

L 9495-66

ACC NR: AP5028466

SUB CODE: 09/ SUBM DATE: 29Aug63/ ATD PRESS: 4167

Card 212

L 7993-66

ACC NR: AP5026564

SOURCE CODE: UR/0286/65/000/019/0127/0127

AUTHORS: Lebedev, O. Ye.; Levina, G. N.; Lepekhina, V. T.; Libman, M. L.;
Martynkevich, G. M.; Ozerov, L. N.

ORG: none

TITLE: Arrangement for protecting and uncovering evacuated gauge of a device.
Class 62, No. 175398 /announced by Special Construction Bureau of the Analytic
Instrument Construction, AN SSSR (Spetsialnoye konstruktorskoye byuro
analiticheskogo priborostroyeniya AN SSSR) /

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 19, 1965, 127

TOPIC TAGS: vacuum, vacuum measurement, vacuum seal 17

ABSTRACT: This Author Certificate introduces an arrangement for protecting and uncovering an evacuated gauge of a device while introducing the gauge into the investigated medium (see Fig. 1). The arrangement contains a sealed hood connected to the nipple of the device and a mechanism for destroying this hood. To make sure that the investigated medium enters the gauge and to protect the gauge from damage while it is being uncovered, the hood is made up of two metallic parts fixed to one another and to the nipple with airtight glass seams. The parts of the hood are also provided with earlike holders which are connected to the hood-destroying mechanism.

Card 1/2

UDC: 629.19:621.3.083.8:543.27

L 7993-66

ACC NR: AP5026564

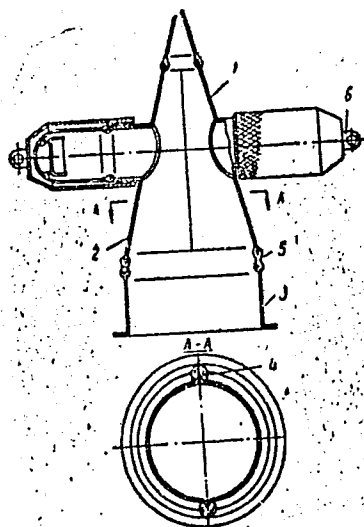


Fig. 1. 1 and 2- hood; 3- nipple of the device; 4 and 5- glass seams; 6- ears

Orig. art. has: 1 figure.

SUB CODE: IE/ SUBM DATE: 12Oct64
nw

Card 2/2

LEBEDEV, P., kand.veterinarnykh nauk

Buildings for raising calves with rotation of groups under conditions
prevailing in Siberia. Sel'. stroi. no.5:10-11 My '62. (MIRA 15:7)
(Calves) (Siberia--Farm buildings)

LEEDEV, P.

On ship and train. Sov.profsoiuzy 19 no.2:21 Ja '63.

(MIRA 16:2)

1. Direktor ochno-zaochnoy shkoly No.1 Oktyabr'skoy zheleznoy dorogi, Leningrad.

(Railrads--Employees--Education and training)

(Leningrad--Correspondence schools and courses)

LEBEDEV, P. [Lebedev, P.]

Investigations concerning the compressive force of light. Magyar fizikai folyoir 8 no.4:335-354 '60. (EBAI 10:2)

1. Egyetemi Fizikai Laboratorium, Moszkva.
(Light)

LEBEDEV, P.A.

"The Stability of Transient Motion During a Finite Time Interval,"
Trudy Moskovskogo Aviatsionnogo Instituta //Proceedings, Moscow Institute
of Aviation/ , Fascicle 50, Oborongiz Publishing House, 1955

All-Leningrad Seminar on the Theory of Automatic Control (1955-1956)

25(1)

SOV/159-58-3-6/31

AUTHOR: Lebedev, P.A.

TITLE: An Analytical Method of Investigating the Kinematics of Mechanisms With Plane-Moving Curvilinear Links

PERIODICAL: Nauchnyye doklady vysshey shkoly, Mashinostroyeniye i priborostroyeniye, 1958, Nr 3, pp 34-43 (USSR)

ABSTRACT: In this article the author explains a new analytical method for investigating the kinematics of flat, four-link mechanisms, whose connection rod is represented by a curvilinear link, whereby the symmetry axis of the slot of the latter is given by an equation of the corresponding function. Such mechanisms are found in machines and equipment produced in the USSR, for example in the feeders of the snow loaders of types G-3 and 2S-3, in the rotary mechanism of decade step selectors of automatic telephone exchanges and in the link mechanisms of motion picture projectors. For calculating such mechanisms, the known applications of analytical calculations are inadequate. The author based his method of analytical investigation on

Card 1/3

SOV/159-58-3-6/31

An Analytical Method of Investigating the Kinematics of Mechanisms
With Plane-Moving Curvilinear Links

plane kinematic geometry (Ggiyevetskiy, 1931). This method permits expressing all kinematic parameters of mechanisms in algebraic equations. For his method, the author uses the following theorem: if two points are given, A $\{(x_A, y_A), (\dot{x}_A, \dot{y}_A)\}$ and C $\{(x_C, y_C), (\dot{x}_C, \dot{y}_C)\}$ in two rectangular coordinate systems located in one plane, the angle of rotation of the coordinate axes is determined by the formula:

$$\theta = \text{arc tg} \frac{(y_C - y_A)(\dot{x}_C - \dot{x}_A) - (x_C - x_A)(\dot{y}_C - \dot{y}_A)}{(x_C - x_A)(\dot{x}_C - \dot{x}_A) + (y_C - y_A)(\dot{y}_C - \dot{y}_A)}$$

The author proves this theorem and develops the equation for the aforementioned mechanisms. Figure 3-6 show diagrams of the parameter changes of the kinematics of feeder mechanisms of loaders during the period

Card 2/3

SOV/159-58-3-6/31

An Analytical Method of Investigating the Kinematics of Mechanisms
With Plane-Moving Curvilinear Links

of one turn of the crank. There are 6 diagrams and
5 Soviet references.

This article was presented by the
Kafedra "Teoriya mekhanizmov i mashin" Leningradskogo
tekstil'nogo instituta (Chair "Theory of Mechanisms
and Machines" of the Leningrad Textile Institute)

SUBMITTED: March 24, 1958

Card 3/3

LEBEDEV, P. A.

Bee Culture

Increasing the firmness of comb foundations Pchelovodstvo 29, no. 6, June 1952

9. Monthly List of Russian Accessions, Library of Congress, August ² 195~~3~~, Uncl.

LEBEDEV, P. A.

23117 eshche o prioritete russkoy tekhnicheskoy nauki. (O Zakone
Drobleniya E. L. Kirpicheka). Mekhanizatsiya Stroit-Va, 1949
No. 7, C. 1-2.

SO: LETOPIS' NO. 31, 1949

LEBEDEV, P.A.

PHASE I BOOK EXPLOITATION

SOV/4137

Akademiya nauk SSSR. Institut mashinovedeniya. Seminar po tochnosti v mashinostroyenii i priborostroyenii

Trudy, vyp. 14 (Transactions of the Institute of Machine Science, Academy of Sciences USSR. Seminar on Accuracy in Machinery and Instrument Manufacture, no. 14) Moscow, 1960. 84 p. Errata slip inserted. 2,200 copies printed.

Editorial Board: N.G. Bruyevich (Resp. Ed.), Academician; G.G. Baranov, Doctor of Technical Sciences; M.L. Bykhovskiy, Doctor of Technical Sciences; A.P. Vladzhiyevskiy, Doctor of Technical Sciences; B.G. Dostupov, Doctor of Technical Sciences; M.I. Kochenov, Candidate of Technical Sciences; Yu. V. Lyubotov, Candidate of Technical Sciences; D.N. Reshetov, Doctor of Technical Sciences; V.I. Sergeyev, Candidate of Technical Sciences; and A.S. Shatalov, Doctor of Technical Sciences; Ed. of Publishing House: P.F. Zolotov; Tech. Ed.: S.G. Markovich.

PURPOSE: This collection of articles is intended for scientific workers and design engineers.

Card 1/4

Transactions of the Institute (Cont.)

80V/4137

COVERAGE: The book contains articles dealing with the accuracy of the rotating mechanism in a ten-position selector for the dial-telephone system, with bridge-type computing and measuring devices, with calculation of allowances for turbine blades, and with investigations of linear electric circuits and accuracy in automatic machining of bearing rings. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

- Lebedev, P.A. Investigation of the Accuracy of the Mechanism for Revolving the Ratchet Cylinder of a Ten-Position Selector of the Dial-Telephone System 3
The author discusses the construction and operating principles of the ten-position selector used in the dial-telephone system and presents an approximate analytical method for determining kinematic parameters of the mechanism and errors in the ratchet-pawl engagement.
- Sergeyev, V.I. Effect of Inertia Loads, Dry Friction, and Backlash on Performance of Bridge-Type Computing and Measuring Instruments 20
The author presents an analytical method for determining control time and overshoot for a bridge-type multiplier with automatic actuation. The effect of inertia loading, dry friction, and backlash in gear-type speed reducer are taken into account.

