculated with due account of the discharge velocity component, decreases with the increase in δ_3, ⟷ the more, the greater is the chord size. With $\delta_3 = 0.05$, and l/b = 1.22 the nozzle efficiency is smaller by 4.5% than the cascade efficiency, and with a l/b ratio = 0.305 it is smaller by 3%. The function $\varphi^2_{av} = f(b/l)$ has a maximum at

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S/262/62/000/017/001/003
I007/I207

Investigation of the flow pattern...

b/l = 1.5 for δ_3 = 005 to 0.10. With the increase in δ_3 the magnitude of the maximum φ_{av}^2 drops and shifts toward smaller values of b/l. The decrease of the chord size does not lead to a continuous increase of the nozzle efficiency. The chord size of stator blades affects the stage efficiency by reducing the nozzle efficiency and the degree of peripheric reaction. There are 9 figures and 5 references.

[Abstracter's note: Complete translation.]

Card 5/5

S/096/61/000/004/003/007
E194/E255

AUTHORS: Fedorov, M. F., Candidate of Technical Sciences and Garkusha, A. V., Engineer

TITLE: The Influence of Guide Blade Width on the Characteristics of Turbine Stages

PERIODICAL: Teploenergetika, 1961, No. 4, pp. 37-41

TEXT: Diaphragms with narrow guide vanes are widely used in turbines although little work has been published to confirm their advantages. The possibility of improving the turbine efficiency by using this kind of diaphragm is generally based on considerations applicable to individual blades, usually without allowing for factors that alter the structure of the dynamics of the flow in the gap between the rims when the width of the guide vanes is reduced. In the Turbine Laboratory of the Khar'kov Polytechnical Institute an investigation was made of various stages having a constant ratio of mean diameter D = 475 mm to height ℓ of guide vanes $D/\ell = 19$. The guide vanes were of three widths, B, and the length-to-breadth ratios were 0.305; 0.61 and 1.22. Profile type C-1 (S-1) was used. All the guide vanes were made up with the same nominal flow area

S/096/61/000/004/003/007
E194/E255

The Influence of Guide Blade Width on the Characteristics of Turbine Stages

reckoned from the dimensions of the channels between blades at the narrowest sections. Each set of guide vanes was tested with three runners of different flow area, which was achieved by altering the angle of installation of the blades and keeping their number the same. The runner blade profiles were Type T-1-25-21, the relative pitch was 0.664 and the blade height 28.5 mm. The ratio of the flow area of the runner blades to that of the nozzles for runners Nos. 1, 2 and 3 was 1.48, 1.76 and 2.04, the values being chosen to obtain positive, mixed and negative stage reaction over the height of the blades. The tests were made on an air turbine illustrated schematically in Fig. 1. The discs contained no pressure-equalizing apertures. Further details are given about the experimental conditions. Fig. 2 is a typical curve of test results of stage efficiency (allowing the discharge velocity energy to be dissipated). The efficiency is plotted against the velocity ratio for runner No. 1 with three different sets of guide vanes whose length-to-breadth ratios were 1 = 1.22; 2 = 0.61; and 3 = 0.305. It is

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S/096/61/000/004/003/007
E194/E255

The Influence of Guide Blade Width on the Characteristics of Turbine Stages

seen that as the blade width is reduced the efficiency is increased, but the amount of increase depends on the blade breadth and on the velocity ratio. The increase in efficiency that results from making the blades narrower also depends very much on the values of the clearance. Wheel No. 2 which has a greater ratio of area of runner blade to that of nozzle blade. In this wheel there is zero reaction at the mean section only when the guide vanes are relatively broad. As the breadth was reduced, the degree of reaction became negative over the whole height of the blade. With a runner of this kind it should be borne in mind that with broad and medium blades the stage works with leaks under the shrouding, and if the blade is narrow air may be drawn into the gap between the rims from the space beyond the wheel at the blade periphery. In the case of runner No. 3 the relative areas of runner blades and nozzles were such that the runner always worked with negative reaction over the blade height. In this case the efficiency with wide blades is higher than for runner No. 2 and there are indications that the use of still more negative reaction would invert

S/096/61/000/004/003/007
E194/E255

The Influence of Guide Blade Width on the Characteristics of Turbine Stages

the previous influence of blade width on stage efficiency. The results of the efficiency investigations show that for a stage with small positive reaction at the blade roots the nozzle blade length-to-breadth ratio should be increased to 0.6-0.8. The efficiency is thereby raised by 1.5-2% and reaches its highest value. If the reaction is mixed over the height of the blade narrower blades may be used. The test results also show that whilst on transition from wide to narrow blades the reaction at the periphery diminishes considerably, that at the blade roots alters comparatively little. Thus, the main cause of the change in reaction at the periphery is the influence of the breadth on the radial pressure gradient. There are 9 figures and 4 Soviet references.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut
(Khar'kov Polytechnical Institute)

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S/096/61/000/004/003/007
E194/E255

The Influence of Guide Blade Width on the Characteristics of Turbine Stages

Fig. 1

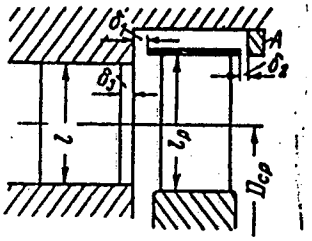


Рис. 1. Схема проточной части ступени.

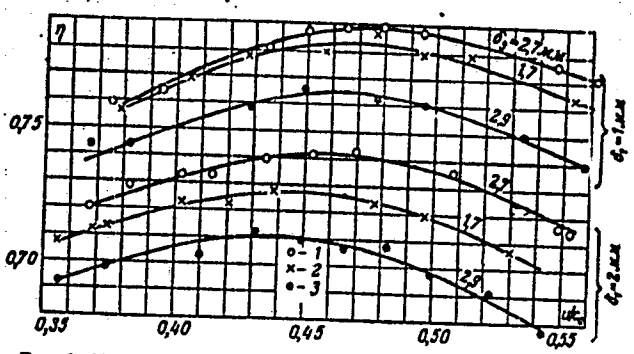


Рис. 2. Изменение к. п. д. ступени в зависимости от u/c_0 при различных удлинениях направляющих лопаток для колеса № 1.
1 — l/b = 1,22; 2 — 0,61; 3 — 0,305.

