

KOZUBOWSKI, Ryszard (Gdansk)

A certain case of selecting the optimum guide vane width in the impulse stages of steam turb..... Inst masz przep PAN no.23:83-102 '65.

1. Submitted January 1964.

KONECKI, Janusz; KOZUBSKA, Mieczysława

Diurnal changes in the tigroid content in motor cells of the ventral horns of the spinal cord in mice. Folia morphologia 12 no. 4:279-283 '61.

1. Zakład Histologii i Embriologii, Śląska Akademia Medyczna, Rokitnica.
Kierownik: doc. dr. A. Vorbrodt.

KOZUBSKA, Mięczyślawa; STEPLEWSKI, Zenon

Histochemical studies on the effect of cortisone on the early stages of liver regeneration in rats. Endokr. pol. 14 no.1: 19-35 '63.

1. Zakład Histologii i Embriologii Ogólnej w Zabrze-Rokitnicy
Kierownik: doc. dr A. Vorbrodt.
(CORTISONE) (PHARMACOLOGY)
(LIVER REGENERATION)
(HISTOCHEMISTRY)

P.T. A. KOZUBSKI, F.

Mining
3

253

622 24

Kozubski F., Eng. Deep Shaft Orientation Methods.

„Sposoby nawiazania glębokimi szybami”. Przegląd Górniczy. No 5, 1949, pp. 537—556, 9 figs. 8 tabs.

Discussion on the methods applied. Comparative results obtained by different methods. Conclusions concerning methods and the way of applying them in various conditions

KOZUBSKI, F.

"Prospecting and raw material bases." p. 442. (PRZEGLAD GORNICZY, Vol. 10, No. 12, Dec. 1954. Stalinograd, Poland)

SO: Monthly List of East European Accessions. (EEAL). LC. Vol. 4. No. 4. April 1955. Uncl.

MROZOWSKI, Mieczyslaw; KOZUBSKI, Franciszek; RUTOWSKI, Tadeusz

The necessary geologic research for planning new hard coal mines.
Przegl geol 9 no.6:296-301 Je '61.

(Poland—Geology) (Poland—Coal mines and mining)

KOZUBSKI, Franciszek

Problem of exact recognition of the tectonics of deposits by drillings and the need for designing deep mines. Przegl geol 10 no.12:629-632 D '62.

1. Centralny Urząd Geologii, Warszawa.

LANGER, Jan; MANKOWSKI, Zygmunt; KOZUBSKI, Jozef

Correct preoperative therapy and specific complications following pulmonary resection (role of bacteriological remission in surgery. Gruzlica 31 no.3:213-218 '63.

1. Z Kliniki Chirurgii Klatki Piersiowej SDL w Zakopanem

Kierownik: prof. dr med. W. Rzepecki.

(PNEUMONECTOMY) (PREOPERATIVE CARE)

(POSTOPERATIVE COMPLICATIONS)

(TUBERCULOSIS, PULMONARY)

L 27261-66 EWT(m) IJP(c)

ACC NR: AP6009522

SOURCE CODE: UR/0113/66/000/005/0045/0045

AUTHOR: Kozubskiy, E. V.

ORG: none

TITLE: Test of accuracy of stereophotogrammetric measurements in bubble chambers.
Class 21, No. 179391

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 5, 1966, 45

TOPIC TAGS: bubble chamber, nuclear physics apparatus, particle track

ABSTRACT: This Author Certificate presents a test for the accuracy of stereophotogrammetric measurements in bubble chambers equipped with reference marks. To increase the accuracy of measurements of three-dimensional particle tracks in the bubble chamber, the testing device consists of a complete prism composed of three transparent plates at right angles to each other. The reference points are marked on the surface of the plates (see Fig. 1).

Card 1/2

UDC: 539.1.073.3

L 27261-66

ACC NR: AP6009522

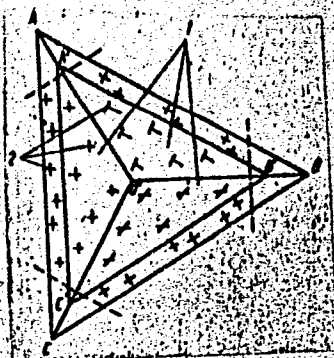


Fig. 1. 1 - plates;
2 - reference points.

Orig. art. has: 1 figure.

SUB CODE: 18, 20/

SUBM DATE: 25Sep64

Card 2/2 *CC*

L 27234-68 EWI(m), IJP(c)

ACG NR: AP6009521

SOURCE CODE: UR/0413/66/000/005/0044/0045

AUTHORS: Zel'dovich, A. G.; Kozubakiy, E. V. 27
B

ORG: none

TITLE: Bubble chamber 19 Class 21, No. 179390 [announced by United Institute for Nuclear Studies (Ob'yedinennyy institut yadernykh issledovaniy)]

SOURCE: Izobreteniya, promyshlennyye obrastysy, tovarnyye znaki, no. 5, 1966, 44-45

TOPIC TAGS: bubble chamber, nuclear physics apparatus

ABSTRACT: This Author Certificate describes a bubble chamber consisting of a chamber surrounded by a vacuum mantle to which the windings of the electromagnet, the photographic and illuminating systems, and the shielding installation are fastened. To decrease the optical inhomogeneity of the liquid occupying the ballast volume of the chamber by cooling, the ballast chamber is equipped with a cooling coil. To prevent supercooling of the liquid in the working chamber, a heater is installed between the ballast and working chamber (see Fig. 1).

Card 1/2

UDC: 539.188.073.3

L 27234-66

ACC NR: AP6009521

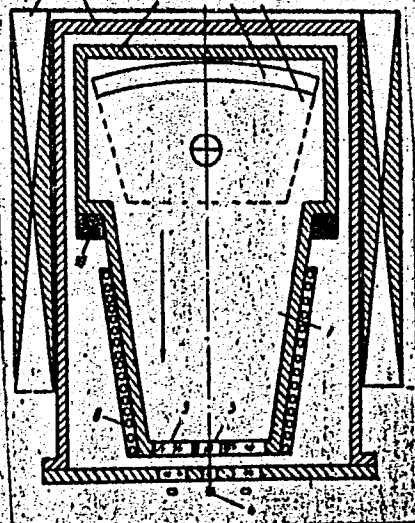


Fig. 1. 1 - body of chamber; 2 - mantle; 3 - windings of electromagnet; 4 - light source; 5 - glass illuminators; 6 - reflecting device; 7 - ballast chamber; 8 - cooling coil; 9 - working chamber; 10 - heater.

Orig. art. has: 1 figure.

SUB CODE: 18/ SUBM DATE: 22Aug64

Card 2/2 CC

YEVDOKIMOV, V.D., kand. tekhn. nauk; KOZUESKIY, I.V., inzh.

Surface hardening and wear testing of parts. Mashinostroenie
no.4134-36 J1-Ag '64. (MIRA 17:10)

YEVDOKIMOV, V.D.; KOZUBSKIY, I.V.

Three-component dynamometer for measuring cutting forces. Stan.1
instr. 35 no.9:31-32 S '64.
(MIRA 17:10)

YEVOKIMOV, V.D., kand. tekhn. nauk; MEZENTSEV, S.A., inzh.; BURDA, I.Kh.,
inzh.; KOZUBSKIY, I.V., inzh.

Burnishing holes in steel parts. Mashinostroenie no.3:41-42
My-Je '65. (MIRA 18:6)

NOSEK, J.; GRESIKOVA, M.; REHACEK, J.; KOZUCH, O.; ALBRECHT, P.

The role of birds in a natural focus of tick-borne encephalitis.

IV. Experimental infection of pheasants (*Phasianus colchicus*) with tick-borne encephalitis virus. *J. hyg. epidem.* 6 no.4:478-482 '62.

1. Virological Institute, Czechoslovak Academy of Sciences, Bratislava.
(ENCEPHALITIS, EPIDEMIC) (BIRDS)

NGSEK, J.; KOZUCH, O.; LICHARD, M.; ERNEK, E.; ALBRECHT, P.

Experimental infection of the great dormouse (*Glis glis*) with tick-borne encephalitis virus. Acta virol. 7 no.4:374-376 JI '63.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(TICKS) (ENCEPHALITIS)

KOZUCH, O.; NOSEK, J.; ERNEK, E.; LICHARD, M.; ALBRECHT, P.

Persistence of tick-borne encephalitis virus in hibernating hedgehogs and dormice. Acta virol. (Praha)[Eng] 7 no.5:430-433 S '63.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(ENCEPHALITIS, EPIDEMIC) (ZOOZOSES)
(HIBERNATION)

ERNEK, E.; KOZUCH, O.; LICHARD, M.; NOSEK, J.; ALBRECHT, P.

Experimental infection of *Clethrionomys glareolus* and *Apodemus flavicollis* with tick-borne encephalitis virus. Acta virol. (Praha)[Eng] 7 no.5:434-436 S '63.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

(ENCEPHALITIS, EPIDEMIC)

LIBIKOVA, H.; MAYER, V.; REHACEK, J.; KOZUCH, O.; ERNEK, E.;
ALBRECHT, P.; ZEMLA, J.

Study of cytopathic agents isolated from Ixodes persulcatus
ticks. Acta virol. (Praha)[Eng] 7 no.5:475 S '63.

1. Institute of Virology, Czechoslovak Academy of Sciences,
Bratislava.

(VIRUSES) (TICKS)

LIBIKOVA, H.; REHACEK, J.; MAYER, J.; KOZUCH, O.; ERNER, E.

