IVANOV, Ye.N.

Quadrupole moments of paramagnetic ions in crystalline surroundings. Fiz. tver. tela 6 no.8:2551-2552 Ag '64.

(MIRA 17:11)

1. Kazanskiy gosudarstvennyy pedagogicheskiy institut.

IVANOV, Ye.N.

Setting up a general theory of Brownian movements. Izv. vys. ucheb. zav.; fiz. 8 no.6:54-60 '65. (MIRA 19:1)

1. Kazanskiy gosudarstvennyy pedagogicheskiy institut. Submitted January 26, 1964.

3

AUTHORS: Galperov, V. M., Akol'sin, P. A., Ivanov, Yu. N., Gromova, Ya. B. S/032/60/026/03/034/064 B010/B117

TITLE: On the Application of a Rapid Method of Determining the Liability of Metals to Corrosive Cracking

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol 26, Nr 3, pp 340-341 (USSR)

TEXT: A method used to estimate the resistance to corrosion of steels was suggested by the TsNIITMASh. The deterioration of the plastic properties of the metal in liquid corrosive substances is compared with the deterioration established when tests are performed in air with the state of the sample surface after the test also being considered. As this method gives no specific data concerning the type of corrosive substance, corresponding tests were performed in this case with an austenite steel of the type Kh18N9T in substances with a weak corrosive action. Experimental conditions and results obtained are given (Table). The samples were submitted to several preliminary thermal treatments before testing. It was found that the afore-mentioned test method cannot be used in substances with a weak corrosive action in which the extension of cracks formed by corrosion is very small (as compared to the elongation rate of the sample). There are 1 table and 2 Soviet references.

Card 1/2

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy nauchno-issledovatel'skiy institut im. F. E. Dzerzhinskogo (All-Union Scientific Research Institute of Heat Engineering imeni F. E. Dzerzhinskiy)

18.8300

25666
S/096/61/000/009/003/008
E193/E183

AUTHORS: Gulyayev, V.N., Candidate of Technical Sciences, Akol'zin, P.A., Doctor of Technical Sciences, Gromova, Ye.S., Engineer, and Ivanov, Ye.N., Engineer.

TITLE: Stress-corrosion cracking of Steel 1Kh18N9T (1Kh18N9T) in sodium hydroxide and sodium chloride solutions

PERIODICAL: Teploenergetika, 1961, No.9, pp. 50-55

TEXT: Stress-corrosion cracking of austenitic stainless steel tubes that has occurred at several power stations (both in the Soviet Union and abroad), where they are used in the steam generating plant operating under particularly severe conditions, prompted the present authors to undertake the investigation described in the present paper. The experiments were carried out on tubular specimens, tested on equipment designed to simulate conditions obtaining in industrial practice. The composition of this steel varied within the following limits: 0.09-0.11% C; 0.85-1.24% Mn; 0.46-0.56% Si; 0.02% S; 0.015% P; 18.3-20.3% Cr; 9.7-10.2% Ni; and 0.5-0.6% Ti. In the actual tests the specimens,

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Stress-corrosion cracking of ....

filled with the appropriate solution (hot or cold) under pressure of up to 120 atm were stressed in tension, and either time-to-rupture was determined, or the extent (if any) of cracking was periodically measured. The concentration of NaOH in the test solutions varied between 40 and 40 000 mg/ℓ., the Cl^- concentration in the NaCl solution varying between 0.3 and 150 000 mg/ℓ. (In some tests hydrazine was added to the NaCl solution). Solutions, both deaerated and saturated with oxygen, nitrogen or argon, were tested. The effect of stress concentration was also studied by using specimens with a sudden change in the cross-section area. Finally, the effect of exposure to the corroding medium alternating with dry periods was studied. The results can be summarised as follows. 1) Under certain conditions, NaOH solutions can cause stress-corrosion cracking of steel 1Kh18N9T, even when the latter is in the fully austenitic state. 2) A 4% NaOH solution (pH = 14) can cause cracking of this steel or cause the development of leaks in faulty portions of a component in a time as short as several hours. 3) No stress-corrosion cracking was observed in specimens stressed for 900 hours at

Stress-corrosion cracking of ....

30 kg/mm^2 in contact with NaOH solutions of pH = 11, 12 or 13, at 310 °C and under a pressure of 120 atm. This means that failures due to stress-corrosion of steel 1Kh18N9T components in heat exchangers are most likely to occur in the regions of high NaOH concentration. 4) The rate of stress-corrosion is decreased when large quantities of oxygen or nitrogen are present in the NaOH solution. The time-to-rupture of the steel studied, subject to the action of a 4% NaOH solution with a nitrogen content of 1100-2000 mg/ℓ is 3-20 times longer than that in a solution with a nitrogen content of 15.8 mg/ℓ only. The effect of argon is similar, but not so pronounced. This is illustrated in Fig.4, showing the strain/time (mm/h) curves for specimens tested under a stress of 35 kg/mm^2 in a 4% NaOH solution, non-deaerated (curve 1), saturated with argon (curve 2), and saturated with air (curve 3). 5) Chlorine ions cause stress-corrosion cracking of steel 1Kh18N9T only in the presence of oxygen, the rate of corrosion at a given oxygen content increasing with increasing Cl^- concentration. When both oxygen and depolarising action of the H^+ ions are absent, no stress-corrosion of steel 1Kh18N9T takes place in aqueous

Stress-corrosion cracking of ....

solutions of NaCl, with the Cl^- content of up to 150 000 mg/ℓ. 6) In the presence of traces of oxygen, stress-corrosion of the steel studied can occur at both low (100 mg/ℓ) and high (150 000 mg/ℓ) Cl^- concentrations, but only if other contributing factors (such as non-uniform stress distribution, local damage of the protective oxide skin, etc.) operate. 7) At higher oxygen contents, stress-corrosion cracking of steel 1Kh18N9T can occur in water (at 310 °C and under a pressure of 120 atm) with a Cl^- content as low as 20 mg/ℓ. Thus, specimens simultaneously subjected to stress (35-40 kg/mm^2) and to the action of a solution (at 120 atm and 310 °C) containing 20 - 100 000 mg/ℓ Cl^- and 450 mg/ℓ O_2, can fracture in several hours. 8) Addition of up to 15 mg/ℓ hydrazine has no harmful effect, no cracking having been observed in specimens tested for 3590 hours at 310 °C and under 120 atm in a solution containing 100 mg/ℓ Cl^- and 15 mg/ℓ N_2H_4. 9) Other factors (the Cl and O concentration) being equal, the rate of stress-corrosion cracking of steel 1Kh18N9T is increased approximately twentyfold under conditions of exposure to the corroding medium alternating with drying.

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Stress-corrosion cracking of S/096/61/000/009/003/008
E193/E183

It was concluded that, if there is a possibility of steel 1Kh18N9T coming into contact with a corroding medium of the type studied, the bends in coiled tubes should be subjected to an austenitising treatment, and that no surface defects with residual tensile stresses, not removed by appropriate heat treatment, can be tolerated under these circumstances. The results of the present investigation indicate also that metal-liquid-gas and not metal-liquid systems should be investigated in studies of stress-corrosion phenomena.

There are 9 figures, 5 tables and 4 references: 2 Soviet and 2 non-Soviet. The English language reference reads as follows:

Ref.3: W.J. Singley, C.H. Welinsky, S.F. Whirl, H.A. Klein. "Stress corrosion of stainless steel and boiler water treatment at Shippingport Atomic Power Station". Proc. Amer. Power Conf. 21, 1959. Chicago III, Illinois Inst. Technol. 1959.

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy institut
(All-Union Institute of Heat Engineering)

18 8310

S/032/61/027/006/014/018
B124/B203

AUTHORS: Gulyayev, V. N., Gromova, Ye. S., and Ivanov, Ye. N.

TITLE: Decomposable specimen for tests for long-term corrosion resistance

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 6, 1961, 759

TEXT: Tubular specimens are mostly used in long-term corrosion tests at high pressures and temperatures. Irrespective of their advantages compared with cylindrical specimens, tubular specimens with a tube part welded to the holder have many disadvantages. In this connection, the authors developed a decomposable specimen (Fig.) ground from a rod and consisting of the test part 1, the upper lock 2, and the lower lock 3. The locks should be made of the same material as the test part. When studying the bursting of stainless chrome-nickel and austenitic chrome-manganese-nickel steels, the locks may be made of 1Kh18N9T (1Kh18N9T) steel or a steel of similar composition. The test results with different austenitic steels of about the same chromium content are hardly affected by differing corrosion resistance with the construction chosen. The

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Decomposable specimen for tests

outer surface of the working part (12 mm in diameter) of the specimen is ground, and a thin layer is ground off the inner surface (8 mm in diameter). Insert 4 closes the gap between test part and lock. In the upper nut, there is a boring for pouring in the working liquid and for connecting the specimen with a device for increasing the pressure to the given value. The specimen is fixed in an ИП-2 (IP-2) machine by means of cups 5,6 and connecting holders 7. The spherical rings 8 are introduced for an improved centering of the specimen. Between specimen and spherical ring, the half-rings 9 are placed which transmit the load from the cup to the specimen. The use of the specimen in tests at 310°C and 120 atm in an aqueous NaCl solution yielded favorable results. No discharge from the dismountable connections was observed in long-term tests up to 2,000 hr. There is 1 figure.

