S/065/61/000/001/006/008
E030/E212

AUTHORS: Zaslavskiy, Yu. S. and Shor, G. I.

TITLE: Investigation of the Stability of Solutions of Additives in Oils by Means of their Electrical Conductivity

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1961, No. 1, pp. 52-54

TEXT: Electrical conductivity determinations are suggested as a rapid means of determining the stability of additives in oils to transitions between the colloidal and truly ionic states. Conventional electrolytic type cells are used, being concentric aluminium cylinders, 50 mm high, and 20 and 35 mm diameter respectively. By incorporating a thermostat bath, thermal stability to temperatures up to 250°C may be investigated. By studying change of conductivity with time alone, storage stability may be determined. Molybdenum blue is found to be indefinitely stable at room temperature, but after a short period of heating to 100°C, the conductivity suffers a sudden and permanent decrease. By contrast, the conductivity of molybdenum nonylxanthenate

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S/065/61/000/001/006/008
E030/E212

Investigation of the Stability of Solutions of Additives in Oils by Means of their Electrical Conductivity

solutions increases to a maximum after about 400 hours storage, then falls to a lower, but stable, value after about 600 hours. On taking a series of straight lubricating oil fractions from a high-sulphur crude, and plotting their conductivity versus viscosity, a distinct curvature is obtained, in apparent violation of Walden's Rule. It clearly shows that the concentration of electrically conducting material increases with boiling point. On heating straight oils with or without thermally stable additives to 250°C, little change in conductivity is found on cooling, but with unstable additives, the heating curve is much higher than the cooling curve over a certain high temperature range, but rejoins it at lower temperatures, thus exhibiting a hysteresis-type curve: this is attributed to a shift at high temperatures of the reaction between colloidal micelles and ions. By plotting conductivities versus concentrations, the conductivity of phenolate solutions is seen to be ionic, but that of sulphonate solutions micellar. There are 3 figures, 1 table and 8 references: 6 Soviet and 2 non-Soviet.
ASSOCIATION: VNII NP
Card 2/2

32530
S/065/61/000/012/004/005
E194/E135

11.9700 also 1583 2209

AUTHORS: Zaslavskiy, Yu.S., Shor, G.I., Shneyerova, R.N., Kuznetsova, A.I., and Lebedeva, F.B.

TITLE: Reducing the corrosivity of extreme pressure (E.P.) additives without impairing their effectiveness

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.12, 1961, 39-43

TEXT: Previous work by the authors has shown that whereas anti-corrosion additives should have strongly bonded sulphur or phosphorus in the molecule, E.P. additives should easily release sulphur, phosphorus or chlorine to form compounds on the metallic surfaces at high contact temperatures. This explains the well-known correlation between good anti-wear properties and high corrosivity. A combination of anti-wear and anti-corrosion additive components should overcome the effect of delayed E.P. action in high-speed friction tests. In surfaces subject to high speed friction there is not always time for the E.P. additive to operate. For laboratory tests of two component additives the

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32530
S/065/61/000/012/004/005
E194/E135

Reducing the corrosivity of ....

authors developed radiotracer methods of determining the chemical activity of E.P. additives in oils in the presence or absence of friction. The chemical activity of the E.P. additives was assessed by determining the kinetics of solution of radioactive steel in oil or of copper which was activated with Ag^{110}. Determination of the chemical activity relative to radioactive copper and steel were made with various sulphurised and chlorinated organic compounds and mixtures of these. For example, in tests with copper foil at a temperature of 150 °C it was found that chemical activity of the sulphur-containing additive dibenzyl disulphide and that of chlorinated wax were both much less than the chemical activity of a mixture of these additives. A mixture containing base oil plus 3% dibenzyl disulphide plus 7% chlorinated wax gave the best E.P. protection in the four ball test. When 6% of barium alkyl phenolate dissolved in oxpropylated alkyl-phenol was added to the oil containing dibenzyl disulphide and chlorinated wax there was a marked diminution in corrosivity of the oil without impairment of the E.P. properties. However, the reduced corrosivity to copper lasted for only ten hours. The anti-corrosion properties of

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Reducing the corrosivity of ...

phosphorus-containing compounds were also tested on the assumption that effective protection of metallic surfaces against corrosion by atoms of chlorine and sulphur can be achieved by creating, not a molecular, but a more continuous atomic film which is less penetrable. To create such films the phosphorus-containing compounds must be soluble in the base oil and release phosphorus at considerably lower temperatures than the decomposition temperatures of the E.P. components. It was indeed found that the use of phosphorus-containing additives ensured effective reduction of corrosion of steel at an oil temperature of 200 °C in the presence of a mixture of dibenzyl disulphide and chlorinated wax. Moreover, four ball machine tests showed that the E.P. properties were not impaired. Tricresyl phosphate had no anti-corrosive effect, whilst triphenyl phosphate caused a marked reduction in corrosion. By using phosphorus-containing anti-corrosion components in blends with more chemically active E.P. additives, effective blends may be made using chemical compounds that hitherto have been rejected because of their high corrosivity. E.P. oils were tested on a friction machine in which

X

Reducing the corrosivity of ....

the rubbing surfaces are the ends of two hollow cast iron cylinders of 16 mm external diameter, one of which was radioactive. The tests were made at a speed of 600 r.p.m. with a load of 2.5 kg/cm^2 for a period of one hour. Typical test results show that the base oil gave a mean wear rate of 660 impulses/min of the counter; the base oil plus 3% of additive Л3-6/9 (LZ-6/9) plus 7% chlorinated wax gave a wear rate of 1920 impulses/min. The same plus 0.5% triphenyl phosphite gave a wear rate of 840 impulses/min. Thus the triphenyl phosphite reduced the corrosivity of the E.P. oil to the level of the base oil. There are 3 figures, 1 table and 17 references: 11 Soviet-bloc and 6 non-Soviet-bloc. The four most recent English language references read as follows:

Ref.11: J.S. Elliot, N.E. Hitchcock, E.D. Edwards. Hypoid Gear Lubricants and Additives. J. of the Institute of Petroleum, v.45, no.428, 219-235, 1959.

Ref.12: F.T. Barcroft. A Technique for Investigating Reactions between E.P. Additives and Metal Surfaces at High Temperatures. Wear, v.3, no.6, 413-500, 1960.

X

Reducing the corrosivity of 32530
S/065/61/000/012/004/005
E194/E135

Ref.14: R.B. Campbell, L. Grunberg. Study of reactions of metals with sulphur and phosphorus compounds by pulsed temperatures. Paper no.R1CC/32 at the International Conference on the use of isotopes in Physics and Industry (Copenhagen, September 6-17, 1960). Izd. MAGATE, Vena, 1961.

Ref.15: G. Hugel. Chemical nature of extreme pressure lubrication. Lubrication Engineering, v.14, no.12, 523-526, 1958.

ASSOCIATION: VNII NP

Card 5/5

S/885/62/000/000/018/020
E194/E155

AUTHORS: Zaslavskiy, Yu.S., Shor, G.I., Pasechnichenko, A.N., and Lebedeva, P.B.

TITLE: Radio-tracer methods of studying the anti-wear properties of lubricants

SOURCE: Metody issledovaniya na iznashivaniye; trudy soveshchaniya, sostoyavshegosya 7-10 dek. 1960. Ed. by M.M. Khrushchov. Moscow, Izd-vo AN SSSR. 1962. 182-191

TEXT: Tests in engines with radioactive parts, such as are used at VNII NP and elsewhere, cannot fully assess the properties of additive type oils and they are supplemented by a number of laboratory test procedures. In test rig PYM-1 (RUM-1) irradiated cast-iron blocks slide against the end of a cast-iron ring in the presence of acetic acid vapour, and wear is assessed by measuring the radioactivity of the oil. Alkaline additives such as barium alkyl phenolate retard wear until they are depleted. Results obtained on this apparatus with new and used oils correlate well with those obtained by engine tests and other procedures. A laboratory radioactivity indicator procedure was developed to

Card 1/3

assess the chemical activity of anti-wear additives by dissolving activated steel or copper in the oil. Test results are quoted for oil with various amounts of dibenzyldisulphide and chlorinated wax. Significant results are obtained in tests with steel at 200 °C in 75 hours or with copper at 150 °C in less than 5 hours. The results line up with seizure load determinations on the four-ball machines. The influence of chemical action of E.P. additives on frictional wear at light loads is assessed in a friction machine which uses hollow cylindrical test pieces 16 mm o.d., 10 mm i.d., one being activated. One cylinder is driven at 600 r.p.m. Oil is contained between the cylinders. The radioactivity of all of the oil is measured, and so is the transfer of metal from the irradiated to the inactive rubbing surface. Test results are quoted on high- and low-sulphur basic lubricants with various additives. The repeatability is good and the effects of various changes in the oils are clearly shown. Detergent engine additives can sometimes promote wear. A rig is described which comprises combined oxidation and wear tests. The oil is contained in a teflon cup with a cast iron base against which an irradiated

Radio-tracer methods of studying ... S/883/62/000/000/018/020
E194/E155

hollow cast iron cylinder rotates. A heated plate is contained in the oil and lacquer formation on this plate is assessed by the absorption of β-radiation. Wear is assessed by measuring the radioactivity of the oil. The test sample of 25 ml is heated up to 190 °C during the test by the combined effects of the hot surface and friction. The test lasts for 5 hours. The combination of wear and oxidation test provides an effective way of differentiating between oils.
There are 5 figures and 4 tables.