Card 5/5

S/114/63/000/004/002/005
A004/A127

AUTHORS: Shnee, Ya.I., Doctor of Technical Sciences, Fedorov, M.F., Candidate of Technical Sciences, Garkusha, A.V., Engineer

TITLE: Selecting the closed axial clearance in the bandaged turbine stage

PERIODICAL: Energomashinostroyeniye, no. 4, 1963, 18 - 22

TEXT: The authors present a generalized analysis on the various factors to be considered in the closed axial clearance in bandaged turbine stages, based on tests with an experimental air turbine at the KhPI laboratory and on the generalized test results of some other organizations. Nine stages with bandaged runners with different guide blade extensions were tested. A detailed table of the main design and test data of the ХПИ (KhPI), БИТМ (BITM) and ЦКТИ (TsKTI) turbine stages is given. The authors present recommendations on the optimum clearance and state that, based on investigations carried out, it can be said that for stages with a small relative extension of the guide blades it is expedient, from the efficiency of the stages viewpoint, to choose minimum closed clearances. There are 5 figs, 1 table.

Card 1/1

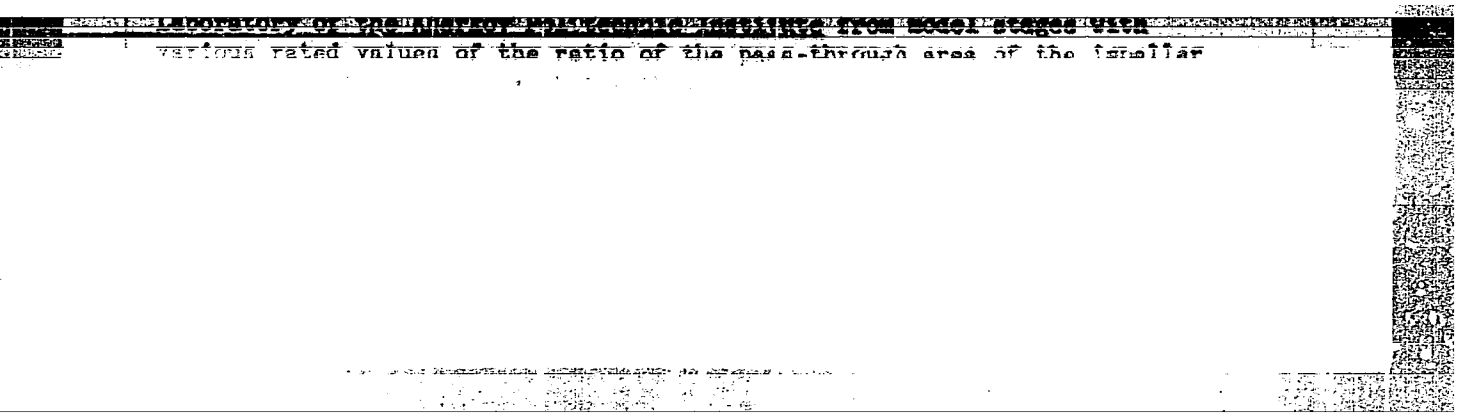
GARKUSHA, A.V., kand. tekhn. nauk; FEDOROV, M.F., kand. tekhn. nauk

Comparison of the efficiency of a turbine stage with different methods of changing the upper ceiling. Teploenergetika 11 no.11:31-34 N '64. (MIRA 17:12)

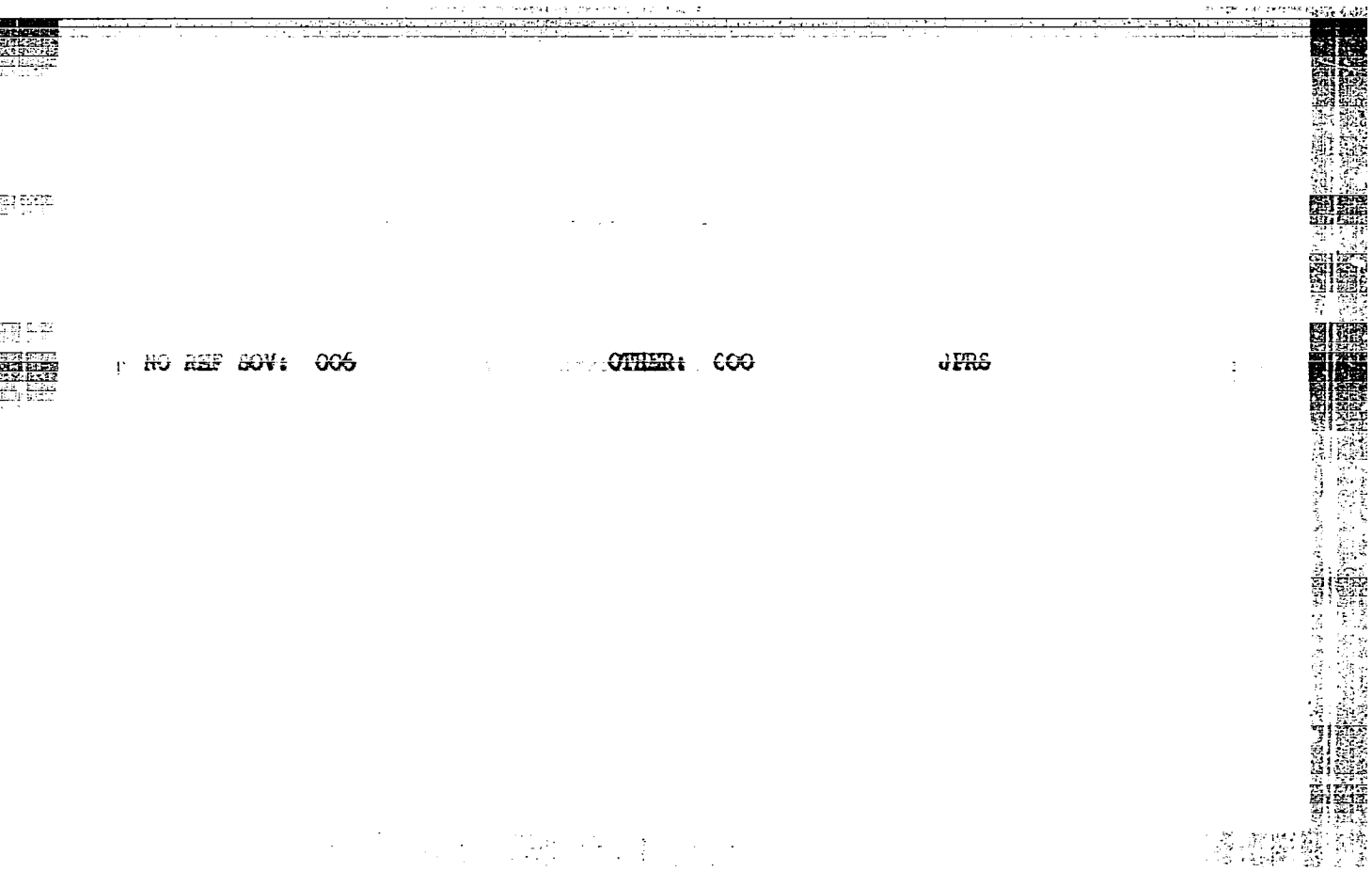
1. Khar'kovskiy politekhnicheskiy institut.