Tick-borne encephalitis viruses are spread by different methods from Eastern part of Europe to Asia. Epidem. Probl. 3 no. 3 1978, 141.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

*

LIBIKOVA, H., REHACEK, J.; GRESIKOVA, M.; KOZUCH, O.; SOMOGYIOVA, J.
Ernek, E.

Cytopathic viruses isolated from ixodes ricinus ticks in
Czechoslovakia. Acta virol (Praha) [Engl] 8 no.1:96 Ja'64.

1. Institute of Virology, Czechoslovak Academy of Sciences,
Bratislava.

*

MAYER, V. KOZUCH, O.

Detection of antibodies against Kemerovo virus by the plaque
technique. Acta virol. (Praha) [Eng.] 8 no.2:190 Mr'64.

1. Institute of Virology, Czechoslovak Academy of Sciences,
Bratislava.

*

KOZUCH, O.; NOSEK, J.

Alimentary infection of the hedgehog with tick-borne encephalitis (TE) virus. Acta virol. (Praha) [Eng.] 8 no.3:284
My'64

1. Institute of Virology, Czechoslovak Academy of Sciences,
Bratislava.

MAYER, V.; KOZUCH, O.

Plaque neutralization -- a sensitive method for detection of antibodies against Kemerovsky virus. *Cesk. epidem.* 13 no.4: 195-200 J1 '64.

1. Virologicky ustav Ceskoslovenske akademie ved, Bratislava.

REHACEK, J.; KOZUCH, O.

Comparison of the susceptibility of primary tick and chick embryo cell cultures to small amounts of tick-borne encephalitis virus. Acta virol. 8 no.5:470-471 S '64.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

GRESIKOVA, M.; KOZUCH, O.

Cultivation of louping ill virus on tissue cultures from chick embryonal cells under different conditions. Cesk. epidem. 14 no. 1:31-35 Ja '65

1. Virologicky ustav Ceskoslovenskej akademie ved, Bratislava.

GRANICOVA, M.; NOSEK, J.; KOCUSEK, J.; HENZL, V.; LICHARD, M.

Study on the ecology of Trichinella spiralis. Acta virol. (Praha)
[Eng.] 9 no.1:83-88 Ja '65

1. Institute of Virology, Czechoslovak Academy of Sciences,
Bratislava.

LIBIKOVA, H.; MAYER, V.; KOZUCH, O.; REHACEK, J.; FRNEK, E.; ALBRECHT, P.

Isolation from Ixodes persulcatus ticks of cytopathic agents (Kemerovo virus) differing from tick-borne encephalitis virus and some of their properties. Acta virol. (Praha) [Eng.] 8 no.4:289-301 J1 '64.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

MAYER, V.; KOZUCH, O.; LIBIKOVA, H.; ZAVADA, J.

Some biological and physico-chemical properties of Kemerovo virus. Acta virol. (Praha) [Eng.] 8 no.4:302-311 J1 '64.

1. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava.

KOZUCH, O.; GRULICH, I.; NOSEK, J.

Experimental infection of the mole with tick-borne encephalitis virus. Acta virol. (Praha) [Eng] 9 no.3:287 My'65.

L. Institute of Virology, Czechoslovak Academy of Sciences, Bratislava; and Institute of Vertebrate Zoology, Czechoslovak Academy of Sciences, Brno.

KARDASZ, Piotr, mgr; KOZUCHAROW, Iwan, mgr

Temperature observations of the water of the Wkra River.
Gosp wodna 23 no.6:243-244 Je '63.

1. Zaklad Melioracji, Instytut Melioracji i Uzytkow Zielonych,
Warszawa.

KOZUCHOWSKA, Izabela

Congenital vascularized cataract. Ann.Univ. Lublin; sec. D 7 no.
11-21 1952.

1. Z Kliniki Okulistycznej Akademii Medycznej w Lublinie. Kierownik:
prof. dr Tadeusz Krwawicz.

(CATARACT,
congen. vascularized)

KRWAWICZ, Tadeusz; DIMITROWSKA, Maria; KOZUCHOWSKA, Izabela

Injuries of the visual organ in agricultural workers. Ann.Univ.
Lublin sec.D 8:167-212 1953.

1. Z Instytutu Medycyny Pracy Wsi s Lublinie. Dyrektor: prof.
dr Jozef Parnas. Z Kliniki Okulistycznej Akademii Medycznej w
Lublinie. Kierownik: prof. dr Tadeusz Krwawicz.

(EYE, wounds and injuries,
in agricultural workers)

(WOUNDS AND INJURIES,
eye, in agriculturalworkers)

(AGRICULTURE,
eye, inj. in agricultural workers)

Kozuchowska, Izabela

EXCERPT A MEDICA Sec. 12 Vol. 9/7 Ophthalmology Jul 55

1157. KOZUCHOWSKA I, Klin. okulist. Akad. med., Lublin. *Zaćma wrodzona unaczyniona. Congenital vascularized cataract ANN. UNIV. LUBLIN, SECT. D 1954, 7/11-12 (247-251) illus. 1

In a 2-yr. -old child a cataract was found in the shape of a folded yellowish lens. Two vessels were simultaneously present. The extraction was performed but the synechiae posteriores remained, the reflex from the fundus was pinkish and faint. The possibility of iritis foetalis is suggested. Szmyt - Łódź (XII, 7*)

POLAND / Human and Animal Morphology (Normal and Pathological). Methods and Technique of Investigation.

5

Abs Jour : Ref Zhur - Biologiya, No 4, 1959, No. 16875

Author : Kozuchowska, Izabela

Inst : NOT given

Title : New Method of Preparation of Pathologico-anatomical Specimens of the Eye According to Mahrburg

Orig Pub : Klin. oczna, 1957, No 4, Dodatek, 417-421

Abstract : No abstract given

Card 1/1

KOZUCHOWSKA, Izabela

Equalization of a complete corneal fistula by the use of excavation grafts. Klin. oczna 32 no.2:167-170 '62.

1. Z Kliniki Okulistycznej AM w Lublinie Kierownik: prof. dr med.
T. Krawicz.

(CORNEAL TRANSPLANTATION) (CORNEA dis)

KOZUCHOWSKA, Izabela

Histological studies on the distribution of glycogen in ocular tumors. Klin. oczna 35 no.3:411-415 '65.

1. Z Kliniki Okulistycznej AM w Imblinie (Kierownik: prof. dr. med. T. Krwawiec).

Direct. Director, to KOZUCHOWSKI, J.
Y. 15, Jan 1954
Steam Raising & Steam Engines

✓ 487 POWER AUTOMATIC CONTROL EQUIPMENT. Kozuchowski, J. ✓ (Pregl. Elektrotech. (Electrotech. Rev.), 21 July 1953, vol. 29, 275-285). In the light of experience gained in Polish power stations and research laboratories the merits and demerits of automatic equipment used for the control of combustion, water and temperature in boiler operation are reviewed, with the aid of twenty one diagrams. B.E.A.

KOZUCHOWSKI, J.

Automation of open-hearth furnace No. 7 of the Pokoj Steelworks installed by the Electric-Power Institute, Breslau Polytechnic. p.448
(POMIARY, AUTOMATYKA, KONTROLA, Vol. 2, No. 11, Nov. 1956, Warsaw, Poland)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 9, Sept. 1957, Uncl.

KOZUCHOWSKI, Jan, prof. dr. inz.

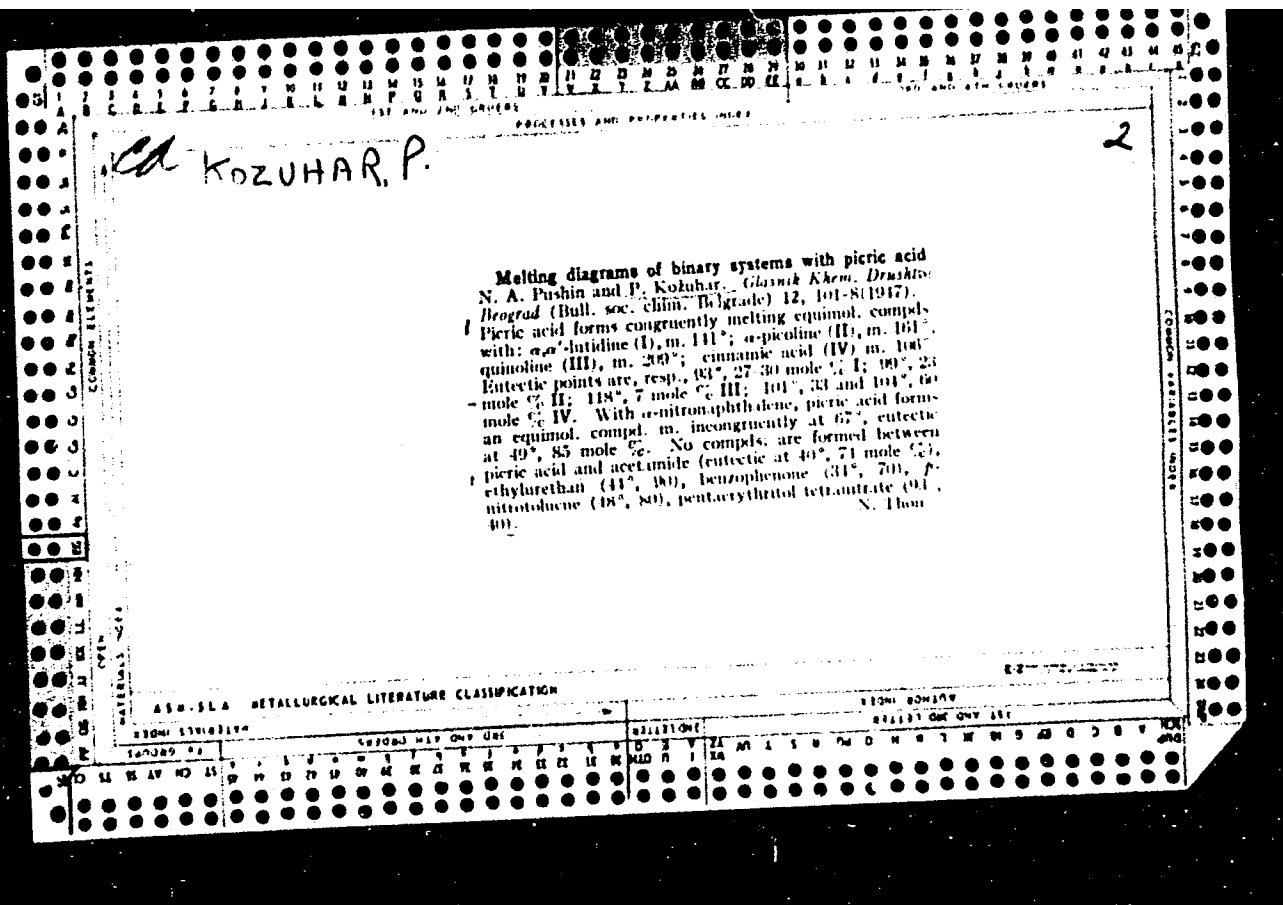
Automation of production processes; before the Polish National Conference. Problemy 19 no.9: 530-534 '63.