Card 3/3

39530
S/065/62/000/008/002/003
E075/E135

11.9700

AUTHORS: Shor, G.I., Zaslavskiy, Yu.S., Morozova, I.A., and Ryabova, D.V.

TITLE: Electrochemical aspects of the mechanism of action of detergent additives to motor oils

PERIODICAL: Khimiya i tekhnologiya topliv i masel, no.8, 1962, 58-66

TEXT: Electrical conductivity measurements of solutions of detergent additives in mineral oils were carried out in the belief that ionic dissociation of the additives, followed by subsequent adsorption of the ions on carbonaceous particles and metal surfaces, constitutes the mechanism of action of most detergent additives. The additives investigated were: alkylphenate - formaldehyde condensation product ВНИИ НП-370 (VNII NP-370), high-ash calcium sulphonate ПМС (PMS), and their mixtures. Different amounts of the additives were dissolved in oil АС-5НК3 (AS-5 NKZ). The conductivity measurements were carried out with a microammeter (0.1 amp, full scale deflection) and a teraohmmeter МОМ-4 (MOM-4) giving a d.c. of 105 V. All the solutions obeyed

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Electrochemical aspects of the ... S/065/62/000/008/002/003
E075/E135

Ohm's law, thus showing that they are non-aqueous electrolytes. Some of the additive mixtures dissolved in the oil gave considerably increased conductivities compared with the solutions containing individual additives and the same cation concentration, which indicated that the additive mixtures dissociated to a considerably higher degree than the single additives. Experiments with a metal plate heated to 250 °C and covered with a thin film of oil containing the additives with Ca^{45} and C^{14} showed that the additives formed films on the metal surface. By studying deposition of soot particles labelled with Tl^{204} on the hot plate and adsorption of the additives with labelled Ca atoms on the metal surface in the presence of soot, it was established that the higher the degree of additive dissociation, the more effective its detergent activity. For a number of alkyl phenate additives the admixture of sulphonates did not give increased electrical conductivity, presumably due to their low solubility. All batches of the investigated additive VNII NP-370 with the added Ca sulphonate were completely soluble in mineral oils, which gave high electrical conductivities. Measurements of the electrical

Card 2/3

Electrochemical aspects of the ... S/065/62/000/008/002/003
E075/E135

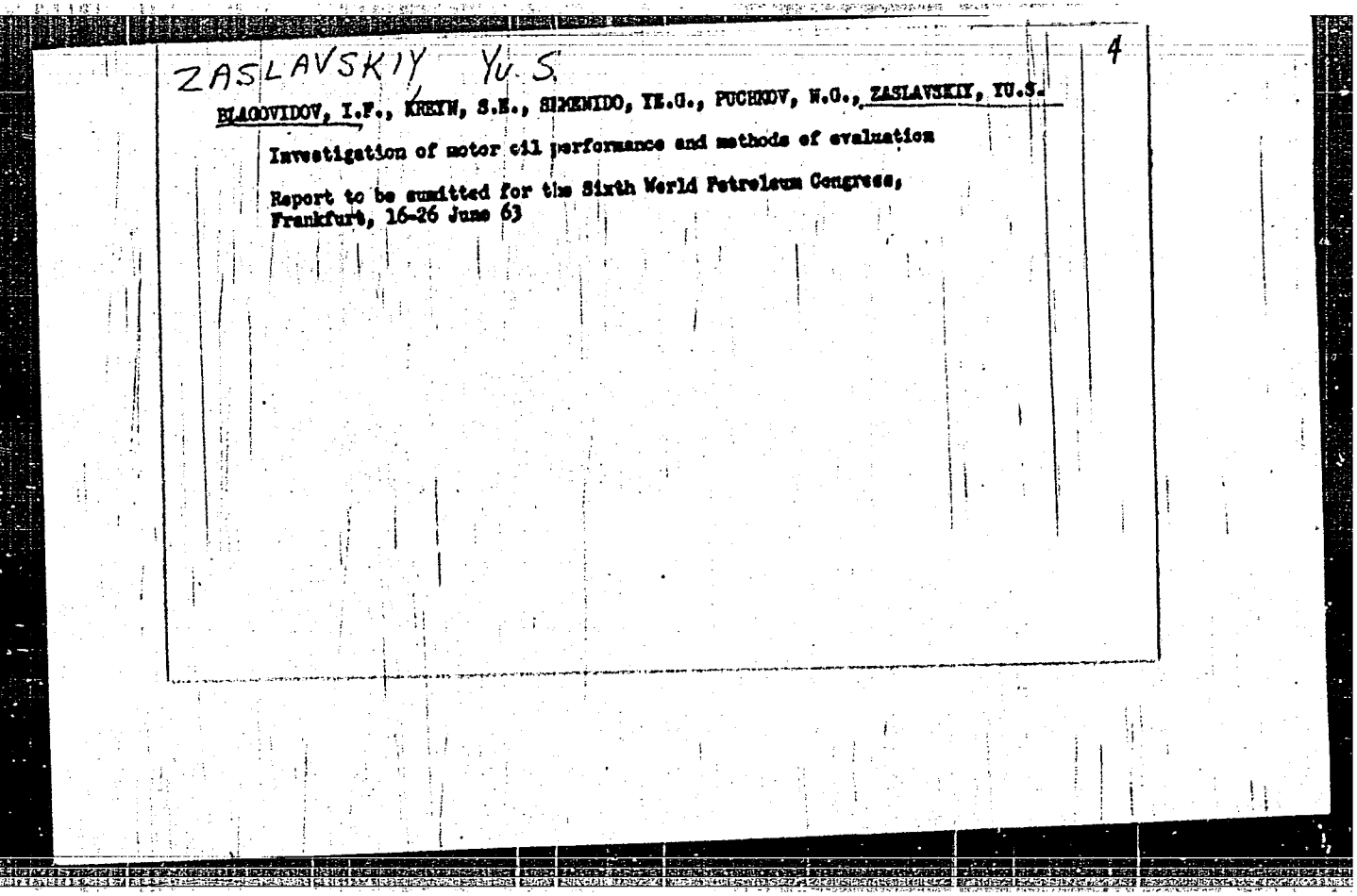
conductivity of detergent additive solutions in motor oils permitted carrying out preliminary laboratory evaluation of the detergent effectiveness of additives and their mixtures, and control of the additive quality.
There are 4 figures and 5 tables.

ASSOCIATION: VNII NP

Card 3/3

ZASLAVSKIY, Yu.S.; SHOR, G.I.; SHNEYEROVA, R.N.; LEBEDEVA, F.B.

Reducing chemical wear in using lubricating oils with antiseizing additives. Tren.i izn.mash. no.15:486-494 '62. (MIRA 15:4)
(Lubrication and lubricants—Testing)



ZASLAVSKIY Yu. S.

4

BLAGOVIDOV, I.F., KREYN, S.E., SIMENIDO, YE.G., PUCHKOV, N.G., ZASLAVSKIY, YU.S.

Investigation of motor oil performance and methods of evaluation

Report to be submitted for the Sixth World Petroleum Congress, Frankfurt, 16-26 June 63

TEXT: The device now reported is illustrated in Fig. 1.

diameter, 1 mm thick) attached to the window, as shown. This plate prevents the β-rays from entering the counter directly so that only the back-scattered β-rays are recorded. A low-activity source (~ 1 μC) is sufficient and a standard scaler may be employed. The intensity of the recorded back-scattered radiation is practically independent on the distance between the source and the [illegible] until the maximum counting rate is obtained. The thickness is then determined from the ratio

$$\frac{n}{n_0} = \frac{[illegible]}{(1/4\pi)A\ 3.7\cdot 10^{?}\ G(n_0,\ r,\ R)/n_0 + [illegible]\ (A)}$$

where n is the counting rate obtained with the coatin[illegible], n_0 is [illegible] A is [illegible] the [illegible]

[illegible]

between the sources and the surface [illegible] r is the radius of the [illegible] coefficient of the coating and f [illegible] factor represen-[illegible] [illegible]ption in the counter window. With a properl[illegible] count of the background becomes negligible and n/n_0 = [illegible] It was found that the ratio n/n_0 could be written in the form

$$n/n_0 = Ae^{-\mu d} + B$$

[illegible] and A, [illegible] and B are constants.

[illegible]

Determination of ....

source the error reaches a minimum at $d = 4.2$ mg/cm^2. The [illegible] has been used to determine the amount of [illegible]

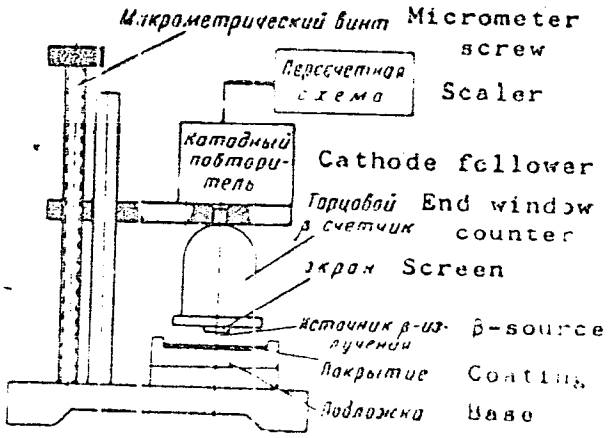
SUBMITTED: January 31, 1962

Card 3/4

Determination of ....