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy nauchno-issledovatel'skiy institut im. F. E. Dzerzhinskogo (All-Union Scientific Research Institute of Heat Engineering imeni F. E. Dzerzhinskiy)

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26384
S/032/61/027/008/007/020
B107/B206

AUTHORS: Gulyayev, V. N., Akol'zin, P. A., Gromova, Ye. S., and Ivanov, Ye. N.

TITLE: Rapid method for testing austenitic steel with regard to its cracking tendency in aqueous sodium-chloride solutions

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 8, 1961, 983-984

TEXT: For the rapid determination of the corrosion-cracking tendency of various types of steel in aqueous chloride solutions, a boiling 42 % solution of $MgCl_2$ is sometimes used. As to its composition this solution does, however, not correspond to the media in which many devices operate; these are affected by aqueous sodium-chloride solutions. V. M. Nikiforova proposed a rapid method (Ref. 1: V. N. Nikiforova. Sb. TsNIITMASh, kn. 77 (1955)) by which the corrosion-cracking tendency of steel can be estimated from the variation of plasticity during elongation of the specimen in a solution. However, this method is not generally applicable, and fails if the formation of corrosion cracks is much slower than the elongation

Card 1/3

Rapid method for...

of the specimen (Ref. 2: V. N. Gulyayev, P. A. Akol'zin, Ye. S. Gromova and Ye. N. Ivanov, Zavodskaya laboratoriya, v. 26, no. 3 (1960)). A new method was elaborated by the authors. They proceeded from the fact that at a higher temperature and a higher oxygen content in the solution, the formation of corrosion cracks proceeds more quickly. In addition, the rate of formation also depends on the chlorine-ion concentration. Stand ВТИ-1 (VTI-1) (Ref. 3: P. A. Akol'zin, V. N. Gulyayev. Stend VTI-1 dlya ispytaniya metallov na dlitel'nuyu korrozionnuyu prochnost' pri vysokikh davleniyakh i temperaturakh rabochey sredy, tema 20 NM-59-475/177 (1959)) is used for testing tubular specimens in a solution which is continuously saturated with oxygen. In order to accelerate the formation of corrosion cracks, the following test conditions were chosen: constant load on the specimen, temperature 310°C, pressure of the medium 120 kg/cm^2, concentration of chloring ions 100,000, of oxygen 450, nitrogen 1050 mg per liter of solution. Specimens of 1Х18Н9Т (1Kh18N9T) steel were tested. At a load of 35 kg/mm^2, the specimen was destroyed in 24 hr 35 min, and at a load of 40 kg/mm^2 in 16 hr. When the load was reduced the time up to destruction increased accordingly (Fig. 1). The elaborated method permits a comparatively rapid estimate of the cracking tendency of various types

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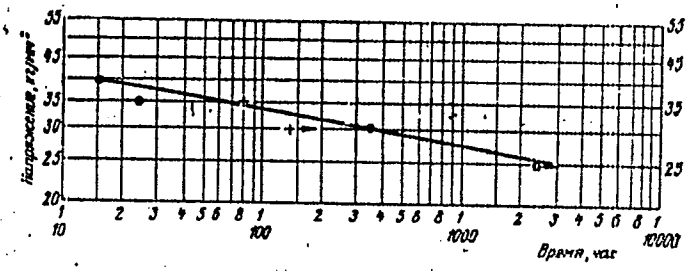
26384
S/032/61/027/008/007/020
B107/B206

Rapid method for...

of steel in sodium-chloride solutions. There are 2 figures and 3 Soviet references. [Abstracter's note: Essentially complete translation.]

ASSOCIATION: Vsesoyuznyy teplotekhnicheskiy nauchno-issledovatel'skiy (All-Union Scientific Research Institute of Heat Engineering)



Legend to Fig. 1: (x) Time in hr; (y) load in kg/mm^2; (•) divided specimens (12 by 2.0 mm); (+) undivided specimens (13 by 1.5 mm).

Card 3/3

AKOL'ZIN, P. A., doktor tekhn. nauk; IVANOV, Ye. N., inzh.

Method for studying corrosion by measuring electrical conductivity of samples. Teploenergetika 10 no.3:8-12 Mr '63. (MIRA 16:4)

1. Vsesoyuznyy teplotekhnicheskiy institut.

(Corrosion) (Electric power plants)

AKOL'ZIN, P.A., doktor tekhn. nauk; GULYAYEV, V.N., kand. tekhn. nauk; TALOV, N.P., inzh.; IVANOV, Ye.N.

Corrosion and mechanical properties of steel substitutes for 1Kh18N9T steel. Teploenergetika 10 no.8:54-59 Ag '63. (MIRA 16:8)

1. Vsesoyuznyy teplotekhnicheskiy institut.
(Steel)

IVANOV, Ye.N.

The 50th anniversary of the organization of the Turkestan Entomologic Station. Zashch. rast. ot vred. i bol. 6 no.12:52-53 D '61. (MIRA 1c:5)

IVANOV, Ye.N.

Forum of entomologists. Zashch. rast. ot vred. i bol. no.1:13-17 '64. (MIRA 17:4)

L 15546-66 EWT(1) IJP(c)

ACC NR: AP6002081 SOURCE CODE: UR/0139/65/000/006/0054/0060

AUTHOR: Ivanov, Ye. N.

ORG: Kazan' State Pedagogical Institute (Kazanskiy gospedinstitut)

TITLE: Concerning the construction of a general theory of Brownian motion

SOURCE: IVUZ. Fizika, no. 6, 1965, 54-60

TOPIC TAGS: Brownian motion, Markov process, probability, statistic distribution

ABSTRACT: The author develops a generalized theory of Brownian motion, free of the shortcomings inherent in the description of Brownian motion by means of a generalized Einstein-Fokker-Planck equation or in the treatment of the Brownian motion as a Markov process. It is claimed that the theory presented is valid for an arbitrary observation interval, regardless of the specific time constant (correlation times) characterizing the Brownian motion and is therefore essentially a theory of non-Markov Brownian motion. This is of

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L 15546-66

ACC NR: AP6002081

particular use in the case of small observation intervals, when inertial effects become important. A distinguishing feature of the method is that it yields the probability distribution of the coordinates of the Brownian particle for both translational and rotational Brownian motion, without the use of the Einstein-Fokker-Planck equation or the Chapman-Kolmogorov equation. It is also claimed that the earlier theories developed by others as well as by the author (ZhETF v. 45, 1509, 1963) can be reduced to particular applications of the theory developed in this article. Author thanks K. A. Valiyev for a discussion of the results and valuable advice. Orig. art. has: 24 formulas.

SUB CODE: 20/ SUBM DATE: 26Jan64/ ORIG REF: 009/ OTH REF: 009

Card 2/2

L 15004-66 EWT(1)/T IJP(c) . GG

ACC NR: AP6001641 SOURCE CODE: UR/0051/65/019/006/0897/0903

AUTHOR: Ivanov, Ye. N.; Valiyev, K. A.

ORG: none

TITLE: Theory of the shape and width of depolarized lines in the Raman spectra of molecular crystals

SOURCE: Optika i spektroskopiya, v. 19, no. 6, 1965, 897-903

TOPIC TAGS: Raman scattering, molecular crystal, single crystal, line width, spectral line

ABSTRACT: A solution of the problem of random walks is used for developing a theory of Raman scattering for molecular crystals. The authors consider the simple but important case where reorientation of individual molecules takes place with respect to a single axis. A solution is given to the one-dimensional problem of random walks for the molecules. The distribution of molecular orientations is determined and is used for explaining the shape and width of lines due to Raman scattering by molecular crystals. It is shown that the shape of the line in the general case consists of superposition of five Lorentz curves. The temperature dependent part of the

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UDC: 535.375.001.1

L 15004-66

ACC NR: AP6001641

width, which is isotropic for polycrystals and anisotropic for single crystals, is determined by the average time between two successive rotations. Orig. art. has: 34 figures.

SUB CODE: 20/ SUBM DATE: 10Aug64/ ORIG REF: 009/ OTH REF: 000

Card 2/2

IVANOV, Ye.N., inzh.

Hydraulic impact in the operation of fire hydrants. Vod. i san. tekh. no.3:5-9 '64. (MIRA 18:2)

Ivanov, Ye. N.

USSR/General Division. Congresses. Meetings. Conferences. A-4

Abs Jour : Ref Zhur-Biologiya, No 20, 1957, 85072

Author : Ye. N. Ivanov
Inst :
Title : The Tenth Soviet-Iranian Conference on Quarantine and Protection of Agricultural Plants Against Pests and Diseases

Orig Pub : Vestn. s.-kh. nauki, 1957, No 1, 147-148

Abstract : No abstract.

Card 1/1

USSR/General Division. , Congresses. Meetings. Conferences. A-4

Abs Jour : Ref Zhur-Biologiya, No 20, 1957, 85071

Abstract : attempts to exterminate locusts (the Moroccan, Shistocercan and Asiatic varieties), the cotton moth (pink worm), the potato canker, citrus blast and wheat stalk rust. The necessity of a closer cooperation between the USSR and Iran was stressed in quarantine and plant protection, in a regular exchange of the newest methods of fighting plant pests and diseases and in sharing information on research, etc.

