

ACC NR: AR6035385

(N)

SOURCE CODE: UR/0398/66/000/009/A023/A023

AUTHOR: Oyak Vlodymezn

TITLE: Vibrations on fishing boats and the problems associated with them

SOURCE: Ref. zh. Vodnyy transport, Abs. 9A140

REF. SOURCE: Sb. Rybolovn. flot. T. 2. L., Sudostroyeniye, 1965, 245-260

TOPIC TAGS: fishing ship, mechanical vibration, vibration damping, shock absorber

ABSTRACT: The increasing sizes of fishing ships and the increase in the number of revolutions of the main and auxiliary engines leads to the danger of excessive vibration. This danger can be estimated by the designer during the course of preparing specifications, if he uses the presented graphs to determine the frequencies of two-node vertical and horizontal free vibrations. The graphs are valid only for small fishing boats of standard design. The questions discussed concern the use of rubber gaskets and spring shock absorber for elastically mounting the engines and equipment on the ir foundations, and the use of vertical struts to reduce the transverse vibrations of the engines. Different suggestions aimed at drafting vibration standards are presented, as well as proposals from the Research Center of the Polish Peoples Republic on standards for transverse oscillations of main and auxiliary engines. 22 illustrations. I. Tryanin. [Translation of abstract]

SUB CODE: 13  
Card 1/1

UDC: 629.12.624.021.09-752

ACC NR: 425922597 SOURCE CODE: UR/0133/66/000/004/0327/0328

AUTHORS: Oyks, G. N.; Matevosyan, P. A.; Ansheles, I. I.; Fatkullin, O. Kh.; Selivanov, V. N.; Petrov, B. S.; Sivkov, S. S.; Fedorov, V. I.

ORG: none

TITLE: Experimental smelting of ball-bearing steel by using a refusing method employing a new technology

SOURCE: Stal', no. 4, 1966, 327-328

TOPIC TAGS: alloy steel, ball bearing steel, metallurgic research / ShKh15 alloy steel

ABSTRACT: A new technology for smelting ball-bearing steel employing a refusing method was developed. This method is based on the results of an earlier investigation by G. N. Oyks, P. A. Matevosyan, I. I. Ansheles, i dr. (Novaya tekhnologiya vyplavki sharikopodshipnikovoy stali, Metallurgizdat, 1962). The salient points of the new technology are: 1) the furnace charge consists of 100% ball-bearing steel scrap; 2) to insure desulfonation, the slag is reduced with pulverized coke only; 3) the oxygen concentration is maintained by additions of red hot bauxite. After the above three steps, the steel is evacuated and poured in the usual way. A comparison of the new method with older ones is presented (see Fig. 1). It is concluded that the new method yields ball-bearing steel of higher quality.

Card 1/2

UDC: 669.187.2

L 10452-67

ACC NR: AP6022507

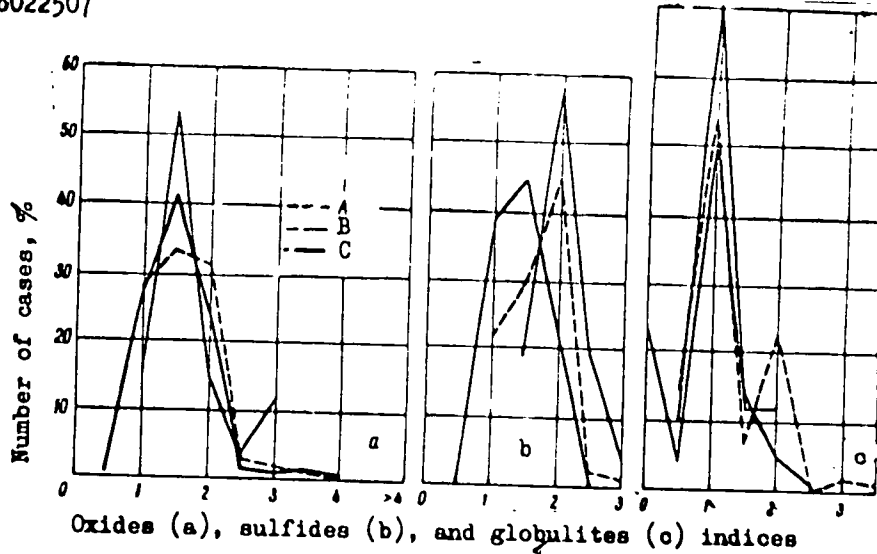


Fig. 1. Comparison of impurities in steel ShKh15: (a) oxides, (b) sulfides, and (c) globulites obtained by evacuation under usual slags (A) and slags of increased oxidative power (B - smelting with oxidation agent, C - smelting according to the new refusing method).

Orig. art. has: 2 tables and 2 graphs.

Card 2/2 *dm* SUB CODE: 11/ SUBM DATE: none/ ORIG RFP: 001

OYAMAA, E. [Ojamaa, E.], kand.tekhn.nauk; KREYS, U. [Kreys, U.], inzh.

Protecting shale-fly ash concrete by impregnating it with petrol-  
atum. Trudy NIIZHB no.22:139-141 '61. (MIRA 22:10)

1. Institut stroitel'stva i stroitel'nykh materialov AN Estonskoy  
SSR.

(Frost resistant concrete) (Petrolatum)

LIVISVIG, Boris, kand. tekhn. nauk, inzh., red.; KREYS, U., inzh., red.; KREYS, T., red.

... ..  
Tallinn, Eesti Teadusliku Instituut, 1978 p. (in  
Estonskoy ... .. (MIRA 17:10)

The Utilization of White Portland Cement Slag

In addition to the Portland cement of the 400-500 type, the fine  
residual properties of the slag are important. The amount  
of the fine ground slag may be 10-20 percent of the total  
employed. The fine ground slag may be used in concrete  
30-50 percent of the weight of the cement. The curing  
temperature should not exceed 700°. The amount of  
fine ground slag is recommended. The  
water content of the concrete may be adjusted by fine  
filler when ground slag is used. The concrete exhibits a  
degree of resistance to the expansion of plastic deformation at  
temperatures of 600-800°. In concrete from the fine ground  
at the point of Kerosene, Methyl Alcohol, Diesel Fuel, etc. with  
particles of size up to 40mm may be used.

1. Slag is used in concrete for fire resistant application.

Card 2

OYAXAA, E. G.