[redacted]

SOURCE: Teploenergetika, no. 11, 1964, 31-34



various rated values of the ratio of the pass-through area of the smaller



SOKOLOVSKIY, G.A., kand.tekhn.nauk; FEDOROV, M.F., kand.tekhn.nauk

Testing the last stage of the K-300-240 turbine developed by the S.M.Kirov Tubogenerator Factory in Kharkov. Teploenergetika 12 no.5:59-62 My '65. (MIRA 18:5)

1. Khar'kovskiy politekhnicheskiy institut.

FEDOROV, M.G., inzh.

Dais for upsetting bolts with long shanks on a friction or crank press. Mash.Bel. no.5:47-49 '58. (MIRA 12:11)
(Bolts and nuts) (Dies (Metalworking))

FEDOROV, M.I. [Fedarau, M.I.]; kand.sel'skokhozyaystvennykh nauk

Effect of forest soil drainage on the anatomical structure and physicomechanical properties of pine wood. Vestsi AN BSSR.Ser. biial.nav. no.4:95-101 '59. (MIRA 13:4)
(Wood) (Soil moisture)

FEDOROV, M. I.

"Optimum Correction Conditions in Bar Roller Straightening Machines." Cand Tech Sci, Ural Polytechnic Inst, Sverdlovsk, 1954. (RZhMekh, Jan 55)

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

FEDOROV, M.I., dotsent, kand.tekhn.nauk; PAL'MOV, Ye.V., prof., doktor tekhn.nauk

Cooling rolled sections with a refrigerator. Trudy Ural.politekh. inst. no.101:45-53 '60. (MIRA 14:3)
(Rolling (Metalwork)—Cooling)

PAL'MOV, Ye.V., prof.,doktor tekhn.nauk; FEDOROV, M.I., dotsent, kand.tekhn.nauk; SABUROV, A.M., inzh.

Residual stresses in rolled sections. Trudy Ural. politekh.inst. no.78:74-88 '60. (MIRA 14:5)
(Rolling (Metalwork))
(Strains and stresses)

VOL'F, V.F.; FEDOROV, M.I.; GRIGOR'YEV, G.G., red.; YETON, L.L., red. izd-va; VAKHTINA, Ye.F., tekhn. red.

[Instructions on mechanical drawing in course and diploma projects for students of the specially "Mechanical equipment of plants in ferrous and nonferrous metallurgy"] Rukovodstvo po vypolneniiu chertezhei kursovykh i diplomnykh proektov dlia studentov spetsial'nosti "Mekhanicheskoe oborudovanie zavodov chernoi i tsvetnoi metallurhii." Izd.2. Pod red. G.G.Grigor'eva. Sverdlovsk, Izd-vo Ural'skogo politekhni-cheskogo in-ta, 1962. 68 p. (MIRA 17:3)

VYDRIN, V.N., kand.tekhn.nauk; BEREZIN, Ye.N., inzh.; KHIMICH, G.L.; TRET'YAKOV, A.V.; FEDOROV, M.I.; VASHCHENKO, Yu.I.

"Mechanical equipment of rolling mills" by A.A. Koroleva. Reviewed by V.N. Vydrin and others. Stal' 22 no.1:61-63 Ja '62. (MIRA 14:12)

1. Chelyabinskiy politekhnicheskiy institut (for Vydrin, Berezin). 2. Nauchno-issledovatel'skiy konstruktorsko-tekhnologicheskiy institut tyazhelogo mashinostroyeniya Uralmashzavoda i Ural'skiy politekhnicheskiy institut (for Khimich, Tret'yakov, Fedorov).
(Rolling mills—Equipment and supplies)
(Koroleva, A.A.)

FEDOROV, M. I., kand. tekhn. nauk, dotsent; Prinimal uchastiye:
SABUROV, A. M., assistent

Pressure on the rollers of straightening machines and the power consumed to straighten large-size shaped sections. Trudy Ural'. politekh. inst. no.119:46-49 '62.
(MIRA 16:1)

(Straightening machines)

FEDOROV, M. I., kand. tekhn. nauk, dotsent

Straightening of large-size shaped sections on roller straighteners. Trudy Ural'. politekh. inst. no.119:35-45 '62. (MIRA 16:1)

(Straightening machines)

ACC NR: AP6024641 SOURCE CODE: UR/0170/66/011/001/0099/0104

AUTHOR: Kafengauz, N. L.; Fedorov, M. I.

ORG: none

TITLE: High frequency pressure oscillations in heat transfer with diisopropylhexane

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 1, 1966, 99-104

TOPIC TAGS: heat transfer, heat transfer fluid, forced flow, pressure effect, oscillation

ABSTRACT: This article gives the results of an experimental study of high-frequency pressure oscillations in heat transfer with diisopropylhexane under conditions of forced movement in a tube at both precritical and supercritical pressures. Diisopropylhexane ($C_{12}H_{24}$) is an organic liquid similar to kerosene in its thermophysical properties. Its specific gravity is 8030 N/m^3, critical pressure 1.96 mN/n^2, and critical temperature 650°K. In a special setup (electrically heated liquid supplied by a gear-and-pinion pump and piezoelectric two-beam indicator of Hungarian manufacture for measuring frequency and amplitude) were conducted the diisopropylhexane experiments which established that transition from ordinary convective heat transfer to surface boiling (at $p < p_{cr}$) or to fluidization (at $p > p_{cr}$) is accompanied by

Card 1/2 UDC: 536.244

ACC NR: AP6024641

high-frequency oscillations of pressure. It is shown that oscillation amplitude increases with heat flux. It is assumed that shock waves forming during attenuation (condensation) of vapor or gas bubbles cause the pressure oscillations. It is concluded that the high-frequency pressure oscillations which occur may be harmful both to strength and operational stability of heat exchange equipment. Orig. art. has: 1 formula and 2 figures.