Card 2/2

IVANOV, Ye.N.

A glorious jubilee. Zashch. rast. ot vred. i bol. 2 no.6:59-60 N-D '57. (MIRA 16:1)
(Vasilii Il'ch Plotnikov, 1877-)

IVANOV, Ye.N.

Honoring professor E.S.Smirnov. Zashch.rast.ot vred. i bol. 4 no.1:59 Ja-F '59. (MIRA 12:2)
(Smirnov, Evgenii Sergeevich, 1898-)

IVANOV, Ye. N.; GUSEV, G. V.; ZHURAVLEV, V. N.

Phenology of the Colorado beetle. Zashch. rast. ot vred. i bol. 6 no.6:50-51 Je '61. (MIRA 16:4)

(Potato beetle)

IVANOV, Ye.N.

Forum of forecasters. Zashch. rast. ot vred. i bol. 7 no.2:36-38 F '62. (MIRA 15:12)
(Plants, Protection of—Congresses)

IVANOV, Ye.N.

In the Coordination Council. Zashch.rast.ot vred.i bol. 7 no.5:58-60 My '62. (MIRA 15:11)
(Plants, Protection of--Congresses)

IVANOV, Ye.N.

Potato wart. Zashch. rast. ot vred. i bol. 7 no.7:48-50 Jl '62. (MIRA 15:11)
(Potato wart)

USPENSKIY, F.M., kand. biol. nauk; SOMOV, I.A.; MUMINOV, A.M., kand. sel'khoz. nauk; IVANOV, Ye.N., kand. biol. nauk; VASIL'YEV, A.A., kand. sel'khoz. nauk; SOLOV'YEVA, A.I., kand. sel'khoz. nauk; ZAPROMETOV, N.G., doktor sel'khoz. nauk; YAKHONTOV, V.M., doktor biol. nauk; KAPUSTINA, R.I.; STROMM, N.G.; POLEVSHCHIKOVA, V.N., kand. sel'khoz. nauk; KARIMOV, M.A., doktor biol. nauk; NOSKOV, I.G., kand. sel'-khoz. nauk; KHODZHAYEV, A.Kh.; ALEYEV, B.G., kand. sel'khoz. nauk; YAKHONTOV, V.V., doktor biol. nauk; STEPANOV, F.A.; LYUBETSKIY, Kh.Z., kand. med. nauk; GUREVICH, B.E.; KONDRAT'YEV, V.I.; SUDARS, L.P.; KOSTENKO, I.R., zasl. agr. Uzbekskoy SSR; GORELIK, I.M., red.; BAKHTIYAROV, A., tekhn. red.

[Manual on controlling the pests, diseases and weeds of cotton, corn, and legumes] Spravochnik po bor'be s vreditelyami i boleznyami khlopchatnika, kukuruzy i bobovykh kul'tur. Izd.2., perer. i dop. Tashkent, Gos.izd-vo UzSSE, 1963. 325 p.
(MIRA 16:5)

(Field crops—Diseases and pests)
(Weed control)

IVANOV, Ye.P.; LEMIDOV, V.V.; BORISOV, Yu.S., redaktor; NOSKIN, R.A., kandidat tekhnicheskikh nauk, retsenzent; MATVEYEVA, Ye.N., tekhnicheskiy redaktor

[Quality control of repair of metalworking equipment; reference manual] Kontrol' kachestva remonta metalloobrabatyvaiushchego oborudovaniia; spravochnoe posobie. Pod red. IU.S.Borisova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 190 p. (MLRA 7:10)

(Metalworking machinery--Maintenance and repair)

IVANOV, Ye.P.

Significance of the thromboplastin generation test in the clinical aspects of hemorrhagic states. Zdrav. Bel. 9 no.6:38-42 Je '63. (MIRA 17:5)

1. Iz kafedry obshchey khimii (zaveduyushchiy - dotsent V.A. Bandurin) Minskogo meditsinskogo instituta.

IVANOV, Ye I.

8(0) PHASE I BOOK EXPLOITATION SOV/2347

Tolokonnikov, Leonid Stepanovich, Mikhail Mikhaylovich Sokolov, Abram Solomonovich Sandler, Vladimir Ivanovich Klyuchev, Yevgeniye Petrovich Ivanov, and Yevgeniy Nikolayevich Zimin

Atlas elektromekhanicheskikh promyshlennykh ustanovok, ch. 1. Elektroprivod i peredatochnyye mekhanizmy (Atlas of Electromechanical Industrial Installations, Pt. 1. Electric Drive and Transmission Mechanisms) Moscow, Gosenergoizdat, 1958. 140 p. 6,500 copies printed.

Chief Ed.: M.G. Chilikin; Eds. (Title page): A.T. Golovan and Leonid Stepanovich Tolokonnikov; Ed. (Inside book): A.L. Saparova; Tech. Ed.: N.I. Borunov.

PURPOSE: The atlas is intended as a manual for students working on machine parts projects and on term and diploma projects related to electrical equipment for drives.

COVERAGE: The atlas presents electromechanical installations for driving, hoisting, and transporting mechanisms (cranes, excavators, hoists, conveyers), rolling mills (continuous rolling mills), metal forming equipment, metal-cutting machine tools and automatic transfer lines. Drawings of general views of mechanisms and drives with the distribution of electrical equipment, elementary circuits and

Card 1/4

Atlas of Electromechanical Industrial Installations (Cont.) SOV/2347

wiring diagrams with the necessary explanations are presented. The mechanical and electrical parts of every mechanism or device are closely related in the manual to enable joint treatment of the sugject and to improve the level of preparation for design. In compiling the atlas most recent design material of the following institutions was used: scientific research institutes VNIIPTMASh, TsKB "Elektroprivod," TsNIITMASh, NIIProdmash, PKO "Soyuzpromekhanizatsiya," GPI, Tyazhpromelektroproyekt, Institutes MEI and MISI; and Plants "Dinamo" and "Pod"yemnik." No personalities are mentioned. There are 28 references, all Soviet.

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Atlas of Electromechanical Industrial Installations (Cont.) SOV/2347

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Atlas of Electromechanical Industrial Installations (Cont.) SOV/2347

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Model 1660 screw cutting lathe Sheets 104-109
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Model 724 planer Sheets 120-122
Subassemblies of unit-head machine tools and transfer machines Sheets 123-125
Electroduplicating semiautomatic milling machine of the type 6441-A Sheets 126-128
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AVAILABLE: Library of Congress (TJ 240. A8)

GO/sfm
10-20-59

Card 4/4

KOZINTSOV, Boris Pavlovich, kand.tekhn.nauk, dotsent; IVANOV, Yevgeniy Petrovich, assistent; KOVALEV, N.A., prof., red.

[Design of planetary and differential gears] Raschet i proektirovanie zubchatykh planetarnykh i differentsial'nykh peredach. Pod red. N.A. Kovaleva. Moskva, Mosk. energ.in-t, 1961. 63 p. (MIRA 16:6)
(Gearing)

IVANOV, V.P.

O edinoi sisteme planovo-periodicheskogo remonta oborudovaniia. (Vestn. Mash., 1951, no. 3, p. 76-81)

Uniform system of planned periodic repair of equipment.

DLC: TK4. V4

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

IVANOV, Ye. P.

"Determination of Excess Recuperation Energy in Electrified Railroads."
Official Opponents were: Doctor of Technical Sciences M. A. CHernyshev
and Candidate of Technical Sciences M. Ye. Krest'yanov.

Dissertation for the Degree of a Candidate of Technical Sciences ~~and 1945-1953.~~
At the All-Union Scientific Research Institute of Railroad Traffic Engineers.
December 28, 1951

IVANOV, Ye.P., kand.tekhn.nauk

Electric power supply along the line. Put' i put.khoz. no.11:6-8 N '59. (MIRA 13:4)
(Railroads—Electric equipment)

IVANOV, Ye.R., kandidat tekhnicheskikh nauk.

The PES-2.5 mobile power plant designed by the Central Scientific Research Institute under the Ministry of Transportation and Communication. Vest. TSNII MPS 15 no.4:40-43 D '56. (MLRA 10:2)

(Electric generators)

PLOKHOTSKIY, M.A., kand. tekhn. nauk; IVANOV, Ye.R., kand. tekhn. nauk

New track machine. Put' i put. khoz. 9 no.7:3-5 '65.
(MIRA 18:10)

IVANOV, Ye.R., kand. tekhn. nauk; PLOKHOTSKIY, M.A., kand. tekhn. nauk

Automatic control of the KLB-3 ballaster. Put' i put. khoz. no.8:5-6 Ag '59. (MIRA 13:3)
(Railroads--Equipment and supplies)
(Automatic control)

MEYERSON, G.A.; SOKOLOV, D.D.; MIRONOV, N.F.; BOGORAD, N.M.; PAKHOMOV, Ya.D.; L'VOVSKIY, D.S.; IVANOV, Ye.S.; SHMELEV, V.M.

Beryllium. Atom. energ. 5 no.6:624-630 D '58. (MIRA 12:1)
(Beryllium)

IVANOV, YE.S.