Dissertation: "Investigation of Blast-Furnace Slag From Kerch' and Magnitogorsk as Fillers for Heat-Resistant Concrete." Cand Tech Sci, Sci Res Inst of Industrial Str. Const., Moscow, 1953. (Referativnyy Zhurnal--Khimiya, Moscow, No 4, Feb 54)

SO: SIM 243, 19 Oct 54

16

The use of the oil of *Oenothera biennis* as a drying oil  
V. Varlamov and G. Oyat'eva *Moskovsko Zhurnal*  
*Dokl. 15, No. 4, 30 (1958)*—The seeds of the plant  
contain 0.88% H<sub>2</sub>O and 27.36% oil based on oven-dry  
seeds (extr. with petr. ether). The oil has d<sub>4</sub><sup>20</sup> 0.9291, n<sub>D</sub><sup>20</sup>  
1.4801, acid no. 0.09, sapon no. 195.7, I no. 147.08 and  
unsaponifiable matter 1.94%. The compn. of fat acids  
is: palmitic 8.6-8.7, oleic 36.4-7.6, linoleic 58.1-64.5  
and linolenic acid 2.3-9.7%. Heated 2 hrs. at 150° and  
then treated with 3% CaAlnO<sub>3</sub> drier (contg. 0.001% of  
active Mn), the oil dries in 24 hrs. to a sufficiently hard  
film. In the permeability to water and protective prop-  
erties it is inferior to linseed oil films. Chas. Blum.

*ca*

**Refining of synthetic acids** V. Varlamov, G. Ovet'eva and N. Davyskova. *Makoleino Zbiranie Dala II*, 494 b (1935), cf. *C. A.* 29, 762D. Crystals obtained by oxidation of petrolatum jelly were refined by autoclaving 15% solutions of acids with 10% excess of KOH in H<sub>2</sub>O (to prevent polymerization) at 180-200° for 1 hr and at 200-3° for 43 min. Similar dehydration with the

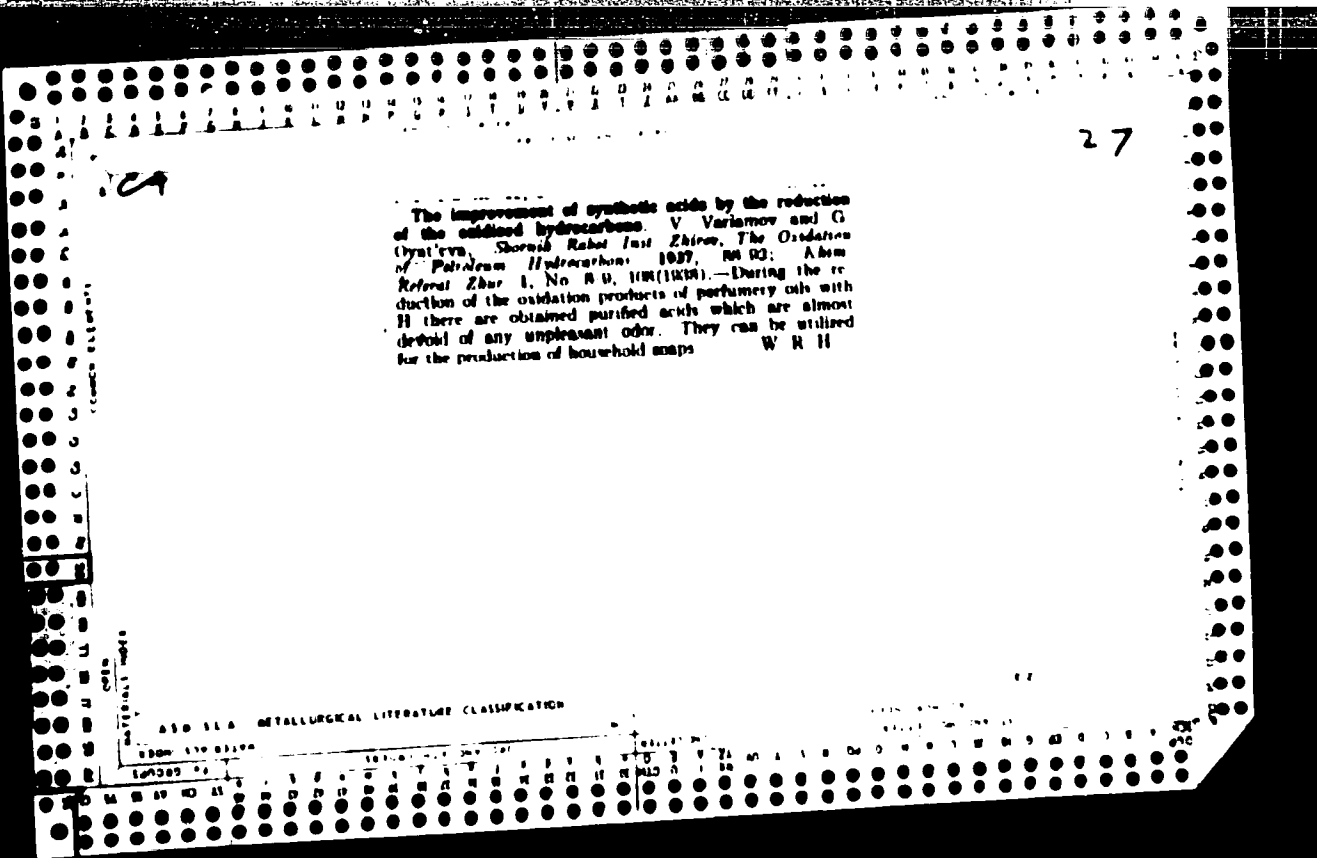
formation of unsatd. acids was effected by autoclaving 21.6% Ca soap in C<sub>6</sub>H<sub>6</sub> with stirring at 250-32° for 1 hr and 25 min. Chas Blanc

AND OTHER METALLOGICAL LITERATURE CLASSIFICATION



The oxidation of petroleum hydrocarbons. V. V. Vasylov and G. Zhakrya. *Sovetsk Rabot Inst. Zhurn. S. S. R. 1937, No. 81*. A temp. increase from 115 to 130°C increases considerably the speed of the oxidation of these petroleum. The quality of the acids obtained is lowered only slightly. The obtaining and the utilization of the vapor products of petroleum oxidation. V. V. Vasylov. *Ibid.* No. 1. The same position as in petroleum oxidation were investigated. They were dissolved in dry solvents, absorbed in alk. scrubbers and adsorbed by charcoal. For a complete desorption of the acids it is necessary to use chemical adsorbents. The recovery of acids from the oxidized product by solvents. I. Neustro