Card 2/4

Transactions of the Institute (Cont.)

80V/4137

Matevosyan, P.A. Investigating the Accuracy of Complex Devices
With Closed Circuits

35

The author investigates some problems of the accuracy of complex mechanical and electronic devices with closed circuits [kinematic chains of gear-cutting machines, mechanical and electronic computers of implicit functions, etc.]. The interrelation between input and output parameters of these circuits is described by algebraic equations. The accuracy and errors of the whole system are calculated from known accuracies and errors of component elements.

Fridlender, I.G. Methods of Check Calculations of Tolerances for Turbine-
Rotor Blades

44

A method is presented for calculating dimensional tolerances and for determining physical-mechanical properties for turbine-rotor blades in order to insure the natural dynamic frequency of the blades in a speed range far enough from the operating speed to avoid resonance. Analytical and experimental methods for determining the values of partial derivatives of basic equations and vibration intensification coefficients (showing the effect of dimensional and physical-mechanical changes of blades on their natural frequency) are discussed.

Card 3/4

Transactions of the Institute (Cont.)

SOV/4137

Lyubotov, Yu. V. On a Method of Determining Errors in Linear Electric Circuits With Resistance Elements

69

The term errors here means the difference between nominal and actual values of parameters. The author presents an analytical method for determining coefficients showing the influence of errors and inaccuracies in assembling (parasitic parameters) on the functioning of linear resistance circuits.

Likhacheva, Ye. A., and V.I. Sergeyev. Investigation of Some Accuracy Problems in Machining Bearing Rings on Transfer Machines

76

The authors examine (by means of mathematical statistics) the interrelation between errors of the following and preceding operations in centerless grinding of tracks of external rings of rolling-contact bearings. It is claimed to be the first attempt to describe certain statistical regularity patterns for the operation of a group of automatic grinders used for the machining of rings.

AVAILABLE: Library of Congress

Card 4/4

VK/pw/mas
10-25-60

POLYAKOV, Vladimir Sergeevich; BARBASH, Iosif Davidovich; LEBEDEV,
P.A., kand.tekhn.nauk, retsenzent; MARKOV, V.G., kand.tekhn.
nauk, red.; SIMONOVSKIY, N.Z., red.izd-va; SPERANSKAYA, O.V.,
tekhn.red.

[Clutches; design and construction] Mufty; konstruksii i
raschet. Izd.2., dop. i perer. Moskva, Gos.nauchno-tekhn.izd-vo
mashinostroit.lit-ry, 1960. 346 p. (MIRA 13:3)
(Clutches (Machinery))

LEBEDEV, P.A.; MARKEVICH, A.A.

Determining inertia moments of coiled springs. Izv.vys.ucheb.
zav.; tekhn.tekst.prom. no.2:134-137 '59. (MIRA 12:6)

1. Leningradskiy tekstil'nyy institut im. S.M.Kirova.
(Textile machinery--Testing)
(Moments of inertia)

LEBEDEV, P.A.

Determining positions of three-dimensional mechanisms
consisting of two-driver groups. Trudy Inst.mash. Sem. po
teor.mash. 21 no.83-84:78-102 '61. (MIRA 14:6)
(Mechanical movements)

FOTEYEV, S.P., otv.red.; LEBEDEV, P.A., red.; GOLUB, N.V., red.;
DOYCHENKO, G.P., red.; IKHEL'ZON, S.M., red.; MARKOV, I.G.,
red.; SAF'YAN, A.Yu., red.; MARKUSIK, N., red.; SHAFETA, S.,
tekhn.red.

[Latest developments in woodpulp and paper production] Novoe
v tselliulozno-bumazhnom proizvodstve. Kiev. Gos.izd-vo
tekhn.lit-ry USSR, 1960. 93 p. (MIRA 14:3)

1. Ukrainskiy nauchno-issledovatel'skiy institut tsellyuloznoy
i bumazhnoy promyshlennosti.
(Woodpulp)

KOLCHIN, Nikolay Ioasafovich, zasl. deyatel' nauki i tekhniki RSFSR, doktor tekhnicheskikh nauk, prof.; MARKEVICH, A.A., kand. tekhn. nauk, retsenzent; LESEDEV, P.A., kand. tekhn. nauk, retsenzent; GARBARUK, V.N., kand. tekhn. nauk, red.; VASIL'YEVA, V.P., red. izd-va; ONISHCHENKO, R.N., red. izd-va; POL'SKAYA, R.G., tekhn. red.

[Mechanical engineering] Mekhanika mashin. Moskva, Mashgiz. Vol.1. [Structure and kinematics of mechanisms. Geometrical and kinematic analysis and synthesis of mechanisms] Struktura i kinematika mekhanizmov, geometricheskii i kinematicheskii analiz i sintez mekhanizmov. Izd.2., perer. 1962. 549 p. (MIRA 15:3)

(Mechanical engineering) (Mechanical movements)
(Gearing)

LEBEDEV, P.A.

Kinematics of the three-dimensional mechanism of the harness
lifting dobbies on looms. Izv.vys.ucheb.zav.; tekhn.tekst.prom.
no.3:135-142 '61. (MIRA 14:7)

1. Leningradskiy tekstil'nyy institut im. S.M. Kirova.
(Looms)

LEBEDEV, P.A.

Analytic determination of the parameters of kinematics of flat
bar linkages. Trudy Inst.mash.Sem.po teor.mash. 22 no.87:
21-30 '61. (MIRA 14:3)
(Mechanical movements)

LEBEDEV, P.A., kand.tekhn.nauk

Determining kinematic parameters for some plane four-bar linkages.
Izv.vys.ucheb.zav.; mashinostr. no.2:59-69 '62. (MIRA 15:5)

1. Leningradskiy tekstil'nyy institut.
(Links and link motion)

LEBEDEV, P.A.

Analytic determination of displacements of three-dimensional
three-bar linkages with adjoining levers. Izv.vys.ucheb.zav.;
prib. 5 no.4:115-119 '62. (MIRA 15:9)

1. Leningradskiy tekstil'nyy institut imeni S.M.Kirova.
Rekomendovana kafedroy detaley mashin.
(Mechanical movements)

LEBEDEV, P.A., kand.tekhn.nauk, dotsent

Kinematics of a three-dimensional crankgear. Izv.vys.ucheb.zav.;
mashinostr. no.6:11-15 '62. (MIRA 15:11)

1. Leningradskiy tekstil'nyy institut.
(Mechanical movements)

ANANOV, G.D., doktor tekhn. nauk; LEBEDEV, P.A., kand. tekhn. nauk,
red.; BARDINA, A.A., tekhn. red.

[Kinematics of three-dimensional hinged mechanisms of agricultural machines] Kinematika prostranstvennykh sharnirnykh mekhanizmov sel'skokhoziaistvennykh mashin. Moskva, Mashgiz, 1963. 219 p. (MIRA 16:9)
(Agricultural machines--Transmission devices)

MASHNEV, M.M.; KRASKOVSKIY, Ye.Ya.; LEBEDEV, P.A.; ROMADIN, I.S.;
VLADIMIROV, V.M., red.; FUFAYEVA, G.I., red.izd-va;
BARANOV, Yu.V., tekhn. red.

[Theory of mechanisms and machines and machine parts] Teo-
riia mekhanizmov i mashin i detali mashin. Vladimir, Rosvuz-
izdat, 1963. 446 p. (MIRA 16:11)

(Machinery--Design and construction)

(Mechanisms--Design and construction)

LEBEDEV, P.A.

Determining the displacements of mechanisms with contacting levers.
Izv.vys.ucheb.zav.; prib. 6 no.3:134-142 '63. (MIRA 16:9)

1. Leningradskiy tekstil'nyy institut imeni S.M.Kirova. Rekomendovana
kafedroy teorii mekhanizmov i mashin.

LEBEDEV, P.A.

On an application of the curvilinear integrals in mechanics.
Studii cerc mec apl 14 no.4:937-945 '63.