SUB CODE: 20/SUBM DATE: 18Nov65/ ORIG REF: 003/ OTH REF: 002

Card 2/2

FEDOROV, M. I.

"The Question of the Direct Cause of Death Due to Hanging." Cand Med, Sci, Central Inst for the Advanced Training of Physicians, Min Health USSR, Moscow, 1954. (KL, No 1, Jan 55)

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

USSR / Pharmacology. Toxicology. V

Abs Jour : Ref. Zhur - Biologiya, No. 3, 1959, 14086

Author : Fedorov, M.I.; Talantov, V.V.
Inst :
Title : A Case of Photodeveloper Poisoning.

Orig Pub : Kazansk. med. zh., 1957, No. 2-3, 112-114

Abstract : A case of developer (metol;I) poisoning is described which confirms that I is a hemolytic, methemoglobin-forming poison which induces a number of clinical and pathomorphologic diseases (nausea, vomiting, headache, cyanosis, increased blood viscosity, leucocytosis, jaundice, blood coagulation in the vessels, changes of erythrocyte pigmentation, hemolysis of blood in the vessels and hemorrhages). According to its chemical structure, I is similar to aniline dyes;

Card 1/2

FEDOROV, M.I., (Kazan')

Problem of the cause of death in mechanical asphyxia (strangulation). Pat.fiziol. i eksp.terap. 2 no.4:48-49 Jl-Ag '58 (MIRA 11:12)

1. Iz kafedry normal'noy fiziologii Kazanskogo meditsinskogo instituta (zav. chlen-korrespondent AMN SSSR A.V. Kibyakov).
(STRANGULATION,
cause of death in cats (Rus))

FEDOROV, M.I., kand.med.nauk (Kazan')

Diagnostic significance of perivascular hemorrhages in the fundus of the fourth ventricle for the diagnosis of asphyctic death. Kaz. med. zhur. no.6:58-59 N-D '60. (MIRA 13:12)
(BRAIN—HEMORRHAGE) (ASPHYXIA)

FEDOROV, M.I. (Kazan')

Sudden death from acute hemorrhagic pancreonecrosis following intoxication. Kaz. med. zhur. no. 2:107-108 Mr-Ap '61.
(MIRA 14:4)

(PANCREAS—DISEASES) (ALCOHOLISM) (DEATH—CAUSES)

FEDOROV, M.I., kand.med.nauk (Kazan')

Sudden death in tracheotomized patients. Kaz. med. zhur. no.1:75-76 Ja-F '62. (MIRA 15:3)

(TRACHEA--SURGERY)
(DEATH--CAUSES)

FEDOROV, M.I., kand.med.nauk

Sequelae of a near drowning. Kaz.med.zhur. no.3:43-47 My-Je '62.
(MIRA 15:9)

1. Kafedra psikhiatrii (zav. - prof. M.P.Andreyev) Kazanskogo meditsinskogo instituta.
(DROWNING, RESTORATION FROM)

44829
S/246/63/063/001/001/001
B144/B186

27.1140

AUTHOR: Fedorov, M. I.

TITLE: Clinical and morphological characteristics of acute anoxaemia

PERIODICAL: Zhurnal nevropatologii i psikhiatrii, v. 63, no. 1, 1963, 19-26

TEXT: The changes brought about in the nervous system by strangulation were studied in 4 own and 10 published cases. The main symptoms in individuals surviving asphyxia (some hours to 20 days) were unconsciousness, tonic and clonic spasms, decerebration rigidity, rigidity of the muscles of limbs and occiput, increased muscular tone, hyperkinesis, periodic contraction and dilatation of the pupil, and hyperhidrosis. The time of survival had a marked effect on the morphological changes in the brain, which were the more severe the longer the person survived strangulation. Owing to disturbances of the circulation and to the acute anoxia during the strangulation, irreversible ischemic necroses were observed, mainly in the cerebral cortex, which explains that most patients did not regain consciousness. The subcortical formations and the cerebellum were less affected; the stem,
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the pons Varoli and the myelencephalon proved the most resistant parts. This is consistent with the clinical observation that restoration of the respiratory and cardiovascular functions did not save the patient's life, if the unconsciousness lasted longer than 1 day. Often death was due to complications which could not be controlled because of the damaged function of the cortex. The motor disturbances result from the failing inhibition of subcortical centers, diencephalon and mesencephalon by the cerebral cortex. There are 7 figures.

ASSOCIATION: Kafedra nervnykh bolezney (zav. - prof. L. I. Omorokov) Kazanskogo meditsinskogo instituta (Department of Nervous Diseases (Head - Prof. L. I. Omorokov) of the Kazan' Medical Institute)

SUBMITTED: September 22, 1961

FEDOROV, M.I.

Period of the development and duration of the healing of the rope imprints in persons revived after hanging. Nauch. trudy Kaz. gos. med. inst. 14:307-308 '64.

Determination of the duration of strangulation according to the clinical picture. Ibid.:309-310 (MIRA 18:9)

1. Kafedra sudebnoy meditsiny (zav. - dotsent M.I.Fedorov) Kazanskogo meditsinskogo instituta.

FEDOROV, M.K., inzhener.

Concrete heater with device for heating inflowing air. Rats. i izobr. predl. v strei. no.124:18-20 '55. (MIRA 9:7)
(Radiant heating)

LIBER, I.S.; FEDOROV, M.K.; NECHAYEV, M.A., inzhener, nauchnyy redaktor; KARPOV, V.V., redaktor izdatel'stva; PUL'KINA, Ye.A., tekhnicheskiy redaktor

[Concrete sanitary engineering blocks and heating installations] Betonnye sanitarno-tekhnicheskie bloki i nagrevatel'nye pribory. Leningrad, Gos. izd-vo po stroit. i arkhitekture, 1956. 65 p. (MIRA 9:10)
(Concrete blocks)
(Heating)

Fedorov, M. K., Antonov, V. S., Doronina, N. A., Gidrologiya rek Sovetskoy Arktiki (Hydrology of the rivers of the Soviet Arctic), Leningrad Morsk. Transport (Marine Transport), 1956, 96 pages (RZhGeofiz 11/57-9884 K) (Book)

ANTONOV, V.S.; BURDYKINA, A.P.; FEDOROV, M.K.