N. Davydova and G. Zhakrya. *Ibid.* No. 81. For the separation of the acids from the other nonseparable substances the following were used as solvents: H<sub>2</sub>O, CH<sub>2</sub>Cl<sub>2</sub>, phenol, butanol and CCl<sub>4</sub>. Best results were obtained with phenol and with butanol. The extraction by high molecular weight hydrocarbons of nonseparable substances from soaps of synthetic acids. V. V. Vasylov and G. Zhakrya. *Ibid.* No. 6. By means of a single treatment with paraffin of the soap the content of nonseparable substances is lowered from 25% to only 6%. The obtaining of organic acids from synthetic esters. Z. Kenigsberg. *Ibid.* No. 82. During the hydrogenation of the K and of the Na salts of the oxoacids a partial transformation into the acid and unsatd. org. acids takes place. An increase of the nonseparable substances takes place simultaneously, which is accompanied by the decarboxylation of a part of the oxoacids. Through A. M. H. *Referat Zhurn. S. S. R. No. 7, 87, 88, 89.*



27

The improvement of synthetic acids by the reduction of the oxidized hydrocarbons. V. Variamov and G. Ghyat'eva, Shornik Rabot Inst Zhirco, The Oxidation of Petroleum Hydrocarbons, 1937, RM 00; Akim Referat Zbur 1, No. 8 U, 100(1938).—During the reduction of the oxidation products of perfumery oils with H there are obtained purified acids which are almost devoid of any unpleasant odor. They can be utilized for the production of household soaps. W R H

VARLAMOV, V.S., kand.tekhn.nauk; MIRONOVA, A.N., kand.fiziko-khimicheskikh nauk; OYATEVA G.I.

Monolakyolamides of synthetic fatty acids. Masl.-zhir. prom. 27  
no. 4:30-33 Ap '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zhirov.  
(Acids, Fatty) (Amides)

IVANOVA, Z. M.; KONSTANTINOV, I. Ye.; OYEDOROV, G. A.

"Scintillation Spectrometer for Fast Neutrons."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22  
Feb 64.

MIFI (Moscow Engineering Physics Inst)

OYELIKISHKIN, S N

✓ 2340. STABILIZATION OF THE COMBUSTION PROCESS DURING THE FIRING OF FUEL PORCELAIN IN TUNNEL KILNS. Oyelikishkin, S.N. (Steklo Keram. (Glass & Ceramics, Moscow), 1955, vol. 12, (9), 9). The firing schedule is often upset by fluctuations in fuel supply. It is suggested that firing should be regulated by a fixed and uniform gas supply, which can be achieved by installing a gas pressure regulator on the supply pipe to the kiln.

S. Ceram. A.S.

OYERIU, Ion [Oeriu, I.]

Relation between the chemical structure and the antitubercular activity of some  $\alpha$ -naphthoquinone derivatives. *Biokhimiia* 28 no.3: 380-383 My-Je '63. (MIRA 17:2)

1. Department of Chemotherapy, Academy of Sciences of the Rumanian People's Republic, Bucharest.

QETTNER, C.

Drauss, F. and Qettner, C.

Chemistry of "per" compounds. II. Distinction between different types of "per compounds.

Z. anorg. allgem. Chem., Vol. 218, 1934, pp. 21-32

Chem. Abs., Vol. 28, 5359-4

OYFA, A.I.

Pathological and anatomical changes in rats after infusion of growing doses of aminazine [with summary in French]. Zhur. nevr. i psikh. 57 no.2:214-219 '57. (MLRA 10:6)

1. Tul'skaya psikhonevrologicheskaya bol'nitsa (glavnyy vrach V.T.Sviridov).

(CHLORPROMAZINE, tox.

in high dosage admin. to rats, pathol. of brain)

(BRAIN, pathol.

in high dosage admin. of chlorpromazine to rats)



OYFA, A. I. (Tula)

Devices for intra-arterial injecting of fixating mixtures. Arkh.  
pat. no.4:79-81 '62. (MIRA 15:4)

1. Iz Tul'skoy psikhonevrologicheskoy bol'nitsy (glavnyy vrach  
V. T. Sviridov)

(HISTOLOGY—EQUIPMENT AND SUPPLIES)

077A, A.I.

Pathoanatomical changes in rats following prolonged administration of amiazine (with summary in French). Zhur.nevr. i psikh. 57 no.8: 1026-1030 '57. (MIRA 10:11)

1. Tul'skaya psikhonevrologicheskaya bol'nitsa (glavnyy vrach V.T. Sviridov)

(CHLORPROMAZINE, effects,

on various organs in rats, histopathol. (Rus))

Country : USSR  
Category: Human and Animal Morphology (Normal and Pathological).  
Pathological Anatomy

S

Abs Jour: RZhBiol., No 2, 1959, No 7664

Author : Oyfo, A.I.

Inst : ~~XXXXXXXXXXXXXXXXXXXX~~

Title : Pathologic-Anatomical Changes in Rats in Prolonged  
Introduction of Aminazine.

Orig Pub: Zh. nevropatol. i psikhiatrii, 1957, 57, No 8, 1026-  
1030.

Abstract: Fatty degeneration of the liver cells and epithelium  
of collective canaliculi of kidneys appeared after  
subcutaneous introduction to 36 rats in the course  
of 6 months of 2 ml of aminazine each, these changes

Card : 1/2

S-55

Card 1/1

"Pathoanatomical Changes in Rats Upon the Administration of Increasing doses of Aminazine" by A. I. Oyfa, Tula Psychoneurological Hospital (senior physician, V. T. Tviridov), Zhurnal Nevropatologii i Psikhiiatrii imeni S. S. Korsakov, Vol 57, 1957, No 2, pp 214-219

Experiments conducted on white rats to determine the effect of increasing doses of aminazine on the brain and internal organs of the animals established: (1) therapeutic and double-therapeutic doses produced no pathological changes either in the brain or in the internal organs of the rats; (2) doses three to four times in excess of therapeutic produced changes in the form of fatty dystrophy of the liver. No appreciable changes in the brain were noted; (3) doses of aminazine 5.5 times in excess of therapeutic produced considerable changes in the brains of the animals, and proved to be fatal to some of the rats. Investigations conducted after the animals were decapitated revealed clearly expressed manifestations of central tinctorial acidophilism in the cells of the cortex, a phenomenon not observed in the animals which died from aminazine, and therefore must have been the result of acute hypoxia of the brain. Aminazine itself does not cause hypoxia. (U)

OYFA, A.I.

Distribution of glycogen in the central nervous system during the use of aminazine. Zhur. nevr. i psikh. 61 no.12:1864-1870 '61. (MIRA 15:7)

1. Tul'skaya psikhonevrologicheskaya bol'nitsa (glavnyy vrach V.T. Sviridov) Gosudarstvennyy nauchno-issledovatel'skiy institut psikhologii (dir. - prof. V.M. Banskchikov, nauchnyy rukovoditel' - prof. A.P. Avtaysn) Ministerstva zdravookhraneniya RSFSR, Moskva.