1. Kierownik Katedry Systemow Energetycznych, Politechnika, Wroclaw; dyrektor Instytutu Automatyki Systemow Energetycznych; przewodniczacy Podkomitetu Automatyki; zastepca przewodniczacego Polskiego Komitetu Pomiarow i Automatyki przy Naczelnej Organizacji Technicznej, Warszawa; czlonek Komitetu Automatyki, przewodniczacy Zespolu Automatyzacji Procesow Przetworczych, Polska Akademia Nauk, Warszawa.

KOZUCHOWSKI, Jan, prof. dr

Cybernetic future of megawatts. Przegl. techn. 85 no.21:3 24 My '64.

1. Dyrektor Instytutu Automatykacji Systemow Energetycznych, Warszawa.



CA

KOZUHAR, P.

18

Preparation of magnesium oxide from serpentine. P. (ar. Kozuhar (Univ. Belgrade). *Bull. soc. chim. Belgrade* 13, 213-60(1918).—An aq. suspension of finely ground serpentine is treated at 60-70° with HNO₃ or with nitrous gases, the soln. filtered, and the filtrate treated with the calcul. amt. of MgO to ppt. Fe and Ni. After filtering, the soln. is treated with enough MgO to give MgO.Mg(NO₃)₂, evapd., and the residue dried and then heated at 330-350° to give a fine white powder, the nitrous gases being recycled. The properties of this material in constructional work are described. S. Edmund Berger

KOZHAROV, S. [Kozlukharyov, s.]; KUMANOV, P.

Chromosome numbers of four Bulgarian plants. Doklady BA 17
no. 5:491-494 '64

1. Submitted by Academician P. Jordanoff [Jordanov, P.]

KOZHAROV, S. [Kozhukharov, S.]; KUZMANOV, B.

Chromosome numbers of some Bulgarian plant species. Godishnik
biol 57 no.1:103-109 '62-'63 [publ. '64.].

KOZUK, I. V.

126. Effect of Dichlorethane on the Organism

"Problems of Labor Hygiene in the Use of Dichlorethane in the Aviation Industry," by I. V. Kozuk, Chair of Industrial Hygiene Central Institute for the Advanced Training of Physicians, Gigi-yena Truda i Professional'nyye Zabolevaniya, Vol 1, No 1, Jan/Feb 57, pp 31-38 ✓

Investigations conducted to determine the effect of dichlorethane, a glue solvent used in the aviation industry, on the organism established that prolonged exposure to the vapors of the chemical produced changes in the functional condition of the central nervous system and disturbed the motor apparatus regulating the functions of the upper extremities. It was also established that the allowable limit of concentration of dichlorethane vapors in the air must not exceed 0.005 milligram per liter. On the basis of the investigations, it was recommended that steps be taken to find a substitute for dichlorethane that proper ventilation facilities be installed in premises where work is being done with solvent, and that a 6-hour working day be instituted for workers handling the chemical. (U)

KOZUKH, B.S.

Disorder of bone growth in tuberculous gonitis. Ortop.travm.
i protez. no.6:62-64 '61. (MIRA 14:8)

1. Iz kafedry rentgenologii (zav. - prof. A.Ye. Rubasheva)
Kiyevskogo instituta usovershenstvovaniya vrachey i rentge-
notdeleniya raybol'nitsy Kiyev-Svyatoshinskogo rayona
Kiyevskoy oblasti.

(KNEE--TUBERCULOSIS)

YUGOSLAVIA

Dr Vlado KOZUL, Department of Internal Medicine, General Hospital
(Interni odjel Opće bolnice) Osijek.

"Eust - Myocardial Infarction Syndrome."

Zagreb, Liječnički Vjesnik, Vol 84, No 12, Dec 62; pp 1225-1232.

Abstract [English summary modified]: Description of syndrome in 2 men
aged 43, 42: pericardial friction rub, mild fever, pleural effusion,
refractory to anticoagulants and antibiotics but responsive to
prednisone. Two diagrams, 1 Yugoslav and 7 Western references.

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and of the Brothers Dr Sobol General Hospital (Opća Bolnica), Rijeka.

"Meloreostosis Léry."

Zagreb, Liječnički Vjesnik, Vol 85, No 9, September 1963, pp 979-988.

APPROVED FOR RELEASE: Monday, July 31, 2000 CIA-RDP86-00513R000825 300

Abstract: [Authors' French summary modified] What is involved are unusual
changes in the skeleton within the framework of sclerosal dystrophy,
which changes show up in X-rays largely in the form of longish dark and
relatively regular streaks, much like wax streaks around a lighted
candle. Such changes have been localized in the great majority of known
cases (96.6 percent) in one or more of the extremities, with fewer in
various bones of the skull and trunk. The etiology of these changes is
unknown. The most probable of numerous theories is that congenital anom-
alies are at issue. The illness is quite rare, only 88 cases having been
described in the available literature, to which should be added one de-
scribed in the current article. The disease is relatively benign and
progresses slowly, but more serious disturbances can arise if a joint
becomes affected. No successful therapy has yet been found.

Two photographs, two Soviet and 37 Western references of varying date.

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34869-65 DTIC(A)/NTIS(D)/TEC(A7)/AD(A5)/DND(B)/AWA(C) IJP(e) Jp
ACCESSION NO: AP-005095 8/0051/65/018/002/0337/0338

37
1

AUTHOR: Kozulin, A. S.

TITLE: RAMAN SPECTRA OF SnCl_4 , SbCl_3 , and $2\text{SnCl}_2 \cdot \text{O}_2$ in the region of valence vibrations

SOURCE: Optika i Spektroskopiya, v. 18, no. 2, 1965, 337-338

TOPIC TAGS: Raman spectra, antimony compound, nuclear quadrupole resonance, spectrum resolution

ABSTRACT: Compounds of this type are of interest for the manufacture of organic semiconductors and for the design of heterogeneous catalysis. In view of the discrepancy between the quadrupole resonance data and the published data on the Raman spectra of these substances, the author plotted the Raman spectra in the region of the valence vibrations of these compounds, using an ISP-51 spectrometer with a photo attachment and an automatic recorder. An exciting line of wavelength 5348 Å was used. The results have shown, in contrast with the early data, that antimony chloride and the antimony-benzene complex both have three resonant frequencies in

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L 34869-65

ACCESSION NR: AP-005055

the valence region, as would follow from the nuclear quadrupole resonance data. In the case of $\text{Si(CH}_3\text{)}_4$ only two lines were observed, but this is attributed to the small asymmetry parameter (10%), which makes it possible to resolve one doublet with the observed data, or also to the low intensity of the third frequency. In conclusion, we sincerely grateful to V. B. Grechishkin, at whose initiative and under whose continuous attention the work was done. Orig. art. has 1 figure and 1 table.

