

Isotope Production (Cont.)

SOV/1297

Shtukkenberg, Yu.M., and V.I. Drobot. Employing a 4π -Counter for Absolute Measurement of Activity 270

Shtukkenberg, Yu.M., and V.I. Drobot. A Method Employing a 4π -Counter for Registering Internal-Conversion Electrons 278

Tissen, M.Yu. A Scintillation 4π -Counter With Stilbene Crystals for Absolute Measurement of Beta-activity. This article describes a counter for the absolute measurement of beta-activity from 0.15 to 3.5 Mev. The instrument uses two standard stilbene crystals (30 mm diameter, 10 mm height) and photomultiplier FEU-19 or FEU-29. Correction factors are discussed and data on activity measurement are plotted. 285

AVAILABLE: Library of Congress

TM/atr
4-10-59

Card 12/12

ZHIVOTOVSKIY, I.L., inzhener.

Vibration equipment for forming reinforced concrete products.
Nov.tekh. i pered.ep. v strel. 18 no.4:10-12 Ap '56.(MIRA 9:7)
(Reinforced concrete)

ZHIVOTOVSKIY, L.S., and others.

Opređenje raspolagaemykh i potrebnkh raskhodov vozdukh v sisteme okhlazhdenia avyadobraznogo motora. Moskva, BNT, 1946.

Title tr.: Determination of the amount of air available and the amount necessary in cooling systems of radial engines.

NCF

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

SEMIDUBERSKIY, Mikhail Sruif'yevich; TURK, V.I., kand.tekhn.nauk, retsenzent;
ZHIVOTOVSKIY, L.S., kand.tekhn.nauk, retsenzent; KRYUCHKOVICH, N.M.,
inzh., retsenzent; ZHIVOTOVSKIY, L.S., kand.tekhn.nauk, nauchnyy
red.; PRUDNIKOVA, M.N., red.; GILSON, P.G., tekhn.red.

[Pumps, compressors, ventilators] Masosy, kompressory, ventilatory.
Moskva, Gos. izi-vo lit-ry po stroit. materialam, 1957. 222 p.
(Compressors) (MIRA 11:4)
(Pumping machinery)
(Ventilation-- Apparatus and supplies)

BAYBAKOV, Oleg Vladimirovich; ZEYEGOFER, Oleg Iosifovich; KISELEV, P.G.,
red.; ZHIVOTOVSKIY, L.S., red.; VORONIN, K.P., tekhn. red.

[Hydraulics and pumps] Gidravlika i nasosy. Moskva, Gos. energ.
izd-vo, 1957. 240 p. (MIRA 11:7)
(Pumping machinery) (Hydraulics)

KISELEV, Petr Grigor'yevich, kand. tekhn. nauk; Prinyal-uchastiye
KRIVCHENKO, G.I., dots., kand. tekhn. nauk; ZHURIN, V.D., prof.,
doktor tekhn. nauk, red.; DANIL'CHENKO, N.V., red.; ZHIVOTOVSKIY,
L.S., red.; ORLOV, V.A., red.; VORONIN, K.P., tekhn. red.

[Reference book for calculations in hydraulic engineering] Spra-
vochnik po gidravlicheskim raschetam. Izd.3., perer. i dop. Pod
red. V.D.Zhurina. Moskva, Gos. energ. izd-vo, 1961. 352 p.

(MIRA 14:8)

(Hydraulics—Tables, calculations, etc.)

KHASKEL'BERG, I.G., inzh.; ZHIVOTOVSKIY, L.S., kand.tekhn.nauk; KARLIN,
B.I., kand.tekhn.nauk

Method of designing pressure hydraulic transportation of sand and
sand-and-gravel materials. Stroi.mat. 7 no.6:32-34 Je '61.

(MIRA 14:7)

(Sand and gravel plants) (Hydraulic conveying)

AUTHORS: Zhivotovskiy, L. S., Karlin, B. I., Lopatin, N. A.,
Platonov, V. A., Sochilov, V. V. and Slyevich, V. A.

TITLE: Calculation of head loss due to friction in a horizontal pulp duct

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 3, 1963, 111, abstract 3B691 (Gidrotekhn. str-vo, 1962, no. 10, 45-49)

TEXT: Different results obtained in calculating the head loss of a suspension of solids in water from different formulas induced the authors to make field tests using pulp ducts 40-60 mm in diameter. The solid phase is represented by sands containing several size-fractions, and by fine gravel. Empirical constructions are based on Dyuran's parameters. The authors use these parameters for solids containing a range of grain sizes. [Abstracter's note: Complete translation.]

Card 1/1

LEVIN, B.M., kand. tekhn. nauk; KADYKOV, V.T., inzh.;
ZHIVOTOVSKIY, L.S., kand. tekhn. nauk; KARLIN, B.I., kand.
~~tekhn. nauk~~

Study of the loss of head in hydraulic conveying of micro-
granular material along horizontal pipes. Trudy MIIT no.176;
53-58 '63. (MIRA 17:6)

SMOLENSKIY, L.A., aspirant; ZHIVOTOVSKIY, L.S., kand. tekhn. nauk;
KARLIN, B.I., kand. tekhn. nauk

Study and calculation of hydraulic cyclone sand classifiers. Trudy MIIT no.176:108-125 '63. (MIRA 17:6)

YUFIN, Andrey Pavlovich. Prinsipialni uchastiye: CHERNOSKUTOV, K.A. inzh.;
ZHIVOTOVSKIY, I.S. dots., kand. tekhn. nauk; VOLNIN, B.A.,
dots., kand. tekhn. nauk; DOLGACHEV, F.M., dots., kand.
tekhn. nauk; FILIMONOVA, I.V., kand. tekhn. nauk; MAL'TSEV,
M.V., kand. tekhn. nauk; TARASOV, V.K., kand. tekhn. nauk;
KHOLIN, N.D., prof., retsenzent; OGORODNIKOV, S.P., dots.,
kand. tekhn. nauk, retsenzent

[Hydromechanization] Gidromekhanizatsiya. Moskva, Stroizdat,
1965. 496 p. (MIRA 18:8)

USSR/Electricity
Motors, Induction
Electrical Machines

May 49

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

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

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

58/49T50

ZHIVOTOVSKIY, L.V.

PANZRAT'YEV, A.F., inzhener; ZHIVOTOVSKIY, L.V., inzhener.

New series of 0.6--7 kw explosionproof induction electric motors.
Vest.elektropron. 27 no.9:24-27 S '56. (NERA 10:9)

1. Zavod "Kuzbasselektromotor" Ministerstva elektrotekhnicheskoy
promyshlennosti.

(Electric motors, Induction)