S/120/63/000/001/039/072
E032/E514

Fig. 1:



Card 4/4

BLAGOVIDOV, I.F.; BOROVAYA, M.S.; DRUZHININA, A.V.; DERYABIN, A.A.; ZASLAVSKIY, Yu.S.; MONASTYRSKIY, V.A.; PUCHKOV, N.G.; FILIPPOV, V.F.

Selecting additives to oils for various uses. Khim. i tekh. topl. i masel. 8 no.3:54-62 Mr '63. (MIRA 16:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gazov i polucheniyu iskusstvennogo zhidkogo topliva.

(Lubrication and lubricants--Additives)

L 29379-66 EWP(j)/EWT(m)/T GG/RM/DJ

ACC NR: AP6018621 (A) SOURCE CODE: UR/0065/66/000/006/0024/0027

AUTHOR: Makeyeva, Ye. D.; Makhnenko, G. Kh.; Zaslavskiy, Yu. S.

ORG: VNII NP

TITLE: Radiation resistant lubricating greases based on sodium terephthalamate

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 6, 1966, 24-27

TOPIC TAGS: lubricant, radiation protection

ABSTRACT: Lubricating greases prepared by the thickening of mineral oils and synthetic liquids with terephthalamates, which are assymetric derivatives of terephthalic acid of the general formula

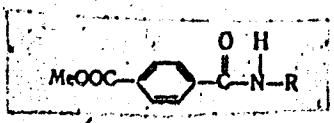


exhibit high radiation resistance, high water repellency, and good structural strength and adhesion to rubbing surfaces at above 200C. Sodium terephthalamate-base lubricating greases were prepared in two steps: 1) synthesis of sodium terephthalamate, and 2) preparation of greases from mineral oils MS-20s and DS-11,

Card 1/2 UDC: 665.582

L 29379-66

ACC NR: AP6018621

synthetic hydrocarbon oil MAS-35,[1] and polymethylphenylsiloxane liquid FM-1322/300. Specification numbers of the oils are given in the source. The thickener concentration varied from 8 to 14%. The preparative procedure of the greases is described in the source. Study of the properties of the greases showed that: 1) they melt at 200—245C; 2) the thickening capacity of sodium terephthalamate and the colloidal stability of the greases can be further improved by using a sodium terephthalamate-sodium benzoate complex (molar ratio: 1/0.5); 3) the basic physicochemical properties of terephthalamate greases are not substantially impaired by γ-radiation doses of 10^8 rad. Orig. art. has: 1 figure and 5 tables. [BO]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 012/ ATD PRESS: 5008

Card 2/2 CC

L 20632-66 EWT(m)/T DJ

ACC NR: AP6011220 (A) SOURCE CODE: UR/0413/66/000/006/0057/0057

INVENTOR: Blagovidov, I. F.; Druzhinina, A. V.; Monastyrskiy, V. N.; Puchkov, N. G.; Deryabin, A. A.; Borovaya, M. S.; Filippov, V. F.; Avaliani, T. K.; Zaslavskiy, Yu. S.; Tarmanyan, G. S.; Shor, G. I.; Dmitriyeva, N. A.; Belyanchikov, G. P.; Kuliyev, A. M.; Suleymanova, F. G.; Zaynalova, G. A.; Sadykhov, K. I.

ORG: none

TITLE: Preparative method for motor oils. Class 23, No. 179868

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 57

TOPIC TAGS: lubricating oil, lubricant additive

ABSTRACT: An Author Certificate has been issued for a preparative method for motor oils, involving the introduction of additives. To impart the required service properties, the additives used are an alkylphenol-formaldehyde condensation product (3—15%), a sulfonate additive (1—6%), an additive based on xanthates or dithiophosphates (0.5—1%), and an organosilicon additive (0.003—0.005%) [the additives are no further identified in the source]. [SM]

SUB CODE: 11/ SUBM DATE: 02Aug62/ ATD PRESS: 4225

Card 1/1 UDC: 665.521.5002.237

ZASLAVSKIY, Yu. S.; SHOR, G. I.; MOROZOVA, I. A.; LEBEDEVA, F. B.; YEVSTIGNEYEV, Ye. V.; SHNEYEROVA, R. N.

"New methods of investigation of lubricant properties."

report submitted for Intl Lubrication Conf, Washington, D.C., 13-16 Oct 64.

1. ZASLAVSKIY, Yu.

2. USSR (600)

4. Shaft Sinking

7. Sixty-two meters of completed shaft in one month, Mast. ugl., 1, No. 9, 1952.

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

ZASLAVSKIY, Yu., inzhener; DUBOVELOV, V., inzhener.

Sectional chute door with pneumatic control. Mast.ugl.3 no.3:20-21 Mr '54. (MLRA 7:4)

(Mine hoisting)

ZASLAVSKIY, YU.

ZASLAVSKIY, Yu., inzhener.

New development in shaft sinking in the Donets Basin. Mast.ugl. 3 no.7:7-9 Jl '54. (MLRA 7:7)
(Donets Basin--Shaft sinking)

DAVYDOV, M.P.; ZASLAVSKIY, Yu.Z.; ZORI, A.S.

150 meters of prepared mine shafts per month. Mekh.trud.rab. 8 no.8:17-20 D '54. (MLRA 8:1)

1. Upravlyayushchiy trestom Stalinshakhtoprokhodka (for Davydov) 2. Glavnyy inzhener prokhodcheskogo stroyupravleniya No.3 (for Zaslavskiy). 3. Nachal'nik tekhnicheskogo otdela tresta (for Zori) (Donets Basin--Mining engineering)

ZASLAVSKIY, Yu., inzhener.

Widespread use of reinforced concrete tubbings. Mast.ugl. 5 no.6: 6-9 Je '56. (MLRA 9:8)

(Donets Basin--Mine timbering)

ZASLAVSKIY, Yu.Z.

Improve methods of vertical shaft sinking in the Krivoy Rog Basin. Shakht. stroi. no.2.9-12 '58. (MIRA 11:3)

1. Glavnyy inzhener tresta Krivbassshakhtoprokhodka.
(Krivoy Rog--Shaft sinking)

ZASLAVSKIY, Yu.Z., kand. tekhn. nauk; VOLKOV, N.S., inzh.; ZHULIN, Yu.L., inzh.

Investigating the thermoelastic stresses surrounding mine workings located at great depths. Sbor. DonNIGI no.33: 183-191 '64. (MIRA 17:11)

ZASLAVSKIY, Yu.Z., kand. tekhn. nauk (Donetsk); KOCHETOV, V.V., kand. tekhn. nauk; BYDEROVSKIY, S.I., inzh.; PUL'MAN, V.M., inzh.; KAZAKEVICH, E.V., inzh.; MAKSIMCHUK, A.A., inzh.

Create a Soviet firm for vertical shaft sinking. Gor. zhur. no.9:5-8 S '64. (MIRA 17:12)

1. TSentral'nyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut podzemnogo i shakhtnogo stroitel'stva, Moskva (for Kochetov, Byderovskiy). 2. Krivorozhskiy filial Vsesoyuznogo nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (for Pul'man, Kazakevich, Maksimchuk).

ZASLAVSKIY, Yu.Z., kand.tekhn.nauk

Predicting the swelling of rock in the groun of single horizontal workings. Shakht.stroi. 8 no.11:11-12 N '64. (MIRA 18:1)

1. Donetskiy nauchno-issledovatel'skiy ugol'nyy institut.

ZASLAVSKIY, Yu.Z., kand. tekhn. nauk

Determining the optimal parameters of cushion pads for monolithic concrete supports. Transp. stroi. no.33:270-272 '64. (MIRA 17:11)

ZASLAVSKIY, Yuliy Zinov'yevich; AFONINA, G.P., red.; STARODUB, T.A., tekhn. red.

[Reinforcing vertical mine shafts with solid concrete]Kreplenie vertikal'nykh stvolov shakht monolitnym betonom. Kiev, Gostekhizdat USSR, 1962. 190 p. (MIRA 16:3)
(Mine timbering) (Concrete reinforcement)

ZASLAVSKIY, Yu.Z., kand.tekhn.nauk; CHEKAREV, V.A., kand.tekhn.nauk

"Equipment for sinking and drilling vertical shafts" by N.A. Malevich [doktor tekhn.nauk]. Reviewed by IU.Z. Zaslavskii and V.A. Chekarev. Shakht. stroi. 5 no.7:30-32 Jl '61. (MIRA 15:6)

(Shaft sinking—Equipment and supplies)
(Automatic control)
(Malevich, N.A.)

ZASLAVSKIY, Yu.Z., kand.tekhn.nauk; LADOZHINSKIY, V.N., inzh.