(NERVOUS SYSTEM) (GLYCOGEN) (CHLORPROMAZINE)

OYFA, I.L.; BERG, A.I., redaktor; DZHIGIT, I.S., redaktor; YELIN, O.G.,  
redaktor; KULIKOVSKIY, A.A., redaktor; MOZHEHEVELOV, B.N., redaktor,  
SMIRNOV, A.D., redaktor; TARASOV, F.I., redaktor; TRAMM, B.F., re-  
daktor; CHECHIK, P.O., redaktor; SHAMSHUR, V.I. redaktor, MALININ,  
R.M., redaktor; FRIDKIN, A.M., tekhnicheskiy redaktor.

[Intercom loud-speaker apparatus] Peregovornoe gromkogovoriashchee  
ustroistvo. Moskva, Gos. energ. izd-vo, 1954. 14 p. (Massovaya ra-  
diobiblioteka, no. 202) (MIRA 7:11)  
(Loud-speakers)

OYFE, G.R.

Cardioplasty in cardiospasm. *Eksp. klin. i anest. zhurn.* 1964, 33-36 N-D '64.

1. 1-ya gorodskaya klinicheskaya bol'nitsa (glavnyy vrach - dr. Kononov; nauchnyy rukovoditel' - prof. M.A. Kuznetsov), Dnepropetrovsk.

OYFE, G.R.

Treating chemical wounds. Ortop., travm. i protez. 17 no.3:68-69  
My-Je '56. (MIRA 9:12)

1. Iz 2-go bol'nichno-poliklinicheskogo ob'yedineniya g.Novoshakhtin-  
ska Kamenskoy oblasti.  
(SOUNDS--TREATMENT)



OYFERAKH, M. I.

"Basic Tasks in the Intensified Struggle against Tuberculosis"

Proc. Tuber., No. 2, 1948

OYFERAKH, M. I.

"New Steps in the Fight against Tuberculosis"

Prob. Tuber., No. 1, 1949

OYFBEAKH, M. I.    Professor, Institute of Tuberculosis, Academy of Medical Sciences USSR

"Training of Medical Staffs on Problems of Tuberculosis"

Prob. Tuberc., No. 4, 1949

Кудрявцева, А.И.; Покhitонова, М.П.; Ойфербах; Беркос, К.П.; Белятская,  
Н.О.

Healing in primary tuberculosis in children. Prof.tuberk., Moskva  
no.2:23-31 Mr-Apr '50. (CJML 19:3)

1. Of the Institute of Tuberculosis of the Academy of Medical  
Sciences USSR (Director -- Z.A.Lebedeva; Scientific Director --  
Prof. A.Ye.Rabukhin).

OYFKBACH, M.I.; ELINSON, F.L.; SHATALOVA, O.S.; MAZINA, Ye.G.; YAMPOL'SKAYA,  
V.D.

Incidence of healing in primary tuberculosis in adolescents and adults.  
Prob. tuberk., Moskva no.2:31-36 Mr-Apr '50. (GLML 19:3)

1. Of the Institute of Tuberculosis of the Academy of Medical Sciences  
USSR (Director -- Z.A.Lebedeva; Scientific Director -- Prof. A.Ye.Ra-  
bukhin)

FELDMAN I. KH., OYFEBAKH M. I., TOSHNIK V. L.

Klinicheskie nabljudeniia nad terapevticheskim deistviem tubina pri tuberkuleze. [Clinical observations of therapeutic effect of tubin in tuberculosis] Probl. tuberk., Moskva No. 5 Sept-Oct 50 p. 58-62.

1. Of the Institute of Tuberculosis of the Academy of Medical Sciences (Director -- Z. A. Lebedeva) and of the First Department of Tuberculosis (Head -- Prof. A. Io. Rabukhin) of the Central Institute for the Advanced Training of Physicians (Director -- V. P. Lebedeva).  
CIML Vol. 20 No. 2 Feb 1951

KUDRYAVTSEVA, A.I.; OYFEBAKH, M.I.

Efficacy of anti-tuberculous measures. Sovet. med. 16 no. 9:37-40  
Sept 1952. (CIML 23:3)

1. Professors. 2. Of the Dispensary Sector of the Institute of Tuberculosis (Director -- Z. A. Lebedeva), Academy of Medical Sciences USSR.

OYFERAKH, M.I., professor.

Materials for the classification of tuberculosis; information on the work of the Committee on the Classification of Tuberculosis. Probl. tub. no.6:50-58 N-D '53. (MLRA 6:12)

1. Predsedatel' komissii po klassifikatsii tuberkuleza.  
(Tuberculosis) (Classification--Medicine)

SHMELEV, N.A.; professor; OYFBAKH, M.I., professor; SOLOV'YEVA, kandidat  
meditsinskikh nauk. ~~\_\_\_\_\_~~

Problem of tuberculosis; data from the commission of the study of  
tuberculosis. Vest. AMN SSSR no.2:60-67 '55. (MLRA 8:8)  
(TUBERCULOSIS, prevention and control  
in Russia)



OYFERBAKH, M.I., professor

Joint scientific session on tuberculosis. Vest. AMN SSSR 11 no.1:  
75-78 '56. (MLRA 9:5)

(KAZAKHSTAN--TUBERCULOSIS)

OYFEBAKH, M.I., prof.

Modern principles and methods for the compound treatment of tuberculosis. Zdrav. Kazakh. 17 no.9:21-26 '57.

(MIRA 12:6)

1. Iz Instituta tuberkuleza AMN SSSR.  
(TUBERCULOSIS)

OYFERBAKH, M.I., professor

Importance of drug resistance in tuberculosis [with summary in French]. Probl.tub. 35 no.1:3-10 '57. (MLRA 10:6)

1. Iz Instituta tuberculeza (dir. Z.A.Lebedeva) Akademii meditsinskikh nauk SSSR.

(ISONIAZID, ther. use

tuberc., resist., management (Rus))

(STREPTOMYCIN, ther. use

same)

~~ОУВЕШАКН, М.И., professor~~

Changes in the classification of tuberculosis. Probl.tub 35 no. 1  
70-75 '57. (MIRA 1957)

(TUBERCULOSIS,  
classif. (R<sub>119</sub>))

OYFERBAKH, Mark Il'ich, prof., doktor med.nauk; VAZHEL', Yu.G., red.;  
BERLOV, A.P., tekhn.red.