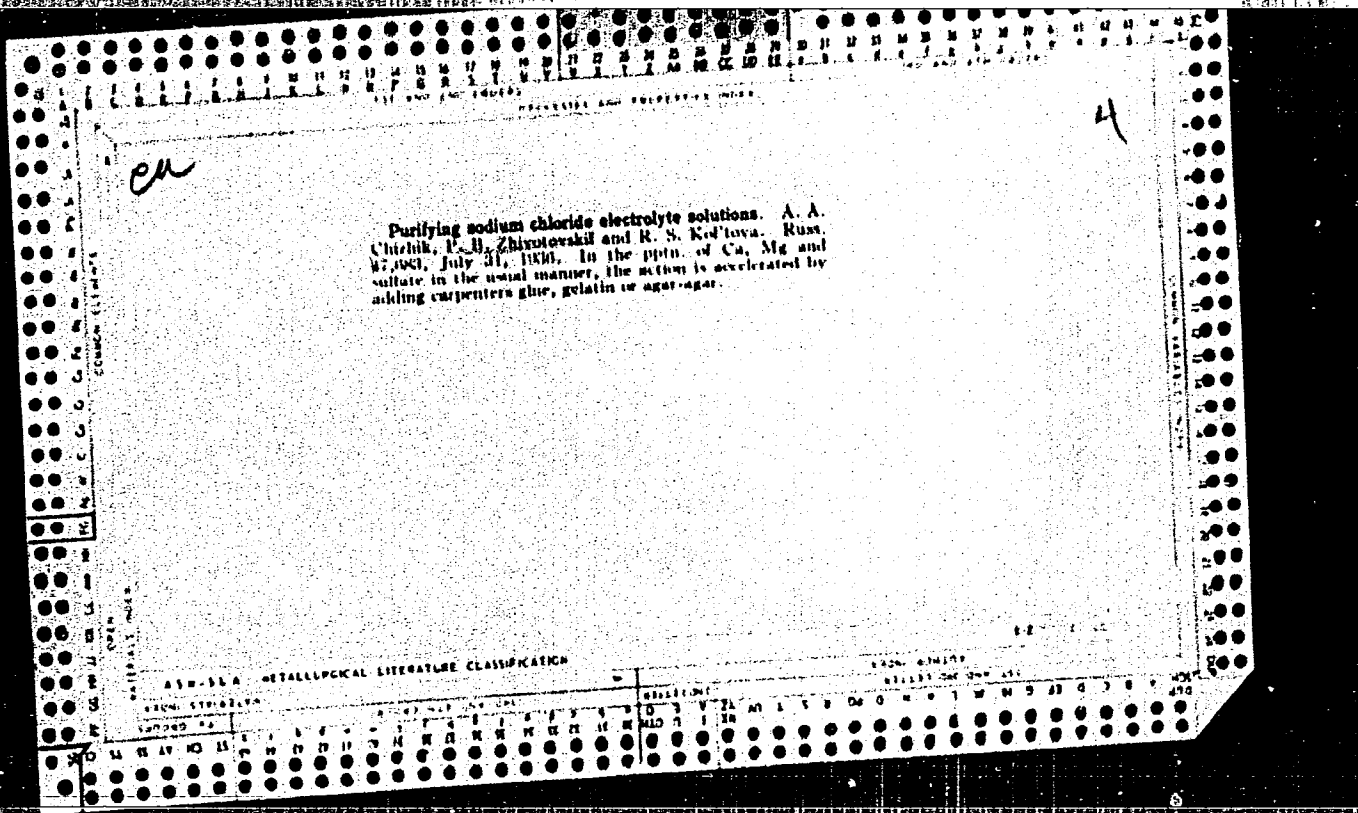
ZHIVOTOVSKIY, L.V., inzh.

Remarks concerning the calculation of electric motors with two-
cage rotors. Vest. elektroprom. 33 no.8:73-76 Ag '62. (MIRA 15:7)
(Electric motors)

ZHIVOTOVSKIY, N.L., inzh.

Producing hollowcast floor beams. Nov.tekh. i pered. op. v stroi.
19 no.7:8-11 JI '57. (MIRA 10:10)

(Precast concrete)
(Floors, Concrete)



MOROZOV, A.; ZHIVOV, A.

Volunteer fire brigades are protecting socialist property.
Muk.-elev. prom, 25 no.4:4-6 Ap '59, (MIRA 13:1)

1. Gosudarstvennyy komitet Soveta Ministrov SSSR po khlēboproduktam.
(Grain elevators--Fires and fire prevention)

ZHIVOV, A.N.

Method for solving frame systems using the EMSS-7 electric model. Mat mod. i elek. tsepi no.1:87-91 '63. (MIRA 16:11)

KAZMIN, N.T.; ZHIVOV, K.I.; MAKAROV, A.V., retsenzent; KUPRIYANOV, F.S.,
retsenzent.

[Knotting machines in the weaving industry] Usloviashal'nye ma-
shiny tkatskogo proizvodstva. Moskva, Gos. nauchno-tekhn. iss-
vo Ministerstva promyshlennykh tovarov shirokogo potrebleniia,
SSSR, 1953. 76 p. (MLRA 7:8)
(Textile machinery)

ZHIVOV, KIRILL IVANOVICH

KAZMIN, Nikolay Tikhonovich; ZHIYOV, Kirill Ivanovich; KUPRIYANOV, Fedor
Sergeyevich; SIMAKIN, V.V., retsentsent; SEBEL', N.M., redaktor;
DMITRIYEVA, N.I., tekhnicheskij redaktor

[Reeding section and knotting machines of the weaving industry]
Probornyj otdel i usloviyasal'nye mashiny tkatskogo proizvodstva.
Moskva, Gos. nauchno-tekhn. izd-vo M-va legkoj promyshl.SSSR,
1957. 182 p. (MLRA 10:6)
(Weaving)

ZHIVOV, Kirill Ivanovich; KATKOV, Leonid Ivanovich; GUSEVA, Ye.M., red.;
DMITRIYEVA, N.I., tekhn. red.

[Beam warping machines] Partionnye snoval'nye mashiny. Moskva,
Sovetskoye tekhn. izd-vo lit-ry po legkoi promyshl. SSSR, 1958.
41 p. (MIRA 12:8)

(Textile machinery)

ALEKSEYEV, K.G.; ZHIVOV, K.I.; TOPILIN, A.P.; LYUBIMOVA, N.S., kand.
tekhn.nauk, red.; SHIMELIOVICH, Yu.B., red.; SUNGUROV, V.S.,
tekhn.red.

[Basic characteristics of the new AT-100-5, ATK-100-M and
AT-120-5 looms] Osnovnye osobennosti novykh avtomaticheskikh
tkatskikh stankov AT-100-5, ATK-100-M i AT-120-5. Moskva,
Biuro tekhn.informatsii legkoi promyshl., 1958. 44 p.

(MIRA 13:12)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka. Pavil'on
"Khlopok."

(Looms)

YEFREMOV, Sergey Mikhaylovich; ZHIVOV, Kirill Ivanovich; HOVIKOV, A.K.,
retsensent; SEGAL', N.M., red.; KNAKNIN, M.T., tekhn.red.

[AT-175-L1 automatic loom with a Zh-13 Jacquard machine] Avto-
maticheskii tkatskii stanok AT-175-L1 s zhakkardovoi mashinoi
Zh-13. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po legkoi prom.,
1958, 111 p. (MIRA 12:2)

(Looms)

ZHIVOV, K.I.; STEPANOV, N.A.

The UA-300 automatic weft-rewinding machine. Biul. tekhn.-ekon.
inform. no.3:50-52. '58. (MIRA 11:6)

(Textile machinery)

ZHIVOV, K.I.

The AT-100-S automatic single-shuttle loom. Biul. tekhn. ekon. inform.
no.9:57-59 '59. (MIRA 13:3)
(Looms)

ZHIVOV, K.I.

The AT-120-L-type automatic loom. Biul.tekh.-ekon.inform. no.12:
#1-42 '59. (MIRA 13:4)
(Looms)

ZHIVOV, L. G.

Cand., Technical Sci.

Mbr., Krivoi Rog. Mining Inst., -c1948-.

"Electric Drive for Scraper Winches and Ventilators which Operate Intermittently,"

Gor. Zhur., No. 10, 1948;

"Determining the Power of Drifting Substations of Iron Ore Mines,"

ibid., No. 5, 1949.

ZHIVOV, Doc L. G.

PA 237T27

USSR/Electricity - Induction Motors
Braking

Jul 52

"Braking Regulator for Mineshaft Elevator," Doc
L. G. Zhivov, Cand Tech Sci, North Caucasus Min-
ing-Metallurg Inst

"Elektrichestvo" No 7, pp 20-26

Analyzes transient processes in braking regulator
for induction motor. Examines whole process from
start of braking to full stop. Cites calculated
curves and oscillograms verifying calens. Sub-
mitted 26 Oct 51.

237T27

FA 242T24

ZHIVOV, L. G.