ASSOCIATION: None

SUBMITTED: 02Apr65

INDEX: 00

SUB CODE: OP

HR REF SOV: 005

OTHER: 001

Card 2/2

ACC NR: AP7001928

SOURCE CODE: UR/0125/66/000/012/0022/0025

AUTHOR: Nedoseka, A. Ya.; Kozulin, G. P.; Moiseyenko, V. P. (Kuybyshev)

ORG: Electric Welding, Institute im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)

TITLE: Transverse shrinkage of aluminum-alloy sheet structures

SOURCE: Avtomaticheskaya svarka, no. 12, 1966, 22-25

TOPIC TAGS: aluminum alloy property, alloy welding, alloy structure shrinkage, structure transverse shrinkage/AMg 6 alloy, AMg 5v alloy

ABSTRACT:

Experiments have been conducted to determine the effect of welding conditions on the transverse shrinkage of AMg6 and AMg5v aluminum-alloy parts made of sheets and plates 2—16 mm thick. It was found that the higher the arc power and the heavier the welded section, the greater the weld shrinkage. The least shrinkage is caused by automatic single-pass welding of a square butt joint, especially at high speed. A manually welded V-joint has much more shrinkage (see Fig. 1). The length of the

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UDC: 621.791.011:669.715

ACC NR: AP7001928

Shrinkage, mm

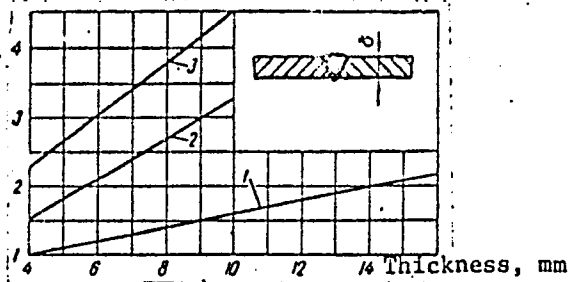


Fig. 1. Thickness dependence of transverse shrinkage in AMg5v and AMg6 alloy sections; automatic single pass welding, square butt joint 1; manual welding at a rate of 9-10 m/hr; V - joint 2; same, 3-4 m/hr 3.

weld also affects the shrinkage: the longer the weld the greater the shrinkage. The maximum shrinkage occurs at a weld length of 500 mm; further increases in weld length have no additional effect. Generally, butt joints should be assembled with a minimum clearance and welded at the highest speed possible. It is also recommended that the weld be finished without interruption to reduce local shrinkage and warping. The shrinkage allowances can be determined from diagrams plotted for various welding methods and conditions.

SUB CODE: 13/ SUBM DATE: 13Jan66/ ORIG REF: 002/ OTH REF: 002 / ATD PRESS: 5111

Card 2/2

KOZULIN, M.G.

Electric slag welding of cast lids for tube mills.
Avtom.svar. 18 no.11:52-53 N '65.

(MIRA 18:12)

1. Tol'yattinskiy zavod "Volgotsentyazhmash". Submitted
February 1, 1965.

L 35810-66 EWP(k)/EWT(d)/EWT(m)/T/EWP(l)/EWP(g)/EWP(v)/EWP(t)/ETI IJP(c)

ACC NR: AP6015247 WH/WW/JD/HM (A) SOURCE CODE: UR/0125/66/000/005/0053/0053 54

AUTHOR: Kozulin, M. G.; Syatishev, A. P.; Fomin, V. V. 52
BORG: [Kozulin, Syatishev] Tol'yattinsk Volgotsemyazhmash Heavy Cement Machinery Plant (Tol'yattinskiy zavod "Volgotsemyazhmash"); [Fomin] Institute of Electric Welding im. Ye. O. Paton, AN UkrSSR (Institut elektrosvarki AN UkrSSR)TITLE: Consumable-electrode electroslag welding of 400-mm thick Kh18N10T stainless steel 16 18

SOURCE: Avtomaticheskaya svarka, no. 5, 1966, 53

TOPIC TAGS: stainless steel, power transformer, electroslag welding, welding electrode/Kh18N10T stainless steel, TShS power transformer

ABSTRACT: Industrial techniques of welding of this kind, based on the use of A-645 welding machine⁴ powered by a TShS-3000-3 transformer, as performed at the Volgotsemyazhmash Plant, are described. The consumable electrode was prepared in the form of three 5-mm thick plates of Kh18N10T sheet steel with four welded-on guide spirals of Sv-06Kh19N9T¹ wire (diameter 3 mm). Inside diameter of the spiral: 5 mm. Outside diameter: 11 mm. On being thus assembled, this electrode was inserted in a holder. It was insulated from the work part by a fiberglass fabric. On both sides the joint was backed with wedge-reinforced water-cooled copper tacks. Recommended

Card 1/2

UDC: 621.791.756:669.15-194:669.26'24

L 35810-66

2

ACC NR: AP6015247

welding regime: welding current 2500-3000 a, voltage 40-42 v, welding rate 220-240 m/hr, welding flux ANF-7, depth of weld pool 45-55 mm, clearance 35 mm. The welding occurs stably, without spatter and splash. Welding time for a specimen measuring 400x700 mm in area: 1 hr. No defects have been discovered afterward. This consumable-electrode technique of the electroslag welding of 400-mm thick Kh18N10T stainless Cr-Ni cast steel may be employed in the fabrication of flanges, hoops and other large-sized shapes for chemical industry. Orig. art. has: 1 figure and 1 table.

SUB CODE: 11,13,07/ SUBM DATE: 28Dec65/ ORIG REF: 000

Card 2/2

KOZULIN, M.G.; SYATISHEV, A.P.

Electric slag welding of cast frames for jaw crushers. Avtom.
svar. 18 no.5:46-48 My '65. (MIRA 18:6)

1. Tol'yattinskiy zavod "Volgotsemyazhmash".

KOZULIN, M. G.; SYATISHEV, A. P.

Electric slag welding of jaw crusher frames. Avtom. svar. 15
no.11:59-65 N '62. (MIRA 15:10)

1. Volzhskiy zavod oborudovaniya tsementnoy promyshlennosti i
tyashelogo mashinostroyeniya, Stavropol'.

(Crushing machinery--Welding)

PREMET, G.K.; Primal uchastiye: LAGOSHA, T.F.; OMEI'CHENKO, N.I.;
SEMENOVA, R.A.; SPINOV, R.I.; VASILINETS, I.M.; RADIONOVA, I.A.;
KOZULIN, N.A., prof.

Entrapping of harmful volatile substances in the manufacture
of drying oils. Lakokras.mat.i ikh prim. no.1:65-67 '63.
(MIRA 16:2)

(Drying oils)

SMEKOV, R.Ye.; KOZULIN, N.A.

Elastic properties of polymer melts and their practical utilization.
Zhur.prikl.khim. 35 no.12:2693-2700 D '62. (MIRA 16:5)

1. Leningradskiy tekhnologicheskii institut imeni Lensoveta.
(Polymers) (Rheology)

L 2139-65 EWT(m)/EWP(q)/EWP(b) ASD(m)-3 JD
ACCESSION NR: AP4041685

S/0153/64/007/002/0313/0319

AUTHOR: Kozulin, N. A.; Kulyamin, A. F.

12
11

TITLE: Process of mixing powdered materials in a fluidized bed.

SOURCE: Izvuz. Khimiya i khimicheskaya tekhnologiya, V. 7, no. 2, 1964, 313-319

TOPIC TAGS: fluidized bed, mixing, powdered material, channeling prevention, apparatus, fluidizing rate, material loss

ABSTRACT: A fluid bed method, including a means of preventing channel formation, was worked out for mixing highly dispersed powdered materials. The apparatus that was constructed assures a high degree of uniformity in the mixture after a short mixing time and with low power consumption (on the order of 0.3 kvatt-hr./1 ton mix). Channel formation is prevented by a 2-paddle mixer rotating at 20-60 rev./min. and positioned immediately over the gas distributing device (grid). Experiments were run with PbO, ZnO, BaSO₄, TiO₂ and MgO on columns of 30, 200 and 300 mm. diameter. Graphs are included showing calculations on power consumption by the agitator, critical rate of fluidizing the finely dispersed materials in the

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L 2139-65

ACCESSION NR: AP4041685

presence of the agitator, and the geometric dimensions of the apparatus and agitator paddles (relationship between apparatus diameter and paddle length, and between the height and diameter of circle described by the paddle). Material loss from the apparatus does not exceed 1.5-2%, and inclusion of a filter of cotton "belting" almost completely eliminates this loss. Orig. art. has: 7 figures, 7 equations and 1 table.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovyeta (Leningrad Technological Institute) Kafedra oborydovaniya khimicheskikh zavodov (Department for Equipping Chemical Plants)