[Progress in the prevention and treatment of tuberculosis]  
Uspekhi v profilaktike i lechenii tuberkuleza. Moskva, Izd-vo  
"Znanie," 1958. 23 p. (Vsesoiuznoe obshchestvo po rasprostraneniui  
politicheskikh i nauchnykh znani. Ser. 8, vyp. 1, no.21)  
(TUBERCULOSIS) (MIRA 12:1)

OYFEBAKH, M.I., prof.; LYAKHOVETSKAYA, N.A.

Timely detection of tuberculosis in adults. Trudy Inst. tub.  
AMN 7:171-183 '58. (MIRA 13:10)  
(TUBERCULOSIS--DIAGNOSIS)

OYFEBAKH, M.I., prof.

Preventing the rise of cavernous forms of tuberculosis and their  
treatment. Trudy Inst. tub. AMN 7:184-194 '58. (MIRA 13:10)  
(TUBERCULOSIS--PREVENTION)

OYFEBAKH, M.I., prof.

Some problems of the differential diagnosis of tuberculosis. Probl.  
tub. 36 no.8:45-50 '58. (MIRA 12:7)

1. Iz Instituta tuberkuleza ANM SSSR (dir. Z. A. Lebedeva).  
(TUBERCULOSIS--DIAGNOSIS)



ОУФЕБАКН, М.И., проф.; БЕЛЯЕВА, Н.К.

Differential diagnosis of nonspecific pneumonia. Sov.med. 24  
no.3:43-48 Mr '60. (MIRA 14:3)

1. Is Instituta tuberkuleza AMN SSSR. (dir. - chlen-korrespondent  
AMN SSSR prof. N.A. Shmelev).  
(PNEUMONIA)

POMEL'TSOV, K.V. (Moskva, Leningradskiy pr., d.75-A, kv.42); OYFEBAKH, N.I.

Present-day clinical and X-ray detection -- a basis for the further lowering of morbidity and mortality from pulmonary tuberculosis. Vest. rent. 1 rad. 36 no.4:3-10 J1-Ag '61. (MIRA 15:2)

1. Iz Instituta tuberkuleza AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. N.A.Shmelev).  
(TUBERCULOSIS--DIAGNOSIS)

YGENBLIT, A.A.

Thermodynamic analysis of the process of rapid flame burning. *Sov. J. Appl. Phys.* 39 no. 7:176, 1974. 2 p. 165.

(MIRA 18:8)

ACC NA: 100-1010

UIC: 0000: UR/0062/51/000/005/1009/1016

AUTHOR: [Name redacted] (Deceased); Tonkov, K. A.; Trafimov, I. I.  
Solomonov, A. A.; Solomonov, A. A.; Polinaeva, Z. V.; Golosova, A. A.  
Aristova, V. S.

ORG: none

TITLE: Reactions of formation of alkyl(aryl)chlorosilanes in a direct interaction between alkyl (aryl) chlorides and silicon. Report no. 6. Role of cuprous chloride in the formation of dialkyldichlorosilanes

SOURCE: AN SSSR. Izv. Ser khim, no. 6, 1966, 1009-1016

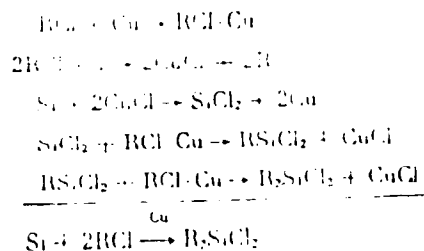
TOPIC TAGS: silane, chloride, silicon compound, copper compound, CHEMICAL REACTION

ABSTRACT: A mechanism is proposed for the formation of dimethyl(diethyl)dichlorosilane and methyl(ethyl)trichlorosilane during the reaction of methyl (ethyl) chloride with silicon on cuprous chloride. The proposed mechanism for the formation of dialkyldichlorosilanes is as follows:

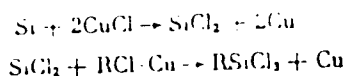
UDC: 546.287+542.91+541.126+543.422

Card 1/2

ACC NR: AP6024019



The formation of alkyltrichlorosilane is represented as follows:



Experimental data obtained confirmed these mechanisms. Thermodynamic calculations of the initial stages of the reactions of methyl and ethyl chloride with silicon were performed. The formation of dichlorosilane is thermodynamically quite probable under the conditions of synthesis of alkylchlorosilanes. UV spectra of the products formed by the reaction of cuprous chloride with silicon showed a group of bands characteristic of the spectrum of  $SiCl_2$ . Orig. art. has: 2 figures and 5 tables.

SUB CODE: 07/ SUBM DATE: 12Feb64/ ORIG REF: 008/ OTH REF: 012

Cord

2/2 *ldh*

OYFEBAKH, M.I., prof.; RABUKHIN, A.Ye., prof.

Conference on tuberculosis in Weimar (German Democratic  
Republic). Probl. tub. 41 no.5:92-94 '63.

(MIRA 17:1)

OYFMAN, K.V., (Melitopol')

Our wage practices. Shvein.prom. no.6:8-10 N-D '62.

(MIRA 15:12)

(Melitopol'—Wages—Clothing industry)

OYGENZIKHT, Ye.L.

Treatment by nasal electrophoresis as revealed by data of the  
"Pravda" Sanatorium. Vop. kur. fizioter. i lech. fiz. kul't.  
25 no. 5:456-457 S-0 '60. (MIFA 13:10)

1. Iz sanatoriya "Pravda" Moskovskoy oblasti (glavnyy vrach  
Z.I. Smirnova).

(ELECTROPHORESIS)



GYKHER, A.A., dot:

[Collection of problems on the strength of materials  
Sbornik zadach po soprotivleniu materilov. Moskva,  
Mosk. energ. in-t. Pt.1. 1963. 91 p. (MIRA 1814)

1. Kafedra soprotivleniya materialov Moskovskogo energe-  
ticheskogo instituta.

OYKHIER, K.

Repair specialization and the economy of labor. *Sov. truzh.*  
no.9:67-70 S '62. (MIRA 15:2)

1. Proyektno-tekhnologicheskii institut Sverdlovskogo soveta  
narodnogo khozyaystva.  
(Sverdlovsk Province—Machine tools—Maintenance and repair

OYKHER, K.

Why has the interesting beginning been forgotten? Sots.trud. no.5:  
98-100 My '56. (MLRA 9:8)  
(Industrial management)

OYKHRR, E.F., insh.

Calculating productive capacity in the manufacture of machinery.

Vest.mash. 40 no.12:69-74 D '60.