USSR/Electricity - Induction Motors Dec 52

"Calculation of Starting Resistances for Induction Motors of Mine Hoists," Docent L. G. Zhivov, Cand Tech Sci, North Caucasus Mining Metallurgical Inst

"Elektrichestvo" No 12, pp 29-33

Proposes method for calcg starting resistances which makes it possible to determine max and min starting forces, find starting resistances, and cal transient operating conditions of hoist system by means of catalogue parameters of motors and time required for hoist mechanism to reach rated speed. Submitted 7 Dec 52

242T24

ZHIYCY, L. G.

Electrical Engineering Abstracts
May 1954
Regulation

1957. Calculation of the regulating resistances of a Ward Leonard drive of a winder. *L. G. ZHIYCY, Elektricheskoye, 1953, No. 11, 26-31. In Russian.*

The theoretical efficiency of a winder can be achieved only if the theoretical accelerations are obtained. The regulating resistances in the operating field circuit must therefore be calculated so as to assure a good approximation to theoretical values of the speeds, accelerations and distances corresponding to the individual resistance steps. A necessary condition is the matching of the resistance steps and the steps of the controlling apparatus which represent the main parameters on which the operation of the drive depends. The calculator shows that unless the speed control is continuous, the number of resistance steps in the generator field circuit must be very accurately determined and should be as small as possible. To this number corresponds a steady minimum speed on each resistance step for which the current peak on inserting or removing the resistance concerned becomes a minimum, and starting and retarding become as smooth as possible. The results apply not only to winder drives but to all cases of application of Ward Leonard drives (rolling and blooming mills, etc.).

B. S. KRALJ

ZHIVOV, L.G., kandidat tekhnicheskikh nauk; KARMAZIN, V.I., kandidat
~~tekhnicheskikh nauk~~; KOZLIK, V.I., inzhener

Grizzlies with mesh heated by electric current. Gor.zhur.
no.9:46-48 S '55. (MIRA 8:8)
(Screens (Mining))

ZHIVOV, L.G., kandidat tekhnicheskikh nauk.

Automatized installations in Krivoy Rog Basin mines. Gor.
zhur. no.7:19-25 J1 '56. (MLRA 9:9)

1. Nauchno-issledovatel'skiy gornorudnyy institut.
(Krivoy Rog--Mining engineering) (Automatic control)

ZHIYOV, L.G., kandidat tekhnicheskikh nauk; KOZLIK V.I., inzhener;
GREBNEV, S.K., inzhener.

Best transformer parameters for heating grizzly screens. Gor.shur.
no.12:34-35 D '56. (MIRA 10:1)

1. Nauchno-issledovatel'skiy gornorudnyy institut.
(Screens(Mining))

ZHIVOV, Lev Grigor'yevich; GUSAROVA, Valentina Petrovna; GLADILIN, L.V.,
doktor tekhnicheskikh nauk, retsenzent; MARTYNOV, G.P., inzhener,
retsenzent; TRIFONOV, Yu.T., inzhener, retsenzent; TARASOV, L.Ya.,
redaktor; SMOLDYREV, A.Ye., redaktor izdatel'stva; VAYNSERTYH, Ye.B.,
tekhnicheskij redaktor

[Remote control and automation of scraper loader hoists] Distantion-
noe i avtomaticheskoe upravlenie skrepernymi lebedkami. Moskva, Gos.
nauchno-tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1957.
222 p. (MIRA 10:9)

(Automatic control) (Excavating machinery)

Zhivov, L. G.

127-58-5-11/30

AUTHOR: Zhivov, L.G., Candidate of Technical Sciences

TITLE: Automation of Cage Hoistings of Low Capacity (Avtomatizatsiya klet'yevykh pod'yemov maloy moshchnosti)

PERIODICAL: Gornyy Zhurnal, 1958, Nr 5, pp 33-36 (USSR)

ABSTRACT: Besides the main hoisting machines, auxiliary hoisting winches of 50 to 300 kw capacity are used in the mines of ferrous and non-ferrous metallurgy. Their automation can cut labor costs since the cage hoisting can be operated by one worker, accompanying the cage while moving the people or pushing the button in case of lifting freight. It is expedient to apply the generator-motor system as a drive. Specialists of the NIGRI and Ingulets Mine Administration (Krivoy Rog Basin) have automated a one-cage hoisting in the blind shaft Nr 5. This hoisting has a 70-kw machine and serves 4 working levels. It is working 85% of the time. It is provided with both hand and automatic operation. A detailed description is given and the mode of operation is described. The hoisting machine has operated for more than one year and proved to be reliable. It

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Automation of Cage Hoistings of Low Capacity

127-58-5-11/30

reduced the number of attendants by one machine operator and 10 workers. To ensure communication between the cage moving in a shaft and the hoisting machine, a cable is necessary; it is recommended that cables of the GRShS type be used for shafts up to 300 m deep. There is one circuit diagram.

ASSOCIATION: NIGRI

AVAILABLE: Library of Congress

Card 2/2 1. Mines-Automation 2. Hoists 3. Winches

ZHIVOV, L.G., kand. tekhn. nauk.

Remote control systems for electric locomotives. Bezop. truda v
prom. 2 no.12:19-21 D '58. (MIRA 11:12)
(Electric locomotives) (Remote control)

8(2), 28(1)
AUTHOR: Zhivov, L. G., Docent, Candidate of Technical Sciences
SOV/105-59-5-19/29

TITLE: Automation of Mine Elevator Installations With Speed Regulation
by Means of Frequency (Avtomatizatsiya klet'yevykh pod'yemnykh
ustanovok putem regulirovaniya skorosti chastotoy)

PERIODICAL: Elektrichestvo, 1959, Nr 5, pp 78-80 (USSR)

ABSTRACT: An experimental elevator installation with a capacity of
100 kw was mounted under the direction of the author in a
mine of the Krivbass in 1957-58. During the delay and the
drawing up (dotyazhka) of the mine cage, the induction motor
was connected to a voltage with the frequency of 3.75 cycles
(while it was disconnected from the voltage with a frequency
of 50 cycles when the mine cage approached the point of be-
ginning delay). At a normal maximum speed of the cage of
3 m/sec, the frequency of 3.75 cycles causes a speed of
0.20 - 0.23 m/sec during the approach of the cage to the
terminal point. The elevator unit consisted of a mine cage
and a counterweight. The oscillograms recorded and shown here
indicate that the delay of the mine cage gives satisfactory
results by regulating with low frequency at any sign, and
load moment. It is shown that the wirings for the automation

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SOV/105-59-5-19/29

Automation of Mine Elevator Installations With Speed Regulation by Means of Frequency

of elevator units must comply with the following condition: the magnetic flux of the machine must be regulated in dependence on the load moment. The voltage must be regulated in the active resistor of the stator in consideration of its drop. In this case, the magnetic flux will only depend on the load, and the voltage-regulation law is expressed by formula (4) (Ref 2, formulas (5,74)). When connecting the motor to the voltage with low frequency, the speed of the motor decreases, and the transition process in this case is expressed by formula (5). When the motor is connected to the voltage with low frequency, the motor-rotor circuit must be connected to a highly effective resistor. With a decrease in speed, the resistor is switched-off again, and the motor softly passes over to pulling up to the terminal point. The change of load demands, according to formula (4), a regulation of the magnetic flux, i.e. a change of the amount γ . If γ is not regulated, the speed during the approach to the terminal point (if the loads are heavier than calculated) decreases so much that - as the tests have shown - the motor stops, or the approach to the terminal point takes a long time. Finally, the capacity of the frequency transformer is investigated,

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SOV/105-59-5-19/29

Automation of Mine Elevator Installations With Speed Regulation by Means of Frequency

and formula (6) (Ref 2, formula (4,94)) is given for the capacity of the frequency transformer during braking. It is finally said that by means of speed regulation with low frequency the problem of delay and of the approach of the cage to the terminal station can be solved. There are 4 figures and 3 Soviet references.