1. Institutul de textile "M. Kirov", Leningrad.

RUZINOV, L.D.; LEBEDEV, P.A., kand. tekhn. nauk, retsenzent;
VUL'FSON, I.I., kand. tekhn. nauk, retsenzent; VAL'KOVSKIY,
A.A., kand. tekhn. nauk, red. [deceased]

[Design of mechanisms based on geometric transformations]
Proektirovanie i raschet mekhanizmov na osnove geometri-
cheskikh preobrazovanii. Moskva, Mashinostroenie, 1964.
147 p. (MIRA 17:12)

KOPYLOV, B.F.; LEBEDEV, P.A.; CHERDANTSEVA, M.V. (Leningrad)

"Small-base semiconductor film transformers as applied to the investigation of dynamic parameters of mechanisms".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

LEBDEV, P.A.; ORESTOVA, A.V.

Determining the parameters of the movement of batten mechanisms.
Izv. vys. ucheb. zav.; tekhn. tekst. prom. no.6:123-130 '64.
(MIRA 18 3)
1. Leningradskiy institut tekstil'noy i legkoy promyshlennosti
imeni Kirova.

LEBEDEV, P.A.; YEFRON, A.I.

Plane oscillations of a connecting rod with variable cross section
and curvilinear axis of symmetry. Bul Inst Politeh 26 no.5:23-37
S-O '64

1. Leningrad Textile Institute.

LEBEDEV, P.A.; SIDOROV, N.G.

Studying the interaction between a crawler tractor and the ground
in turns. Trakt. i sel'khoz mash. no.3:7-10 Mr '65.

(MIRA 18:5)

LEBEDEV, P.A.

Theory of screw kinematic pairs. Teor. mash. i mekh. no. 96/97:
5-18 '63. (MIRA 17:1)

SHANOVA, Lyubov' Grigor'yevna; LEBEDEV, P.B., red.; MEDVEDEVA, R.A.,
tekh. red.; YELAGIN, A.S., tekh. red.

[A party committee and the brigades of communist labor] Partinyi
komitet i brigady kommunisticheskogo truda. Moskva, Izd-vo
"Sovetskaya Rossiya," 1960. 78 p. (MIRA 14:7)

1. Zamestitel' sekretarya partkoma Novosibirskogo metallurgicheskogo
zavoda imeni A.N.Kuz'mina (for Shpanova)
(Novosibirsk--Steel industry)

LARIONOV, Aleksey Nikolayevich; LEBEDEV, P.B., red.; LUKINA, L.Ye., tekhn. red.

[School and life; practices of the party organization in Ryazan Province] Shkola i zhizn'; iz opyta raboty Riazanskoj oblastnoi partiinoi organizatsii. Moskva, Izd-vo "Sovetskaja Rossiia," 1958. 61 p.
(MIRA 11:12)

1. Pervyy sekretar' Ryazanskogo oblastnogo komiteta KPSS (for Larionov)
(Education, Cooperative)
(Ryazan Province--Agriculture)

KOROLEV, Vladimir Pavlovich; LEBEDEV, P.B., red.; YELAGIN, A.S.,
tekhn.red.

[Rural Communists and the problems of farm mechanization]
Sel'skie kommunisty i voprosy mekhanizatsii sel'skogo kho-
ziaistva. Moskva, Izd-vo "Sovetskaya Rossiya," 1960. 43 p.
(MIRA 13:7)
(Serpukhov District--Farm mechanization)

BOL'SHAKOVA, Valentina Pavlovna, doyarka; LEBEDEV, P.B., red.; YELAGIN,
A.S., tekhn.red.

[My experience in increasing the milk yield of primipara heifers]
Moi opyt razdoia pervotelok. Moskva, Izd-vo "Sovetskaia Rossia,"
1961. 15 p. (MIRA 14:6)

1. Kolkhoz imeni Lenina Lyubytinskogo rayona Novgorodskoy oblasti
(for Bol'shakova).
(Dairying)

POPOV, Aleksandr Mikhaylovich, svinar'-mekhanizator; LEBEDEV, P.B., red.;
KLYUCHEVA, T.D., tekhn.red.

[Producing 646 kilograms of pork every day] Kazhdyi den' 646 kilo-
grammov svininy. Moskva, Izd-vo "Sovetskaia Rossiia," 1961. 19 p.
(MIRA 14:6)

1. Sovkhoz "Borovichanin" Novgorodskoy oblasti (for Popov).
(Novgorod Province—Swine)

LEBEDEV, P.B., otv. za vypusk.

[Leading agricultural workers talk about their experience; materials of the Conference of Leading Agricultural Workers of Siberia, Novosibirsk, 1961] Peredoviki sel'skogo khoziaistva o svoem opyte; materialy soveshchaniia peredovikov sel'skogo khoziaistva Sibiri, Novosibirsk, 1961. Moskva, Izd-vo "Sovetskaia Rossiia," 1961. 162 p. (MIRA 14:7)

1. Soveshchaniye peredovikov sel'skogo khoziaistva Sibiri, Novosibirsk, 1961.

(Siberia--Agriculture)

DROTI, N.; LEBEDEV, P.D.

Extrapleural pneumothorax in pulmonary tuberculosis. Probl. tub.
no. 2:40-44 Mr-Ap '54. (MLRA 7:5)

1. Iz tuberkuleznogo sanatorija (glavnyy vrach N. Droti) v Tirane
(Albania).

(PNEUMOTHORAX, ARTIFICIAL,
*extrapleural)

LOBEDEV, F. D. and A. A. SHCHUKIN,

Fabrichno-zavodskaya teplotekhnika. Dop. v kachestve uchebn. posobiya dlia energeticheskikh vuzov i fakul'tetov. Moskva, Gosenergoizdat, 1948. 272 p. diagrs.

Bibliography: p. 370

(Industrial thermotechnics.)

DLC: TJC65.L37

CU CtY MH

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

IMINEV, T. D.

36062 Provoz elektornaya kholodil'naya ustroystva. Za ekhvat'yu t.p.l'va, 1949, No. 11,
S. 33-34

SO: Letopis' Zhurnal'nykh Statey, Vol. 45, 1949

LEBEDEV, P. D.

157T28

USSR/Electricity - Synchronous Machines Generators, Thermal Protection Jan 50

"Investigation of Heat Transfer in Electric Machines," Docent V. V. Yen'ko,
Cand Tech Sci, Docent P. D. Lebedev, Cand Tech Sci, Moscow Power Eng Inst
imeni Molotov, 6 pp

"Elektrichestvo" No 1

Gives results of experimental investigation of heat transfer from head parts of stator winding. Investigations were carried out on synchronous generator winding and in aerodynamic tube (at various air-flow velocities). Results showed previous formulas obtained by authors and other investigators were not entirely correct due to considerable turbulence of flow occurring in this region of the stator. As result of present investigation on actual generator, more accurate formulas were obtained. Submitted 12 Oct 49.

PA 157T28

LESEDEV, F. D.

Drying apparatus; textbook. Moskva, Gos. energ. izd-vo, 1952. 264 p. (54-18,40)

IP363.F5

LEBEDEV, P. D.

7585 LEBEDEV, P. D. Generatory tepla dlya radiatsionny kh sushil'nykh ustanovok. M-L, Gosenergoizdat, 1954. (1), 56 s. s ill. 20 sm. (M-vo elektrostantsiy SSSR. Gos. inspektsiya po promenergetike i energonadzoru. Inform. pis' mo. No. 1/27) 5.5000 ekz. 1 r. 60 k. Avt. ukazan na 2-y s. obl. - Bibliogr: S. 55-56 (34 nazv.) (55-664 zh)

66.047 + (016.3)

SO: Knizhnaya LeTopis, Vol. 7, 1955

LEBEDEV, Planteleymon Dmitriyevich; VERBA, M.I., redaktor; LARIONOV,
G.I., tekhnicheskiiy redaktor.

[Drying by infra-red rays] Sushka infrakrasnymi luchami. Moskva.
Gos. energ. izd-vo, 1955. 231 p. (MLRA 8:8)
(Infrared rays--Industrial application)
(Drying apparatus)

LEBEDEV, Panteleymon Dmitriyevich; SHCHUKIN, Aleksey Aleksandrovich;
MURZAKOV, V.V., redaktor; FRIDKIN, A.M., tekhnicheskij redaktor

[Industrial heat engineering] Promyshlennaya teplotekhnika. Izd.
2-oe, perer. Moskva, Gos. energ. izd-vo, 1956. 384 p. (MLRA 9:9)
(Heat engineering)

LEBEDEV, P. D.