(MIRA 1):12)

(Machinery industry)

S. 122/60-50-10-11-11  
A161A13

AUTHOR: Oykhner, K. P. 2.10.1966

TITLE: Considering the production capabilities of machine building industry

PERIODICAL: Vestnik mashinostroyeniya 1969, No. 2

TEXT: The article presents a report on an article by Candidate of Technical Sciences Doctor V. I. Ganstak and Engineer P. I. Maydanchik ("Vestnik mashinostroyeniya", no. 2, 1969) and concerns the production capacity calculation in the construction, "ММБТН" (НИИТН) [Исследования по определению производительности машностроительных предприятий машиностроительных заводов (Regulation for estimation of production capacity of machine building and metalworking plants), Gosplanizdat, 1969]. The author does not agree with V. I. Ganstak and P. I. Maydanchik in some points of their criticism of the regulation, as well as to criticize the regulation and points out its deficiencies. The considerations concern production capacity calculations on 3-shift and 2-shift workday basis, bottlenecks and their liquidation ways, and also the corresponding methodical recommendations in the regulation; conditions of work taking into account the complexity

Card 1/2

GANSHTAK, V.I., doktor ekonomicheskikh nauk, prof.; SYKH, A.F., inzh.

Problems in proper utilization of equipment in the machinery  
industry. Vest. mashinostr. 43 no.10:74-78 O 1973. (MIRA 16:11

OYKMAN, G.D.

Reorganization of sanitary and epidemic control services in rural districts of Chernovtsy Province. Gig. i san. 22 no.7:54-56 J1 '57. (MIRA 10:10)

1. Iz Moskovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.
2. Gosudarstvennyy sanitarnyy inspektor Klina.

(PUBLIC HEALTH,

rural sanit. & anti-epidem. serv. in Russia (Rus))

RELIEMAN, I.F.; OYKMAN, A.O.

Operation of sugar refineries. Sub. from. 31 no. 8:19-22 Apr 1957.  
(Sugar industry)



OYKS, G. I. Dr.

Raschet, Martenovskiy. Pechet' (Calculations of Open-Hearted Fibrous Creations,  
(Paper edition,

125 p. 754

SO: Four Continent Book List, April 1954

KUDRII, V.A.; ~~OYKS, G.N.~~; SCROKIN, S.P.; NECHKIN, Yu.M.; GLUSHTEV, M.V.;  
NAM, B.P.; LAPSHOVA, M.P.; YUDSK, A.A.; PETRENKO, G.D.;  
ADRIANOVA, V.P.

Smelting high-grade steel in open-hearth furnaces fired with  
natural gas. Stal' 20 no. 7:599-602 J1 '60. (MIRA 14:5)  
(Open-hearth furnaces--Equipment and supplies)

S/137/62/000/003/016/191  
AG06/A101

AUTHORS: Nam, B. P., Oyks, G. N.

TITLE: The behavior of hydrogen in a basic open-hearth furnace pool during melting of high-quality steel on natural gas

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 25, abstract 2175  
("Sb. nauchn. tr. Zhdanovsk. metallurg. in-t", 1961, no. 3, 14-22)

TEXT: Investigations were made on 130-ton basic open-hearth furnaces, operating on the scrap process. It was established that the H content, by the moment of completed melting, depends mainly upon the total duration of the charge and melting periods, and upon the fraction of natural gas in the gas-mazut mixture. An increase of the H content in the heats without adding ore, from the moment of full melting until the beginning of active bubbling, is connected with the process of surface reaction of C oxidation. The addition of ore during this period entailed a reduction of the H content. During the period of active bubbling the H content depends mainly on the burning-out rate of C.  $V_c$ . Degassing of the pool takes place at  $V_c > 0.005\%$  C in 1 minute. The degassing effect depends then on the initial H content when active bubbling begins. The higher

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L 21136-65 EPA(s)-2/EWT(m)/EWP(b)/T/EWA(d)/EWP(e)/EWP(t) ASD(m)-3/AS(mp)-2  
WH/JD

ACCESSION NR: AP4045655

S/0133/64/000/009/0805/0808

AUTHOR: Oyks, G. N.; Matevosyan, P. A.; Ansheles, I. I.; Fatkullin, O. Kh.;  
Selivanov, V. M.; Shurygin, G. D.; Sivkov, S. S.; Fedan, A. T.

TITLE: Results of vacuum casting ball-bearing steel by different methods

SOURCE: Stal', no. 9, 1964, 805-808

TOPIC TAGS: vacuum casting, ball bearing steel, degassing alumina rich  
brick lining

ABSTRACT: A new method involving vacuum casting by gas circulation was developed by the authors in collaboration with B. S. Petrov, M. N. Kul'kova, Ye. N. Ponomarev, Yu. I. Ponomareva, R. M. Zimina, V. I. Fedorov and K. V. Belyakov. The new production process was compared to the method employed at Krasnyy Oktyabr' Plant comprising vacuum casting in the ladle which was found to be ineffective in the treatment of 20 to 30 ton charges. Therefore, the plant metallurgists tried out degassing of the steel in the jet as well as circulation vacuum casting. The specimens were adequately degassed with the

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L 21136-65

ACCESSION NR: AP4045655

steel giving up gas at a rate of 200 to 300 l/min. Hydrogen contents decreased from 43 to 54%. In the process of vacuum casting steel in the ladle, the specimens displayed greater amounts of oxide and sulfide inclusions than in circulation vacuum casting or vacuum casting during reladling. The greatest number of globular inclusion was identified in specimens produced by vacuum casting in the ladle. The appearance of this defect is attributed to the increased contact of lightweight melts with chamotte refractories. The authors give preference to circulation vacuum casting despite globule formation and suggest that the use of alumina-rich brick for the lining of the vacuum chamber through which argon is blown and for the sleeve coil lining would substantially improve this process. However, it still remains to be tested on a mass production scale and with heavy weight melts. Orig. art. has: 3 figures and 2 tables

ASSOCIATION: None

SUBMITTED: 00

NR REF SOV: 003

ENCL: 00

OTHER: 002

SUB CODE: MM

Card 2/2

L 6669-65

EWI(m)/EWP(q)/EWP(b) IJP(c) NJW/JD

ACCESSION NR: AR4036013

B/0276/64/000/003/0009/0009 51

SOURCE: Ref. zh. Tekhnol. mashinost. Sv. t., Abs. 3044

AUTHOR: Kachanov, N. N.; Sakhon'ko, I. M.; Pobelkina, V. M.; Laposhko, A. D.; Oyko, G. N.; Baranov, I. A.; Ansheles, I. I.