SUBMITTED: January 3, 1959

Card 3/3

ZHIVOV, Ley Grigor'yevich; MIRSKAYA, V.V., red.izd-va; IL'INSKAYA, G.M.,
tekhn.red.

[Automatic control of electric locomotive haulage in mines]
Avtomatizatsiia elektrovoznói otkatki na rudnikakh. Moskva,
Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 220 p.
(MIRA 13:10)
(Mine haulage) (Electric locomotives) (Automatic control)

FEDOROV, S.A., gornyy inzh.; BOVIN, A.A., gornyy inzh.; ZHIVOV, L.G.,
kand. tekhn. nauk (Moskva)

Discussion of the article by I.A. Kal'nitskii and S.P.
Vasil'evskii "Automation of stoping equipment in the mining
industry" Gor. zhur. no.1:54-58 Ja '62. (MIRA 15:7)

1. Tsentral'nyy nauchno-issledovatel'skiy institut olovyannoy
promyshlennosti, Novosibirsk (for Fedorov, Bovin).

(Mining machinery)

(Kal'nitskii, I.A.B.) (Vasil'evskii, S.P.)

ZHIVOV, L.G., kand.tekhn.nauk

Automatic regulators used in the manufacture of glass
fibers. Mekh.i avtom.proizv. 16 no.10:31-32 0 '62.
(Glass fiber industry) (MIRA 15:11)

ZHIVOV, L.G., kand. tekhn. nauk; GEYLER, L.B., doktor tekhn. nauk,
prof., retsenzent; GUSAROVA, V.P., kand. tekhn.nauk, red.

[Drive and automatic control of hoisting machinery] Pri-
vod i avtomatika pod"emnykh mashin. Izd.2., perer. i dop.
Moskva, Mashinostroenie, 1964. 398 p. (MIRA 17:11)

CHERNYAK, M.G.; ASLANOVA, M.S.; VOL'SKAYA, S.Z.; KUTUKOV, S.S.;
SIMAKOV, D.P.; NAYDUS, G.G.; BOVKUNENKO, A.N.; KOVALEV, N.N.;
SHKOL'NIKOV, Ya.A.; ZHIVOV, L.G.; KOVALEV, N.P.; KOZHUKHOVA,
N.V.; KOROLEVA, A.Ye.; VINOGRADOVA, A.M.; OSIPOVA, O.M.;
BADALOVA, E.I.; BRONSHTEYN, Z.I.; L'VOV, B.S.; KRYUCHKOV,
N.N.; BLOKH, K.I.; MASHINSKAYA, N.I., red.

[Continuous filament glass fibers; technology fundamentals
and their properties] Nepreryvnoe stekliannoe volokno; osnovy
tehnologii i svoistva. Moskva, Khimiya, 1965. 319 p.
(MIRA 18:8)

ACC NR: AP6026506

(A)

SOURCE CODE: UR/0118/66/000/005/0031/0035

AUTHOR: Zhivov, L. G. (Candidate of technical sciences)

ORG: none

TITLE: Complex stabilizer of technological parameters of glass fiber

SOURCE: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 5, 1966, 31-35

TOPIC TAGS: glass fiber, automatic control system, industrial automation, automation equipment

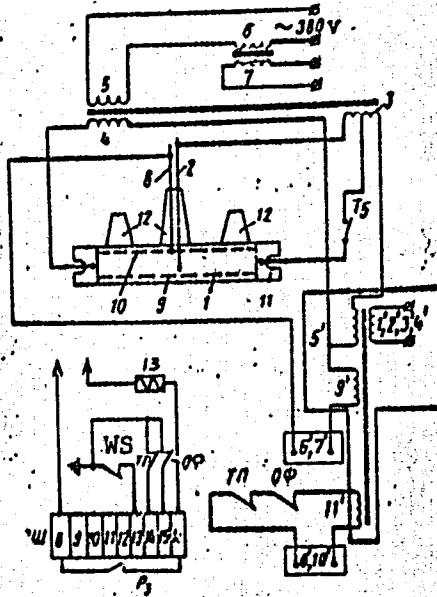
ABSTRACT: The complex stabilizer comprises a glass-melt viscosity controller, a level controller, and protective devices. The essential parts of the stabilizer (see figure) are: 1 - glass-melting crucible; 2 - glass-melt viscosity sensor (platinum rod); 3 - furnace-transformer additional winding; 4 - same, secondary; 5 - same, primary; 6 - saturation-reactor power winding; 7 - same, control winding; 8 - glass-melt-level sensor (platinum needle); 9 - crucible screen; 10 - glass-melt level; 11 - power-supply connections; 12 - crucible throat; 13 - batcher magnet; 1'2'3'4'5'9'11' - reference input unit and associated elements; 6'7' - level

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UDC: 677.52:62-531.2

ACC NR: AP6026506

controller and associated elements; 8'10' - over-heating and phase-break protection; WS - winder starter. The above stabilizer, whose operation is explained in some detail, maintains a temperature of 1200C within ± 0.3 to 0.5% and the level within ± 0.1 to 0.3 mm. Metric number spread is within ± 3 . It is planned to introduce the above stabilizer in all Soviet glass-fiber plants in 1966. The stabilizer was developed by the "VNI of glass fiber" and is being manufactured by "Sevkavelektropribor," Nal'chik. Orig. art. has: 4 figures and 3 formulas.



SUB CODE: 13, 09 / SUBM DATE: none / ORIG REF: 002

Card 2/2

ZHIVOV, L. I.

ZHIVOV, L. I. -- "Investigation of the Process of Enclosed Sinking." Sub 28 Apr 52,
Moscow Order of Labor Red Banner Higher Technical School imeni Bauman
(Dissertation for the Degree of Candidate in Technical Sciences)

SO: VECHERNAYA MOSKVA, JANUARY - DECEMBER 1952

Zhivov, L. I.

"Determining Forces of Closed Die Upsetting", Mashiny i Tekhnologiya
Obrabotka Metallov Davleniyem, Sbornik Statey, Mashgiz, Moscow, 1953,
pp 70-86.

ZHIVOV, L.I., kandidat tekhnicheskikh nauk.

Changes in cylindrical specimens during upsets on smooth plates.
[Trudy] MVTU no.42:48-52 '55. (MIRA 9:5)
(Metalwork--Testing)

ZHIVOV, L.I., dotsent, kand. tekhn. nauk

Classification of crank presses. Izv. vys. ucheb. zav.; mashinostr.
no.9:146-151 '58. (MIRA 12:10)

1.Khar'kovskiy politekhnicheskiy institut im. V.I. Lenina.
(Power presses)

S/145/60/000/006/014/015/XX
D221/D304

AUTHOR: Zhivov, L.I., Candidate of Technical Sciences, Docent

TITLE: The typical load graph of closed stamping in a horizontal forging machine

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 6, 1960, 120 - 128

TEXT: The equation which determines the effort of stamping in a closed cylindrical die takes into consideration the force of deformation P_2 ; the area of the cross section of the die F_d ; the ratio of the die zone: height H_d , the diameter D_d ; the clearance between the punch, and the die Δ ; the height of flash l_c ; and the friction coefficient μ . The problem consists of selecting the dimensions of the tool zone and the initial blank, with the nominal force of the designed machine P_n and the technological factors of the machining as the base data. Owing to the rapidity of the deformation it is as-

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The typical load graph of closed ...

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sumed that σ_s varies linearly. The ratio $(H/D)_d$ is empirical, and is within the limits of 0.15 to 0.25. The length of the flash is usually $l_f \approx \Delta$. The blank sizes are held in proportion $h_0/d_0 = 2 - 2.5$. The curve of effort due to closed die stamping has 3 sections. The first corresponds to free forging, when the friction forces at the faces of the blank produce a barrel shape. The current dimension of the forged workpiece is defined by the barrel-shape coefficient λ . When the blank is in contact with the tool along the maximum dimension, then the metal flow is characterized by a knee of the curve. The effort at that instance is related to the sizes of the unfilled corners with a corresponding equation for its calculation. The deformation changes again when the radius of the corners is equal to the clearance Δ . The further increase of pressure causes the outflow of metal and the formation of the flash. The effort in the third section of the curve $P = f(\Delta h)$ is given by

$$P = F_d \sigma_s \left\{ 0.2 \left(\frac{H}{D} \right)_d^2 - 1.5 \left(\frac{H}{D} \right)_d + 1.5 \ln \frac{H_d}{4} + \frac{1}{3} \times \frac{[1 - 1/2(H/D)_d]^3}{(H/D)_d} + \right. \quad (1)$$

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The typical load graph of closed ...