Efficiency of various flowsheets for shaft sinking in the Krivoy Rog Basin. Shakht. stroi. 5 no.5:11-16 My '61. (MIRA 14:6)

1. Trest Krivbassshakhtoprokhodka (for Zaslavskiy). 2. Nauchno-issledovatel'skiy gornorudnyy institut (for Ladozhinskiy).
(Krivoy Rog Basin--Shaft sinking)

88677

S/127/60/000/001/001/005
B012/B058

12.9100

AUTHORS: Vagin, G. I., Manager of the Trust, Zaslavskiy, Yu. Z., Chief Engineer of the Trust

TITLE: Large-scale mechanization of the sinking of vertical shafts

PERIODICAL: Gornyy zhurnal, no. 1, 1960, 44-48

TEXT: The sinking of shafts (usually to a depth of from 700 to 1000 m) in the Krivorozhskiy basin largely determines the total construction time of the mine. In 1957, the trust Krivbassshakhtoprokhodka (Krivbass-shakhtoprokhodka Trust) was established in the Krivorozhskiy basin, similar to the other trusts in the coal mining industry, in order to increase the speed of sinking vertical shafts. Starting in August 1957, the collective of engineers and technicians has taken a number of important measures on the basis of experience made at home and abroad. Concrete of high early strength is used for reinforcing the shafts. Metal casings (Fig.1) developed by engineers of the Trust are used for this purpose. In most cases concrete is fed to a depth of up to 650 m through a pipeline as is shown in Fig. 2. Fig. 3 shows a mechanized mixing installation

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Large-scale mechanization of....

operated by two to three persons. The control of the loading equipment in the Novaya-Rakhmanovskaya mines, Yuzhnaya Gleyevatskaya mines, and others was centralized from a control column with automatic blocking of the loading equipment and the hoist. Despite the rock hardness of 10 to 20 (according to Protod'yakonov), the measures indicated resulted in an increase in production. Fig. 4 shows equipment for shaft sinking according to the parallel process without provisional reinforcing, developed by the engineers of the Trust. The collective of the Trust works together with the krivorozhskiy institut Giprorudmash (Krivoy Rog Institute Giprorudmash), krivorozhskiy institut Krivbassproyekt (Krivoy Rog Institute Krivbassproyekt) and Dnepropetrovskiy gornyy institut (Dnepropetrovsk Mining Institute) and makes here a number of recommendations for the increase of the speed of sinking and the production as such. There are 4 figures.

ASSOCIATION: Trest Krivbassshakhtoprokhodka

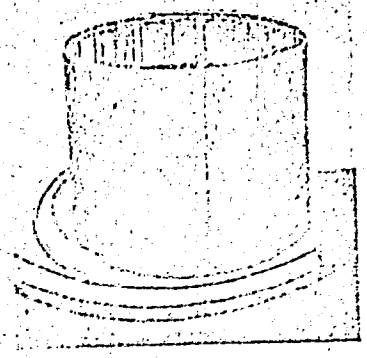
Card 2/8

88677

S/127/60/000/001/001/005
B012/B058

Large-scale mechanization of...

Fig. 1. Displaceable metal casing for shaft reinforcement by concrete of high early strength.



Card 5/8

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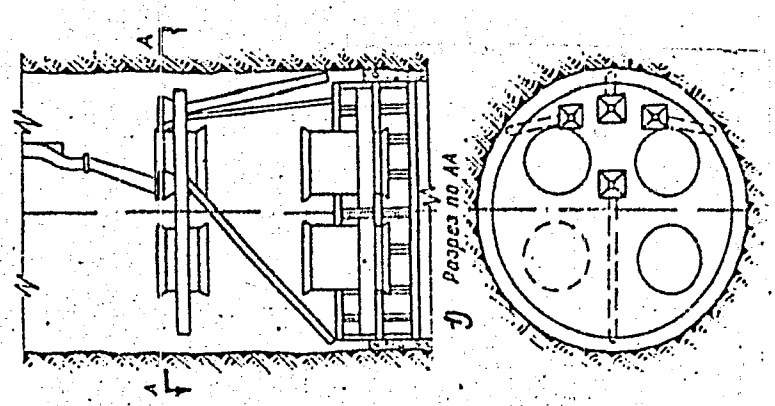
B012/B058

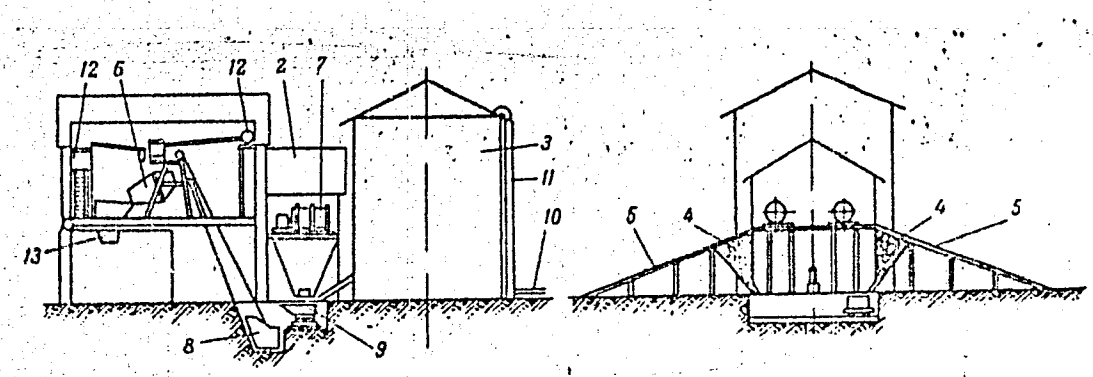
Fig. 2. Scheme for concrete mixing.

Legend: (1) Section A-A.



Card 4/8

Large-scale mechanization of...



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Large-scale mechanization of....

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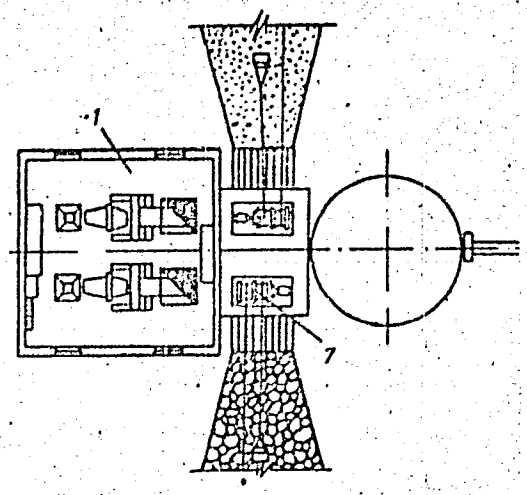


Fig. 3. Mechanized concrete-mixing installation of the Mine imeni Lenin

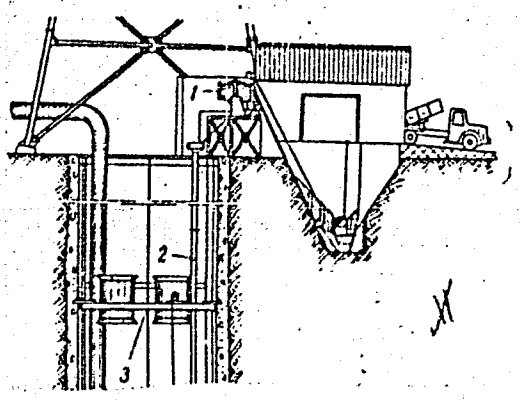
Legend: (1) Building for two mixers, (2) building for two scraper winches, (3) cement store, (4) aggregate- and sand bunker, (5) inclined ramp for bunker loading, (6) concrete mixer of 425 l capacity, (7) scraper winch [illegible]-10 (LA-10), (8) skip for charging the mixer, (9) dump car (dosage instrument), (10) horizontal screw conveyor, (11) vertical screw conveyor, (12) water- and calcium chloride container, (13) bunker for ready mixed concrete.

Card 6/8

Large-scale mechanization of...

Fig. 4. Shaft sinking equipment proposed by the Krivbassshakhtoprokhodka Trust

Legend: (1) Concrete mixer, (2) set of concrete lines for feeding concrete into the shaft, (3) tentering frame, (4) (4) short shield-loading platform, (5) conical part of the shield loading platform, (6) ring platform for sinkers, (7) displaceable planking, (8) lower bottom for the planking.



Card 7/8

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Large-scale mechanization of...

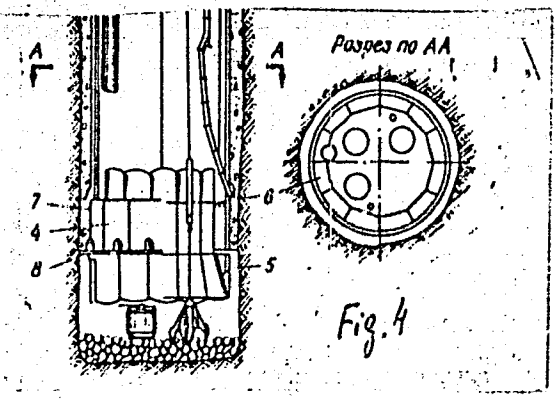


Fig. 4

Card 8/8

ZASLAVSKIY, Yu.Z., inzh.