TITLE: The quality and properties of silicon-free bearing steel

CITED SOURCE: Tr. Vses. n.-i. konstrukt.-tekhnl. in-ta podshipnik. prom-sti,  
no. 1(33), 1963, 54-68

TOPIC TAGS: ShKh15 steel, silicon free steel, high purity steel, bearing steel,  
instrument bearing steel, stainless steel

TRANSLATION: An industrial method has been developed for making ShKh15 bearing steel, which does not contain silicon, making it possible to obtain metal with a smaller content of nonmetallic inclusions than is possible with ordinary steel-making methods. Silicon-free ShKh15 steel can be used for making instrument bearings and is recommended as an initial material for electroslag remelting. The hardenability and annealability of silicon-free steel from the heats that

Card 1/2

L 6669-65

ACCESSION NR: AR4036013

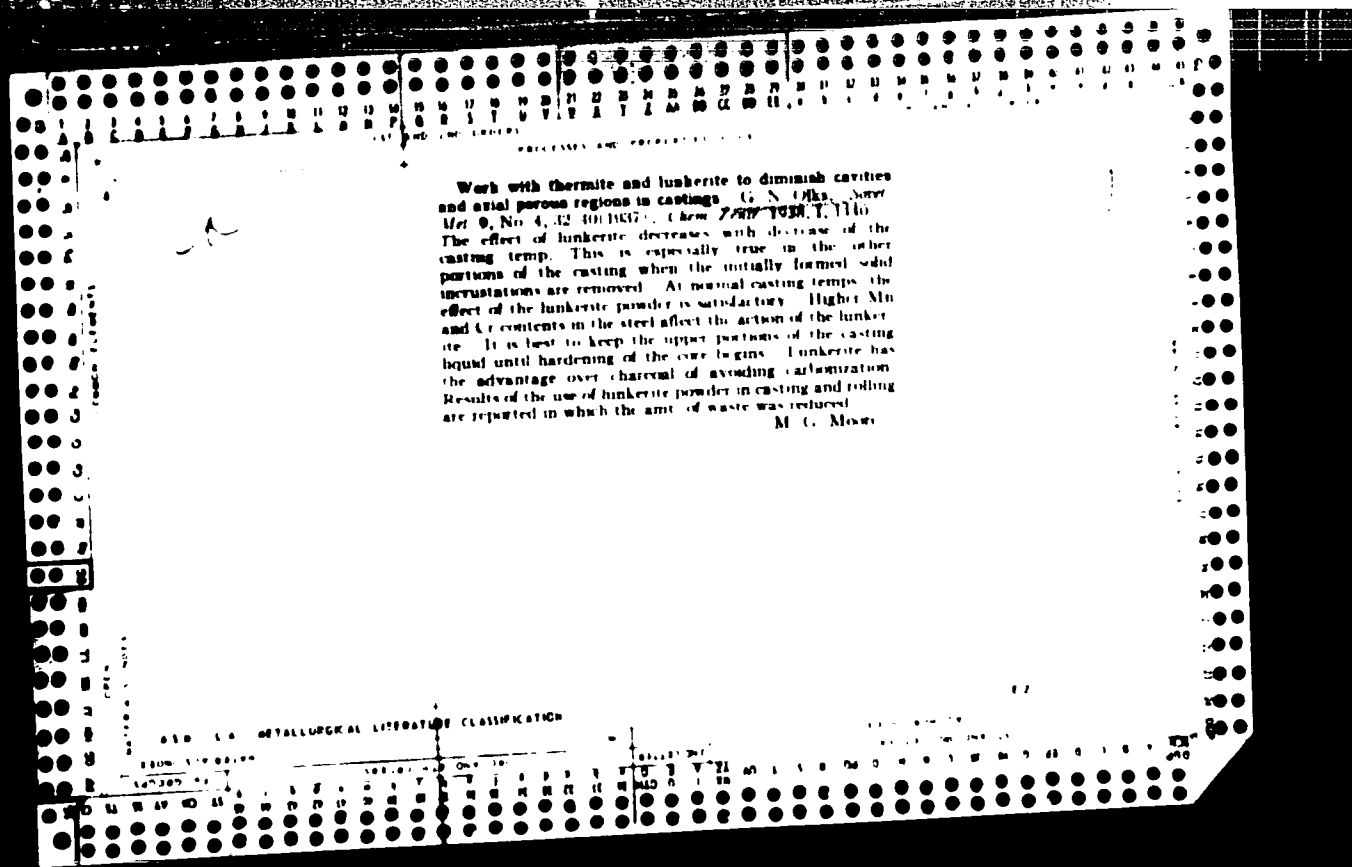
were tested were lower than in the case of ShKh15 steel produced by conventional methods. The contact resistance and strength properties, except for torsional strength, of silicon-free steel matched those of ShKh15 steel produced by conventional methods. The corrosion resistance in a 3% solution of NaCl of silicon-free ShKh15 steel was somewhat higher than that of ShKh15 steel produced by conventional methods. A drawback of the new industrial process is the instability of purity of the ShKh15 steel with respect to nonmetallic inclusions.