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$$+ \mu \frac{2 l_3}{\Delta} + 2.1 \} . \quad (1)$$

However, the actual machine is characterized by the rigidity of its construction and the friction in its members. Elastic deformation of the machine affects the deformation process, especially in the region of high pressures. This causes a deterioration of the energy indices of the unit. The friction incurs losses during the stroke and also in the passage of dead center which is determined by the friction circle. Therefore, the load curve of the machine indicates the active forces of deformation, and also the load and unloading due to rigidity. The path of the slide S, is given by $S = \Delta h + \Delta l$, where Δh is the absolute deformation of the blank and Δl the elastic deformation of the machine which corresponds to the active load at that instant. In small machines the energy losses due to loading are small, but they attain 10 - 15 % of the total energy during the working period in the case of large units. The load graphs of an actual horizontal forging machine with a nominal force of 1250 t at 27 strokes per min. are analyzed. The efficiency of the unit is com-

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The typical load graph of closed ...

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puted and plotted. The effect of friction causes the rigidity to have a more pronounced influence on the energy losses. Changes in the used up moment of inertia of the flywheel for a specified coefficient of irregularity are also shown. The third index is formed by the irregularity of the stroke on machines with different stiffness. It is stated that optimum results for the above press are secured when the rigidity is 0.2 to 0.3 mm per 100 tons of active load. This corresponds to the practical data for the better quality machines of this class. There are 6 figures, 2 tables and 3 Soviet-bloc references.

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut (Zaporozhe Engineering Institute)

SUBMITTED: March 14, 1959

Card 4/4

S/145/60/000/008/005/008
D212/D304

AUTHOR: Zhivov, L.I., Candidate of Technical Sciences, Docent

TITLE: Force regime of open stamping

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroye-
niye, no. 8, 1960, 99 - 104

TEXT: The author offers a method of establishing the limit of pla-
stic equilibrium in such a way that the force should be minimum.
Theoretical investigation is carried out and an approximate formula
is derived which is stated to be useful in practice. There are 5 fi-
gures and 5 Soviet-bloc references.

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut (Zaporozhe
Institute of Machine Construction)

SUBMITTED: January 19, 1960

Card 1/1

ZHIVOV, L.I., kand.tekhn.nauk, dotsent; YEVSTRATOV, V.A.

"Technological processes of drop forging" by A.M.Mansurov.

Reviewed by L.I.Zhivov, V.A.Evstratov. Vest.mash. 42 no.4:87

Ap '62.

(MIRA 15:4)

(Forging) (Mansurov, A.M.)

ZHIVOV, L.I.; CHUMAKOV, B.N.

New method of measuring angles of deflection and angular velocity of shaft rotation on press forging machines. Kuz.-shtam. proizvod. 5 no.11:30-32 N '63. (MIRA 17:1)

ZHIVOV, L.I., kand. tekhn. nauk, dotsent

Elastic unloading and external friction in the mechanism of a
crank press. Izv. vys. ucheb. zav.; mashinostr. no.11:65-72
'63. (MIRA 17:10)

1. Zaporozhskiy mashinostroitel'nyy institut.

ZHIVOV, L.I., kand. tekhn. nauk, dotsent

Efficiency of the working stroke of a crank press. Izv. vys.
ucheb. zav.; mashinostr. no.8:192-200 '64.

(MIRA 17:11)

1. Zaporozhskiy mashinostroitel'nyy institut.

L 3948-66 EWT(d)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(z)/EWP(b)/EWP(l)/
EWA(c) IJP(c) MJW/JD/HW
ACCESSION NR: AP5023348

UR/0304/65/000/005/0075/0077
621.97

AUTHORS: Zhivov, L. I. (Candidate of technical sciences); Dubina, V. I. (Engineer) ⁴⁴⁵⁵ 54 B

TITLE: Reverse extrusion of large aluminum parts on crankshaft presses ^{44,55} 14

SOURCE: Mashinostroyeniye, no. 5, 1965, 75-77

TOPIC TAGS: extrusion, aluminum, extrusion press/ DS 800-1250 press, A00 aluminum, AO aluminum, Al aluminum, 45 steel, U7A steel, U8A steel, Kh12M steel

ABSTRACT: The process of reverse extrusion of 85-mm diameter x 215-mm high x ^{44,55}
0.5-0.5 mm thick aluminum cups has been developed at the Zaporozhskiy
mashinostroitel'nyy institut (Zaporozhskiy Machinery Construction Institute). The
critical conditions were found to be the alignment and parallel location of the
upper 1 and lower 11 plates (see Fig. 1 on the Enclosure) and their parallel dis-
placement. The stamp has four guiding posts 7 and bushings 3 attached to the upper
plate. The upper and lower plates are made of 70-mm thick normalized steel 45
slabs, and the die and plunger are mounted on them against hardened steel inserts 2
(steel U7A) and 10 (steel U8A). The die and plunger are made of Kh12M steel (HRC
56-58 and 60-62 respectively), polished to a 10-11 class finish and chrome plated
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ACCESSION NR: AP5023348

(1-3 micron). The aluminum blanks (A00, A0, A1) were heated to 390-400C in 10-15 minutes, held at that temperature for 50-60 minutes, and air cooled (HB 15-22). Animal fats and mixtures of cylinder oil with beeswax were used as lubricants. It was found that the deformation stress varied between 38-56 kg/mm², the maximum temperature rise was 150-160C, and that spherical cup bottoms required 10-15% lower plunger forces than flat-bottomed cups. Experiments were performed on model DS 800/1250 press as well as on 630- and 500-ton presses. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 01

SUB CODE: IE,MM

NO REF SOV: 000

OTHER: 000

Card 2/3

L 3948-66
ACCESSION NR: AP5023348

ENCLOSURE: 01

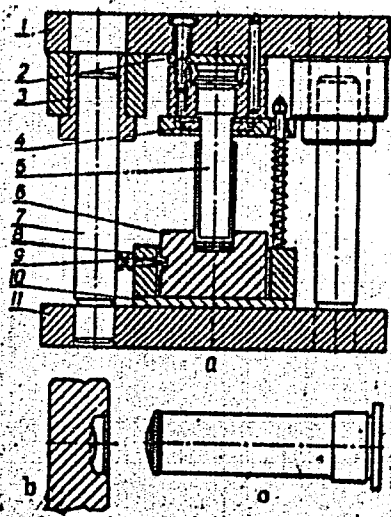


Fig. 1. Press geometry: a - general view; b - die; c - plunger

Card 3/3

DP

ZHIVOV, L.I., kand. tekhn. nauk, dotsent

Cyclic efficiency and energy losses in crank presses.

Izv. vys. ucheb. zav.; mashinoatr. no.5:195-203 '65.

(MIRA 18:11)

ACC NR: AP6009625 EWP(e)/EWP(v)/EWP(f)
IJP(c) AT/WH/JD/HW/JG

AUTHOR: Zhivov, L. I.; Semenov, Yu. N.; Skornyakov, Yu. N.; Shmakov, G. S.