Exploration of river estuaries in northern Siberia. Probl. Arkt. i Antarkt. no. 4:38-51 '60. (MIRA 13:12)
(Siberia--Estuaries)

KLYUYEVA, M.L.; MISHCHENKO, K.P.; FEDOROV, M.K.

Solubility of picric acid in methyl alcohol in the temperature range from 5° to 50°. Trudy LTI no.61:47-51 '60. (MIRA 15:5)
(Picric acid) (Solubility)

5.3400

77664
SOV/80-33-2-39/52

AUTHORS: Klyuyeva, M. L., Mishchenko, K. P., Fedorov, M. K.

TITLE: Brief Communications. Vapor Pressure of Methanol From 5 to 50°

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2, pp 473-475 (USSR)

ABSTRACT: Vapor pressure of purified methanol was carefully measured. The water content in methanol was not over 0.1% (Fisher). There are 2 tables; and 11 references, 4 Soviet, 4 German, 2 U.S., 1 U.K. The U.S. and U.K. references are: G. W. Thomson, Chem. Rev., 38, 1 (1946); W. Ramsay, S. Young, Phil. Trans, (A), 178, 313 (1887); O. F. Tower, and A. F. Germann, J. Am. Chem. Soc., 36, 2449 (1914)

SUBMITTED: July 2, 1959

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Brief Communications. Vapor Pressure of Methanol From 5 to 50°

77664
SOV/80-33-2-39/52

Table 1. Key to Table 1: (a) temperature (in °C); (b) pressure P (in mm); (c) test series number; (d) average for two series; (e) calculated; (f) P calculated--P found (in mm); (g) = $\frac{\Delta P}{P \text{ found}}$ (in %).

a	b				f	g
	c		d	e		
	I	II				
11.9	62.07	62.28	62.2	61.97	−0.23	−0.37
14.69	72.63	72.57	72.6	72.57	−0.03	−0.04
17.72	85.67	85.96	85.8	85.84	+0.04	+0.05
22.06	107.80	108.32	108.1	108.40	+0.30	+0.28
24.93	125.91	126.75	126.3	126.00	−0.30	−0.24
30.15	164.45	165.22	164.8	164.20	−0.60	−0.36
34.59	203.50	204.55	204.0	203.90	−0.10	−0.05
37.60	233.70	236.04	234.9	235.40	+0.50	+0.21
39.76	258.73	260.36	259.6	260.30	+0.70	+0.27
42.60	297.54	298.29	297.9	297.70	−0.20	−0.07
45.39	337.30	337.53	337.4	336.00	−1.40	−0.41
48.53	386.00	387.37	386.7	385.90	−0.80	−0.21
50.21	412.32	414.28	413.3	415.00	+1.70	+0.41

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MISHCHENKO, K.P.; FEDOROV, M.K.

Activities of the solvent in methanol solutions of picric acid in the temperature range from 5° to 50°. Zhur.prikl. khim. 34 no.8:1889-1891 Ag '61. (MIRA 14:8)
(Picric acid) (Methanol)

FEDOROV, M.K.

The technique of short-range water level forecasting at the mouths of the Indigirka and Kolyma Rivers. Trudy AANII 213:112-163 '61.
(MIRA 14:6)

(Indigirka River Estuary--Hydrology)
(Kolyma River Estuary--Hydrology)

MISHCHENKO, K.P.; FEDOROV, M.K.

Structure of picric acid solutions in methanol. Zhur.strukt.khim. 3 no.1:15-20 Ja-F '62. (MIRA 15:3)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Picric acid) (Methanol)

FEDOROV, M.K.

Effect of the exploitation of power on the Yenisey on the level of its lower reaches. Probl. Arkt. i Antarkt. no.12:131-133 '63. (MIRA 16:7)

(Yenisey River--Hydrology)

DIBROV, I.A.; MASHOVETS, V.P.; FEDOROV, M.K.

Method of measuring the saturated vapor pressure and density of aqueous solutions at temperatures up to 350°C and pressures up to 200 kg cm^2. Zhur.prikl.khim. 36 no.6:1250-1253 Je '63. (MIRA 16:8)

1. Leningradskiy tekhnologicheskiy institut imeni Lensoveta.
(Solution (Chemistry)) (Vapor pressure)

FEDOROV, M.M., gornyy inzhener, elektromekhanik

Principles of mine hoisting machinery control. Ugol' 30 no.9: 25-30 S'55. (MLRA 8:12)

1. Trest Stalinshakhtostroymontazh
(Mine hoisting)

FEDOROV, Mikhail Mikhaylovich; IL'ICHEV, A.S. redaktor [deceased]; KHOMITSEVICH, K.I., kandidat tekhnicheskikh nauk, redaktor; KUCHEROV, P.S., redaktor; FEDOROVA, Z.M., kandidat tekhnicheskikh nauk, redaktor; KUKHTENKO, A.I., doktor tekhnicheskikh nauk, redaktor; KRYZHANOVSKIY, O.M., kandidat tekhnicheskikh nauk, redaktor SAVIN, G.N., akademik, otvetstvennyy redaktor; ZIL'BAN, M.S., redaktor izdatel'stva; RAKHLINA, N.P., tekhnicheskiy redaktor

[Selected works in two volumes] Izbrannye trudy; v dvukh tomakh. Kiev, Izd-vo Akad. nauk USSR. Vol.1. 1957. 274 p. (MLRA 10:6)

1. Akademiya nauk USSR (for Savin). 2.Chlen-korrespondent Akademii nauk SSSR (for Il'ichev). 3. Chlen-korrespondent Akademii nauk USSR (for Kucherov)
(Mine hoisting)

FEDOROV, M.M., inzh.