Flow of concrete mixtures being fed into shafts by pipe. Shakht. stroi. no.12:11-14 D '59. (MIRA 13:3)

1.Trest Krivbassshakhtoprokhodka.
(Shaft sinking) (Concrete--Transportation)

ZASLAVSKIY, Yuliy Zinov'yevich; SMOLDYREV, A.Ye., otv.red.; ROMANOVA, L.A., red.izd-va; GALANOVA, V.V., tekhn.red.

[Vertical shaft sinking in Krivoy Rog Iron Ore Basin] Opyt prokhodki vertikal'nykh stvolov v Krivorozhskom zhelezorudnom basseine. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu delu, 1960. 42 p. (MIRA 13:5)
(Krivoy Rog--Iron mines and mining)
(Shaft sinking)

ZASLAVSKIY, Yu. Z., Cand Tech Sci (diss) -- "Investigation of the erection of mine supports of vertical columns with monolithic concrete when the concrete mixture is delivered by pipe". Dnepropetrovsk, 1960. 16 pp (Min Higher and Inter Spec Educ Ukr SSR, Dnepropetrovsk Mining Inst im Artem), 200 copies (KL, No 15, 1960, 134)

ZASLAVSKIY, Yu.Z., gornyy inzh.

Investigating the officiency of using movable sheathing and short shield scaffolds in vertical shaft sinking. Ugol' Ukr. 3 no.7:21-24 Jl '59. (MIRA 12:11)

1.Trest Krivbassshakhtoprokhodka.
(Shaft sinking)

ZASLAVSKIY, Yu.Z., inzh.

Flowability of concrete mixers delivered to the shaft through pipelines. Shakht.stroi. no.8:17-20 Ag '59.
(MIRA 12:11)

1. Trest Krivbasshakhtoprokhodka.
(Shaft sinking) (Concrete)

ZASLAVSKIY, Yu.Z., insh.

Investigating the segregation of concrete mixes when feeding it by pipeline into the shaft. Shakht.stroi. no.6:12-16 Je '59. (MIRA 12:9)

1. Trest Krivbasshakhtoprokhodka.
(Shaft sinking) (Concrete construction--Testing)

ZASLAVSKIY, Yu.Z., inzh.

New developments in shaft sinking in Krivoy Rog Basin. Shakht. stroi. no.12:9-14 '58. (MIRA 11:12)

1. Glavnyy inzhener tresta Krivbasshakhtoprokhodka.
(Krivoy Rog--Shaft sinking) (Mining machinery)

ZASLAVSKIY, Yu.Z., inzhener.

Safe sinking of vertical mine shafts. Bezop.truda v prom. 1 no.3:5-7 Mr '57. (MIRA 10:4)

1. Glavshakhtoprokhodka Ministerstva stroitel'stva predpriyatii ugol'noy promyshlennosti USSR.
(Shaft sinking)

ZASLAVSKIY, Z.

AID - P-173

Subject : USSR/Aeronautics

Card : 1/1

Author : Zaslavskiy, Z., Lt. Col. Engineer

Title : Bombing from a Fighter Aircraft

Periodical : Air Force Herald, 1, 39 - 43, Ja 1954

Abstract : The dive bombing from a fighter aircraft is described in detail. The author analyzes all turns, direction and velocity changes, diving, recovery, etc. Diagrams.

Institution : None

Submitted : No date

ZASLAVSKIY, Z. B.

Pamiatka rabochego po fil'tratsii v sodovom proizvodstve. Moskva, Gos. nauch.-tekhn. izd-vo khim. lit-ry, 1946. 62 p. diagrs.

Instructions in filtration for workers in soda industry.

DLC: TP245.S7Z3

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

ZASLAVSKY, E.I. (Novosibirsk)

"On the non-linear interaction of a spherical shock wave, resulting from the explosion of a dipped charge, with a free surface"

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

ZASLAVSKY,G.M.;MOISEYEV,S.S.;SAGDEYEV,R.Z. (Novosibirsk)

"On the vanishing dissipation paradox in the magnetohydrodynamic stability theory".

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

ZASLAVSKY, L.

27-4-8/25

AUTHOR: Zaslavsky, L., Teacher at Railway School No. 1, Chernovtsy

TITLE: Learning a New Technique (Izucheniye novoy tekhniki)

PERIODICAL: Professional'no-Tekhnicheskoye Obrazovaniye, 1958, # 4, p 16 (USSR)

ABSTRACT: General information is given on the Chernovtsy Railway School No. 1. The school held 3 conferences recently for pupils, many of whom joined in preparing the material for the lectures.

ASSOCIATION: Zheleznodorozhnoye uchilishche No. 1 (G. Chernovtsy) (Railroad School Nr. 1, Chernovtsy

AVAILABLE: Library of Congress

Card 1/1

ZASLAVSKIY, YU.S.

(3) PHASE I BOOK EXPLOITATION SOV/2715

International Conference on the Peaceful Uses of Atomic Energy. 2nd, Geneva, 1958

Doklady sovetskikh uchenykh; polucheniye i primeneniye izotopov (Reports of Soviet Scientists; Production and Application of Isotopes) Moscow, Atomizdat, 1959. 388 p. (Series: Its: Trudy, vol. 6) 8,000 copies printed.

Eds. (Title page): G.V. Kurdyumov, Academician, and I.I. Novikov, Corresponding Member, USSR Academy of Sciences; Ed. (Inside book): Z.D. Andreyenko; Tech. Ed.: Z.D. Andreyenko.

PURPOSE: This book is intended for scientists, engineers, physicians, and biologists engaged in the production and application of atomic energy to peaceful uses; for professors and graduate and undergraduate students of higher technical schools where nuclear science is taught; and for the general public interested in atomic science and technology.

COVERAGE: This is volume 6 of a 6-volume set of reports delivered by Soviet scientists at the Second International Conference on the Peaceful Uses of Atomic Energy held in Geneva from September 1 to 13, 1958. Volume 6 contains 32 reports on: 1) modern methods for the production of stable radioactive isotopes and their labeled compounds, 2) research results obtained with the aid of isotopes in the field of chemistry, metallurgy, machine building, and agriculture, and 3) dosimetry of ionizing radiation. Volume 6 was edited by: S.V. Levinskiy, Candidate of Medical Sciences; V.N. Prusakov, Candidate of Chemical Sciences; and V.V. Sedov, Candidate of Medical Sciences. See SOV/2081 for titles of volumes of the set. References appear at the end of the articles.

3. Yakovlev, G.N., and V.B. Dedov. Means of Developing Remote Control Methods in the Radiochemical Laboratories of the AN SSSR (Report No. 2025) 44

4. Malkov, M.P., A.G. Zel'dovich, A.B. Fradkov, and I.B. Danilov. Commercial Production of Deuterium by the Low-temperature Distillation Method (Report No. 2323) 54

5. Gverdtsiteli, I.G., R.Ya. Kucherov, and V.K. Tskhakaya. Separation of Isotopes by Diffusion in a Steam Flow (Report No. 2026) 69

6. Zolotarev, V.S., A.I. Il'in, and Ye.G. Komar. Separation of Isotopes on Electromagnetic Units in the Soviet Union (Report No. 2305) 87

7. Alekseyev, B.A., S.F. Dalygin, V.S. Zolotarev, B.V. Panin, Ye.S. Chernorotov, and G.Ya. Shchepkin. Separation of Isotopes of Rare-earth Elements by the Electromagnetic Method (Report No. 2227) 102

8. Morosov, P.M., B.N. Makov, M.S. Ioffe, B.G. Brezhnev, and G.M. Fradkin. Ion Sources for the Separation of Stable Isotopes (Report No. 2303) 111

9. Bealin, M.V., and P.M. Morosov. Electric Field Effect in Ion Beams on Stable Isotope Separation by the Electromagnetic Method (Report No. 2304) 127

10. Bogdanova, N.G., P.L. Gruzin, G.I. Yermolayev, and I.D. Nikulinskiy. Use of Radioactive Isotopes in Metallurgical Research (Report No. 2218) 134