ORG: none

TITLE: Investigation of hot compacting and extrusion of sintered copper-boron nitride alloy

SOURCE: Kuznechno-shtampovoychnoye proizvodstvo, no. 3, 1966, 1-3

TOPIC TAGS: copper alloy, boron nitride containing alloy, alloy compacting, hot compacting, sintered alloy, alloy extrusion

ABSTRACT: Electrolytic copper powder PM-2 mixed with 1, 2, 3, 4, or 5% boron nitride was compacted under 4 t/cm² pressure into briquettes 38 mm in diameter and 30 mm high. Briquettes were sintered at 920C for 2 hr in ammonia gas and extruded at 700, 800, or 900C to 12, 16, and 20 mm in diameter, i. e., with respective extrusion ratios $\epsilon = 2.41, 1.87, \text{ and } 1.39$. With these reductions the bars had a density of 98%. Lower reduction ($\epsilon = 1.2$) produced bars with 95% density, whose electric conductivity was found to be lower. Examination of the microstructure and hardness tests of alloys annealed at 300-800C showed that recrystallization of copper-boron nitride alloys proceeds much slower than that of copper. Sintered copper underwent a complete recrystallization in two hours at 800C, while copper-boron nitride alloys still had the deformation texture. The alloys with a high content of boron nitride require a high

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UDC: 621.984.5

L 20751-66

ACC NR: AP6009625

extrusion pressure. This can be explained by the recrystallization delaying effect of the dispersed boron-nitride phase. High-quality extrusions from this alloy can be obtained by extrusion at 820—880C with ratios of at least 2.0 for alloys with 2% boron nitride, or at least 2.4 for alloys with 2—5% boron nitride. Orig. art. has: 3 figures. [ND]

SUB CODE: 13, 11/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001/ ATD PRESS: 4224

Card 2/2 *J*

ZHIVOV, M.; MATSNEV, L.

Improve the quality of designs. NTO 5 no.10:49-50 0 '63.

(MIRA 17:1)

1. Predsedatel' soveta nauchno-tekhnicheskogo obshchestva Tresta po proizvodstvu elektromontazhnykh rabot v rayonakh TSentra. (for Zhivov). 2. Uchenyy sekretar' nauchno-tekhnicheskogo obshchestva Tresta po proizvodstvu elektromontazhnykh rabot y rayonakh TSentra (for Matsnev).

BURCHE, Fedor Yakovlevich, prof.; ZHIYOV, M.A., red.; VARGANOVA, A.N.,
red.isd-va; SHLIKHT, A.A., tekhn.red.

[Reference manual on sanitation for populated places]

Spravochnik po sanitarnoi ochistke naselennykh mest. Moskva,
Izd-vo M-va kommun.khoz.RSFSR, 1958. 141 p. (MIRA 12:7)
(Sanitary engineering)

PRIBOCHENKO, S.K. [deceased]; ZHIYOV, M.A.; KAUROV, S.A.; YERESNOV, N.I.,
red.; SAMSONOV, V.M., red.izd-va; VOLKOV, S.V., tekhn.red.

[Tables for calculating wages of truck drivers and municipal
sanitation workers paid according to a piece-rate system]
Tablitsy dlia raschetov zarabotnoi platy shoferov i rabochikh-
adel'shchikov po sanitarnoi ochiatke gorodov. Moskva, Izd-va
M-va kommun.khoz.RSFSR, 1958. 538 p. (MIRA 13:1)
(Wages) (Refuse and refuse disposal)

ZHIVOV, Matvey Aronovich; PANKOV, Valentin Pavlovich; LIFSHTS, B.A., red.;
MIRONOV, A.V., red. izd-va; LELYUKHIN, A.A., tekhn. red.

[Manual for operators of machinery used in municipal sanitation]
Spravochnik mekhanika po mashinam dlia sanitarnoi ochildki gorodov.
Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1960. 183 p.

(MIRA 14:7)

(Street cleaning—Equipment and supplies)
(Refuse and refuse disposal—Equipment and supplies)

ZHIVOV, Matvey Aronovich; LIFSHITS, Boris Arkad'yevich; YERESNOV, N.I.,
red.; BAKHTIYAROVA, R.Kh., red. izd-va; LELYUKHIN, A.A., tekhn.
red.

[Organization and technology of municipal sanitary engineering]
Organizatsiia i tekhnologiya uborki goroda. Moskva, Izd-vo M-va
kommun. khoz. RSFSR, 1961. 230 p. (MIRA 15:6)
(Sanitary engineering)

ZHIVOV M.S.

SYROMYATNIKOV, I.A.; GRUDINSKIY, P.G.; PETROV, I.I.; KOROL'KOVA, V.I.;
SERBINOVSKIY, G.V.; BOL'SHAM, Ya.M.; LIVSHITS, D.A.; FATERMAN, A.L.
MAYFELD, M.P.; ZHIVOV, M.S.; ONKIN, A.K. (Moskva)

Candidate of engineering L. P. Podol'skii. Elektrichestvo no.1:96
Ja '58. (MIRA 11:2)

(Podol'skii, Lev Petrovich, 1887)

DELIBASH, B.A.; ZHIVOV, M.S.; TRUNKOVSKIY, L.Ye.; SOKOLOV, D.V.,
inzh., nauchnyy red.; VDOVENKO, Z.I., red. izd-va;
SHERSTNEVA, N.V., tekhn. red.

[Modern methods for conducting electrical equipment instal-
lation operations]Progressivnye metody proizvodstva elektro-
montazhnykh rabot. Moskva, Gosstroizdat, 1962. 134 p.
(MIRA 15:12)

(Electric wiring) (Electric lines)

ZHIVOV, M.S.

Lengthening the distance between cable supports. Prom.energ. 17
no.2:35-37 F '62. (MIRA 15:3)
(Electric lines--Poles)

ZHIVOV, M.S., inzh.; NAYFEL'D, M.R., inzh.

Problems concerning electrical wiring operations in dwellings and
public buildings. Prom. energ. 17 no.3:42-47 Mr '62.
(MIRA 15:2)

(Electric wiring, Interior)

ZHIVOV, M.S., inzh.; VENITSIANOV, Ye.A., inzh.

Mechanization of piercing operations. Mont. i spets. rab. v.
stroitel'stve no. 3:23-26 Mr '62 (MIRA 15:6)

1. Vsesoyuznyy trest po montazhy elektrostantsiy promyshlennykh
predpriyatiy tsentral'nykh rayonov Ministerstva stroitel'stva
predpriyatiy metallurgicheskoy i khimicheskoy promyshlennosti SSSR.
(Drilling and boring--Electric equipment)

DELIBASH, B.A., inzh.; ZHIVOV, M.S., inzh.

Organization of work in the assembly of the electric
equipment of heavy-duty blast furnaces. Mont. i spets.
rab. v stroi. 24 no.6:10-14 Je '62. (MIRA 15:6)

1. Vsesoyuznyy trest po montazhu elektrostantsiy promyshlennykh
predpriyatiy tsentral'nykh rayonov Ministerstva stroitel'stva
predpriyatiy metallurgicheskoy i khimicheskoy promyshlennosti
SSSR.

(Blast furnaces---Electric equipment)

ZHIVOV, Mikhail Semenovich; ROZENSHTEYN, G.Ye., nauchn. red.;
MUPKINA, V.G., red.; TOKER, A.M., tekhn. red.

[Equipment for study rooms for training electricians in
electric equipment installation operations] Oborudovanie
uchebnogo kabineta elektromontazhnoi tekhnologii dlia
obucheniia elektromonterov. Moskva, Proftekhizdat, 1963.
86 p. (MIRA 17:4)

DELIBASH, Boris Apostolovich; ZHIVOV, Mikhail Semenovich;
PROKHORENKOV, A.T., inzh., nauchn. red.; LYTKINA, L.S.,
red.; KASIMOV, D.Ya., tekhn. red.

[Installation of the electrical equipment of large cupola
furnaces] Montazh elektrooborudovaniia krupnykh domennykh
pechei. Moskva, Gosstroizdat, 1963. 105 p.
(MIRA 17:1)

SOKOLOV, B.A., inzh., red.; ZHIVOV, M.S., inzh., red.; BOL'SHAM,
Ya.M., inzh., red.; KUZNETSOV, M.P., inzh., red.;
ZIL'BERMAN, R.I., inzh., red.; IFTINKA, G.A., red.izd-va;
MOCHALINA, Z.S., tekhn. red.