Adjusting hoisting machine speed-limiting devices. Shakht. stroi. no.4:21-26 Ap '59. (MIRA 12:5)
(Hoisting machinery--Brakes)

FEDOROV, Mikhail Mikhaylovich; KHOMITSEVICH, K.I., kand.tekhn.nauk, red.toma; KUCHEROV, P.S., red.; KUKHTENKO, A.I., doktor tekhn. nauk, red.; FEDOROVA, Z.M., kand.tekhn.nauk, red.; KRYZHANOVSKIY, O.M., kand.tekhn.nauk, red.; ZIL'BAN, M.S., red.izd-va; MATVEYCHUK, A.A., tekhn.red.

[Selected works in two volumes] Izbrannye trudy v dvukh tomakh. Kiev, Izd-vo Akad.nauk USSR. Vol.2. 1960. 462 p. (MIRA 13:7)

1. Deystvitel'nyy chlen AN USSR (for Fedorov). 2. Chlen-korrespondent AN USSR (for Kucherov).

(Mining machinery)

FEDOROV, M.M., gornyy inzh.; VASILEVSKIY, M.N., kand.tekhn.nauk; TRAUBE, Ye.S., inzh.

Automatic control of hoisting machines with asynchronous drive. Gor. zhur. no.12:38-43 D '60. (MIRA 13:12)

1. Giproniselektroshakht, Stalino (for Vasilevskiy, Traube).
(Hoisting machinery--Electric drives)
(Automatic control)

BELYY, V.D., prof.; FEDOROV, M.M., inzh.

Effect of the shoe material on the braking system design. Izv. ucheb. zav.; gor. zhur. no.12:129-134 '60. (MIRA 14:1)

1. Donetskiy ordena Trudovogo Krasnogo Znameni politekhnicheskiy institut imeni N.S. Khrushcheva. Rekomendovana kafedroy soprotivleniya materialov Donetskogo politekhnicheskogo instituta.
(Hoisting machinery--Brakes) (Mine hoisting)

FEDOROV, M.M., insh.; KIPTILYY, A.A., insh.

Adjusting automatic skip hoisting equipment. Shakht.stroi. 4 no.9:12-14 S '60. (MIRA 13:8)

1. Donetskoye kontrol'no-naladochnoye otdeleniye.
(Mine hoisting) (Automatic control)

LEBEDINSKIY, Mikhail Aleksandrovich; FEDOROV, M.M., red.; YENYUTIN, V.V., red.; VORONIN, K.P., tekhn. red.

[Technology of the production of electronic vacuum devices] Tekhnologiia elektrovakuumnogo proizvodstva. Pod red. M.M.Fedorova. Moskva, Gos. energ. izd-vo. Pt. 1. 1961. 479 p. (MIRA 14:10)
(Electronic apparatus and appliances)

FEDOROV, M.M.

Using dynamic breaking in the automation of hoisting systems.
Ugol' Ukr. 5 no.11:18-22 N '61. (MIRA 14:11)
(Mine hoisting) (Automation)

FEDOROV, Mikhail Mikhaylovich. Prinimal uchastiye MAKSIMOV, L.T., inzh.; D'YAKOVA, G.B., red.izd-va; OVSEYENKO, V.G., tekhn. red.; SHKLYAR, S.Ya., tekhn. red.

[Adjusting hoists during installation] Naladka montiruemykh pod"emnykh mashin. Moskva, Gosgortekhizdat, 1963. 343 p. (MIRA 16:4)

(Mine hoisting)

FEDOROV, M.K.,Cand Phys-Math Sci— (diss) "Study of smoke pollution of the air and its effect upon the changes in the radiation and light regimes of an industrial city(Zaporozh'ye)." Dnepropetrovsk, 1958. 15 pp (Dnepropetrovsk State Univ im 300th Anniversary of the Reunification of Ukraino and Russia), 120 copies (KL,43-58-114)

FEDOROV, M.M.

Effect of smoke on light conditions in cities [with summary in English]
Gig. i san. 23 no.8:14-18 Ag '58 (MIRA 11:9)

1. Iz Kafedry fiziki Zaporozhskogo pedagogicheskogo instituta.
(SMOKE,
eff. on light in cities (Rus))

AUTHOR: Fedorov, M. M. 20-118-4-18/61

TITLE: The Distribution of Dust and Smoke Particles According to Their Size in a Modern Industrial Town (O raspredelenii po razmeram chastits pyli i dyma v vozdukhe industrial'nogo goroda)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 118, Nr 4, pp. 691-693 (USSR)

ABSTRACT: From 1951 - 1952 the author investigated the dust and smoke content of the atmosphere in the twon of Zaporozh'ye. The final conclusions on the size distribution of the particles can be drawn on the basis of the conducted measurements of the concentration of the particles suspended in air. These measurements were conducted with an Owens counter for the precipitation of dust. The particles precipitated into a cylinder were counted in a microscope and classified into four groups according to their diameter.: Small particles with a diameter of less than 5μ, medium-sized particles with 5 - 1o μ and with 1o - 2oμ, and large particles with a diameter exceeding 2oμ. The number of particles in each group

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was counted in the measurements. The present communication employs the results of measurements in the new parts of the town at a distance of 3 km from the main sources of industrial smoke production. The samples were taken at a height of 3, 13 and 26 m above the ground. The formulae for the elaboration of the experimental results are given and discussed. The results of the elaboration of the observations are illustrated by a table and by a diagram. According to them, the distribution of the particles to the dimensions is logarithmically normal even in an heterogenous aerosol - in the lower atmospheric strata of an industrial town. The data obtained here permit the computation of the mean geometrical radius r_g of the particles for every level, and of the mean quadratic deviation of the logarithm of the radii. The computations furnish the values 3,6; 3,4 and 3,0μ for r_g at the heights of 3; 13 and 26 m above the ground. The decrease of r_g with increasing height speaks in favour of a reduction of the number of big particles in the higher strata of the atmosphere and also furnishes a quantitative characteristics of this reduction. The data obtained here are also well approximated by the normal logarithmic distribution law. There are 1

FEDOROV, M.M. (Zaporozh'ye)

Apparatus for measuring the size of dust particles. Fiz.v shkole 22 no.6:49-50 N-D '62. (MIRA 16:2)
(Measuring instruments) (Dust)

SYVOROTKIN, G.S.; DMITRIYEVA, Ye.A.; FEDOROV, M.M.