SUBMITTED: 16Apr63

ENCL: 00

SUB CODE: GC

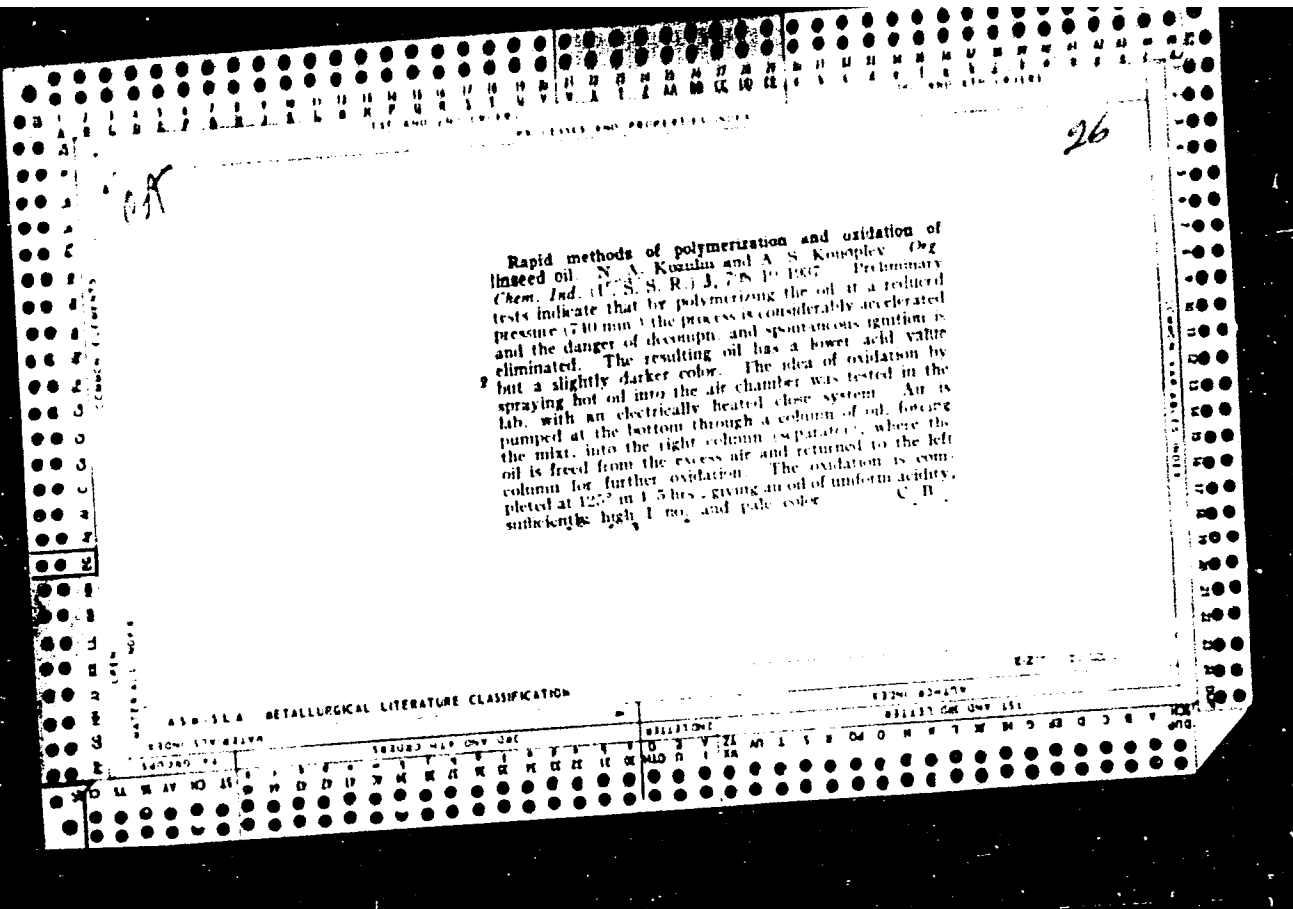
NO REF SOV: 004

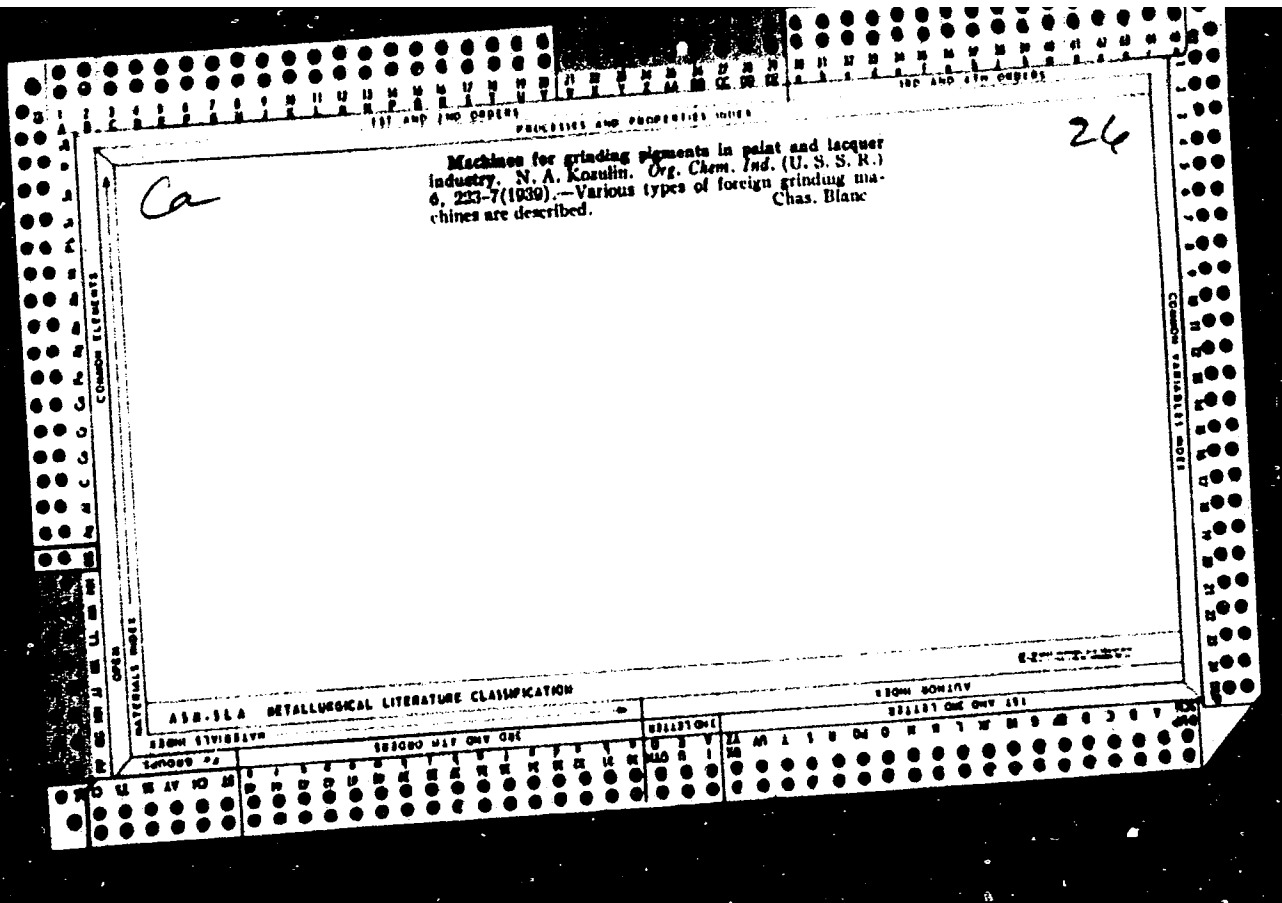
OTHER: 002

Card 2/2

KOZULIN, N.A.; PAVLOV, L.N.

Hydraulic resistance of a layer of crushed bauxite cake during the
process of counterflow leaching. Tsvet. met. 37 no.6:33-38 Je '64.
(MIRA 17:9)





KOZULIN, N. A.

PA 58T41

USSR/Engineering
Metallurgical Plants
Furnaces, Metallurgical

Aug 1947

"Reconstruction of Muffle Furnaces in Zinc-Oxidizing
Plants," N. A. Kozulin, Engr, 2 pp

"Khim Prom" No 8

Briefly describes calculations made before reconstruc
tion operations were undertaken to muffle furnaces,
for processing zinc at lacquer and paint industries,
in order to increase efficiency of furnaces.

58T41

KOZULIN, N.A. --

"Hydrodynamic theory of the Process of Treating Faint Pastes on Rolling Machines." Dr Tech Sci, Leningrad Technological Inst, Leningrad, 1954. (RZhKhim, No 20, Oct 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (10)

SO: Sun. No. 481, 5 May 55

Kozulin, N. A.

SAPOZHNIKOV, Matvey Yakovlevich; BULAVIN, Ivan Anisimovich; KANTOROVICH, Z.B., professor, doktor tekhnicheskikh nauk, retsentsent; ZUBKOV, V.A., dotsent, kandidat tekhnicheskikh nauk, retsentsent; BASSKAZOV, N.I., kandidat tekhnicheskikh nauk, dotsent, retsentsent; SIDENKO, P.M., kandidat tekhnicheskikh nauk, retsentsent; KOZULIN, N.A., professor, doktor tekhnicheskikh nauk, retsentsent; STOLIYAROV, S.A., redakter; GURVICH, E.A., redakter; LYUDKOVSKAYA, N.I., tekhnicheskii redakter.

[Machines and apparatus used in the silicate industry] Mashiny i apparaty silikatnoi promyshlennosti; obshchii kurs. Izd.2-ee, dop. i perer. Moskva, Gos.izd-vo lit-ry po stroitel'nyim materialam, 1955. 423 p.

(Clay industries)

(MLRA 9:5)

Kozulin, N.A.