21(4) PHASE I BOOK EXPLOITATION SOV/2714

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

Doklady sovetskikh uchenykh; yadernoye goryucheye i reaktornyye metally. (Reports of Soviet Scientists; Nuclear Fuel and Reactor Metals) Moscow, Atomizdat, 1959. 670 p. (Series: Its: Trudy, vol. 3. 8,000 copies printed.

Ed. (Title page): A.A. Bochvar, Academician, A.P. Vinogradov, Academician, V.S. Yemel'yanov, Corresponding Member, USSR Academy of Sciences, and A.P. Zefirov, Doctor of Technical Sciences; Ed. (Inside book): V.V. Pereversev and G.M. Pchelintseva; Tech. Ed.: E.I. Mazel'.

PURPOSE: This volume is intended for scientists, engineers, physicians, and biologists working in the production and peaceful application of atomic energy; for professors and students of schools of higher technical education where the subject is taught; and for people interested in atomic science and technology.

COVERAGE: This is volume 3 of a 6-volume set of reports on atomic energy, presented 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 3 consists of two parts. The first part, edited by A.I. Zubov, is devoted to geology, prospecting, concentration and processing of nuclear source material. The second part, edited by G.L. Zverev, includes 27 reports on metallurgy, metallography, processing technology of nuclear fuels and reactor metals, and neutron irradiation effects on metals. The titles of the individual papers in most cases correspond word for word with those in the official English language edition on the Conference proceedings. See SOV/2081 for the titles of the other volumes of the set.

Sinel'nikov, K.D., V. Ya. Ivanov, V.M. Amonenko, and V.D. Burlakov. Refining Beryllium and Other Metals by Condensation on Heated Surfaces (Report No. 2051) 526

Ivanov, Ye.S., and V.M. Shmelev. Melting and Casting of Beryllium (Report No. 2048) 536

Vol'skiy, A.N., N.V. Vyatkina, N.P. Sterneva, E.L. Kal'tman, and T.S. Posobilo. Production of Chemically Pure Strontium, Barium, Magnesium, and Calcium (Report No. 2050) 542

Bochvar, A.A., G.Ya. Sergeyev, A.A. Zhul'kova, L.I. Kolobneva, and G.I. Tomson. Effect of Thermal Cycling and Cooling on the Dimensional and Structural Stability of Various Metals and Alloys (Report No. 2190) 554

Zaymovskiy, A.S., G.Ya. Sergeyev, V.V. Titova, B.M. Levitskiy, and Yu.N. Sokurskiy. Influence of the Structure and Properties of Uranium on Its Behavior Under Irradiation (Report No. 2191) 573

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IVANOV, Ye.S.; SAATCHIAN, S.A.

Manufacturing plasticate packing collars for hydraulic presses. Der. prom. 7 no.2:22-23 F '58. (MIRA 11:1)

1. Leningradskaya mebel'naya fabrika im. Khalturina.
(Packing (Mechanical engineering)) (Plastics)

IVANOV, Ye.S.; KUSHVIDENKO, P.P.

Use of static condensers at peat winning enterprises of the Sverdlovsk Peat Trust. Torf.prom. 31 no.6:15-16 '54. (MLRA 7:9)

1. Sverdlovskiy torfotrest (for Ivanov). 2. Monetnoye torfopredpriyatiye (for Kushvidenko).
(Condensers (Electricity))

IVANOV, Ye.S.

Apparatus for melting formalin. Sbor.vnedr.ratn.pred. v les.i meb.prom. no.2:186-187 '59. (MIRA 13:8)

1. Leningradskaya mebel'naya fabrika im. Khalturina.
(Formaldehyde)

IVANOV, Yevgeniy Sergeyevich; MORUSHKIN, Georgiy Vasil'yevich; SAATCHAN, Sergey Aleksandrovich; GOLUBEVA, T.M., red.; TELYASHOV, R.Kh., red.izd-va; GVIRTS, V.L., tekhn.red.

[Mechanization experiments at the Khalturina Furniture Factory] Opyt mekhanizatsii na mebel'noi fabrike im. Khalturina. Leningrad, 1963. 15 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Derevoobrabatyvaiushchaia promyshlennost', no.4) (MIRA 16:10)
(Leningrad--Furniture industry--Equipment and supplies)

IVANOV, Ye. S.

Electric Motors

Increasing the power coefficient. Der. i lesokhim. prom. 1 No. 7, 1952.

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

1. VINNITSKIY, I. B., Engs.; IVANOV, Ye. S.; KROL', L. B.

2. USSR (600)

4. Steam Boilers - Preheating

7. Preventing corrosion and the clogging of steam boiler air preheaters with ashes. Elek. Sta., 23, No. 10, 1952

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

IVANOV, Ye.S., inzh.

Concerning the simplification of the administrational system of electric power plants. Elek. sta. 32 no.7:82-83 Jl '61. (MIRA 14:10)

(Electric power plants)

IVANOV, Yevgeniy Sergeyevich; GOLUBEVA, T.M., inzh., red.; FREGER, D.P., red. izd-va; GVIRTS, V.L., tekhn. red.

[Use of contact electric heating in the enterprises of the future industry]Primenenie kontaktnogo elektronagreva na predpriiatiiakh mebel'noi promyshlennosti. Leningrad, 1962. 27 p. (Leningradskii dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriia: Derevoobrabatyvaiushchaia promyshlennost', no.2) (MIRA 15:8)

(Electric heating) (Woodwork)

L 32942-66 EWP(c)/EWP(k)/EWT(m)/EWP(h)/T-2/FSS-2/EWP(w)/EWP(v) IJP(c) EM/WW

ACC NR: AP6021778 SOURCE CODE: UR/0413/66/000/012/0040/0040

INVENTOR: Kopelev, S. Z.; Zemlyanitskiy, A. N.; Ivanov, Ye. S.; Motin, I. I.

ORG: none

TITLE: Reversible turbine. Class 14, No. 182738

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 40

TOPIC TAGS: turbine engine system, turbine engine, turbine design, turbine disk

ABSTRACT: The proposed reversible turbine for driving, for example, a marine propeller shaft, contains disks with rotor blades with forward and reverse motion and piping with throttle valves for axial feeding of the working medium to the guide vanes. To increase efficiency and improve the engine's pickup, the disks with the forward and reverse motion are mounted on a commom shaft and are connected to it by overrunning clutches for automatic reversal, depending on the feeding of the working medium to the forward or reverse-motion guide vanes. [TN]

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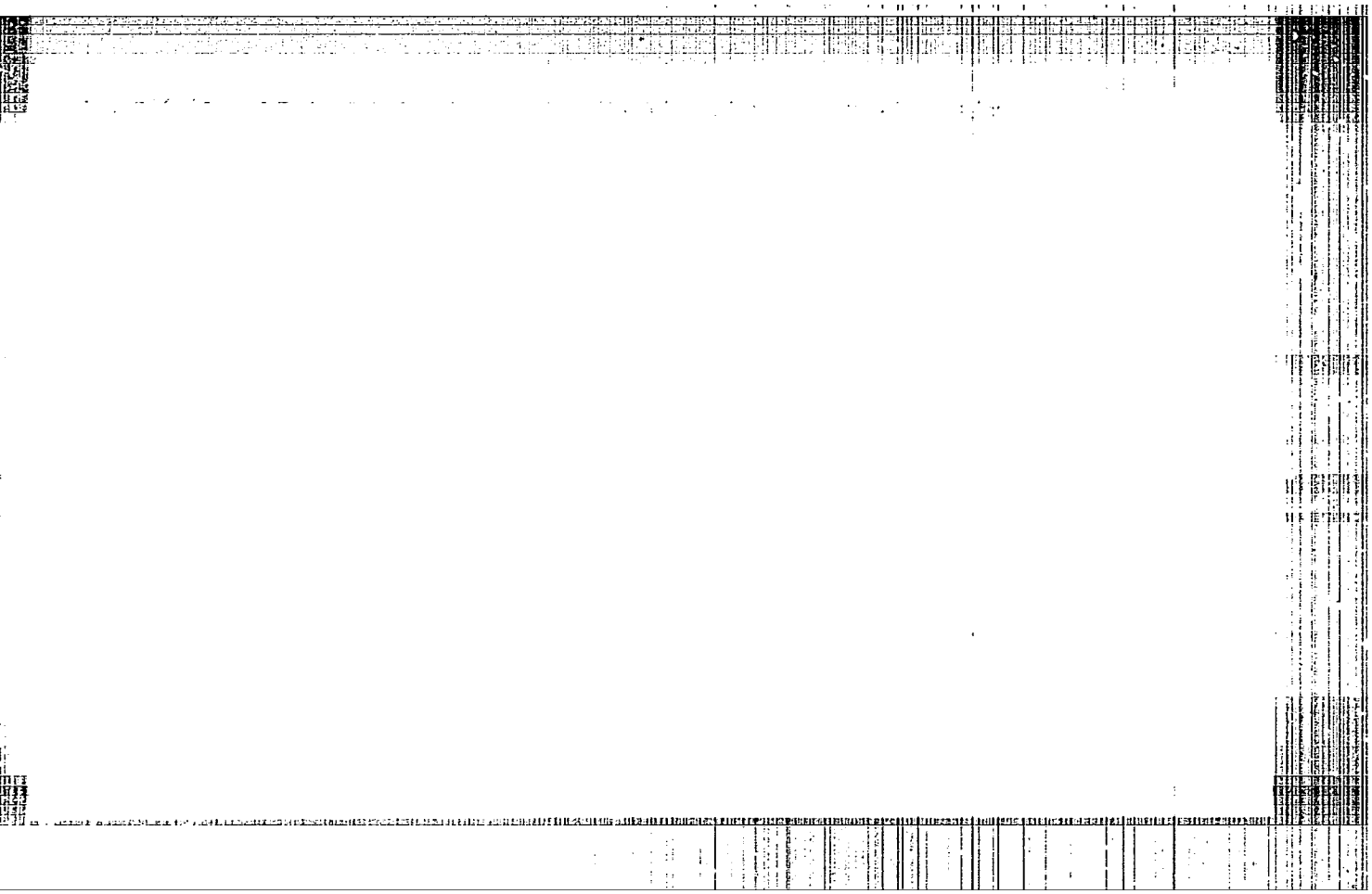
Card 1/1 UDC: 621.438-581



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IVANOV, Ye.S.