AID P - 4366

Subject : USSR/Heat Engineering
Card 1/1 Pub. 110-a - 11/19
Author : Lebedev, P. D., Dr. Tech. Sci. Prof. Moscow Power
Institute
Title : Some problems on the method of experimental research
on heat-transfer and mass-exchange.
Periodical : Teploenergetika, 4, 44-48, Ap 1956
Abstract : A review of the design of instruments and installations
recently devised for research on the transfer of heat
and matter in heat exchangers. Six diagrams. Ten
Russian references, 1947-1955; one, 1954 English ref-
erence.
Institution : None *Moscow Power Engineering Inst.*
Submitted : No date

LEBEDEV, P.D., doktor tekhnicheskikh nauk.

Development of drying processes. Prom.energ. 11 no.2:5-6 F '56
(Drying) (MLRA 9:6)

LEBEDEV, P. D. (Doctor of Technical Sciences)

Moscow. Energeticheskii institut

Istoriya energeticheskoy tekhniki SSSR v trekh tomakh. t. 1: Teplotekhnika
(History of Power Engineering in the USSR in Three Volumes. v. 1: Heat Engineering)
Moscow, Gosenergoizdat, 1957, p. 479, 5,000 copies printed.

Ed.-Compiler: Konfederatov, I. Ya., Doctor of Technical Sciences; Authors: Badyl'kes, I. S., Doctor of Technical Sciences; Belinsky, S. Ya., Candidate of Technical Sciences; Gimmel'farb, M. L., Candidate of Technical Sciences; Kalafati, D. H., Candidate of Technical Sciences; Kertselli, L. I., Professor; Kovalev, A. P., Doctor of Technical Sciences; Konfederatov, I. Ya., Doctor of Technical Sciences; Lavrov, V. N., Doctor of Technical Sciences; Lebedev, P. D., Doctor of Technical Sciences; Lukinskiy, V. V., Doctor of Technical Sciences (deceased); Petukhov, B. S., Doctor of Technical Sciences; Satanovskiy, A. Ye., Doctor of Technical Sciences; Semenenko, N. A., Doctor of Technical Sciences; Smel'nitskiy, S. G., Candidate of Technical Sciences; Sokolov, Ye. Ya., Doctor of Technical Sciences; Chistyakov, S. F., Candidate of Technical Sciences, and Shcheglyayev, A. V., Corresponding Member, USSR Academy of Sciences; Editorial Board of set: Bel'kind, L. D., Doctor of Technical Sciences; Glazunov, Doctor of Technical Sciences; Golubtsova, V. A., Doctor of Technical Sciences; Zolotarev, T. L., Doctor of Technical Sciences; Iabash, S. V., Doctor of Technical Sciences; Kirillin, V. A., Corresponding Member,

USSR Academy of Sciences; Konfederatov, I. Ya., Doctor of Technical Sciences; Margulova, T. Kh., Doctor of Technical Sciences; Meshkov, V. V., Doctor of Technical Sciences; Petrov, G. N., Doctor of Technical Sciences; Sirotnskiy, L. I., Doctor of Technical Sciences; Styrikovich, M. A., Corresponding Member, USSR Academy of Sciences; and Shneyberg, Ya. A., Candidate of Technical Sciences. Ed.: Matveyev, G. A., Doctor of Technical Sciences; Technical Ed.: Medvedev, L. Ya.

PURPOSE: The book is intended for technicians in all branches of heat engineering.

COVERAGE: This book presents the development of the basic branches of heat engineering in the Soviet Union and it is the first volume of 3 volumes entitled History of Power Technology in the USSR. The first chapter gives a concise history of the development of heat engineering from its very beginning to the middle of the 19th Century when the fundamentals of the theoretical heat engineering were established. A detailed description of the development of heat engineering in pre-Revolutionary Russia is given in Ch. 2 to 5 and its status before 1917 is described. In the main part of the volume, Ch. 6 to 16, the development of various branches of the Soviet heat engineering is presented. The theoretical fundamentals of heat engineering, of manufacturing boilers, turbine installations of heat power plants, district heating, heat control, automation of thermal processes, and cooling techniques are covered extensively. Each chapter is supplemented with a bibliography. The book is illustrated with photographs, charts and diagrams, worked out by the authors of the respective chapters. At the end of the book there is a chronological list of significant events in the development of heat engineering.

Lebedev, P.D.

GERASIMOV, S.G., professor, redaktor; KAGAN, Ya.A., kandidat tekhnicheskikh nauk, redaktor; ~~LEBEDEV, P.D.~~, professor, glavnyy redaktor; LUKNITSKIY, V.V., professor, redaktor [deceased]; SHEYNDLIN, A.Ye., professor, redaktor; AYZENSHTAT, I.I., redaktor; VORONIN, K.P., tekhnicheskii redaktor

[Heat engineering handbook] Teplotekhnicheskii spravochnik. Moskva, Gos.energ.izd-vo. Vol.1. 1957. 728 p. (MLRA 10:9)
(Heat engineering)

LEBEDEV, P.D.

3-12-17/27

AUTHOR: Lebedev, I.I.

TITLE: The Scientific-Methodical Conference on Automation and Telemechanization (Nauchno-metodicheskaya konferentsiya po avtomatizatsii i telemekhanizatsii)

PERIODICAL: Vestnik Vysshey Shkoly, 1957, # 12, pp 77 - 79 (USSR)

ABSTRACT: Analyses of present training conditions in the fields of automation and telemechanization of technological processes revealed that the educational programs of these special disciplines do not provide the engineers with sufficient knowledge in the field of technology dealing with the production of automatic, telemechanical and measuring devices.

A scientific methodical conference was convened in June 1957 by the USSR Ministry of Higher Education. Present were vuz professors and teachers and leading workers of specialized enterprises. The plenary sessions dealt with the following reports: P.D. Lebedev on the conditions of engineering training in the fields of automation, telemechanization, measuring technics and calculation devices. N.S. Torochesnikov on engineering training in the automation and telemechanization of chemical production. Three directions are distinguished in the training of en-

Card 1/2

AVAIL
Card

Congress

...atus. For the expansion of auto-
... instrument designing must be or-

000000000001

LEBEDEV P.D.

LEBEDEV, P.D.

14(1); 15(6) PHASE I BOOK EXPLOITATION SOV/1499

Технически справочник, т. 2 (Heat Engineering Handbook, Vol. 2) Moscow, Gosenergoizdat, 1958. 672 p. 40,000 copies printed.

Compilers (All Instructors of the Moscow Power Institute):
 V.V. Luchitskiy, Doctor of Technical Sciences (Deceased);
 Ye. Ya. Sokolovskiy, Doctor of Technical Sciences; P.D. Lebedev,
 Doctor of Technical Sciences; M. V. Lavrov, Doctor of Technical
 Sciences; G.P. Ivantsov, Candidate of Technical Sciences;
 B.M. Golubkov, Candidate of Technical Sciences; A.M. Shcherbyuk,
 Candidate of Technical Sciences; S.P. Mikitin, Candidate of Technical
 Sciences; S.F. Chistyakov, Candidate of Technical
 Sciences; Ye. G. Dudnikov, Doctor of Technical Sciences; A.M.
 Bakhatov, Candidate of Technical Sciences; Ed.: I.I. Ayzenshtat;
 Tech. Ed.: K.F. Voronin, and G.Ye. Lariouov; Eds. of Set:
 S.G. Gerasimov, Professor; Ye. A. Magan, Dozent; P.D. Lebedev,
 Professor (Chief Ed.) and V.V. Luchitskiy, Professor (Deceased).

Card 1/6

Heat Engineering (Con.) SOV/1499

PURPOSE: This book is intended for students of power engineering and polytechnical vuzs. It may also be used by engineering and technical personnel engaged in the design, construction and operation of thermal equipment of thermoelectric power stations and industrial plants.

COVERAGE: This is the second volume of a two-volume heat-engineering handbook compiled by a group of professors and docents of the Moscow Power Engineering Institute. This volume deals with the thermoelectric power plants, heating and heat-insulating systems, automatic control of thermal processes. Special chapters are devoted to boiler materials, piping and other equipment. Brief information on the following subjects is given: heat-exchangers, evaporating and fractionating equipment, refrigeration systems and heat pumps, industrial furnaces, production, transportation and storage of fuel gases, pumps, fans, compressors, hoisting and transporting mechanisms, and temperature, pressure and flow measuring instruments. Standard graphical symbols for heat-power plant equipment and instruments and also the latter symbols and corresponding dimensions of various engineering quantities are given. Changes in the GOST (All-

Card 2/6

LEBEDEV, P.D., doktor tekhn. nauk, prof.; SOROKIN, A.F., doktor tekhn. nauk, prof.