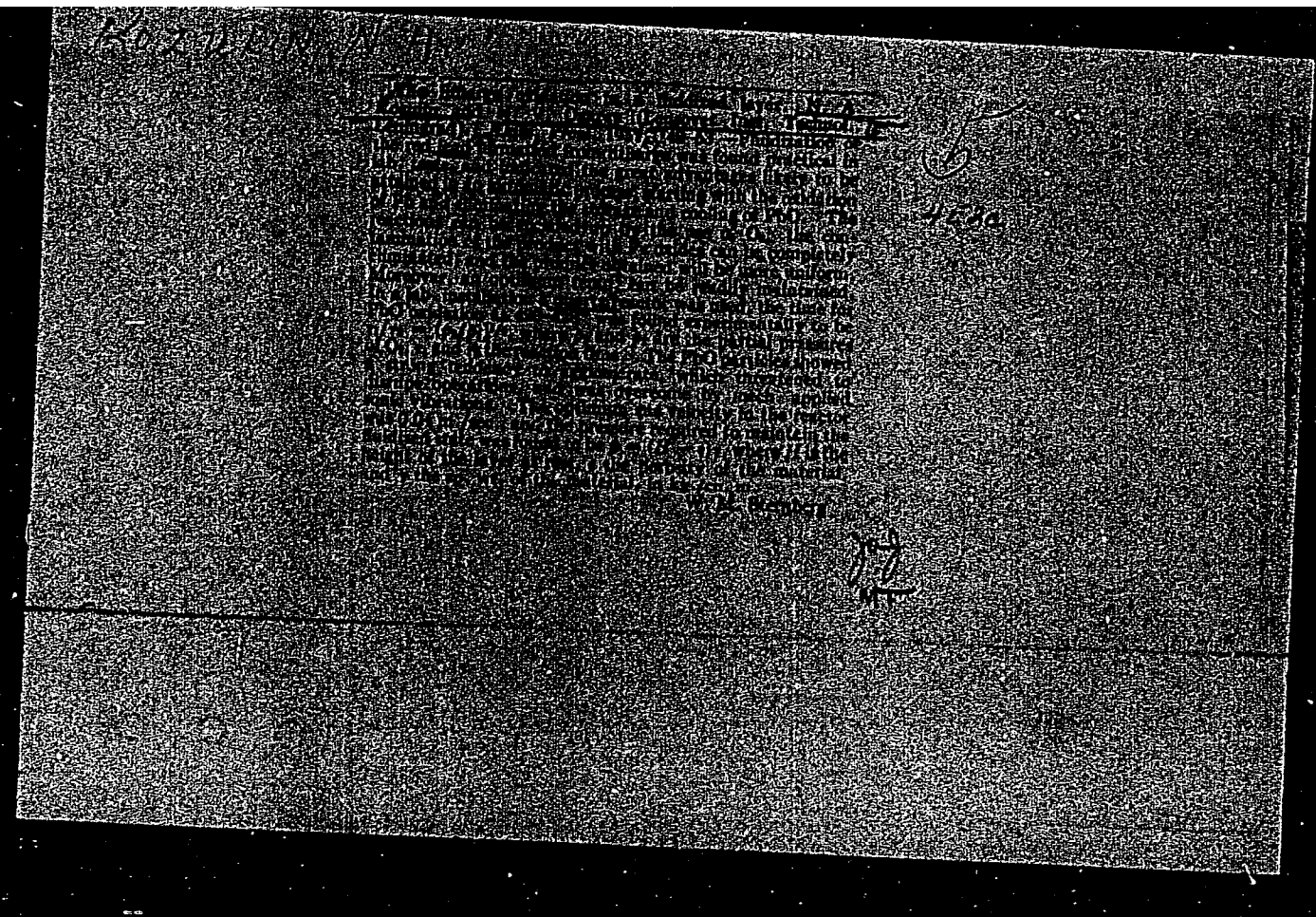
✓ Determining length, diameter, and baffle height of rotary furnaces in the chemical industry. N. A. Kozulin. *Trudy Leningrad. Inst. im. Leninskie* 32, 81-84 (1956). In the design of rotary furnaces, equations and graphs are given for detg. dimensions. V. H. Gottschalk

KOZULIN, N.A.

KANTOROVICH, Zalmen Ben'yaminovich, professor; KOZULIN, N.A., professor, retrosaznet; SALAMATOV, I.G., inzhener, retrosaznet; KASSKAZOV, N.I., kandidat tekhnicheskikh nauk, redaktor; TIKHONOV, A.Ya., tekhnicheskiy redaktor

[Machinery of the chemical industry] Mashiny khimicheskoi promyshlennosti. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry. Vol.1. [Machinery for processing liquids and free-flowing materials] Mashiny dlia obrabotki zhidkikh i sypuchikh sred. 1957. 568 p. (MIRA 10:10)

(Chemical engineering--Equipment and supplies)



KOZULIN, N. A.

EYDLIN, Isaak Yakovlevich, dots.kand.tekhn.nauk; KOZULIN, N.A., retsenzent;
KLOPOV, V.M., retsenzent; VASENKO, A.V., red.; VOROB'YEVA, N.N.,
red.izd-va; SHITS, V.P., tekhn.red.

[Papermaking and finishing machines] Bumagodelatel'nye i otdelochnye
mashiny. Moskva, Goslesbumizdat, 1958. 484 p. (MIRA 11:6)
(Papermaking machinery)

44

PHASE I BOOK EXPLOITATION

SOV/3759

Kozulin, N.A., and I.A. Gorlovskiy

Oborudovaniye zavodov lakokrasochnoy promyshlennosti (Equipment of Plants in the Paint Industry) Leningrad, Goskhimizdat, 1959. 477 p. Errata slip inserted. 4,000 copies printed.

Ed.: V.M. Kirillov; Tech. Ed.: T.A. Fomkina.

PURPOSE: This book is intended for engineers and technicians of the paint, varnish and lacquer industry. It may also serve as a textbook for students of chemical and technical schools of higher education.

COVERAGE: The book reviews plant machinery and equipment used in the paint, varnish and lacquer industry and indicates operating conditions and designs of equipment for the mechanization and improvement of production processes. The equipment used in production of pigments, which consists of different types of settlers, condensers, sorters, filters, centrifuges, drying apparatus and separators, is described and illustrated in detail in part I. Part II presents descriptions, designs and operating conditions of equipment used in

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Equipment of Plants (Cont.)

SOV/3759

the production of polyester resins, varnishes, cellulose lacquer, and enamels. Filtering equipment, such as filters and centrifugal supersettlers of various types is also discussed. Part III covers equipment used in the production of dye pastes such as kneading and mixing machinery and different types of grinders. Fundamentals of the grinding process are discussed and ways of increasing the rate by improving equipment design are analyzed. No personalities are mentioned. References accompany each chapter.

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Settlers	11
Hydrocyclones	18
Cartridge-type vacuum-filter-condensers	21
Ultrasonic-type condensers	25
Ways of improving the effectiveness of condensers and classifiers	26

Card 2/8

KOZULIN, N.A., doktor tekhn.nauk, prof.; MIKHALEV, M.F., kand. tekhn.nauk

Determining the force of rolls in the plasticization of rubber.

Khim.mash. no.1:26-28 Ja '59.

(Rubber machinery)

(MIRA 12:7)

KOZULIN, N.A., doktor tekhn. nauk, prof.; PAVLOV, N.G., inzh.

Determining the performance of ultra centrifuges from thickened
deposits. Khim. mash. no.6:23-26 N-D '59. (MIRA 13:3)
(Centrifuges) (Separators (Machines))

KANTOROVICH, Zalman Ben'yaminovich, prof.; KOZULIN, N.A., prof., doktor tekhn.nauk, retsenzent; NIKOLAYEV, A.M., prof., doktor tekhn. nauk, retsenzent; ALAVERDOV, Ya.G., inzh., red.; SOKOLOVA, T.F., tekhn.red.

[Principles for the calculation of chemical machines and apparatus] Osnovy rascheta khimicheskikh mashin i apparatov. Izd.3., vnov' perer. i dop. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 743 p.

(MIRA 13:7)

(Chemical engineering--Equipment and supplies)

MAYZEL', Maks Mikhaylovich; KOZULIN, N.A., prof., doktor tekhn.nauk, retsenzent; GUREVICH, A.L., dotsent, kand.tekhn.nauk, retsenzent; RAKOVSKIY, M.Ye., dotsent, kand.tekhn.nauk, retsenzent; MINAYEVA, T.M., red.; PLEMYANNIKOV, M.N., red.; KNAKNIN, M.T., tekhn.red.

[Principles of automatic control of industrial processes] Osnovy avtomatizatsii tekhnologicheskikh protsessov. Moskva, Izd-vo nauchno-tekhn.lit-ry RSFSR, 1960. 877 p. (MIRA 13:9)
(Automatic control)

2252

S/146/61/004/002/005/011
B124/B206

26.2/95

AUTHORS: Plekhov, I. M., Kozulin, N. A.

TITLE: Approximation method for calculating pneumatic mechanisms
with unilateral effectPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye,
v. 4, no. 2, 1961, 52-57

TEXT: The unilateral piston-movement mechanism with constant load is used when the reciprocating motion of the piston can proceed under the effect of an external load; the diagram of the unilateral mechanism is shown in Fig. 1. The equation determining the equality of forces acting on the piston can be written down in the form $mx'' + Q + Q_0 + \mu F_m(p - p_0) = F(p - p_0)$; after inserting $p_i = p_0 + (Q + Q_0)/F_1$ and $F_1 = F - \mu F_s$, $(m/F_1) \cdot x'' = p - p_i$ (1) is obtained. From the condition of the equality of the air quantity introduced and the change of the quantity of air in the filled volume, $Gdt = d(V \cdot \gamma)$ results. For isothermal pressure change in the working space of the cylinder, this equation takes the form $GRT/F = px' + (x + x_0)p'$ (2),

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Approximation method...

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S/146/61/004/002/005/011
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X

p_1 being the pressure at the start of the movement, m the reduced mass of the piston and all moving parts, G the air consumption, Q the outer load, Q_0 the load through elasticity of the piston rings and other connected mechanisms, μ the coefficient of friction of the piston ring against the cylinder wall, F_s the piston ring surface in contact with the cylinder wall, F the area of the piston, and x_0 the initial coordinate of the piston; $x_0 = V_0/F$. x is the displacement of the piston. Through joint solution of Eqs. (1) and (2), $(m/F_1)(x_0+x)x'''' + (m/F_1)x' \cdot x'' + p_1 \cdot x' = GRT/F$ (3) is obtained, which can only be solved by numerical integration (Ref. 2: Bezhanov B. N. Pneumaticheskiye mekhanizmy (Pneumatic mechanisms). Mashgiz, 1957), which is however time-consuming and difficult for practical calculations. The curves of pressure- and acceleration change can be described by the equation

$$x'' = A_0 t \cdot e^{-(t/\tau_0)} \quad (4).$$

When inserting the expressions obtained for x , x' and x'' by means of integrating and differentiating of Eq. (4) into Eq. (3) at the initial condition $t=0$ and $t=\infty$, one obtains for the coefficients A_0 and τ_0 :

$$A_0 = GRTF_1/mx_0F \text{ and } \tau_0 = \sqrt{mx_0/p_1 \cdot F_1} \quad (5).$$

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Approximation method...