[Construction specifications and regulations] Stroitel'nye
normy i pravila. Moskva, Gosstroizdat. Pt.3. Sec.I.
ch.6.[Electrical systems; regulations for organizing and
carrying out the work, acceptance of the works] Elektro-
tehnicheskie ustroistva; pravila organizatsii i proiz-
vodstva rabot, priemka v ekspluatatsiiu (SNiP III-I. 6-62)
1963. 134 p. (MIRA 16:10)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po de-
lam stroitel'stva. 2. Gosudarstvennyy komitet po delam
stroitel'stva SSSR (for Sokolov). 3. Mezhdudomstvennaya
komissiya po peresmotru stroitel'nykh norm i pravil Akademi
stroitel'stva i arkhitektury SSSR (for Zhivov). 4. Gosudar-
stvennyy proyektnyy institut Ministerstva stroitel'stva
RSFSR (for Bol'sham, Kuznetsov). 5. Vsesoyuznyy gosudarst-
vennyy proyektnyy institut Ministerstva energetiki i elek-
trifikatsii SSSR (for Zil'berman).
(Electric power distribution)

DELIBASH, B.A., inzh.; ZHIVOV M.S., inzh.; HAYFEL'D, M.R., inzh.

Experience in the installation of electrical equipment in large
cupola furnaces. Prom. energ. 18 no.3:34-40 Mr '63.

(MIRA 16:6)

(Cupola furnaces—Electric equipment)

ZHIVOV, M.S.

Defects of the PPM-10 spring drive. Prom. energ. 18 no.11:58-59 N
'63. (MIRA 16:12)

Vsesoyuznyy trest po elektrifikatsii promyshlennykh predpriyatiy
tsentral'nykh rayonov SSSR.

ZHIVOV, Mikhail Semenovich; SHUMILOVSKAYA, I.P., red.

[How to organize electric equipment installation operations] Kak organizovat' elektromontazhnye raboty. Moskva, Izd-vo "Energia," 1964. 70 p. (Biblioteka elektromontera, no.129) (MIRA 17:8)

KAMINSKIY, Yevgeniy Abramovich; NAYFEL'D, M.R., retsenzent;
ZHIVOV, M.S., retsenzent; SHUMILOVSKAYA, I.P., red.

[Electric wiring of dwellings and how to take care of
it] Kwartirnaia elektroprovodka i kak s nei obrashchat'sia.
Izd.2., perer. i dop. Moskva, Izd-vo "Energia," 1964.
142 p. (MIRA 17:7)

ALEKSEYEV, Aleksandr Grigor'yevich; ZHIVOV, M.S., red.

[Organization and economics of electrical equipment installation operations] Organizatsia i ekonomika elektromontazhnogo proizvodstva. Moskva, Izd-vo "Energia," 1964. 149 p.
(MIRA 17:7)

GUBINA, A.A.; ZAKGEYM, Ye.N.; ZUSMANOVICH, V.M.; IVANOV, K.N.;
LISITSYN, S.N.; MOZGOV, A.Ya.; PAVLOV, A.S.; PISKORSKIY,
B.N.[deceased]; USHOMIRSKAYA, A.I.; FINKEL'SHTEYN, S.M.;
CHISTOVSKIY, V.B.; SHER, S.Yu.; ADAMOV, O.V., nauchn. red.;
BEYZERMAN, A.N., nauchn. red.; ZHIVOV, M.S., nauchn. red.;
POGORELYY, P.P., nauchn. red.; STAROVEROV, I.G., nauchn. red.;
STESHENKO, A.L., nauchn. red.; TSEYTLIN, M.M., nauchn. red.;
KOKHANENKO, N.A., inzh., red.; VOLNYANSKIY, A.K., glav. red.

[Assembling interior sanitary equipment] Montazh vnutren-
nikh sanitarno-tekhnicheskikh ustroystv. Moskva, Stroizdat,
1964. 725 p. (MIRA 17:8)

VOLFYAN, Georgiy Abramovich; IVANCHUKOV, A.F., nauchn. red.;
ZHIVOV, M.S., nauchn. red.; SOROKINA, M.I., red.

[Industrial training of powerhouse electricians;
concise methodological instructions] Proizvodstvennoe
obuchenie elektromonterov remontnikov; kratkie metodi-
cheskie ukazaniia. Moskva, Vysshaya shkola, 1964. 162 p.
(MIRA 18:1)

BOGDANOV, K.D.; DELIBASH, B.A.; VENETSIANOV, Ye.A.; GUREYEV, V.A.;
ZHIVOV, M.S.; ZEVAKIN, A.I.; NAYFEL'D, M.R.; NEYMAN, Kh.G.;
KUZNETSOV, M.P.; RIZOVATOV, A.V.; RUBINSHTEYN, Ya.A.;
TRIFONOV, A.N.; TRUNKOVSKIY, L.Ye.; KHROMCHENO, G.Ye.

[Organization and performance of electrical equipment installation operations] Organizatsiia i proizvodstvo elektromontazhnykh robot. Moskva, Stroiizdat, 1964. 602 p.
(MIRA 18:3)

MASANOV, Nikolay Fedorovich; ZHIVOV, M.S., red.

[Electrical wiring in pipes] Elektroprovodki v trubopro-
vodakh. Moskva, Energiia, 1965. 91 p. (Biblioteka
elektromontera, no.154). (MIRA 18:4)

GLAZKOV, Aleksandr Nikolayevich; ZHIVOV, M.S., nauchn. red.

[Installation of power distribution networks, lighting
networks, and electrical equipment] Montazh silovykh i
osvetitel'nykh setei i elektricheskogo oborudovaniia.
Moskva, Stroiizdat, 1965. 284 p. (MIRA 18:8)

ACC NR: AP6036713

SOURCE CODE: UR/0119/66/000/011/0003/0006.

AUTHOR: Zhivov, N. P. (Engineer)

ORG: none

TITLE: Perspectives of industrial application of standard pneumatic systems of automated checking and control

SOURCE: Priborostroyeniye, no. 11, 1966, 3-6

TOPIC TAGS: pneumatic control system, automatic pneumatic control, automatic control equipment, electronic equipment, data processing equipment, industrial automation, *pneumatic servomechanism*

ABSTRACT: Perspectives of using standard pneumatic systems of automatic control in industry are discussed citing as an example PUSK-3, a system of pneumo-electronic centralized and automatic monitoring, regulation, and remote control of continuous technological processes. The data units and servomechanisms of the system are primarily pneumatic. PUSK-3 forms the second stage of a hierarchical multistage pneumo-electronic complex of the "Kompleks-EPE" type; it also can be used independently as a control panel system. A multistage automatic control structure is assembled by breaking up a complex system into its functional stages, arranging these according to increasing complexity, and making the lower stages independent, as these are relatively simple and common in application to a variety of technological processes. Fig. 1 represents a functional diagram of "Kompleks-EPE," and Fig. 2

Card 1/4

UDC: 62.525

ACC NR: AP6036713

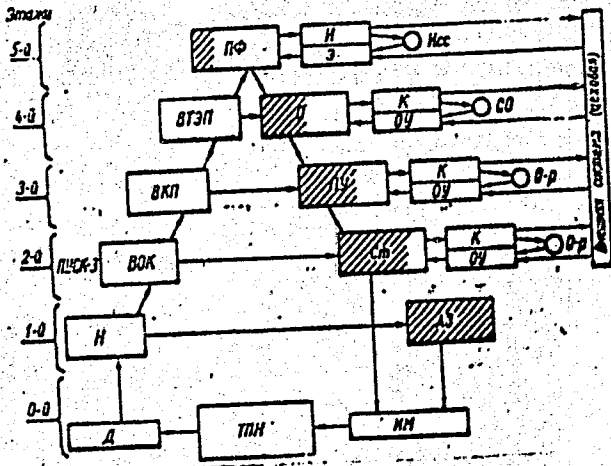


Fig. 1. Functional diagram of "Kompleks-EPE"