Mechanism of heat and mass transfer in boiling solutions. Izv. vys. ucheb. zav.; energ. no. 1:80-85 Ja '58. (MIRA 11:7)

1. Moskovskiy energeticheskiy institut (for Lebedev). 2. Ivanovskiy energeticheskiy institut im. V.I.Lenina (for Sorokin).
(Heat--Transmission) (Mass transfer) (Solution(Chemistry))

14(1); 15(6)

PHASE I BOOK EXPLOITATION

SOV/1499

Teploekhnicheskiiy spravochnik, t. 2 (Heat Engineering Handbook, Vol. 2) Moscow, Gosenergoizdat, 1958. 672 p. 40,000 copies printed.

Compilers (All Instructors of the Moscow Power Institute);
V.V. Luknitskiy, Doctor of Technical Sciences (Deceased);
Ye.Ya. Sokolov, Doctor of Technical Sciences; P.D. Lebedev,
Doctor of Technical Sciences; M.L. Gimmel'farb, Candidate
of Technical Sciences; N.V. Lavrov, Doctor of Technical
Sciences; G.P. Ivantsov, Candidate of Technical Sciences;
B.N. Golubkov, Candidate of Technical Sciences; A.N. Sherstyuk,
Candidate of Technical Sciences; S.P. Nikitin, Candidate of
Technical Sciences; S.F. Chistyakov, Candidate of Technical
Sciences, Ye.G. Dudnikov, Doctor of Technical Sciences; A.M.
Baklastov, Candidate of Technical Sciences; and M.I. Berba,
Candidate of Technical Sciences. Ed.: I.I. Ayzenshtat;
Tech. Ed.: K.P. Voronin, and G.Ye. Larionov; Eds. of Set:
S.G. Gerasimov, Professor; Ya.A. Kagan, Docent; P.D. Lebedev,
Professor (Chief Ed.) and V.V. Luknitskiy, Professor (Deceased).

Card 1/6

Heat Engineering (Con.)

SOV/1499

PURPOSE: This book is intended for students of power engineering and polytechnical vuzes. It may also be used by engineering and technical personnel engaged in the design, construction and operation of thermal equipment of thermoelectric power stations and industrial plants.

COVERAGE: This is the second volume of a two-volume heat-engineering handbook compiled by a group of professors and docents of the Moscow Power Engineering Institute. This volume deals with thermo-electric power plants, heating and ventilating systems, industrial plant thermal equipment, heat measuring instruments and automatic control of thermal processes. Special chapters are devoted to boiler materials, piping and other equipment. Brief information on the following subjects is given: heat-exchangers, evaporating and fractionating equipment, refrigeration systems and heat pumps, industrial furnaces, production, transportation and storage of fuel gases, pumps, fans, compressors, hoisting and transporting mechanisms, and temperature, pressure and flow measuring instruments. Standard graphical symbols for heat-power plant equipment and instruments and also the letter symbols and corresponding dimensions of various engineering quantities are given. Changes in the GOST (All-

Card 2/6

Heat Engineering (Cont.)

SOV/1499

Union State Standards) which occurred after compilation of the handbook are noted. No personalities are mentioned. References appear at the end of each chapter.

TABLE OF CONTENTS:

Foreword	3
PART 2. HEAT POWER (Continuation)	5
Section 3. Electric Power Plants. Heating Networks	
Ch. 18. Thermoelectric Power Plants	5
Ch. 19. Heating Networks and Systems	69
PART 3. THERMAL EQUIPMENT FOR INDUSTRIAL PLANTS	116
Ch. 20. Heat Exchangers	116
Card 3/6	

Heat Engineering (Cont.)	SOV/1499	
Ch. 21. Evaporating and Fractionating Installations		156
Ch. 22. Driers		184
Ch. 23. Refrigeration Systems and Heat Pumps		235
Ch. 24. Production, Supply and Industrial Storage of Fuel Gases		274
Ch. 25. Industrial Furnaces		312
Ch. 26. Heating and Ventilating Systems		346
PART 4. AUXILIARY EQUIPMENT FOR INDUSTRIAL PLANTS		379
Ch. 27. Pumps, Fans, and Compressors		379
Ch. 28. Hoisting and Transporting Mechanisms		421
Card 4/6		

Heat Engineering (Cont.)	SOV/1499	
PART 5. HEAT MEASURING INSTRUMENTS AND AUTOMATIC CONTROLS		
Ch. 29. Heat Measurement and Instruments		444
Ch. 30. Automatic Control of Thermal Processes		444
		513
PART 6. MATERIALS FOR BOILERS, PIPING, AND OTHER EQUIPMENT		
Ch. 31. Metals		581
Ch. 32. Constructional, Thermal-insulating, Packing, and Other Materials		581
Ch. 33. Lubricating Materials		605
Appendix		628
Card 5/6		635

Heat Engineering (Cont.)

SOV/1499

Supplement

Index

643

AVAILABLE: Library of Congress

664

GO/lsb
5-15-59

Card 6/6

LEBEDEV, P.D.

3-58-3-3/32

AUTHOR: Lebedev, P.D., Professor, Doctor of Technical Sciences, Chief of the Main Administration of Polytechnic and Machine-Construction Vuzes, USSR Ministry of Higher Education

TITLE: Against the Beaten Track in Practical Training (Protiv shablona v proizvodstvennom obuchenii)

PERIODICAL: Vestnik Vysshey Shkoly, 1958, Nr 3, pp 16-20 (USSR)

ABSTRACT: The author deals with the two forms of practical training; school training workshops and training at enterprises. He describes how this training is conducted at some of the higher technical schools and examines suggestions made to change the method. At many vtuzes, much time is devoted to learning methods of cold and hot machining of metals, and the future specialty of the student is disregarded. The Moskovskoye vyssheye tekhnicheskoye uchilishche (MVTU) (Moscow Higher Technical School) and the Moskovskiy energeticheskiy institut (MEI) (Moscow Power-Engineering Institute) are mentioned. In the School training workshops, posters and kinematic drawings are widely displayed. He points to the

Card 1/3

Against the Beaten Track in Practical Training

3-58-3-3/32

radiotekhnicheskiy fakultet (Radio-Engineering Faculty) of the Ural'skiy politekhnicheskiy institut (Ural Polytechnic Institute) where the amount of time in the training workshops for cold and hot machining of metals has been considerably reduced. The final practical training of the students is conducted in specialized radio-engineering workshops. This organization of work is recommended. He considers the transferring of small mechanical workshops and factories to the vtuzes (suggested by the Gor'kovskiy and Tomskiy politekhnicheskiy institut - Gor'kiy and Tomsk Polytechnic Institutes) as impracticable. Technological practice at an enterprise should be done at advanced plants having foundry, forging, mechanical, assembly and other workshops, and a modern production organization. For the students of the Moscow Higher Technical School this practice lasts 25 days, while for the students of the Moscow Power-Engineering Institute, technological practice is organized differently, and requires 6 weeks. This work often enables the students to obtain very valuable information on their future specialty. The author examines other questions in plant practical training and

Card 2/3

Against the Beaten Track in Practical Training

3-58-3-3/32

in conclusion, stresses the necessity to attach the schools to definite enterprises. There is 1 Soviet reference.

ASSOCIATION: Glavnoye upravleniye politekhnicheskikh i mashinostroitel'nykh vuzov, Ministerstvo vysshego obrazovaniya SSSR (Main Administration of Polytechnic and Machine-Construction Vuzes of the USSR Ministry of Higher Education)

AVAILABLE: Library of Congress
Card 3/3

3-58-7-32/36

AUTHOR: Lebedev, P.D., Doctor of Technical Sciences, Professor

TITLE: Higher Technical Education in Sweden (Vyssheye tekhnicheskoye obrazovaniye v Shvetsii)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 7, pp 84-88 (USSR)

ABSTRACT: The author, who is the head of the Glavnoye upravleniye politekhnicheskikh i mashinostroitel'nykh vuzov (Central Administration of the Polytechnical and Machine Building Higher Schools), accompanied by the director of the Leningradskaya lesotekhnicheskaya akademiya imeni S.M. Kirova (The Leningrad Academy of Forest Engineering imeni Kirov) Professor V.M. Nikitin, the director of the Leningradskiy korablestroitel'nyy institut (Leningrad Shipbuilding Institute) Dotsent Ye.V. Tovstych and the Aspirant I.V. Kallistova, visited Sweden in February 1958 and studied the organization of higher technical education in this country. The delegation was very much impressed with its organization.

Card 1/1

LEBEDEV, P.D., doktor tekhn. nauk, prof.