Sleep therapy in neuroses, asthenia, and other disorders of psychic activity. Zhur.nevr. i psikh. 55 no.7:511-515 '55. (MLRA 8:10)

1. Kafedra psikhiatrii Voyenno-Morskoy meditsinskoy akademii (nachal'nik kafedry Prof. A.S. Chistovich)

(MENTAL DISORDERS, therapy, sleep ther.)
(SLEEP, therapeutic use, ment. disord.)

IVANOV, Ye.S.

Material for a clinical pathophysiological study of disruptions of higher nervous activity in alcoholic delirium. Vop.psikh. i nevr. no.1:108-124 '57 (MIRA 11:8)

1. Iz psikhiatricheskoy kliniki Voyenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.
(DELIRIUM TREMENS)
(REFLEXES)

IVANOV, Ye.S.

Account of a conference in honor of the 100th anniversary of the Department of Psychiatry at the S.M.Kirov Academy of Military Medicine. Vop. psikh. i nevr. no.5:277-281 '59. (MIRA 14:5)
(PSYCHIATRY)

NESTEROV, V.G.; NIKITIN, D.N., nauchn. red.; IVANOV, Ye.S., red.

[Bioecological system of measures for increasing the productivity of forests] Bioekologicheskaia sistema povysheniia produktivnosti lesov. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliulozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoziaistvu, 1964. 37 p. (MIRA 17:9)

1. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Nesterov).

IVANOV, Ye.V.; ZATVORNITSKIY, G.F.; YAKOVLEV, P.K.

Introduction of trees and shrubs in the Kuybyshev Botanical Garden.
Biul.Glav.bot.sad no.52:16-24 '64. (MIRA 17:4)

1. Botanicheskiy sad Kuybyshevskogo pedagogicheskogo instituta.

IVANOV, Ye.V., inzhener; SYCHEV, P.M., inzhener.

Some devices for assembly operations in shipbuilding.
Sudostroenie 22 no.10:31-33 O '56. (MLRA 10:2)

(Shipbuilding--Equipment and supplies)

IVANOV, Ye.V., inzhener.

Machine tool for grinding crankshaft journals. Sudostroenie 23 no.8:59-60 Ag '57. (MIRA 10:11)
(Shafts and shafting) (Grinding machines)

DUKOR, A.G., inzh.; IVANOV, Ye.V., inzh.; SYCHEV, P.M., inzh.

Casting steel screw propellers in shell molds. Sudostroenie 23 no.12:49-53 D '57. (MIRA 11:2)
(Propellers) (Steel castings)

PRZHIBYL, Iozef [Přibyl, Josef], doktor-inzhener; IVANOV, Ye.V., inzhener [translator]; BIBULYA, P.N., doktor tekhnicheskikh nauk, redaktor; GRUSHEVSKAYA, G.M., redaktor izdatel'stva; MATVEYEVA, Ye.N., tekhnicheskiy redaktor

[Solidification and feeding of castings. Translated from the Czech] Zatverdevanie i pitanie otlivok. Perevod s cheshskogo E.V.Ivanova. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 286 p. (MLRA 10:7)

1. Zaveduyushchiy kafedroy "Liteynoe proizvodstvo v Gorno-metallurgicheskom institute v Ostrave (for Przhibyl)
(Steel castings)

YAMPOL'SKIY, M.I.; IVANOV, Ye.V.

Some problems of technology of the basic converter process. [from "Blast Furnace and Steel Plant" no. 5, '60]. Metallurg 6 no. 1:38-39 Ja '61. (MIRA 14:1)
(United States—Bessemer process)

IVANOV, Ye.V., inzh.

A high-production milling head. Energomashinostroenie 9 no.2: 30-31 F '63. (MIRA 16:3)

(Milling machines)

IVANOV, Ye.V., inzh.

Modern methods for machining turbine blades on a chuck lathe.
Energomashinostroenie 9 no.8:33 Ag '63. (MIRA 16:8)
(Turning) (Blades)

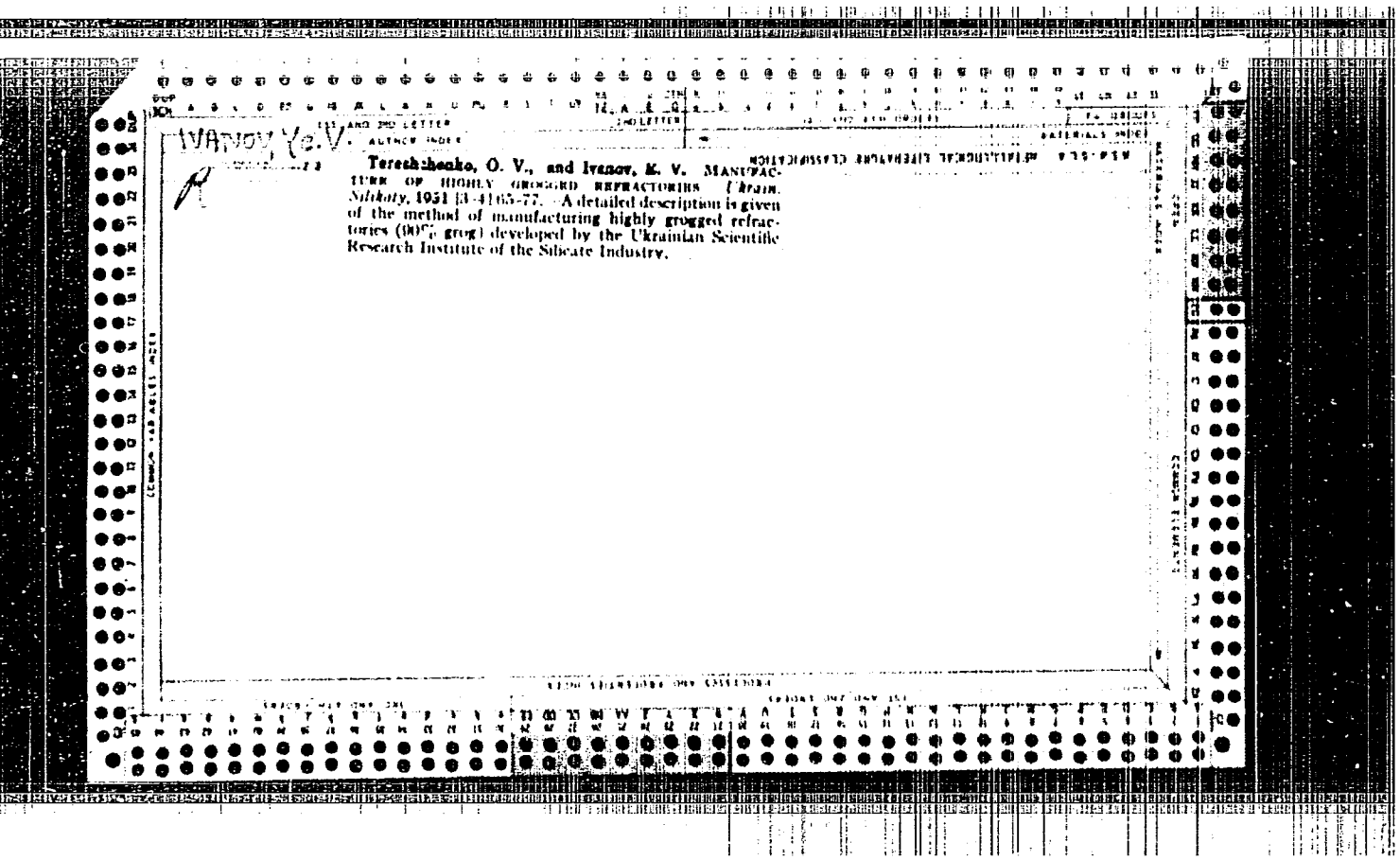
IVANOV, Ye.V., inzh.

Machining tail grooves in steam-turbine runners. Mashinostroenie no.3: 23-28 My-Je '62. (MIRA 15:7)

1. Khar'kovskiy turbinnyy zavod imeni S.M.Kirova.
(Metal cutting) (Steam turbines)

FILIN, N.A.; ZYKOV, A.M.; IVANOV, Ye.V.; KRASAVIN, V.V.