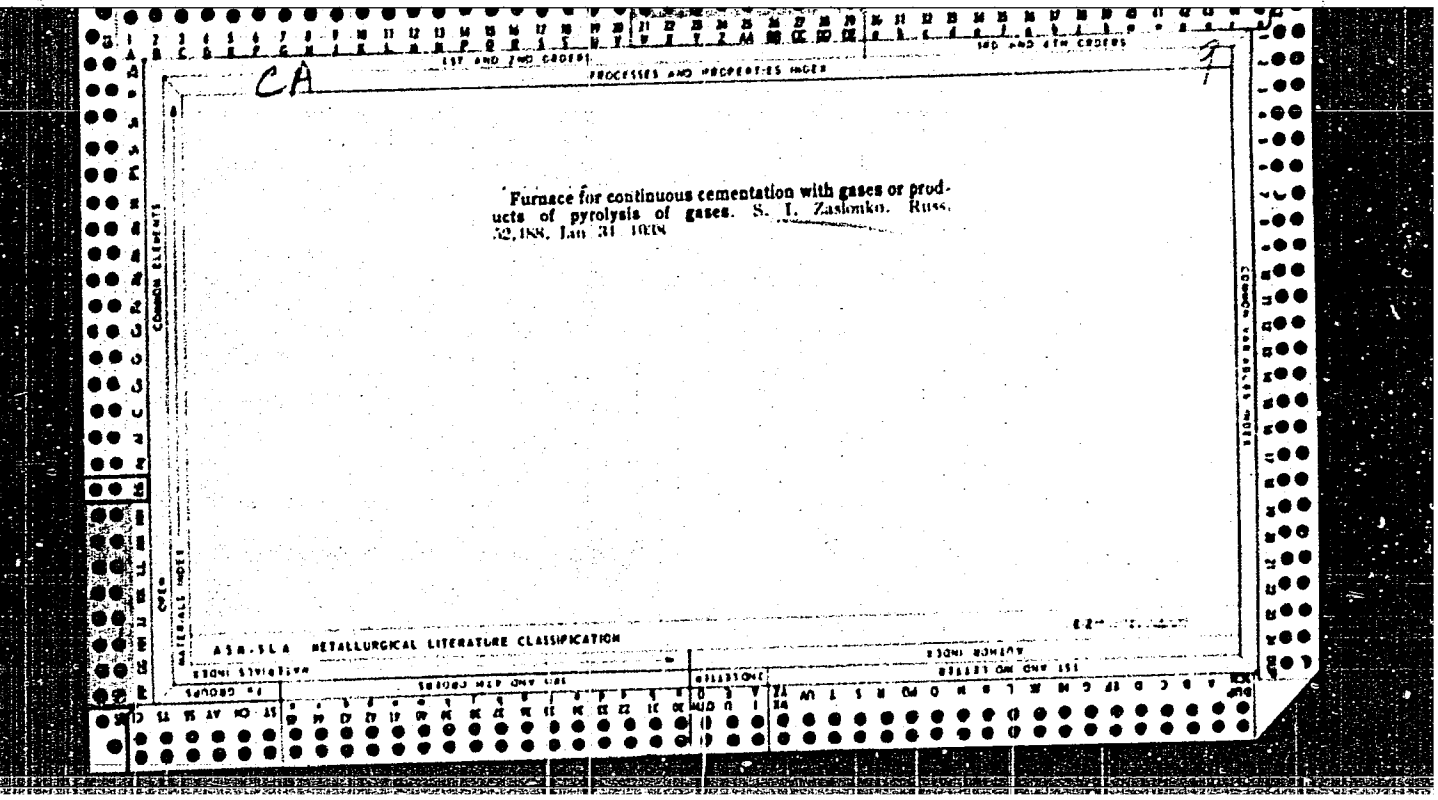
11. Shmeilovskiy, N.N., V.A. Yanushkovskiy, and I.M. Taksar. The Theory and Practice of Relay-type Instruments Based on Radioactive Isotopes (Report No. 2232) 135

12. Zaslavskiy, Yu.S., G.I. Shor, and R.N. Shneyerova. Studying the Mechanism of Protection of Rubbing Surfaces Against Wear Due to Corrosion (Report No. 2198) 148

13. Rumyantsev, S.V., and L.N. Mateyuk. The Tu^{170}, Eu^{155}, and Ce^{144} as Sources of Radiation for Checking Thin-walled Products (Report No. 2295) 160

14. Bruk, B.I., A.S. Zav'yalov, and G.I. Kapyrin. Studying the Redistribution of Elements in Metal Alloys and Weld Compounds by Autoradiographic and Radiometric Methods (Report No. 2236) 172

15. Gruzin, P.L., A.I. Yevstyukhin, V.S. Yemel'yanov, G.G. Ryabova, G.B. Fedorov. Studying the Diffusion and Distribution of Elements in Alloys of Zirconium and Titanium Base by the Radioactive Isotope Method (Report No. 2526) 189



CA

Furnace for continuous cementation with gases or products of pyrolysis of gases. S. I. Zaslonko. Russ. 52,188, Jan 31 1938

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

ZASLONKO, S.I.

AUTHOR: Zaslonko, S.I., Engineer. 110-9-19/23

TITLE: Nickel-free Heat-resisting Steel and Cast Irons for the Plates (Hearths) and other Parts of Electric Furnaces Operating at Temperatures up to 1 000 °C. (Beznikelevyye zharoupornyye stali i chuguny dlya plit (podin) i drugikh detaley elektropechey, rabotayushchikh pri temperature do 1000 °C.)

PERIODICAL: Vestnik Elektropromyshlennosti, 1957, Vol.28, No.9, pp. 74 - 76 (USSR).

ABSTRACT: Expensive chrome-nickel steels with a nickel content of 12 - 18% are used in the manufacture of the plates (hearths) of chamber-type electric furnaces working at temperatures of 850 - 1 000 °C. The design office of the Elektropech' Trust sought a cheaper heat-resistant alloy for this purpose which did not contain nickel or other scarce constituents. A literature survey on the chemical composition and heat-resistance of steel and cast iron was first made. Hearth castings of the selected alloys were tested in industrial furnaces to determine their life and in the laboratory to establish their resistance to scale formation and to heat. This article gives the test results on the different alloys. Chrome-manganese steels, some containing titanium, proved quite unsatisfactory because scale from the metal dropped on to the heating elements and short-circuited

Card1/3

Nickel-free Heat-resisting Steel and Cast Irons for the Plates (Hearths) and other Parts of Electric Furnaces Operating at Temperatures up to 1 000 °C.

them. High chromium steel (22-33%) was rejected on account of its unsatisfactory casting properties. This also applied to similar steels containing aluminium. Chrome-copper steels operated satisfactorily at a temperature of 1 000 °C with a loading of 150 kg/m^2 for more than 500 hours without distortion. The quantity of scale formed was negligible. High-chrome cast iron had impossibly bad casting characteristics. However, after the manganese content had been raised to 7%, the casting properties became good. The results of scaling tests at high temperatures on chrome-magnesium cast irons are tabulated together with their composition. Some of these materials worked for periods up to a year in furnaces. In comparing the mechanical properties of these steels with steel ЭИ-417, which contains 18% nickel, it should be remembered that the ЭИ-417 samples were made from rolled material and the others from cast sheets. When steel with a minimum nickel content of 12% is replaced by nickel-free steel or cast iron, the saving is not less than 2.50 Roubles per kg. The various steels and cast irons were melted in induction furnaces with capacities up to 150 kg. It is concluded that

 hearths for electric furnaces working at temperatures of up to

110-9-19/23

Nickel-free Heat-resisting Steel and Cast Irons for the Plates (Hearths) and other Parts of Electric Furnaces Operating at Temperatures up to 1 000 °C.

1 000 °C may be made of chrome-manganese cast iron and chrome-copper steel of the following chemical compositions: a) cast iron; 1.5 - 2.5% C, 4.0 to 5.5% Mn, 29 - 32% Cr, 2 - 3% Si: b) chrome-copper steel; 0.2 - 0.3% C, 0.8 - 1% Mn, 18 - 22% Cr, 2 - 2.7% Si and 2.3 - 2.8% Cu.

There is 1 table.

ASSOCIATION: Elektropech' Trust (Trest "Elektropech'")

SUBMITTED: February 11, 1957.

AVAILABLE: Library of Congress.

Card 3/3

MIKELADZE, G.Sh.; NADIRADZE, Ye.M.; PKHAKADZE, Sh.S.; GOGORISHVILI, B.P.; DGEBAUDZE, G.A.; SOLOSHENKO, P.S.; SEMENOV, V.Ye.; BARASHKIN, I.I.; SHIRYAYEV, Yu.S.; POSPELOV, Yu.P.; KATSEVICH, L.S.; ROZENBERG, V.L.; Prinimali uchastiye: LORDKIPANIDZE, I.S.; TSKHVEDIANI, R.N.; DZODZUASHVILI, A.G.; DUNIAVA, A.G.; PEKARSKIY, L.F.; GRITSENYUK, Yu.V.; ZHELTOV, D.D.; LUZANOV, I.I.; GLADKOVSKIY, V.P.; PODMOGIL'NYY, V.P.; VOROPAYEV, I.P.; BRIKOVA, O.V.; VRUBLEVSKIY, Yu.P.; KLYUYEV, V.I.; BAYCHER, M.Yu.; LOGINOV, G.A.; SHILIN, V.K.; POPOV, A.I.; ZASLONKO, S.I.

Industrial experiments in the smelting of 45 o/o ferrosilicon in a heavy-duty closed electric furnace. Stal' 25 no.5:426-429 My '65. (MIRA 18:6)

1. Gruzinskiy institut metallurgii (for Lordkipanidze, TSkhvediani, Dzodzuashvili, Guniava). 2. Nauchno-issledovatel'skiy i proyektnyy institut metallurgicheskoy promyshlennosti (for Brikova, Vrublevskiy, Klyuyev). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut elektrotermicheskogo oborudovaniya (for Baycher, Loginov, Shilin, Popov, Zaslonko).

ZASLONKO, S.I. inzh.