High-temperature drying of materials by utilization of the
internal vapor-pressure gradient. Trudy MEI no.30:169-178 '58.
(MIRA 12:5)

1. Moskovskiy ordena Lenina energeticheskiy institut, Kafedra
sushil'nykh i teploobmennykh ustroystv.
(Drying)

5(2)

AUTHORS:

Lebedev, P.D., Professor, Doctor of Technical Sciences; Verba, M.I., Docent, Candidate of Technical Sciences; Leonchik, B.I.; Portnov, V.D. and Sadchikov, O.V., Engineers SOV/143-59-2-14/19

TITLE:

The Drying of Heated, Inorganic Solutions by Means of Spraying (Sushka raspilyleniyem podogretykh neorganicheskikh rastvorov)

PERIODICAL:

Izvestiya vysshikh uchebnykh zavedeniy - Energetika, 1959, Nr 2, pp 111-116 (USSR)

ABSTRACT:

When drying heat-resistant, inorganic solutions by spraying them into a stream of hot flue gases, the heat and mass exchange processes may be considerably intensified by heating the solution to a temperature somewhat below its boiling point prior to spraying, maintaining an adequate pressure in the pipeline. A more intensive dehydration is observed with a sudden reduction of the pressure of the heated liquid when the latter leaves the sprayer. The dehydration process is achieved, by the heat of

Card 1/5

The Drying of Heated, Inorganic Solutions by Means of Spraying SOV/143-59-2-14/19

the drying agent (flue gas), and by the interior heat of the atomized particles. The preliminary heating of the solution causes a reduction of the viscosity and surface tension, and consequently, it changes the character of the intermediate-phase surfaces and with them the spray dispersion. Thereby the basic laws are disturbed which are valid for the dispersion of a cold liquid flow. For investigating the basic thermal and hydrodynamic peculiarities of this drying process, an experimental, semi-industrial drying chamber was built at the Kafedra su-shil'nykh i teploobmennykh ustroystv MEI (Chair of Drying and Heat-Exchange Equipment of MEI). The drying chamber was built in such a way that one parameter of the process could be changed while all the others were kept constant. Provisions were made to perform the drying in a direct flow and in a counterflow of flue gas, or to feed the drying gases from the sides of the chamber. Figure 1 shows a diagram of the drying unit. The basic series of

Card 2/5

SOV/143-59-2-14/19

The Drying of Heated, Inorganic Solutions by Means of Spraying

tests was conducted with centrifugal sprayers. A total of 60 experiments was made for which a 50% salt solution was used as experimental liquid. The liquid consumption was changed from 70-260 kg/h, the temperature of the liquid was varied from 75-300°C, the pressure of the liquid from 50-150 atm. The temperature of the flue gases was varied from 190-550°C. Kerosene was used as a fuel for heating the drying chamber. Since preliminary heating of the liquid causes a faster crystallization of the dispersed particles, the interaction of the flue gas components with the product is less intensive than when using a cold liquid. The increase of the sulfur content of the dried material did not exceed the maximum permissible value of 0.06% SO₄. The processing of the experimental data and their analysis showed that the most favorable drying conditions were obtained at a liquid temperature of 280°C, and at an initial gas temperature of 460°C. The irrigation factor was 0.1 kg of the solution per kg

Card 3/5

SOV/143-59-2-14/19

The Drying of Heated, Inorganic Solutions by Means of Spraying

of dry gas. The specific fuel consumption for 1 kg of the product was 200-250 g/kg - product. The mass exchange factor was 12-20 kg/m² hour. When spray drying cold liquids the mass exchange factor at the same temperature of flue gases amounted to 8-12 kg/m² hour. The effectiveness of interphase surface which means the dispersion of atomized particles. So far, peculiarities of flowing out and disintegrating of a heated liquid stream were not considered in the works of Soviet and foreign scientists. The authors established some characteristic hydrodynamic phenomena of this process and some calculated suggestions for the design of sprayers will be subject of future investigations. The authors mention only the four types of sprayers used during their experiments: a centrifugal sprayer with one tangential inlet, a centrifugal sprayer with two tangential inlets, a centrifugal sprayer with a special conical atomizer and a conical nozzle. The

Card 4/5

SOV/143-59-2-14/19

The Drying of Heated, Inorganic Solutions by Means of Spraying

experiments with the centrifugal sprayers showed that their output was reduced by 30-40% when the liquid was heated to 260-290°C, in comparison with the cold liquid. The authors came to the conclusion that the preliminary heating increases the drying efficiency of heat-resistant inorganic liquids. The preliminary heating of the liquid prior to spraying permits the use of flue gases of fuels with a low sulfur content as a drying agent. There are 2 tables, 1 diagram, 1 graph, and 2 Soviet references.

ASSOCIATION: Moskovskiy ordena Lenina energeticheskii institut
(Moscow Lenin Order-Power Engineering Institute)

PRESENTED: Kafedra sushil'nykh i teploobmennykh ustanovok
(Chair of Drying and Heat Exchange Equipment)

SUBMITTED: November 26, 1958

Card 5/5

10.4000
~~24 (7) 21.5400~~

66175
SOV/143-59-10-13/22

AUTHORS: ~~5.1175(A)~~
Lebedev, P.D., Doctor of Technical Sciences, Professor,
and Verba, M.I., Candidate of Technical Sciences,
Leonchik, B.I., Engineer

TITLE: Laws Governing The Atomizing of a Superheated Liquid

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika,
1959, Nr 10, pp 76-83

ABSTRACT: The results of an investigating of the hydrodynamic peculiarities of atomizing superheated liquids are published in this article. When heating a solution to a temperature of 300-330°C (preventing boiling by applying the proper pressure in the pipeline) prior to atomizing, the specific volume increases by approximately 1.5 times, the kinematic viscosity decreases (by 6-5 times) and the surface tension is less (by 10-12 times). Peculiar hydrodynamic conditions are created by the practically instantaneous boiling of the superheating liquid upon leaving the atomizer. They determine the structure of the spray cone and influence the second-

Card 1/4.

66175

SOV/143-59-10-13/22

Laws Governing The Atomizing of a Superheated Liquid

ry dispersion of the drops. The process of atomizing superheated solutions differs considerably from the atomizing of a cold liquid due to changes in thermo-physical and hydromechanical conditions. The investigations were performed on an experimental installation which was different from the one described by the same authors [Ref 1] only in performing the atomization in a cylindrical, vertical drying chamber of 800 mm diameter and 2.3 m height. Preliminary tests [Ref 1] showed that a conical nozzle had the best characteristic as an atomizer, creating a very high degree of dispersion and greater spray cone angles of the atomized matter. Its design is simple compared to other atomizer types. Geometrically similar nozzles with different diameters of the minimum profile were used (0.28, 0.35, 0.44, 0.63, and 0.805 mm). The flow factor for these nozzles was 0.8-0.95, depending upon the temperature of the solution and increasing together with it. The liquid to be atomized consisted of

Card 2/4

66175

SOV/143-59-10-13/22

Laws Governing The Atomization of a Superheated Liquid

ordinary water and an inorganic salt solution having a specific gravity of 1.36 (concentration 500 g/l). The investigations were conducted at pressures of 90-150 atmospheres and at liquid temperatures of 160-320° C. The dispersion of drops and the density of the spray were investigated by microphotographs and other aids. The formation of drops in the spray cone is a result of a complicated separation and fusion process of the primary drops. The pulsation of the drop motion, and the impossibility of formulating boundary conditions in the development of the process exclude a complete analytical solution of this problem. Theoretical investigations of G.I. Petrov and T.D. Kalinina [Ref 6], B.D. Katsnel'son and V.A. Shvab [Ref 5] and other investigators show the possibility of using existing equations, describing the disintegration process of a flow with the aid of the theory of similarity. The authors of this paper noticed a practically constant flow of the superheated liquid thru the conical nozzle ✓

Card 3/4

66175

SOV/143-59-10-13/22

Laws Governing the Atomization of a Superheated Liquid

le. This observation and theoretical assumptions of I. L. Perl'man [Ref 8] lead to the conclusion that the boiling of the liquid starts outside the nozzle. The principal laws governing the atomizing of a superheated liquid by conical nozzles were established by the authors as a result of their investigations. They obtained formulas for calculating the mean volume-surface diameter of drops, for calculating the atomizing spectrum and graphs of local spray cone densities. This paper was presented by the Kafedra sushil'nykh i teploobmennykh ustroystv (Chair of Drying and Heat Exchanging Devices). There are 2 diagrams, 3 graphs and 10 Soviet references.