Sulfurizing oxidized nickel-cobalt ores by sodium sulfate.
Trudy LPI no.223:174-189 '63. (MIRA 17:11)



IVANOV, Ye.V.

Tereshchenko, O. V., and Ivanov, K. V. MANUFACTURE OF HIGHLY GROGGED REFRACTORIES. *Ukrain. Silikaty*, 1951 [3-4] 65-77. A detailed description is given of the method of manufacturing highly grogged refractories (80% grog) developed by the Ukrainian Scientific Research Institute of the Silicate Industry.

137-58-6-11766

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 6, p 79 (USSR)

AUTHOR: Ivanov, Ye.V.

TITLE: Refractory Service Life in a Converter in Which Oxygen is Used (Sluzhba ogneuporov v konvertere, rabotayushchem s primeneniyem kisloroda)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurgii, 1957, Vol 18, pp 719-724

ABSTRACT: The results of shop experiments in the study of refractory service life in converters (C) conducted by the All-Union Refractories Institute and the TsNIIChermet are described. In experiments at the Novo-Tul'skiy metallurgical plant in 1954 (264 heats in a 5-7 t C with bottom blow enriched by O_2), the maximum service life of rammed bottoms of ground reclaimed chrome-magnesite and magnesite-chromite brick with high-silica tuyeres is 28 heats. The life of shell linings of chrome-magnesite brick from the Satka plant is 89 heats. When open-hearth pig iron was bottom blown by a steam-and-oxygen mixture at the Yenakiyevo metallurgical plant in 1956, a packed bottom of ground chrome-magnesite brick with a binder of

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137-58-6-11766

Refractory Service Life in a Converter in Which Oxygen is Used

water glass was used with fireclay brick tuyeres. In two series of experiments (66 and 140 heats, 9-11 and 7-15 tuyeres with effective-aperture cross sections of 60-73 and 46.5-71 cm^2, steam-and-oxygen mixture pressure of 1.05-2.2 and 0.6-2.18 atm, shell lining of magnesite-chromite and periclase spinel), the maximum mean life of the bottoms was 11 and 9.3 heats respectively. The shell linings were found to erode more intensively in the lower portion of the C bath, and the elevated process temperatures had an unfavorable effect on the service life of the lining. At the im. Petrovskiy Works, with top blowing of open-hearth pig iron by O_2, the life of periclase spinel lining was 149 heats, as against 184 when water was delivered to the blow, corresponding to a consumption of refractories of 15 kg/t steel. It is proposed to test dolomite, magnesia dolomite, and special magnesia refractories for C lining.

A.D.

1. Refractory materials--Life expectancy 2. Furnaces--Materials
3. Furnace liners--Determination 4. Oxygen--Effectiveness

Card 2/2

AFANAS'YEV, S.G.; KOSTENETSKIY, O.N.; SHUMOV, M.M.; IVANOV, Ye.V.; PAVLOV, A.I.; GARGER, K.S.; KRIVULYA, G.D.; UMNOV, V.D.; UL'YANOV, D.P.; MAMCHITS, K.A.; PETROV, S.A.; SOROKIN, A.A.; FRIDMAN, Ye.L.; EPSHTEYN, Z.D.; IVANTSOV, G.P.; NETESIN, A.Ye.

Reports (brief annotations). Biul. TSNIICHM no.18/19:106-107 '57. (MIRA 11:4)

1. Zavod im. Petrovskogo (for Kostenetskiy). 2. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Shumov, Epshteyn, Ivantsov). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov (for Ivanov). 4. Stal'proyekt (for Pavlov). 5. Metallurgicheskiy zavod im. Dzerzhinskogo (for Garger, Krivulya, Umnov, Ul'yanov, Mamchits, Petrov, Sorokin). 6. Dnepropetrovskiy filial Giprometza (for Fridman). 7. TSentral'nyy institut informatsii chernoy metallurgii (for Netesin)

(Bessemer process)

VARNAVSKIY, I.N.; MIKHAYLIKOV, S.V., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; BAPTIZMANSKIY, V.I., kand. tekhn. nauk, dots.; LEVIN, S.L., prof., doktor tekhn. nauk.; OYKS, G.N., prof., doktor tekhn. nauk; GERBER, M.S.; BIGEYEV, A.M., kand. tekh. nauk, dots.; LIFSHITS, S.I., kand. tekhn. nauk; POLYAKOV, A.Yu., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; FOFANOV, A.A., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; OGRYZKIN, Ye.M.; GONCHARENKO, N.I., kand. tekhn. nauk; ABRAMOV, B.A., nauchnyy sotrudnik; MALINOVSKIY, V.G.; LAPOTYSHKIN, N.M., kand. tekhn. nauk; AFANAS'YEV, S.G., kand. tekhn. nauk; SHUMOV, M.M., starshiy nauchnyy sotrudnik; IVANOV, Ye.V.; EPSHTEYN, Z.D., starshiy nauchnyy sotrudnik.

Discussions. Biul. TSNIICHM no.18/19:107-119 '57. (MIRA 11:4)

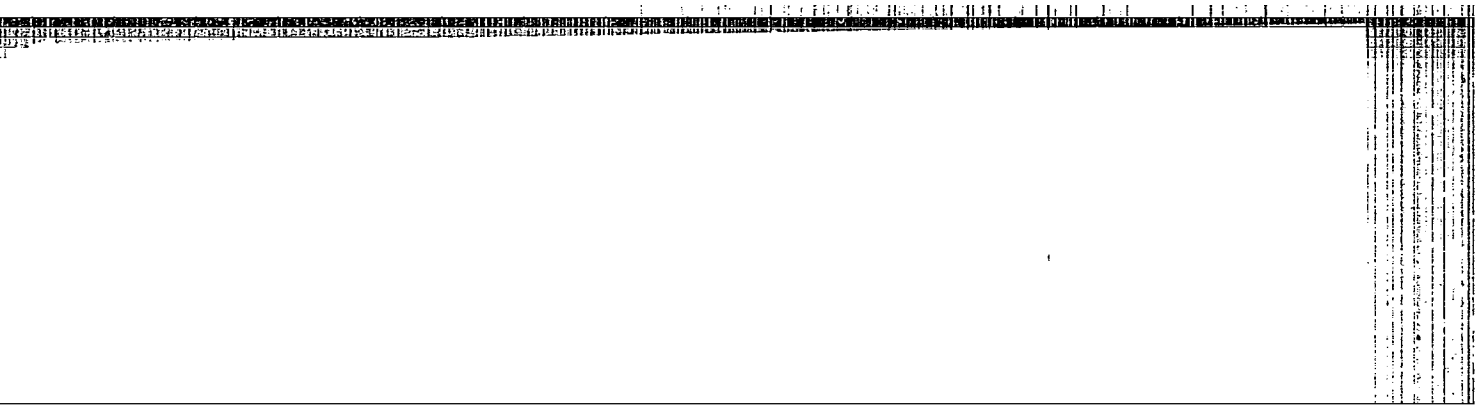
1. Nachal'nik konverternogo tsekha Orsko-Khalilovskogo kombinata (for Varnavskiy. 2. Institut metallurgii Ural'skogo filiala AN SSSR (for Mikhaylikov, Abramov). 3. Direktor Ukrainskogo instituta metallov (for Goncharenko). 4. Dnepropetrovskiy metallurgicheskiy institut (for Baptizmanskiy, Levin). 5. Zaveduyushchiy kafedroy metallurgii stali Moskovskogo instituta stali (for Oyks). 6. Zaveduyushchiy laboratoriyey Yenakiyevskogo metallurgicheskogo tekhnikuma (for Gerber). 7. Kafedra metallurgii stali Magnitogorskogo gorno-metallurgicheskogo instituta (for Bigeyev). 8. Rukoboditel' konverternoy gruppy TSentral'noy zavodskoy laboratorii zavoda im. Petrovskogo (for Lifshits). 9. Institut metallurgii im. Baykova AN SSSR (for Polyakov).

(Continued on next card)

VARNAVSKIY, I.N.---(continued) Card 2.

10. Ural'skiy institut metallov (for Fofanov). 11. Institut chernoy metallurgii AN USSR (for Ogryzkin). 12. Nachal'nik TSentral'noy zavodskoy laboratorii Yenakiyevskogo metallurgicheskogo zavoda (for Malinovskiy). 13. TSentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (for Lapotyshkin, Shumov, Epshteyn). 14. Nachal'nik konverternoy laboratorii TSentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii (for Afanas'yev). 15. Nachal'nik laboratorii Vsesoyuznogo nauchno-issledovatel'skogo instituta ogneuporov (for Ivanov).