D - Data units; N - standardization; VOK - computation of generalized coordinates; VKP - computation of complex indexes; VTEP - computation of technical and economical indexes; PF - search for the purpose function (investigation of the technological process); I - investigation; E - experimenting; Iss - investigator; O - optimization; K - checking; OY - operation control; SO - senior operator; PU - program control; Or - operator; St. - stabilization; AZ - automatic protection; TPN - continuous technological process; IM - servomechanism.

a functional diagram of PUSK-3. PUSK-3 includes a pneumatic and an electronic part. The pneumatic one consists entirely of elements of the Universal System of Elements of Industrial Pneumoautomation (USEPPA). The pneumatic part can perform all control

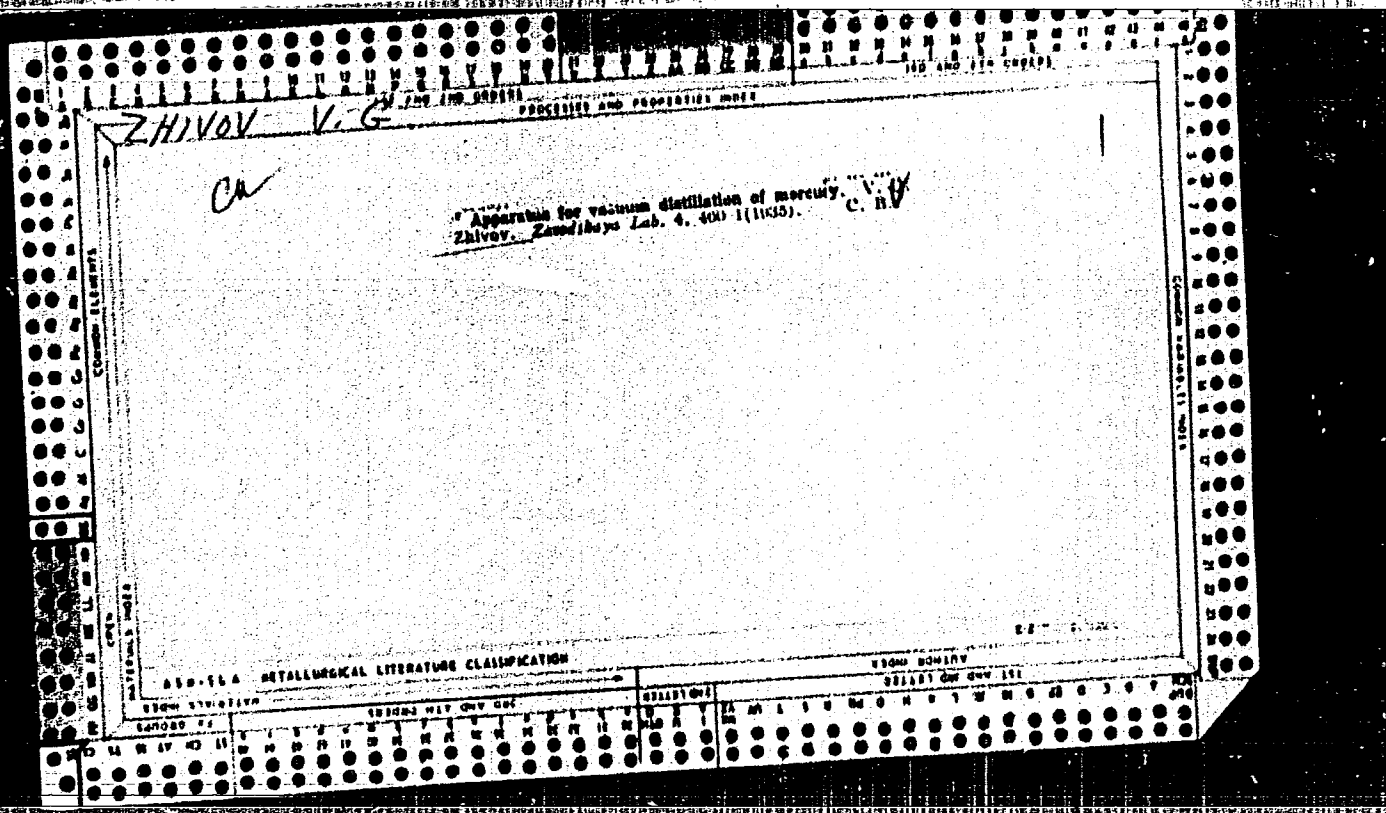
Card 2/4

ACC NR: AP6036713

functions independently when the control object is entirely pneumatically equipped. Otherwise, both parts operate jointly. PUSK-3 was developed at the Central Scientific Research Institute of Large-Scale Automation, and was demonstrated at the 1966 Spring Leipzig Fair. At the present time two PUSK-3 systems are in experimental industrial operation, three are being mounted and adjusted, and several more are under production. Orig. art. has: 7 figures.

SUB CODE: 1309 / SUBM DATE: none / ORIG REF: 007/

Card 4/4



1ST AND 2ND LETTER		3RD AND 4TH LETTERS		MATERIALS INDEX	
ZHIVOV V. G.					
R					
<p>Zhivov, V. G. LUTING COMPOUND FOR USE AT HIGH TEMPERATURES. <i>Zavodskaya Lab., 4 (4) 401 (1935)</i>.—The lute has a composition of about 50% Al₂O₃, 25% MgO, and 25% kaolin mixed to the consistency of a stiff paste with a small amount of soluble glass. Instead of MgO, pulverized magnetite brick can be used. The lute has a high refractoriness, is impermeable to gases, and is sufficiently resistant to chemical influence (especially of chlorine). A lute containing no kaolin and mixed with water can be used for coating the winding of platinum and nichrome furnaces.</p>					
1ST AND 2ND LETTER		3RD AND 4TH LETTERS		MATERIALS INDEX	

INDEX AND 6TH CODES

PROCESSES AND PROPERTIES INDEX

ZHIVOV V.G.

2

Method of determining the structure of sublimates.
Y. G. Zhivov, Zavoiskaya Lab. 4, 824-B(1938).—The
structure and degree of dispersion of sublimates can be
detd. by placing an object glass in the path of the gases
during sublimation, and then examg. with a microscope.
Chas. Blanc

COMMON ELEMENTS

MATERIALS INDEX

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

APPROPRIATE

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PROPERTIES AND PROPERTIES SHEET

13

ZHIVOV V.G.

The production of pure anhydrous aluminum fluoride. Byull. V. G. Zhivov, 1960, Informatsionnyi Bibliograf. Byull. Vyssoya. Nauka, Leningrad, Inst. Inzhenerov i Proektirovaniya Aluminia, (Elektron. Prom. 1939, No. 01-2, 16-33; Khim. Referat. Zhur. 1960, No. 8, 98).—A review of data on the properties of AlF₃ and methods for its production. Conditions for distg. pure anhyd. AlF₃ from Al fluoride and basic tech. AlF₃ are described. The starting material is placed in an aluminum crucible. Another aluminum crucible is used as condenser. The crucibles must be made from very pure aluminum, have a min. porosity and their walls must be thin. Tech. AlF₃ must be heated carefully before using. The crucibles are heated in a Tsunami-type oven and the distn. is carried out at not below 1100°. To avoid basic F compds. in the sublimed AlF₃, the distn. must be carried out in a current of HF or in an inert or noble gas (N₂, Ar). The temp. can be lowered if the distn. is carried out under a reduced pressure. The method produced considerable amts. of AlF₃.

W. R. Henn

METALLURGICAL LITERATURE CLASSIFICATION

197082

CALLISTONE