Use of fertilizers for nursery-grown woody plants. Trudy TSNII MPS no.204:151-155 '60. (MIRA 14:4)

(Trees--Fertilizers and manures)

OBLIVAL'NYY, F.A.; LUSHIN, L.A.; SIDOROV, M.T.; FEDOROV, M.M.

Replacing the floor under the central part of the treatment channel. Stek.i ker. 18 no.8:37 Ag '61. (MIRA 14:8)
(Glass furnaces)

FEDOROV, M.N.; LAGERT, I.K.

Use of cysteine in differentiating the bactericidal and bacteriostatic effects of mercury preparations. Zhur.mikrobiol., epid.i immun. 33 no.8:49-51 Ag '62. (MIRA 15:10)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta antibiotikov.

(MERCURY COMPOUNDS) (CYSTEINE)

FEDOROV, M. N., SPRERANSKAYA, V. N., SIYANITSKIY, F. M., SHUSTROV, A. K., ALEKSANDROV, P. M., KLEVANKIN, V. N., BORISKIN, M. M., LIL'F, G. M., ZIL'BERMINTS, I. V., GUDNEVA, O. A., POPOV, S. C., DENISENKO, V. K., KOROVIN, F. T., GUTSEVICH, A. V., FEREFIL'YEV, P. P. and POGODINA, E. A.

"The Effectiveness of a Chemical Method for Combatting Arthropods over Large Areas from Airplanes."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

(Leningrad - Moscow)

FEDOROV, M.N.

Laboratory tests on the simultaneous extermination of rodents and their ectoparasites [with summary in English]. Med.paraz.i paraz. bol. 26 no.1:40-42 Ja-F '57. (MLRA 10:6)

(RODENTS
simultaneous eff. of DDT on rodents & their ectoparasites)
(DDT, eff.
on rodents & their ectoparasites, simultaneous extermination)

FEDOROV, M.N.

Block lining of the furnaces and brickwork of heating boilers made of heat-resistant concrete and reinforced concrete. Sbor. trud. NIIST no.14:17-33 '63.

(MIRA 17:10)

1. FEDOROV, M. N., Engr.

2. SSSR (600)

4. Gates

7. Selecting construction types for gates under a heavy load. Gidr. stroi. 21 No. 10, 1952

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

FEDOROV, M. N.

Operating welded, double-wing sluice gates. Mor.i rech.flot 13 no.1:23-24 My '53. (MLRA 6:10)

(Locks (Hydraulic engineering))

FEDOROV, M.N., inzh.; ALTSHULER, B.A., kand.tekhn.nauk

Fire-resistant reinforced concrete block facing for heating boilers. Gor. khoz. Mosk. 35 no.2:44-45 F '61. (MIRA 14:2)

1. Nauchno-issledovatel'skiy institut santekhniki Akademii stroitel'stva i arkhitektury (for Fedorov). 2. Nauchno-issledovatel'skiy institut betona i zhelezobetona Akademii stroitel'stva i [illegible] (for Al'tshuler).

(Boilers)

ADAMOVICH, P.V.; BATURIN, V.V.; VAKHVAKHOV, G.G.; VAYNGAUZ, L.G.; VILENSKIY, Ye.Ya.; GAMBURG, P.Yu.; DAVYDOV, Yu.S.; KARPIS, Ye.Ye.; KUZNETSOVA, Z.I.; KOP'YEV, S.F.; LIVCHAK, I.F.; LOBACHEV, P.V.; LEV, G.M.; NOTKIN, Ye.M.; PIRUMOV, A.I.; POLIKARPOV, V.F.; PROTOPOPOV, A.P.; REPIN, N.N.; SLADKOV, S.P.; TALIYEV, V.N.; TROITSKAYA, F.B.; FEDOROV, M.N.; SHEVELEV, F.A.; SHKABEL'NIKOVA, L.P.; SHCHOTSKIY, A.I.; SMIRNOV, L.I., inzh., nauchnyy red.; SMIRNOVA, A.P., red. izd-va; MOCHALINA, Z.S., tekhn. red.; RODIONOVA, V.R., tekhn. red.

[Present level and prospects for the development of sanitary engineering and the production of sanitary engineering equipment] Sovremennyi uroven' i perspektivy razvitiia sanitarnoi tekhniki i proizvodstva sanitarno-tekhnicheskogo oborudovaniia. Moskva, Gosstroiizdat, 1962. 283 p. (MIRA 15:8)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut sanitarnoy tekhniki.

(SANITARY ENGINEERING)

DZHAMALOV, O.B., doktor ekon. nauk, GUSEV, Yuriy L'vovich, dots., kand. tekhn. nauk; KOP'YEV, Sergey Fedotovich, prof., doktor tekhn. nauk; ALEKSANDROVICH, Yu.B., retsenzent; FEDOROV, M.N., starshiy inzh., retsenzent; OSENKO, L.M., red. izd-va; RODIONOVA, V.M., tekhn. red.

[Boiler systems and thermal networks]Kotel'nye ustanovki i teplovye seti. Moskva, Gosstroiizdat, 1962. 310 p. (MIRA 16:1)

1. Gosudarstvennyy komitet Soveta Ministrov SSSR po delam stroitel'stva (for Aleksandrovich). 2. Nauchno-issledovatel'skiy institut sanitarnoy tekhniki Akademii stroitel'stva i arkhitektury SSSR (for Fedorov).
(Boilers) (Heating from central stations)

OLESOVA, T.Sh., inzh.; MAKSINA, T.N., inzh., red.; FEDOROV, M.N., kand. tekhn. nauk, red.

[Collection of Soviet and foreign inventions; welding] Sbornik otechestvennykh i inostrannykh izobretenii; svarochnaia tekhnika. Moskva, TSentr. nauchno-issl. in-t patentnoi informatsii i tekhniko-ekon. issledovanii, 1964. 106 p. (MIRA 16:3)

1. Russia (1923- U.S.S.R.) Komitet po delam izobreteniy i otkrytiy.

FEDOROV, M.N., inzh.