The equations for calculating pressure and displacement have the form:

$x = v_s [t - 2\tau_0 + (t + 2\tau_0)e^{-t/\tau_0}]$ (6) and $p = p_1 + (mv_s/\tau_0^2 F_1)te^{-t/\tau_0}$ (7) (v_s = rate of steady flow) and $v_s = GRT/p_1 \cdot F$ (8). These equations produce for $mv_s > 0.7$

enough accurate results, while the change of the parameters is fluctuating for $mv_s < 0.7$, for which reason the time of motion can be determined

according to V. V. Berdnikov (Ref. 3: Issledovaniye dinamiki porshnevnykh pnevmaticheskikh dvigateley (Investigation of the dynamics of pneumatic piston engines). Tr. seminarov po teorii mashin i mekhanizmov. Izd. AN SSSR, 1956, vol. 15, no. 60). The type of the change of parameters for reciprocating motion of the piston always oscillates around their values during steady motion, and the time of motion can therefore be determined without greater errors and without consideration of the forces of inertia, under the assumption that the piston suddenly assumes the velocity of the steady motion: $t = x/v_s$ (9). The pressure during steady motion is determined from the equation $p_1 = p_0 + (Q - Q_0)/(F + F_s)$ (10). Many experiments were conducted for controlling the calculated data. Diagram and description of the experimental device are given in the study by one of the authors (Ref. 1:

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B124/B206

Approximation method...

Plekhov I. M. Priblizhenny metod rascheta pnevmaticheskikh mekhanizmov dvukhstoronnego deystviya (Approximation method for calculating two-sided pneumatic mechanisms). "Izvestiya vysshikh uchebnykh zavedeniy SSSR", "Priborostroyeniye", 1961, no. 1). Fig. 2 shows the experimental and the calculated pressure- and displacement curves for a straight motion. The maximum difference between the experimental and calculated data amounted to 10 %. The equation determining the equality of the forces acting on the piston during straight piston motion has the form

$mx'' + Q + Q_0 + Q_s + sx + F_s(p - p_0) = F(p - p_0)$ (11). Without considering the forces of inertia, Eq. (11) changes to the form $p = p_i + sx/F_1$ (12) (Q_s is the force of preliminary compression, $p_i = p_0 + (Q + Q_0 + Q_s)/F_1$; $F_1 = F - F_s$).

When inserting instead of G (air consumption) its value

$G = \psi f a_T \gamma_T \sqrt{1 - (p/p_T)^2}$ (13) in Eq. (2), $(\psi f a_T / F) \sqrt{p_T^2 - p^2} = (x + x_0) p' + x p$ (14)

is obtained. For supercritical air velocity, $t = A [\xi^2 - \xi_1^2 - B(\xi - \xi_1)] / \sqrt{1 - \xi^2}$ (15)

holds and for subcritical conditions

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S/146/61/004/002/005/011
B124/B206

Approximation method...

$t = A[2(\sqrt{1 - \epsilon_x^2} - \sqrt{1 - \epsilon^2}) + B(\text{arc sin } \epsilon - \text{arc sin } \epsilon_x)]$ (16). For Eqs. (15) and (16), the definitions $A = (F \cdot F_1 \cdot p_r) / (\psi \cdot f \cdot a_T \cdot s)$; $B = \epsilon_1 - s x_0 / F_1 \cdot p_r$; $\epsilon_1 = p_i / p_r$; $\epsilon = p / p_r$; $\epsilon_x = p_x / p_r$ hold, where ψ is the rate of discharge, f the cross section of the pipe, p_r the pressure in the receiver, p_i the pressure at the starting moment of the motion, s the rigidity of the spring, ϵ the critical pressure ratio and a_T the sound velocity for isothermal processes. For the reciprocating motion, $t = (A_1 B_1 / \sqrt{1 - \epsilon^2}) \ln(p_i / p)$ holds in the case of supercritical conditions and

$$t = A_1 \left[2 \sqrt{\left(\frac{p}{p_0}\right)^2 - 1} - 2 \sqrt{\left(\frac{p_x}{p_0}\right)^2 - 1} - B_1 \left(\text{arch } \frac{p}{p_0} - \text{arch } \frac{p_x}{p_0} \right) \right]. \quad (18)$$

of subcritical ones. For Eqs. (17) and (18), the definitions $A_1 = (F \cdot F_2 \cdot p_0) / (\psi f \cdot a_T \cdot s)$; $B_1 = p_k / p_0 - x_0 s / F_2 \cdot p_0$; $F_2 = F + \mu F_s$ hold, where p_i is the pressure at the moment of piston motion, p_k the pressure at the moment of the piston stoppage, p_0 the atmospheric pressure, and

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S/146/61/004/002/005/011
B124/B206

Approximation method...

$p_k = p_0 + (Q + Q_p - Q_0)/F_2$; $p_1 = p_k + s_{x_k}/F_2$. Eqs. (15) to (18) can be used for $v_{\text{mean}} \cdot m < 0.3$; considerable pressure fluctuations occur in the case of $v_{\text{mean}} \cdot m > 0.3$, and a reciprocating piston motion is even possible in the case of $v_{\text{mean}} \cdot m > 1$. Fig. 3 shows the calculated and experimental diagrams of pressure change and displacement for the straight motion. This study was recommended by the Department of Automation of Chemical Establishments. There are 3 figures and 4 Soviet-bloc references.

ASSOCIATION: Leningradskiy tekhnologicheskii institut im. Lensovet
(Leningrad Technological Institute imeni Lensovet)

SUBMITTED: November 25, 1960

Card 6/8

29330
S/119/61/000/010/002/008
D209/D303

26.7190

AUTHORS: Kozulin, N.A., Doctor of Technical Sciences, Professor and
Plekhov, I.M., Engineer

TITLE: Investigating the dynamic characteristics of pneumatic single-acting piston mechanisms

PERIODICAL: Priborostroyeniye, no. 10, 1961, 7 - 9

TEXT: The authors propose an approximate method of design for single-acting piston mechanisms. They make the following assumptions in deriving the formulae: The air flow in the pipe is quasistationary and isothermal; the friction force at the glands is independent of the piston velocity; the air efflux coefficient is constant; the effect of the damping device is ignored. The equation of motion of the piston is

$$\frac{m}{F - \mu F / \mu} \cdot \frac{d^2 x}{dt^2} = p - p_1, \quad (1)$$

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D209/D303

Investigating the dynamic ...

where $p_p = Q + Q_0 / F - \mu F \mu + p_0$, here: m - transferred mass of piston and moving parts in $\text{kgf sec}^2 / \text{m}$; Q - external load in kgf ; Q_0 - force of friction at the glands in kgf ; μ - coefficient of friction; $F \mu$ - gland area in contact with the cylinder in m^2 ; p - pressure in the working chamber of the cylinder in kgf / m^2 ; p_0 - atmospheric pressure in kgf / m^2 ; F - piston area in m^2 ; x - piston displacement in m ; p_p - pressure in the working chamber at the beginning of the piston movement in kgf / m^2 : Also

$$\gamma = \frac{p}{R T} ; \quad V = F (x + x_0) .$$

$$\frac{GRT}{F} = p \frac{dx}{dt} + (x + x_0) \frac{dp}{dt} , \quad (2)$$

where G - air flow in kg/sec ; R - gas constant in m / degree ; T - temperature in degrees; $x_0 = V_0 / F$; V_0 - initial volume of working chamber in m^3 ; V - full volume of working chamber in m^3 ; γ - specific weight of
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D209/D303

Investigating the dynamic ...

air in the working chamber in kgf / m^3 . Approximate formulae for the flow in subcritical conditions and in the supercritical condition of inflation are taken from (Ref. 1: B.N. Beshanov, Pnevmaticheskiye mekhanizmy (Pneumatic Mechanisms) Mashgiz, 1957) and (Ref. 5: I.P. Ginzburg, Prikladnaya gidrogazodinamika, (Applied Hydrodynamic of Gases), Izd. Leningradskogo universiteta, 1958). These formulae give most accurate results with long pipes. In the case of flow through orifices they result in an error of up to 5%. The full cycle of operation of a pneumatic mechanism consists of an initial, basic and final period. The time of the initial period is obtained for $x = 0$; for supercritical condition and for the subcritical case. The basic period begins when the pressure in the chamber reaches the value p . The relationship between the displacement and time is obtained by simultaneously solving (1) and (2). The approximate solution of the resulting equation was based on experimental results. After a series of transformations, the expressions for pressure, displacement and duration of the final period are obtained. The reverse stroke takes place under the force Q and the cycle consists also of 3 periods. The time of the initial period is obtained for supercritical case and subcritical case. The duration of the

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D209/D303

Investigating the dynamic ...

reverse stroke is determined approximately by assuming that the velocity is constant. The duration of the final period is given. The results of this method of calculation were checked experimentally. The appropriate curves are depicted for comparison. According to the results of numerous experiments, the discrepancy between the calculated and experimental data for the total time of operation does not exceed 10%. The largest error is obtained with mechanisms having strokes under 50 mm at the velocity of piston motion above 1 m / sec. There are 2 figures and 6 Soviet - bloc references.