Nickelless heat resistant steels and iron for plates and other parts of electric furnaces operating at temperatures to 1000° C. Vest. elektroprom. 28 no.9:74-76 S '57. (MIRA 10:11)
(Electric furnaces) (Plates, Iron and steel)

ZASLONOV, M.S.; KANTOROVICH, R.A., kand.med.nauk

Epizootiology of rabies in animals in the forest-steppe zone of the Southern Urals. Veterinariia 40 no.7:13-14 Jl '63. (MIRA 16:8)

1. Direktor Troitskoy veterinarnoy laboratorii (for Zaslonov).
2. Institut virusologii AMN SSSR (for Kantorovich).
(Ural Mountain region--Rabies)

LAZAREV, P.S., FEDOROV, A.I., prof.; BUKHTILOV, F.N., dotsent; PAVLOV, P.I., dotsent; ZASLONOV, M.S.; PLEKHANOV, B.P.; Prinimali uchastiye: GRIBOVSKIY, G.P., veterinarnyy vrach; RYBAKOVA, A.V., veterinarnyy vrach

Some characteristics of the course of rabies in cattle. Veterinariia 39 no.9:20-22 S '62. (MIRA 16:10)

1. Troitskiy veterinarnyy institut (for Lazarev, Fedorov, Bukhtilov, Pavlov). 2. Direktor Troitskoy mezhsovkhoznoy veterinarno-bakteriologicheskoy laboratorii (for Zaslonov). 3. Glavnyy veterinarnyy vrach Bredinskogo rayona, Chelyabinskoy oblasti (for Plekhanov).

ZASLONOV, M. S. (Troitsk Inter-Sovkhoz Veterinary Bacteriological Laboratory)

The Laboratory Diagnosis of Brucellosis in Cattle. Coauthor N. N. Kul'dyakin of same organization. Veterinariya, Vol 27, No 6, 1950, Unclassified.

ZASLOV, V.Ya.; MURZIN, G.A.; PAVLOV, O.V.; BELYAYEV, S.G.; ETINGOV, S.I.

Powered tool for installing roof bolting. Gor.zhur. no.4:55-58 Ap '64. (MIRA 17:4)

1. Nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut gornogo i obogatitel'nogo oborudovaniya (for Zaslov, Murzin, Pavlov, Belyayev). 2. Severoural'skiye boksitovyye rudniki (for Etingov).

ZASLOV, V. (Sverdlovsk)

Rod bolting supports. Tekh.mol. 29 no.5:12 '61. (MIRA 14:5)
(Mine roof bolting)

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12.9100

AUTHOR: Zaslov, V. (Sverdlovsk)

TITLE: Bar reinforcement

PERIODICAL: Tekhnika molodezhi, no. 5, 1961, 12

TEXT: The author points out the difficulties arising from increasing strata pressure on the roofs of workings in mining. Among the various systems employed for mine roof reinforcement, such as props, walls and arches made of wood, metal, and reinforced concrete, bar reinforcement is considered the most dependable reinforcing method. Although this method is not new and was mentioned in 1878 for the first time, extensive use of the principle started only recently and is going to replace all other methods of reinforcement. For maximum protection against cave-in of the working roof, metal bars are inserted into holes drilled in the roof. The bars have a wedge-type or split-type lock on one end for fastening within the rock and are threaded on the other end. A nut screwed on the threaded end presses a thrust plate against the roof of the working to absorb the pressure of the upper rock layers. The bars can also be inserted into concrete mortar pumped under pressure into boreholes drilled in the rock. The concrete mortar penetrates also into

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D034/D113

Bar reinforcement

small cracks and thus binds the rock into one monolithic mass. The nut and plate are attached to the threaded end of the bar protruding from the borehole. The main advantages of bar reinforcement are operational safety and economy in material, cost and manpower. Fifteen million cubic meters of timber can be saved annually, the prime costs reduced 4 to 5 times, and the work can be mechanized. A machine for setting bar reinforcements (Fig. 2) is being tested. It is to drill boreholes, set wooden or metal bars into them, wedge the bars, and screw on the nuts. If the bars are to be inserted into concrete mortar, the machine will also pump the concrete into the boreholes. There are 2 figures.

Card 2/3

PAVLOV, O.V., inzh.; ZASLOV, V.Ya., inzh.

Ways of mechanizing the installation of rod bolting. Gor. zhur. no.7: 64-66 Jl '62. (MIRA 15:7)

1. Nauchno-issledovatel'skiy proyektno-konstruktorskiy institut gornogo i obogatitel'nogo oborudovaniya, Sverdlovsk.
(Mine roof bolting--Equipment and supplies)

ZASLOVSKIY, T.I.

Case of paralysis of diagphragmatic and recurrent nerves following thoracocautery. Probl. tuberk., Moskva No. 1:73-74 Jan-Feb 52.
(CIML 21:5)

1. Of Kirovograd Oblast Tuberculosis Sanatorium (Head Physician--N.A. Yeremenko).

ZASLOV, V.Ya., inzh.; PAVLOV, O.V., inzh.; BELYAYEV, S.G., inzh.

Mechanization of the erection of rod bolting. Gor. zhur. no.5:46-48 My '62. (MIRA 16:1)

1. Nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut gornogo i obogatitel'nogo oborudovaniya, Sverdlovsk.
(Mine roof bolting)

ZASLUYEV, V.; ROYTBERG, I.

Made in the capital. Okhr.truda i sots.strakh. 5 no.11:30-31 N '62. (MIRA 15:12)

(Safety appliances)

ZASLUZHNAYA, M.S.

Effectiveness of seroanatoxin therapy of diphteria; experimental data. Zhur. mikrobiol., epid. i immun. 41 no.4:60-64 Ap '64. (MIRA 18:4)

1. Kazanskiy meditsinskiy institut.

ZASMETA, Vitezslav, prof. inz.; KNOP, Jan, doc. CSc.

Twenty years of forestry in liberated Czechoslovakia. Les cas 11 no.4:327-337 Ap '65.

1. Faculty of Forestry of the Higher School of Agriculture, Brno (for Zasmeta). 2. Higher School of Economics, Prague (for Knop).

ZASMETA, V. ; K[redacted]

AGRICULTURE

PERIODICAL: VESTNIK, VOL. 6, no. 2, 1959

Zasmeta, V. ; Kabele, J. Intergration of small forest into collective farms. p. 98.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 5, May 1959, Unclass.

ZASHETA, V.; KNOP, J.

SBORNIK. RADA LESNICTVI

The tasks of forestry after the 11th Party Congress, p. 255.

Praha, Czechoslovakia; Vol. 5, No. 3, Mar. 1959

Monthly list of East European Accession Index (EEAI), Library of Congress, Vol. 8, No. 7, July, 1959

Unclas

HRUZIK, Ladislav, inz.; ZASMETA, Vitezslav, inz.

Improvement of the cooperation between forestry and the wood-working industry. Drevo 18 no.11:393-394 N'63.

1. Ministerstvo zemedelstvi, lesniho a vodniho hospodarstvi.

KABELE, Jaroslav, inz.; ZASMETA, Vitezslav, prof. inz.

Econimic analysis of the state of Czechoslovak forests and the prospect of their development. Les cas 10 no.12:1043-1070 D '64.

1. Ministry of Agriculture, Forestry and Water Resources, Prague (for Kabele). 2. Faculty of Forestry of the Higher School of Agriculture, Brno (for Zasmeta).

ZASMETA, Vitezslav, prof. inz.; HERMUTH, Bedrich, inz.

Evaluation of poplar and willow tree plantations. Les cas 10 no.8:701-704 Ag '64

1. Faculty of Forestry, Higher School of Agriculture, Brno (for Zasmeta). 2. Ministry of Agriculture, Forestry and Water Resources Management, Prague (for Hermuth).

ZASMETA, V.; VACLENA, F.

"A long-range plan should form the basis of correct planning in the forest economy."

p. 329 (Les) Vol. 12, no. 7/8, July/Aug. 1956
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

ZASMETA, V.

Professional forest management; p. 737. SBORNIK, RADA LESNICTVI. Praha. Vol. 28, no. 5, Oct. 1955.

SOURCE: East European Accessions List (EEAL) Library of Congress Vol. 5, No. 7, July 1956.

ZASMETA, Vitezslav, inz.

For the improvement of forestry management standards.
Les cas 10 no. 1:1-2 Ja '64.

Some problems of socialist production relations in forestry.
Ibid.:3-18.

1. Ministerstvo zemedelstvi, lesniho a vodniho hospodarstvi, Praha.

CIZEK, Jaromir, doc., inz.; ZASMETA, Vitezslav, inz.

Criticism of Krutzch's book "Forest building". Les cas 9 no.10: 953-956 O '63.

1. Lesnicka fakulta, Vysoka skola zemedelska, Praha (for Cizek).
2. Ministerstvo zemedelstvi, lesniho a vodniho hospodarstvi, Praha (for Zasmeta).

ZASMETA, Vitezslav, ina.

Implementing the Resolution of the 12th Congress of the Communist Party of Czechoslovakia in the field of helping forestry and the economical use of wood. Drevo 18 no.5:169 My '63.