Installation of the hydraulic equipment of the basic structures of the Kremenchug power system. Energ.stroi. no.23 :71-78 '61.
(MIRA 15:1)

1. Nachal'nik uchastka tresta "Gidromontazh".
(Kremenchug Hydroelectric Power Station--Hydraulic equipment)

I. KUKUY, ...

AGALINA, M.S., inzh.; AKUTIN, T.K., inzh.; APRESOV, A.M., inzh.; ARISTOV, S.S., kand. tekhn. nauk,; BELOSTOTSKIY, O.B., inzh.; BERLIN, A.Ye.,inzh.; BESSKIY, K.A., inzh.; BLYUM, A.M., inzh.; BRAUN, I.V., inzh.; BRODSKIY, I.A., inzh.; BURAKAS, A.I.,inzh.; VAYNMAN, I.Z., inzh.; VARSHAVSKIY, I.N.,inzh.; VASIL'YEVA, A.A.,inzh.; VORONIN, S.A.,inzh.; VOYTSEKHOVSKIY, L.K., inzh.; VRUBLEVSKIY, A.A.,inzh.; GERSHMAN, S.G., inzh.; GOLUBYATNIKOV, G.A.,inzh.; GORLIN, M.Yu., inzh.; GRAMMATIKOV, A.N., inzh.; DASHEVSKIY, A.P.,inzh.;DIDKOVSKIY, I.L., inzh.; DOBROVOL'SKIY, N.L.,inzh.; DROZDOV, P.F.,kand. tekhn. nauk,; KOZLOVSKIY,A.A.,inzh.; KIRILENKO, V.G.,inzh.; KOPELYANSKIY, G.D.,kand. tekhn. nauk,; KORETSKIY, M.M.,inzh.; KUKHARCHUK, I.N.,inzh.; KUCHER, M.G.,inzh.; MERZLYAK, M.V.,inzh.; MIRONOV, V.V.,inzh.; NOVITSKIY, G.V.,inzh.; PADUN, N.M.,inzh.; PANKRAT'YEV, N.B., inzh.; PARKHOMENKO, V.I.,kand. biol. nauk,; PINSKIY, Ye.A.,inzh.; POLLUBNYY, S.A., inzh.; PORAZHENKO, F.F.,inzh.; PUZANOV, I.G.,inzh.; REDIN, I.P.inzh.; REZNIK, I.S.,kand. tekhn. nauk,; ROGOVSKIY, L.V.,inzh.; RUDERMAN, A.G.,inzh.; RYBAL'SKIY, V.I.,inzh.; SADOVNIKOV, I.S.,inzh.; SEVER'YANOV, N.N.,kand. tekhn. nauk,; SEMESHKO, A.T.,inzh.; SIMKIN, A.Kh., inzh.; SURDUTOVICH, I.N.,inzh.; TROFIMOV, V.I.,inzh.; FEFER, M.M.,inzh.; FIALKOVSKIY, A.M.,inzh.; FRISHMAN, M.S., inzh.; CHERESHNEV, V.A., inzh.; SHESTOV, B.S., inzh.; SHIFMAN, M.I., inzh.; SHUMYATSKIY, A.F.,inzh.; SHCHERBAKOV, V.I.,inzh.; STANCHENKO, I.K., otv. red.; LISHIN, G.L.,inzh.,red.; KRAVTSOV,Ye.P., inzh.,red.; GRIGOR'YEV, G.V.,red.; KAMINSKIY, D.N.,red.; KRASOVSKIY, I.P.,red.; LEYTMAN, L.Z., red.[deceased],; GUREVICH, M.S.,inzh.,red.; DANILEVSKIY, A.S.,inzh.,red.; DEMIN, A.M., inzh.,red.; KAGANOV, S.I.,inzh.,red.; KAUFMAN, B.N., kand. tekhn. nauk, red:.LISTOPADOV, N.P.,inzh.,red.; MENDELEVICH, I.R., inzh.,red.[deceased];

(continued on next card)

AGALINA, M.S.... (continued) Card 2.

PENTKOVSKIY, N.I., inzh., red.; ROZENBERG, B.M., inzh., red.; SLAVIN, D.S., inzh., red.; FEDOROV, M.P., inzh., red.; TSYMBAL, A.V., inzh., red.; SMIRNOV, L.V., red. izd-va.; PROZOROVSKAYA, V.L., tekhn. red.

[Mining ; an encyclopedic handbook] Gornoe delo; entsiklopedicheskii spravochnik. Moskva, Ges. nauchno-tekhn. izd-vo lit-ry po ugol'noi' promyshl. Vol. 3.[Organization of planning; Construction of surface buildings and structures] Organizatsiia proektirovaniia; Stroitel'stvo zdanii i sooruzhenii na poverkhnosti shakht. 1958. 497 p. (MIRA 11:12)

(Mining engineering)
(Building)

SOV/86-58-9-39/42

AUTHOR: Fedorov, M. R.

TITLE: Float Gyroscopes (Poplavkovyye giroskopy)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 9, pp 89-91 (USSR)

ABSTRACT: This is a critical review of the book "Float Gyroscopes and Their Use (Poplavkovyye giroskopy i ikh primeneniye), by G. A. Slomyanskiy, and Yu. N. Pryadilov, State Publishing House of the Defense Industry, Moscow, 1958, 244 pages.

Card 1/1

VODOP'YANOV, I.L., insh.; VOLCHEK, V.I., insh.; FEDOROV, M.T., insh.

Reliability of jaw-type crushing machines. Stroi. i dor. mash. 10 no.10:30-31 O '65. (MIRA 18:10)

L 09906-67 EWT(d)/EWT(m) IJP(c)

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TITLE: Stimulated bremsstrahlung effect in the relativistic region

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ABSTRACT: The stimulated bremsstrahlung effect on relativistic electrons is considered. An expression for the cross section for stimulated emission from a photon is derived for the case of scattering on isolated ions. Its asymptotic form for high energies is derived. The case of electron scattering in a crystal is considered. The conditions for negative absorption are derived. Numerical estimates are presented. It is demonstrated that, in principle, an electromagnetic wave amplification factor $\alpha \sim 3 \cdot 10^2$ cm^{-1} can be obtained for narrow

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beams of ultrafast electrons ($\Delta\varphi \leq 10^{-4}$, $\varepsilon > 10^6$ mc^2) scattered in a crystal. The author expresses his sincere gratitude to F. V. Bunkin for suggesting the problem and for discussions. Orig. art. has: 23 formulas. [Author's abstract]

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