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut
(Moscow "Order of Lenin" Institute of Power Engineering)

SUBMITTED: May 23, 1959
Card 4/4

9 (2)

SOV/143-59-10-19/22

AUTHORS: Lebedev, P.D., Doctor of Technical Sciences, Professor,
and Verba, M.I., Candidate of Technical Sciences, Docent

TITLE: The Application of Infrared Radiation in Engineering

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika,
1959, Nr 10, pp 108-113

ABSTRACT: This review contains some data on the design of radi-
ant heat sources which found application in foreign
engineering (USA, West Germany, German Democratic Re-
public, etc). It is based on the monograph by Dr. W.
Borchert and Dr. K. Junbitz [Ref 1]. Fig 4 shows a
ceramic radiator of the type produced by a Leipzig in-
strument building plant and by the Teltow plant of
communication engineering parts in the German Democra-
tic Republic. There are 9 photographs, 3 diagrams and
6 references, 2 of which are English and 4 German.

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut
~~Card # 2~~ (Moscow - Order of Lenin- Power Engineering Institute) ✓

LEBEDEV, P.D.; SHISHKOV, S.V.

Effect of contact heat supply during the radiation drying of moist materials. Inzh.-fiz.zhur. no.7:17-21 JI '60. (MIRA 13:7)

1. Energeticheskiy institut im. G.M.Krzhizhanovskogo, g.Moskva.
(Materials--Drying)
(Heat--Radiation and absorption)

LEBEDEV, P. D., and Leonchik, B. L.

"Spray Drying of Overheated Solutions."

Report submitted for the Conference on Heat and Mass Transfer,
Minsk, BSSR, June 1961.

S/003/61/000/005/001/001
B117/B209

AUTHOR: Lebedev, P. D., Doctor of Technical Sciences, Professor, Chairman of the Scientific and Technical Council of the Ministry of Higher and Secondary Special Education

TITLE: Contribution of university scientists to theory and practice

PERIODICAL: Vestnik vysshey shkoly, no. 5, 1961, 90-96

TEXT: This article deals with the contribution of Soviet schools of higher education to science and national economy. The collective comprises nearly 150,000 scientific and pedagogical collaborators of schools of higher education, among them about half of all Professors and Doctors of Sciences of the USSR. Among them are names of worldwide renown which are leading personalities in their special fields. To these belong Academicians AS USSR A. Ye. Arbuzov, B. A. Arbuzov; A. A. Balandin, N. N. Bogolyubov, S. I. Vol'fkovich, V. A. Kargin, M. V. Kel'dysh, V. A. Kotel'nikov, A. N. Kolmogorov, M. P. Kcstenko, V. D. Kuznetsov, A. N. Nesmeyanov, I. G. Petrovskiy, L. I. Sedov, N. N. Semenov, S. L. Sobolev, A. N. Terenin, V. A. Fok; Corresponding Members AS USSR V. S. Dzhelepov, V. A. Kirillin, V. V. Korshak, N. N. Nekrasov, G. A.

Card 1/7

S/003/61/000/005/001/001
B117/B209

Contribution of ...

Razuvayev, C. A. Reutov, S. E. Frish. Besides research work and pedagogical activity, many scientists at schools of higher education established scientific teams. Famous all over the world are the mathematical teams of Moskovskiy (Moscow) and Leningradskiy (Leningrad) universitet (University), and also the scientific team of mathematicians which has been established by Professor T. A. Sarymsakov at Tashkentskiy universitet (Tashkent University). The scientific teams of physicists, chemists, and mechanical engineers at Moscow, Leningrad, Khar'kovskiy (Khar'kov), Kazanskiy (Kazan'), Tomskiy (Tomsk), and other universities are recognized authorities. Many Lenin prize winners are among the scientists at schools of higher education: S. N. Vernov, Professor at Moscow University, A. Ye. Chudakov, Doctor of Physical and Mathematical Sciences, I. R. Shafarevich, Professor at Moscow University, Academician N. N. Bogolyubov, Head of the kafedra statisticheskoy fiziki MGU (Department of Statistical Physics, Moscow State University), G. A. Razuvayev, Professor at Gor'kovskiy (Gor'kiy University), Academician M. P. Kostenko at the Leningradskiy politekhnicheskiy institut (Leningrad Polytechnic Institute), as well as the following Professors at Moskovskiy energeticheskiy institut (Moscow Institute of Power Engineering): V. A. Venikov, M. P. Vukalovich, Corresponding Member AS USSR V. A. Kirillin, A. Ye. Sheyndlin. The Lenin

Card 2/7

S/003/61/000/005/001/001
B117/B209

Contribution of ...

Prize of 1961 was awarded to the following scientists: Academician A. F. Ioffe (deceased), A. V. Ivanov, Professor at Leningrad University, Yu. I. Lozovoy, Docent at the L'vovskiy politekhnicheskii institut (L'vov Polytechnic Institute), the two Professors at the Krasnodarskiy institut pishchevoy promyshlennosti (Krasnodar Institute of the Food Industry) G. G. Agabal'yants and Docent A. A. Merzhanian, and many others. Many problems worked out at schools of higher education have already been adopted by the Soviet economy and stood the practical tests. Studies in the field of steam turbines for remote heating systems have been brought to an end in 1960 at the Kiyevskiy politekhnicheskii institut (Kiyev Polytechnic Institute). The collective at the Khar'kovskiy politekhnicheskii institut (Khar'kov Polytechnic Institute) developed and put into operation the largest high-voltage pulse generator in the world, supplying 7.6 million volts. A high-power rectifying column with exchange plates has been developed at the Moskovskiy institut khimicheskogo mashinostroyeniya (Moscow Institute of Chemical Machinery). Moreover, machines, devices, new materials and processes have been worked out at schools of higher education. In this connection, the following schools are mentioned: Moskovskiy gornyy institut imeni I. V. Stalina (Moscow Mining Institute imeni I. V. Stalin), Leningradskiy tekhnologicheskii

Card 3/7

S/003/61/000/005/001/001
B117/B209

Contribution of ...

institut imeni Lensovet (Leningrad Technological Institute imeni Lensovet), and Yaroslavskiy tekhnologicheskii institut (Yaroslavl' Technological Institute). Schools of higher education have greatly contributed to the development of space engineering, whereby the space flight of Yuriy Gagarin was made possible. During the last few years, many special, technical, and other laboratories have been established at schools of higher education. At some of them, e. g., the Moscow and Gor'kiy University as well as the Tomskiy politekhnicheskii institut (Tomsk Polytechnic Institute), new scientific research institutes have been established. The number of schools of higher education increases from year to year. The results of their work will be shown at the Exhibition of the Achievements of the Soviet National Economy (VDNKh), at which more than 200 exhibits from 70 schools of higher education were on show last year. Many of them were awarded diplomas and medals of the VDNKh. The work of scientists of Soviet schools of higher education has also found much appreciation in foreign countries. Particular interest was paid to exhibits shown by the Tomsk and L'vov Polytechnic Institutes, as well as by the Kuybyshevskiy aviatsionnyy institut (Kuybyshev Aviation Institute). Many teachers and scientific collaborators of schools of higher education attend international congresses, meetings, and symposia every year. In order

Card 4/7

S/003/61/000/005/001/001
B117/B209

Contribution of ...

to coordinate scientific work, the Nauchno-tekhnicheskii soviet Ministerstva vysshego i srednego spetsial'nogo obrazovaniya SSSR (Scientific and Technical Council of the Ministry of Higher and Secondary Special Education USSR), together with the Akademiya nauk SSSR (Academy of Sciences USSR), specified the tasks of the most important scientific research work. Between 1956 and 1960, the volume of research work performed under industrial contracts has increased three times from the financial point of view, and that not only at schools of higher technical education but also at some universities. Above all, this concerns work in the field of geology. The number of scientific research problems solved during the last ten years have risen two and a half times. Many of them have found practical application in Soviet economy. Between 1958 and 1960, more than 130 scientific conferences and sessions on topical problems have been held by schools of higher education; they were attended also by delegates of universities, special scientific research institutes, ministries, sovnarkhoz, industrial establishments, and by foreign scientists: 1249 delegates attended the Third Conference of Schools of Higher Education on Modern Dielectric and Semiconductor Engineering, held at the Leningradskiy elektrotekhnicheskii institut im. V. I. Ul'yanova (Lenina) (Leningrad Electrotechnical Institute imeni V. I. Ul'yanov (Lenin)) in 1960. ✓

Card 5/7

S/003/61/000/005/001/001
B117/B209

Contribution of ...