1. Ministerstvo zemedelstvi, lesniho a vodniho hospodarstvi.

L 12882-66 EWP(e)/EWT(m)/EWP(b) WH

ACC NR: AT6000502 SOURCE CODE: UR/0000/65/000/000/0348/0351

AUTHOR: Alekseyev, A. G.; Zasolotskaya, M. V.

ORG: None

TITLE: Some crystalline phases appearing in Li_2O-Al_2O_3-SiO_2 glasses with small TiO_2 admixtures

SOURCE: Vsesoyuznoye soveshchaniye po stekloobraznomu sostoyaniyu. 4th, Leningrad, 1964. Stekloobraznoye sostoyaniye (Vitreous state); trudy soveshchaniya, Leningrad, Izd-vo Nauka, 1965, 348-351

TOPIC TAGS: silicate glass, lithium glass, solid solution, catalized crystallization, aluminum silicate

ABSTRACT: Existing scientific literature concerning the state diagram of the Li_2O-Al_2O_3-SiO_2 system refers to the Li_2O-Al_2O_3-SiO_3 cut only and cannot yield information on phase transitions. The present author carried out x-ray studies of crystal glasses along the $Li_2O \cdot 1.16Al_2O_3$-SiO_2 cut. X-ray spectra were recorded for glasses without and with a 5% admixture of TiO_2. Changes in the parameters of the elementary cell and in the density are shown in Figures 1 and 2, respectively. The results show that in devitrified titanium-containing lithia-aluminosilica glasses the eucryptic series of solid solutions (O-series) begins with a crystalline phase the lattice and properties of which are different from those of the β-eucryptite. The series of solid solutions is stable within a wide range of temperatures up to a composition

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L 12882-66

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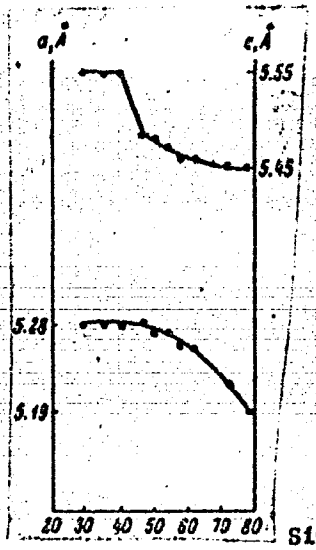

Fig. 1. Changes in the parameters of the elementary cell of β-eucryptite as a function of SiO_2 content.

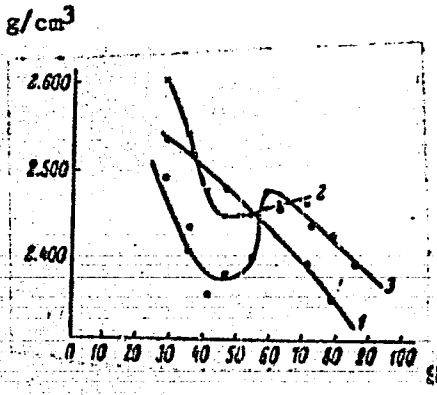

Fig. 2. Change in density with the increase in SiO_2 content
1 - Starting material;
2 - glass crystallized at 830C;
3 - at 1200C.

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having approximately 62% of SiO_2. In samples with a still higher content of SiO_2 at temperatures above 1060—1180C the substance goes over into the spodumene series of solid solutions. Orig. art. has: 3 figures.

SUB CODE: 11, 20 / SUBM DATE: 22May65 / ORIG REF: 001 / OTH REF: 003

Card 3/3

ZASONOV, N.I., kand.tekhn.nauk, red.; SOBOLEVA, Ye.M., tekhn. red.

[Combined steam and gas-turbine power plants] Kombinirovannye paro-gazovye energoustanovki. Moskva, Gosenergoizdat, 1962. 291 p. (MIRA 15:8)

(Power plants)

SHAFRAN, I.K.; LYAMETS, G.Ya.; BOGOSLAVSKIY, Ye.K.; SHESTAK, P.I.; ZASOPIN, K.A.

Reconstruction of the 1,150 blooming mill drives at the Dzerzhinskii Metallurgical Plant. Stal' 24 no.5:432-433 My '64. (MIRA 17:12)

1. Dneprovskiy metallurgicheskiy zavod im. Dzerzhinskogo.

SOV/81-59-21-76720

Translation from: Referativnyy zhurnal, Khimiya, 1959, Nr 21, p 491 (USSR)

AUTHOR: Zasorin, A.M.

TITLE: SVKh Copolymers - New Synthetic Materials

PERIODICAL: Stalingr. prom-st' (Sovnarkhoz Stalingr. ekon. adm. r-na), 1958, Nr 7, pp 14 - 18

ABSTRACT: The technological system of producing copolymers of vinyl chloride with vinylidene chloride (latex of SVKh and dry resin of SVKh) is explained in a popular way. The fields of application of these products and the prospect of developing their production are briefly examined.

N.G.

Card 1/1

ZASORIN, A.P., kandidat tekhnicheskikh nauk.

Analytic calculation of the absorption of nitric oxides. Khim. prom. no.3:162-163 Ap-My '56. (MLRA 9:10)

1. Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina.
(Nitrogen oxides) (Absorption)

5(1)

AUTHORS: Brushteyn, A., Atroshchenko, V. I., Zasorin, A. P.

06236
SOV/64-59-6-28/20

TITLE: Critics and Bibliography

PERIODICAL: Khimicheskaya promyshlennost', 1959, Nr 6, pp 552 - 553 (USSR)

ABSTRACT: Brushteyn reviews the book by V. A. Klevke, N. N. Polyakov, and L. Z. Arsen'yeva "Tekhnologiya azotnykh udobreniy" (Technology of Nitrogen Fertilizers), published by Goskhimizdat, 1956, 287 pages. Atroshchenko and Zasorin give a review of the same book; the book "Tekhnologiya azotnik udobreniy" by S. I. Vol'fkovich and A. M. Dubovitskiy et al. published in 1935, is mentioned as being the first of this kind in the USSR.

Card 1/1

ATROSHCHENKO, Vasiliy Ivanovich; GEL'PERIN, Iosif Il'ich; ZASORIN, Anatoliy Petrovich; KONVISAR, Viktor Ivanovich; KRAYNYAYA, Antonina Yakovlevna; LEYBUSH, Agnessa Grigor'yevna; YASTREBINETSKIY, Anisim Rudol'fovich; VAYNBERG, D.A., red.; ZADOROZHNYY, V.S., tekhn.red.

[Calculation methods in the technology of combined nitrogen] Metody raschetov po tekhnologii sviazannogo azota. Pod obshchei red. V.I. Atroshchenko. Khar'kov, Izd-vo Khar'kovskogo gos.univ., 1960. 302 p. (MIRA 14:4)

(Nitrogen)

S/064/60/000/01/20/024
B022/B008

AUTHORS: Atroshchenko, V. I., Tseytlin, A. N., Zasorin, A. P., Zolotarev, V. S.

TITLE: The Utilization of Nitrogen Oxides - the Waste From Some Processes

PERIODICAL: Khimicheskaya promyshlennost', 1960, No. 1, pp. 79 - 80

TEXT: The problem of the utilization of nitrogen oxide waste developing during the manufacture of some products of the organic synthesis is dealt with in the paper under review. The development of a simple method for the utilization of nitrogen oxide waste in industry is desirable. The principal reactions which determine the forming of nitric acid from nitrogen oxide are mentioned and equations for the reaction rate are given. The utilization of highly concentrated nitrogen oxides permits the production of 55% nitric acid in accordance with the equation of equilibrium of the second reaction ($K_p = P_{NO}/P_{NO_2}$). The absorption takes place in a bubbling column which represents an absorber of improved type in the

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The Utilization of Nitrogen Oxides - the Waste From Some Processes

S/064/60/000/01/20/024
B022/B008

given case. The high nitrogen oxide content in the gas permits also a simplified gas flow through the system, the gas flow being obtained with the aid of a vacuum pump of the type RMK (from acid-resisting alloys). The arrangement is given schematically (Fig.) and its characteristic values are given. The oxygen consumption for a daily production of 55% of HNO_3 amounts to 14 m^3/h in all; the dimensions of the second cooler are reduced to two sevenths, the weight of the column to one fourth, the number of bottoms to 8, and the consumption of electric power to one fifth. There is 1 figure.

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S/153/60/003/004/026/040/XX
B020/B054

AUTHORS: Zasorin, A. P., Khalabuzar', V. G., Pizin, Ye. I.

TITLE: Kinetics of Ammonia Synthesis on an Iron Catalyst With Addition of Uranium

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, 1960, Vol. 3, No. 4, pp. 695 - 698

TEXT: The authors studied the effect of an addition of a natural radioactive substance, uranium, on the catalytic activity of an industrial catalyst. They compared the catalyst with uranium addition with an industrial catalyst of the type "Б" ("B") (2% K_2O and 4% Al_2O_3) and with the catalyst of the type "БТ" ("BT") with increased Al_2O_3 content (2% K_2O and 11-12% Al_2O_3). The catalyst investigated was produced by sintering an industrial catalyst with uranyl nitrate $UO_2(NO_3)_2 \cdot 6H_2O$, the finished catalyst containing 5% of UO_3. The investigations were

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