(Bessemer process)



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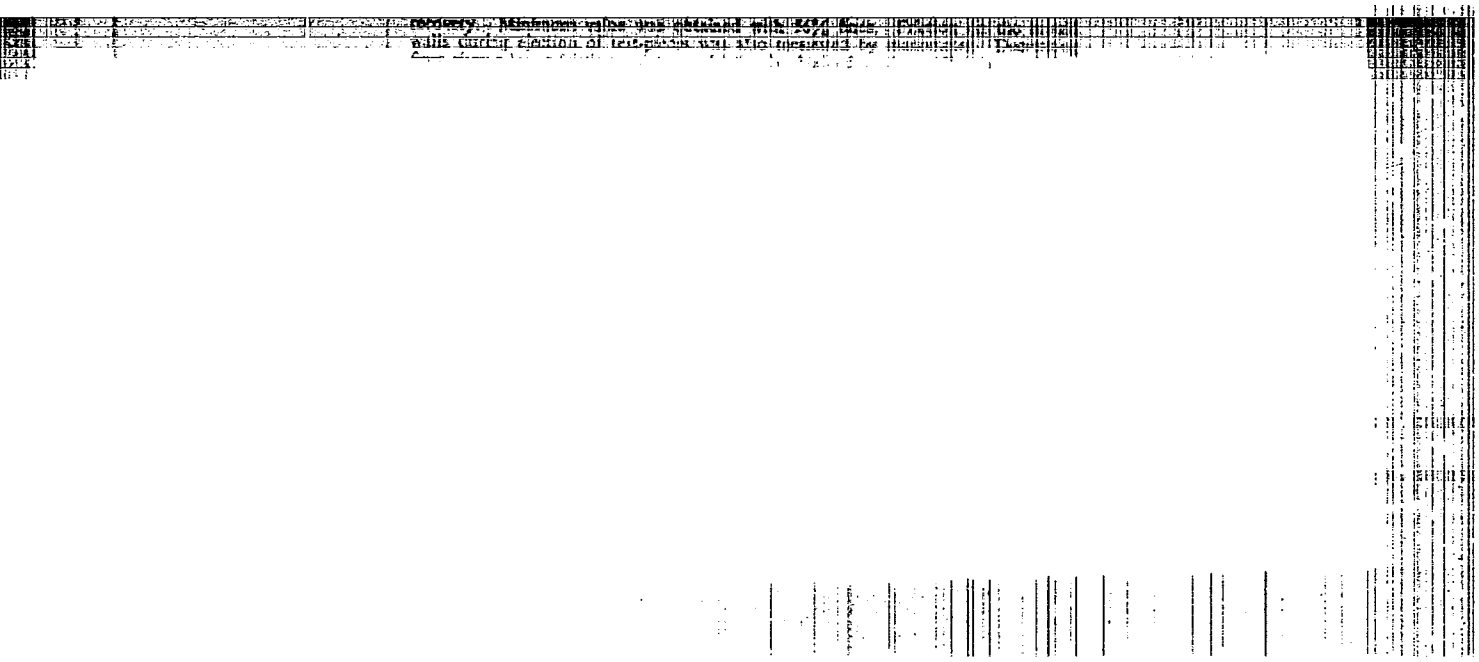

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IVANOV, Ye.V.

AUTHORS: Ivanov, Ye. V., Gaodu, A. N., Marants, A. G. 131-2-1/10

TITLE: On the Problem of the Utilization of Caustic Dust for the Production of Sintered Magnesite Powders (K voprosu. ispol'zovaniya kausticheskoy pyli dlya proizvodstva magnezitovykh spechennykh poroshkov).

PERIODICAL: Ogneupory, 1958, Nr 2, pp. 49-54 (USSR)

ABSTRACT: The investigations of VNIIO have shown, that it is possible to produce powders on the basis of caustic dust with the help of sedimentation. A group of researchers together with Ye. F. Bugayev of the "Magnesite" plant conducted experiments in the laboratory and in the plant for the purpose of silt preparation with a varying content of raw magnesite and of caustic dust. In order to investigate the properties of the dust, samples were taken from different cyclone seperator groups (see figure). The experimental results are given in tables 1 and 2. Magnesite slip from raw magnesium and caustic dust the chemical composition of which is given in table 3 were employed for the laboratory experiments. The properties and precipitation velocities of the slip prepared from 100 % caustic dust are given in table 4. Table 5 contains the slip properties of a mixture of raw magnesite and caustic dust

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and table 6 the chemical composition of the raw magnesite and slip the caustic dust. The modification of the chemical composition of the slip with an addition of caustic dust can be seen from table 7. On the basis of the experiments conducted a pneumatic transport system was constructed for the supply of caustic dust to the mill bunkers. By means of further measures adopted it was possible to produce slip of 100 % caustic dust.
There are 1 figure and 7 tables.

ASSOCIATION: Institute of Refractory Materials, Khar'kov (Khar'kovskiy institut ogneuporov).
Institute of Refractory Materials, Leningrad (Leningradskiy institut ogneuporov).

AVAILABLE: Library of Congress

15(2)
AUTHORS: ~~Ivanov, Ye. V., Minskiy~~, Ya. M., Belyayeva, Z. M. SOV/131-58-12-6/10

TITLE: Deformation of Magnesite Products Under Stress (Deformatsiya pod nagruzkoy magnezitovykh izdeliy)

PERIODICAL: Ogneupory, 1958, Nr 12, pp 558 - 561 (USSR)

ABSTRACT: The quality of magnesite products is determined according to their physical and chemical data, particularly according to the temperature at which the deformation under stress starts. Berezhnoy has obtained products in his experiments with "rapnoye" magnesium oxide the deformation of which started under stress at a temperature of above 1700°. For common refractory magnesite products of the "Magnezit" factory this temperature lies between 1540 and 1560°. Laboratory tests were carried out to determine the influence exercised by a ZrO_2 addition upon this temperature. The composition of the charge and the properties of the burnt samples are presented in table 1. The petrographical investigation was carried out by M. Ye. Drizheruk, petro-

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grapher of the UNIIO (Ref 1). To check the laboratory results products were manufactured at the UNIIO research plant the properties of which in burnt state are given in table 2. Tests with the powder of the "Magnezit" factory were carried out in the UNIIO research plant to investigate the possibility of increasing the temperature at which the deformation under stress of magnesite products begins. The grain composition of the mass is given in table 3. The test bricks were burnt at 1650° and exposed to that temperature for 6 hours. The properties of the burnt products are presented in table 4. The properties of the magnesite bricks manufactured at the "Magnezit" factory and the particularly dense test bricks produced at the UNIIO factory according to the procedure of the works Chasov-Yarskiy imeni Ordzhonikidze, are compared in table 5. Conclusions: It was demonstrated that it is possible to increase the temperature at which the deformation under stress begins , up to 1800° approximately by the use of pure magnesite powder or an addition of 1% ZrO_2, to the ordinary magnesite powders, respectively. It is

pointed out that it would be useful to manufacture at a factory one charge of magnesite products of various types of raw material for the purpose of testing them in the heat aggregates of the iron-metallurgical industry. There are 5 tables and 5 Soviet references.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (Ukrainian Scientific Research Institute of Refractories)

AUTHORS: Ivanov, Ye. O., Gaodu, A. N., Dolgina, G. Z. 131-23-5-8/16
Vit', Ye. F.

TITLE: Testing Magnesite-Chromite and Periclase-Spinellide Bricks in the Converter With Bottom Blowing (Ispytaniye magnezitokhromitovogo i periklazoshpinelidnogo kirpicha v konvertere pri donnoy produvke)

PERIODICAL: Ogneupory, 1958, Vol. 23, Nr 5, pp. 224-229 (USSR)

ABSTRACT: The Yenakiyevo metallurgic works under participation of the Ukrainian Metal Institute as well as the Khar'kov Institute of Refractory Materials carried out experiments with the production of steel with low and average carbon content. This was done by means of blowing through the bottom of Martin cast iron with a vapor-oxygen mixture in a converter of 2800 mm diameter and contents of 12 t of cast iron. In the experiments the converter lining consisted of bricks from the plants im. Petrovskiy and "Magnezit". In both campaigns basic bottoms were applied. The physico-chemical properties of the refractory products are mentioned in table 1. The lining sections next to the bottom showed the highest wear. The operating characteristics of the converter in the experimental cam-

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paigns are illustrated in figures 1 and 2. In the investigation of the finished off refractory products also participated P. D. Pyatikop who carried out the petrographic investigations. In table 3 the physico-chemical properties and in table 4 the mineralogical composition of the finished refractory products are quoted. In figure 3 a brick of the converter after termination of the kiln campaign is shown. The refractory products wear as a result of the mechanical flushing away and the pitting of the working surface of the bricks as well as by chemical erosion at high temperatures. In table 5 chemical analyses of the slags are shown which permit to judge on the dynamic of the wear during fusion. Furthermore it is reported in detail on the wear of the lining in different sections. The periclase--spinellide bricks have shown the best results of all tested refractory bricks of the converter lining. There are 3 figures, 5 tables.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut ogneuporov(All--Union Scientific Research Institute for Refractory Materials) Yenakiyevskiy metallurgicheskiy zavod (Yenakiyevo Metallurgical Plant)

1. Refractory materials - Production 2. Refractory materials - Test methods 3. Refractory materials - Test results

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18 (2)

AUTHORS: Karyakin, L. I., Ivanov, Ye. V. SOV/131-59-10-6/10

TITLE: Petrographical Study of Converter Slags Formed During Upper Introduction of Oxygen in an Open-hearth Pig-iron Furnace

PERIODICAL: Ogneupory, 1959, Nr 10, pp 455-462 (USSR)

ABSTRACT: This paper gives the results of a petrographical study of the slag which was formed in the converter of the Petrovsk Works, and into which pure oxygen was introduced from above into open-hearth pig-iron. The chemical composition of the pig-iron and steel after the introduction of oxygen is given in table 1. The converter was lined with magnesite bricks of the "Magnezit" Works, whose properties are described in more detail. Lime, iron-ore, and bauxite were added, whose chemical composition may be seen from table 2. The chemical and mineralogical composition of the slags are indicated in tables 3 and 4. Further, the slags are described in detail, and figures 1 and 2 show the sections of the primary slag. The final slags belong to the basic class. Their basicity varies from 2.8 to 4.5. The latter are also described in detail, and their sections are indicated in figure 3. The chemical and mineralogical composition of the primary and final slags are

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different. This is explained by the fact that the reactions of slag formation in the converter proceed more slowly than the oxidation of the additions in the pig-iron as shown by figures 4 and 5. Conclusions: It was found that the primary converter slag is a compound silicate melt. The refractory converter lining is worn out most strongly in the last minutes of oxygen introduction, which is further intensified by the addition of iron-ore. Instead of iron-ore, an addition of scrap iron may be very useful for the refractory lining. There are 7 figures, 4 tables, and 9 references, 8 of which are Soviet.