More than 1000 delegates attended the Fourth Conference of Schools of Higher Education on Radio Electronics at Khar'kov University. The All-Union Ornithological Conference of Moscow University was attended by 800 persons, 443 of which came from Union republics, 17 from people's republics, and 14 from capitalist countries. The conferences of schools of higher education at Ryazan' on the topic "The Communist Party as the organizer of the great boom of the socialist agriculture of the USSR"; at Alma-Ata on the topic "The struggle of the CPSU for the conversion of the eastern districts of the country into a granary"; in Minsk on the topic "Communist working brigades and their role in the evolution of the Communist conception of work"; and the conference on the application of physical and mathematical simulation to electrotechnical problems, which was held at the Moscow Institute of Power Engineering, have been very successful. The Ministry of Higher and Secondary Special Education USSR has been publishing periodicals on all fields of science since four years: "Izvestiya vysshikh uchebnykh zavedeniy" (22 series) and "Nauchnyye doklady vysshey shkoly" (5 series). Schools of higher education, among them 10 in Moscow and 19 outside the capital, have been entrusted with the publication of various series of periodicals. Finally, the author emphasizes the necessity of consolidating the success achieved by

Card 6/7

Contribution of ...

S/003/61/000/005/001/001
B117/B209

schools of higher education in the field of scientific work, as well as of eliminating the existing shortcomings.

ASSOCIATION: Nauchno-tekhnicheskiy soviet Ministerstva vysshego i srednego spetsial'nogo obrazovaniya SSSR (Scientific and Technical Council of the Ministry of Higher and Secondary Special Education USSR)

Card 7/7

LEBEDEV, P.D., doktor tekhn.nauk

~~Scientific and Technological~~ conference dedicated to the
40th anniversary of Lenin's plan for the State Commission for
the Electrification of Russia. Teploenergetika 8 no.4:91-
93 Ap '61. (MIRA 14:8)
(Electrification—Congresses)

GRIGOR'YEV, V.A., kand. tekhn. nauk; KOLACH, T.A., dots.;
SOKOLOVSKIY, V.S., assistent; TEMKH, R.M., inzh.;
LEBEDEV, P.D., doktor tekhn. nauk, prof., red.;
ANTIKAYN, P.A., red.; BORUNOV, N.I., tekhn. red.

[Concise manual on heat exchangers]Kratkii spravochnik po
teplobmennym apparatam. By V.S.Grigor'ev i dr. Pod red.
P.D.Lebedeva. Moskva, Gosenergoizdat, 1962. 255 p.
(MIRA 15:9)

(Heat exchangers)

NESTERENKO, Aleksey Vladimirovich; LEBEDEV, L.D., doktor tekhn. nauk, prof., retsenzent; DROZDOV, V.F., kand. tekhn. nauk, dots., retsenzent; IVANOV, V.G., nauchnyy red.; MARTYNOV, A.P., red. izd-va; MURASHOVA, V.A., tekhn. red.

[Principles of thermodynamical calculations in air conditioning and ventilation] Osnovy termodinamicheskikh raschetov ventilyatsii i konditsionirovaniia vozdukha. Moskva, Vysshaya shkola, 1962. 354 p. (MIRA 15:9)

1. Zaveduyushchiy kafedroy "Otopleniya i ventilyatsii" Vsesoyuznogo zaochnogo inzhenerno-stroitel'nogo instituta (for Drozdov). (Heating and ventilation) (Air conditioning) (Ventilation)

LEBEDEV, P.D.; PAVLOVSKIY, L.L.

Radiant heat drying systems with gas heating. Lakokras.mat.i
ikh prim. no.3:60-66 '62. (MIRA 15:7)
(Infrared drying apparatus)
(Painting, Industrial)

LEBEDEV, Panteleymon Dmitriyevich; MIKHAYLOV, N.M., prof., retsenezent;
GINZBURG, A.S., prof., retsenezent; LIKOV, M.V., dots.,
nauchnyy red.; LEONCHIK, B.I., dots., nauchnyy red.; LARIONOV,
G.Ye., tekhn. red.

[Calculation and design of drying systems] Raschet i proektiro-
vanie sushil'nykh ustanovok. Moskva, Gosenergoizdat, 1963. 319 p.
(MIRA 16:3)

(Power engineering) (Drying)

VOLKOV, V.F., kand. tekhn. nauk; LEBEDEV, P.D., prof.; SOKOLOV, Ye.Ya.;
SEMENENKO, H.A.; KOLACH, T.A.; TIKHOMIROV, I.G.;
PAVLOV, M.N.

Training of engineers in the field of industrial power engineering.
Prom. energ. 19 no.11:30-32 W '64. (MIRA 18:1)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova (for Volkov).
2. Moskovskiy ordena Lenina energeticheskiy institut (for Lebedev, Sokolov, Semenenko).
3. Fakul'tet promyshlennoy teploenergetiki Moskovskogo ordena Lenina energeticheskogo instituta (for Kolach).
4. Gosudarstvennyy komitet po koordinatsii nauchno-issledovatel'skikh rabot SSSR (for Ivanov).
5. Nauchno-issledovatel'skiy institut Soveta narodnogo khozyaystva SSSR (for Tikhomirov).
6. Gosudarstvennyy soyuznyy institut po proyektirovaniyu metallurgicheskikh zavodov (for Pavlov).

L-61932-65

ACCESSION NR: AP5019080

UR/0286/65/000/012/0104/0104

AUTHORS: Leonchik, B. I.; Lebedev, P. D.; Danilov, O. L.

TITLE: A method for measuring the mean velocity of the motion of particles in a stream of broadly dispersed gas suspensions. Class 42, No. 172139

am B

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 104

TOPIC TAGS: particle motion, velocity measurement

ABSTRACT: This Author Certificate presents a method for measuring the mean velocity of motion of particles in a stream of broadly dispersed gas suspensions. To simplify the measuring process, the particles are weighed consecutively. Some of the particles are captured in an immobile trap, some in a trap moving at a constant velocity against the stream. The particle velocity is determined from the difference in the weights of the particles captured in the movable and the immobile traps.

ASSOCIATION: none

SUBMITTED: 19Jun64

ENCL: 00

SUB CODE: NP,ME

OTHER: 000

OTHER: 000

Card 11 flk

LYKOV, A.V.; SHEVEL'KOV, V.I.; NESTERENKO, A.V.; LEBEDEV, P.D.; MAKSIMOV,
G.A.; NIKITINA, L.M.

IUrii Leonidovich Kavkazov; on his 70th birthday. Inzh.-fiz.
zhur. 8 no.1:124-125 Ja '65. (MIRA 18:3)

LYKOV, A.V.; LEBFDEV, P.D.; VUKALOVICH, M.P.; GINZBURG, A.S.; SMOL'SKIY,
B.M.; SOKOLOV, Ye.Ya.; SEMENENKO, N.A.; LYKOV, M.V.; LEONCHIK,
B.I.; KRASNIKOV, V.V.; SHUMAYEV, F.G.; DREVS, G.V.

Georgii Aleksandrovich Maksimov; obituary. Inzh.-fiz.
zhur. 9 no.3:418 S '65. (MIRA 18:9)

GEL'PERIN, N.I.; CHUDIAV, P.D.; HARALEOV, G.N.; AYNSSTEYN, V.S.

Heat and mass exchange in the fluidized bed and other dispersion systems. Khim.prom. Akad. Nauk SSSR, 1974, No. 15.

(MIRA 18:8)

LEBEDEV, P.D., prof.; BUZ, M.A., inzh.

A method of calculating the conditions of nondefective drying of
ceramic wall materials on the basis of the theory of probability.
Strci. mat. 11 no.8:12-14 Ag '65. (MIRA 18:9)

L 44227a66 EWT(1)/EWP(m)/EWT(m)/T IJP(c) DS/WW/JW/WE

ACC NR: AP6024636 SOURCE CODE: UR/0170/66/011/001/0037/0041

AUTHOR: Lebedev, P. D.; Leonchik, B. I.; El'perin, I. T. 61

ORG: Power Engineering Institute, Moscow (Energeticheskiy Institut);
Heat and Mass Transfer Institute, AN BSSR, Minsk (Institut Teplo- i
Massoobmena AN BSSR) 3

TITLE: Determination of transport potential fields in flow of coarsely
dispersed gas suspensions ^

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 11, no. 1, 1966, 37-41

TOPIC TAGS: combustion, spray flame, two phase flow, *gas flow, energy transport, calorimeter*

ABSTRACT: A theoretical and experimental study was made of the interphase energy transport in coarsely dispersed systems. In the analysis, the flow of the two-phase system was considered to be quasi-homogenous with sources and sinks of matter. The redistribution of the potentials (temperature gradient, chemical potential, energy flux) takes place due to the interaction of the phases. A differential calorimeter is described for determining the mean particle temperature on the basis of a compensation method. The generalized data on the local transport processes can be used for calculating spray flames. || Orig. art. has: 4

Card 1/2

UDC: 541.182.2/.3