Card 4/4

EYDLIN, Issak Yakovlevich. Prinimali uchastiye VANCHAKOV, V.M., inzh. [deceased]; LATVINOV, M.D., inzh.; KOZULIN, N.A., doktor tekhn. nauk, prof., ofitsial'nyy retsenzent; GOLOVKO, Ye.M., inzh., ofitsial'nyy retsenzent; KLOPOV, V.M., inzh., ofitsial'nyy retsenzent; BRODOTSKIY, A.I., kand. tekhn. nauk, dots., red.; KHIVRICH, Ye.D., red. izd-va; GRECHISHCHEVA, V.I., tekhn. red.

[Papermaking and finishing machines] Bumagodelatel'nye i ot-delochnye mashiny. Izd.2., perer. 1 dp. Moskva, Goslesbum-izdat, 1962. 686 p. (MIRA 16:5)

(Papermaking machinery)

12 7000

32533
S/096/62/000/001/002/008
E194/E955

AUTHORS: ~~Kozulin, N. A.~~, Doctor of Technical Sciences, Professor,
Yershov, A. I., Engineer

TITLE: The influence of a solid phase on the flow aerodynamics and resistance of cyclones

PERIODICAL: Teploenergetika, no.1, 1962, 18-20

TEXT: There is no generally accepted explanation for the lower effective resistance of cyclones when handling dusty gas. Accordingly, work was carried out on a cyclone 200 mm diameter generally similar to cyclone ЦН-15 of НИИОГАЗ design but with a flat end, using sand and apatite dusts of different particle size distribution but both passing a 250 micron sieve. The dust concentrations ranged up to 120 g/m³. Speed and pressure distribution diagrams indicated that the flow is everywhere retarded by the walls. Initially the dust is uniformly distributed; the greatest retardation of solid particles occurs in the conical section where speeds are 2½ to 3 times the inlet speed, and there is considerable dissipation of mechanical energy. Here even a slight reduction of speed has considerable effect on the resistance. Plots of total
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The influence of a solid ...

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S/096/62/000/001/002/008
E194/E955

pressure change show that the overall frictional resistance is much less than the local values and that the greatest pressure drop occurs on transition from the outer zone of rotation to the inner. It is in this region that the greatest difference is observed between the losses of clean and dusty flows, which confirms that dustiness mainly affects flow aerodynamics and resistance only after most of the particles have become concentrated near the cyclone walls. It was found that the overall resistance falls with increasing dust concentration and with 120 g/m^3 dust the resistance is about half that with clean air. Fig. 4 shows a graph of cyclone resistance as a function of dust concentration in g/m^3 . The left hand y-axis plots nominal gas speed and the right hand y-axis inlet speed. Points 1 correspond to sand and 2 to apatite. The resistance change depends negligibly on the size and specific

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The influence of a solid ...

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E194/E955

gravity of the particles, which shows that the energy dissipated by the particles depends mainly on their concentration by weight in the flow. There are 4 figures, no tables and 4 references: 3 Soviet bloc and 1 non-Soviet-bloc.

ASSOCIATION: Leningradskiy tekhnologicheskii institut
(Leningrad Technological Institute)

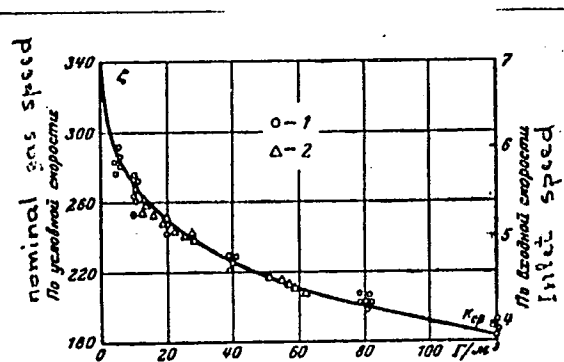


Fig. 4

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SMELOV, R.Ye.; KOZULIN, N.A.

Elastic energy of shear deformation in polymer melts. Zhur.
prikl. khim. 36 no.11:2460-2464 N '63. (MIRA 17:1)

1. Leningradskiy tekhnologicheskii institut imeni Lensoвета.

KOZULIN, N.A., prof.; SHAPIRO, A.Ya.; GAVURINA, R.K.; GRIVA, Z.I.,
red.; LEVIN, S.S., tekhn. red.; ERLIKH, Ye.Ya., tekhn.
red.

[Equipment for the production and manufacture of plastic
articles] Oborudovanie dlia proizvodstva i pererabotki
plasticheskikh mass. Leningrad, Goskhimizdat, 1963. 792 p.
(MIRA 17:1)

SSR/AE/RYASO/3
ACCESSION NO. AF440170 5/0514/64/000/003/0015/0020

AUTHOR: Korol'n, N. A. (Doctor of technical sciences, Professor); Lopachenko, B. I. (Engineer)

TITLE: Investigation of the friction of fluoroplast-4 and low-pressure polyethylene on steel at high sliding rates

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 3, 1964, 18-20

TOPIC TAGS: polyethylene, fluoroplast, friction, friction measurement, plastic steel friction, lubricant

ABSTRACT: The behavior of fluoroplast-4 and low-pressure polyethylene under conditions of sliding friction against steel lubricated with either mineral oil or distilled water was investigated using a B-1A friction machine based on the principles of A. K. Zavitsev (see Fig. 1 of the Enclosure). Cylindrical samples of polymer, 5 mm in diameter, were fixed on the rotating spindle of the machine and a 40Kh-steel ring was pressed against the samples at loads varying from 0.25 to 250 kg. The testing technique is described in detail and the results of tests at sliding rates of 0.2-5.0 m/sec. and temperatures of 20-370K are presented. As shown in Figs. 2 and 3 of the Enclosure, the results confirm the validity

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of the Coulomb-Amontons law for the friction of these materials:

$$R_{fr} = A + \mu N, \quad (1)$$

where R_{fr} is the frictional force, A is a coefficient depending on the adhesion of the surfaces, μ is the coefficient of friction, and N is the compressive force. The results also show that fluoroplast-4 and low-pressure polyethylene are suitable for use under conditions where they come into contact with steel. Orig. art has 6 figures and 10 formulas.

ASSOCIATION: Leningradskiy Tekhnologicheskii Institut (Leningradskoye Tekhnicheskoye Instituty) Institute of Technology

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ENCLOSURE 0

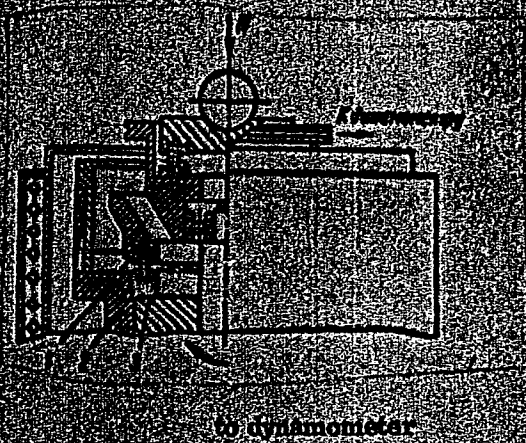


Fig. 1: Diagram of Beta friction machine.
1 - ring of tool steel; 2 - cylindrical sample; 3 - holders.

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ENCLOSURE 12

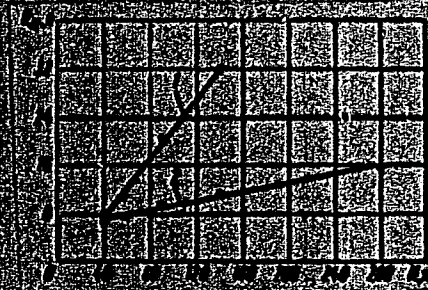


Fig. 3. Change in friction coefficient with increase in load P for fluoroplast-4 and steel in 312K and a sliding rate of 1 m/sec. 1 - lubricated with distilled water; 2 - lubricated with mineral oil.

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ENCLOSURE 05

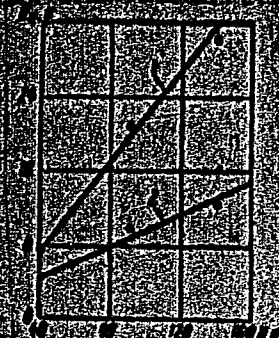


Fig. 5. Change in friction force with increase in load N for low-pressure polyethylene and steel at 313K and a sliding rate of 1 m/sec: 1 - lubricated with distilled water; 2 - lubricated with mineral oil.

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ROZULIN, Nikolay Aleksandrovich; DOLBINSKIY, Boris Yevgenyevich;
MIRZAYEV, R.G.; Eds.

[Plastics as material for the manufacture of end packing
rings] Plastmassy kak material koltsa tantsyozh spilit-
noui. Leningrad, 1961. 21 p. (NTS 17:12)

KOZULIN, N.A., doktor tekhn. nauk, prof.; LOPACHENOK, B.Ye., inzh.

Investigating the friction of Teflon and low-pressure
polyethylene on steel at high sliding speeds. Khim. i neft.
mashinostr. no.3:18-20 S '64. (MIRA 17:12)