ASSOCIATION: Ukrainskiy naucbno-issledovatel'skiy institut ogneuporov (Ukrainian Scientific Research Institute for Refractories)

S/114/60/000/011/008/011
E194/E484

AUTHOR: Ivanov, Ye.V., Engineer

TITLE: A Universal Index Head for Sharpening Shaped Milling Cutters

PERIODICAL: Energomashinostroyeniye, 1960, No.11, pp.30-31

TEXT: It is particularly important that shaped milling cutters should be sharpened accurately both in respect of circumferential pitch and in the radial direction. On the existing universal machines the leading faces of the teeth are sharpened by means of an index head with the milling cutter fed horizontally against the emery wheel. With this arrangement the circumferential pitch cannot be accurately maintained as the horizontal feed is manual. The Khar'kov Turbo-Generator Works has devised a special index head for sharpening the milling cutters, it is illustrated in Fig.2. The cutter to be sharpened is mounted on a shaft which is firmly held in the index head. It can then be rotated through 1/12th of a revolution or any other convenient amount depending on the number of positions on the index head plate and accordingly, the cutter teeth can be fed radially up to the grinding wheel taking a uniform amount off each tooth. The method of setting up is

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A Universal Index Head for Sharpening Shaped Milling Cutters

briefly described. The equipment has given satisfactory results. There are 2 figures.

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S/131/60/000/06/09/012
B015/B007

15.2210

AUTHORS: Ivanov, Ye. V., Minskiy, Ya. M., Belyayeva, Z. M.

TITLE: Magnesite Bricks With Spinel Binding and an Increased Temperature of Deformation Under Load

PERIODICAL: Ogneupory, 1960, No. 6, pp. 281-285

TEXT: The work carried out by the Ukrainskiy institut ogneuporov (Ukrainian Institute of Fireproof Materials) showed it to be possible to increase the temperature of deformation under load by means of additions and/or the use of magnesite with an SiO_2 content of 3% and a CaO content of 2%. However, the products made from such magnesite have a low thermal stability. By the addition of alumina, spinel binding occurs during burning, whereby the thermal stability of the magnesite bricks is increased. For the purpose of producing these bricks, alumina with a grain size $< 2\mu$ was used. The samples obtained from this paste were burned at a temperature of 1,650°C. Their properties are given in Table 1. Petrographical investigations were carried out by L. A. Kuz'mina (Ref. 1). For the purpose of checking these laboratory results, a batch of magnesite bricks was produced

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Magnesite Bricks With Spinel Binding and an Increased Temperature of Deformation Under Load

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with spinel binding at the opytnyy zavod Ukrainskogo nauchno-issledovatel'skogo instituta ogneuporov (Testing Plant of the Ukrainian Scientific Research Institute of Fireproof Materials), the properties of which are given in Table 2. At the Zaporozhskiy ogneupornyy zavod (Zaporozh'ye Plant of Refractories) a further batch of magnesite bricks was produced with spinel binding. The granulation and moisture of the pastes are shown in Table 3. The scheme for inserting the bricks into the furnace is shown in Fig. 1, and the properties of the burned bricks in Table 4. Fig. 2 shows the fettling of an oxygen converter of the Krivorozhskiy metallurgicheskiy zavod (Krivoy Rog Metallurgical Plant). In conclusion, the authors state that a method of producing magnesite bricks of high density, temperature of deformation under load, and thermal stability has been worked out. The use of these bricks for the fettling of basic steel-melting converters is described as inexpedient under the existing technological conditions. There are 2 figures, 4 tables, and 4 Soviet references.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (Ukrainian Scientific Research Institute of Fireproof Materials)

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IVANOV, Ye.V.; BELYAYEVA, Z.M.

Magnesite converter brick made of Czechoslovak magnesite powders. Ogneupory 25 no.11:516-520 '60. (MIRA 13:12)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuprov.
(Donawitz, Austria—Firebrick)

IVANOV, Ye.V.; RAKINA, V.P.; DOLGINA, G.Z.; BELYAYEVA, Z.M.

Service of refractories in converters with top oxygen blow and improvement of the procedure for the production of converter bricks. Sbor.nauch.trud. UNIIO no.5:210-233 '61.
(MIRA 15:12)

(Converters) (Firebrick)

23485
S/131/61/000/005/001/001
B105/B220

15.2210 3009, 3309

AUTHORS: Ivanov, Ye. V., Gaodu, A. N. and Guzenko, G. F. (see Association)

TITLE: The melting of refractory materials in the electric furnace of the type ОКБ-514 (OKB-514) and the manufacture of products from these materials

PERIODICAL: Ogneupory, no. 5, 1961, 214 - 220

TEXT: In the experimental plant UNIIO (Ukrainian Scientific Research Institute of Refractory Materials), a monophase arc furnace of the type ОКБ-514 (OKB-514) was installed in order to obtain melted refractory materials. The furnace is controlled automatically and fed with current from a monophase step-up transformer of the type ЭПОМ-350 (EPOM-350). The primary voltage is 6000 v and may be adjusted to 15 different stages from 34 to 194 v. The furnace was adjusted for melting magnesite powder of the type МПМЗ (MPMZ). A. I. Alekhin, A. V. Ponedel'nikov and Yu. N. Kol'bus assisted in these experiments. Characteristics of the melting of magnesite powder: time of melting: 7 hours 13 minutes; consumption of magnesite powder per melting: 303 kg; average charge of

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The melting of refractory materials ...

powder per hour: 43.7 kg; output of melted magnesite 47.7 %; consumption of power: 9.9 kwh; specific consumption of electrodes: 0.13 kg/kg; specific consumption of coke: 0.05 kg/kg; losses due to dust and burning off: 14.0 %. A block of melted magnesite was obtained in form of a lump 700 × 400 and up to 400 mm high, having a weight of 150 kg. On fracturing, the block showed a zonal structure. The petrographic studies were made by P. D. Pyatikop. The chemical composition of the magnesite block is indicated in % in Table 1. One of the experimental meltings concerned refractory mixtures of 70 % commercial alumina and 30 % magnesite powder (aluminous spinel). Table 2 shows the chemical composition of the block. The characteristics of the melted products cut out of the block are given in Table 3. Furthermore, commercial products were manufactured from powders of melted materials by the ceramic method (Table 4). The chemical and mineralogical composition of the products based on melted materials and manufactured by the ceramic method are evident from Table 5. Finally, it is stated that a voltage of 97 v and an average charge of 50 kg/hr may be considered as optimum conditions for the melting of magnesite in the electric furnace OKB-514.

The melting of refractory materials ...

Of the feeding methods tested, the continuous method is most economic. Products manufactured by the ceramic method from melted materials, amongst them from mixtures of melted and sintered powders, are of high density, (porosity 13 - 19 %) and strenght. Deformation under a load of 2 kg/cm^2 begins at temperatures above 1.800°C. In the furnace OKB-514 and with periodically reduced feed, it is possible to obtain melted magnesite containing up to 98 % MgO when using a charge containing 90 % MgO. One part of the block (10 to 15 %) containing a high percentage of MgO may be eliminated during the distribution. Abstracter's note: The photographs of Figs. 1 and 2 are not reproducible . There are 2 figures and 5 tables.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov (Ukrainian Scientific Research Institute of Refractory Materials) [Abstracter's note: Name of association was taken from first page of journal.]

IVANOV, Ye.V.

Training personnel of engineering departments. Mor. sbor. 47 no.1: 51-54 Ja '64. (MIRA 18:7)

[illegible]. WINNING OF PEAT IN DEPOSITS CONTAINING [illegible]

[illegible], [illegible], [illegible], M.S. and [illegible], [illegible] [illegible]

[illegible]

[illegible] has been successfully overcome by using a dragline excavator which discharges into a [illegible] "stump separating and treatment plant". The stump [illegible] consists of a horizontal [illegible] [illegible] [illegible]

IVANOV,Ye.Ya., inzhener

Protective band coupling. Torf.prom.32 no.5:27-28 '55.
(MLRA 8:10)

1. Moskovskiy torfyanoy institut
(Couplings)