DATE ACQ: 10 Apr 61

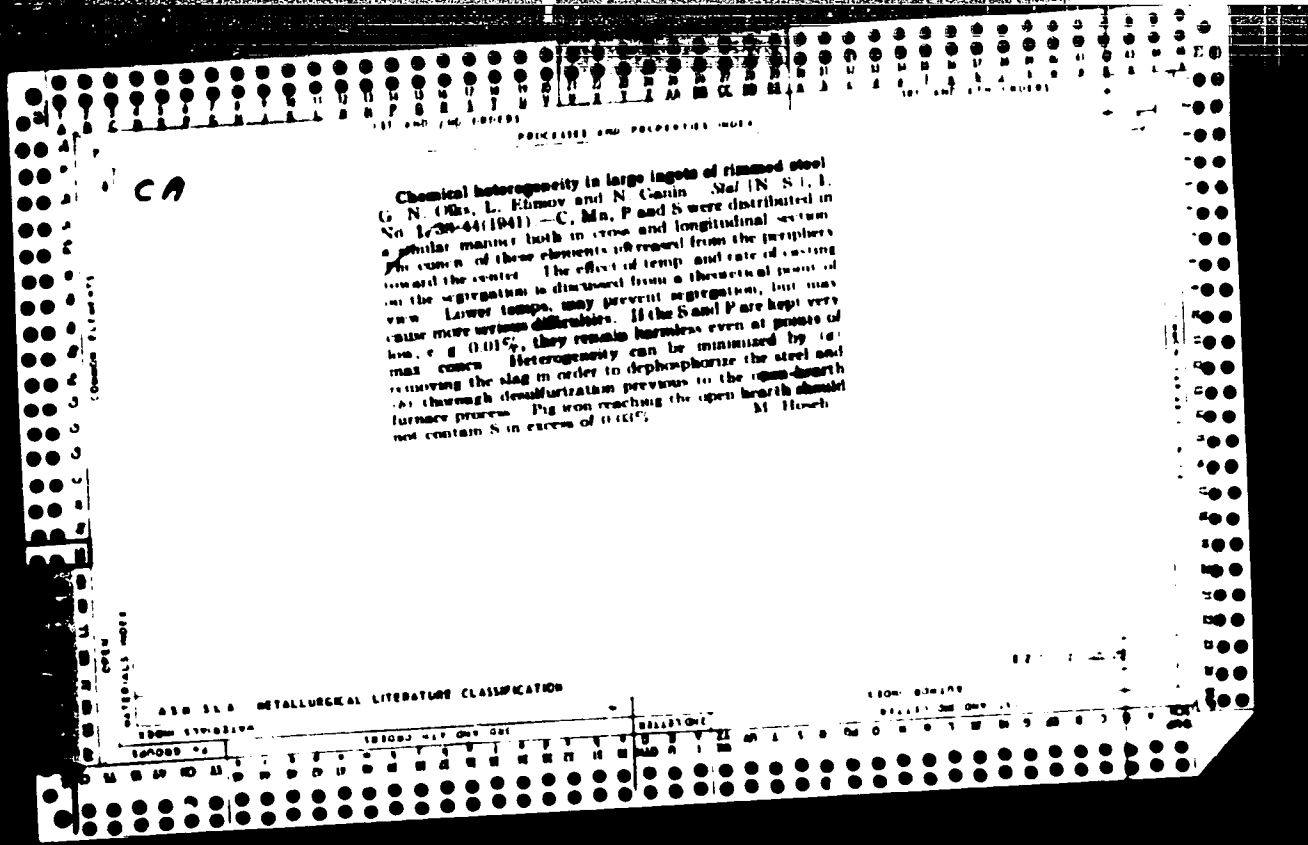
SUB CODE: NH

ENCL: 00

Card 2/2







OIKS, G. N.

OIKS, G. N. Calculations involving the Martin process. Moskva, Gos.  
nauch.-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1949. 85 p.  
(50-15908)

TN740.04

OYER, G.M.

21775 OYER, G.M. 11/12/44 b. 11/12/44 s. 11/12/44 v. 11/12/44  
stall in. Stallia, 20, 14. s. 11/12/44 - 11/12/44. 11/12/44.

cc: let's list 21/12/44, 11/12/44, 11/12/44.

CA

Distribution of columbium in the steel ingot  
U.S.S.R. Yu. M. Maksimov, and A. M. Dymov. Doklady  
Akad. Nauk S.S.S.R. 66, 061 2(1940). The segregation  
of Cb in a killed-steel ingot contg 0.25% Cb was studied  
by chem. analyses made of turnings from the center line of  
200 X 400 mm. slabs cut at 20, 45, and 65% of the dis-  
tance from the top of the ingot after rolling. Cb was  
detd. as follows: A weighed sample was dissolved in HCl,  
sp. gr. 1.19, oxidized with a little HNO<sub>3</sub>, sp. gr. 1.40, and  
evapd. to dryness. The dried residue was wet with 10  
ml. of HCl and heated to 70-80° for 2-3 min. Hot water  
(300 ml.) and 10 ml. of a 15% soln. of Na<sub>2</sub>SO<sub>4</sub> were added  
and the mixt. was boiled for 15-20 min. After 5-8 ml. of  
a 1% gelatin soln. was added, the mixt. was boiled for  
1-2 min. and the residue was filtered on a filter with paper  
pulp. The residue was washed with hot H<sub>2</sub>O, by vol. HCl  
and with hot water. The washed residue and filter were  
dried in a weighed Pt crucible and ignited at 1000-1100°.  
The residue was treated with HF and H<sub>2</sub>SO<sub>4</sub> and ignited at  
1100-1150°. The residue of Cb<sub>2</sub>O<sub>5</sub> was weighed. Data  
from 2 ingots showed the presence of inverse segregation.  
The position of the min. Cb content varied from near the  
center of the ingot to near the edge of the ingot as the slab  
position varied from 20% to 65% from the top of the ingot.  
The S and P contents of the ingots were found to be almost  
const. this indicates the beneficial effect of Cb in de-  
creasing their segregation. A. G. Cox.

CYKE, G. N.; TRUBIN, E. G.

Metallurgy of Steel, Open Hearth Process. (Metallurgiya Stali Martenovskii Process .  
763 pp, Government Scientific Technical Publishing House of Ferrous and Non-Ferrous  
Metallurgy, Moscow, 1951.

B-68125, 1 Sep 53

Yan, ...

Dissertation: "Theory and Practice of ...", ...  
The Institute of ...  
June 1977

... 18, ...

OYKS, G.N.

**USSR •**

Variations in the reduction processes of Kerch cast iron  
G. N. Oly and K. O. Trubn. *Izv. Akad. Nauk S.S.S.R.*  
S.N. Oly. *Tekhn. Nauk* 1986, No. 9, 110-12. Two pro-  
cesses are outlined for high-grade steel production from the  
high-P and V Kerch cast iron, with a recovery of V and the  
utilization of P<sub>2</sub>O<sub>5</sub> slag. W. M. Sternberg

OYKS, G.N., doktor tekhnicheskikh nauk; MILLER, A.I., redaktor; SHAROPIN,  
 V.D., redaktor; MIKHAYLOVA, V.V., tekhnicheskii redaktor.

[The production of boiling steel] Proizvodstvo kiplyashchei stali.  
Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po chernoii i svetloii  
metallurgii, 1955. 438 p. (MLBA 8:12)  
(Steel)



POYARKOV, Aleksey Mikhaylovich; BOYARSHINOV, V.A., redaktor; KAZACHKOV, Ye.A.,  
redaktor; NETESIN, A.Ye., redaktor; OYES, G.N., redaktor; LI HERMAN,  
S.S., redaktor; ANDREYEV, S.P., tekhnicheskiy redaktor.

[The production of steel] Proizvodstvo stali. Khar'kov, Gos.nauchno-  
tekhn.izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1955, 519 p.  
(Steel) (MIRA 8:4)

OYKS, G. N.

18 4E.2c

Blowing the Bath with Oxygen in the O.H. Conversion of High-Phosphorus Pig Iron. G. A. Shneerov, G. N. Ols, V. V. Lerner, V. G. Shchegolev, A. A. Zingarev and E. N. Ruzhenov. (Sov. 1956, (7), 587-592). (In Russian). Experiments made in 1954-55 on 250-ton tilting O.H. furnaces on high-phosphorus pig iron at the Axovatal works are described. Oxygen blown through the back wall into the bath was found to reduce tap-to-tap time 2 1/2 times as much as oxygenation of the flame. By adding 2000 cu. m. of pure oxygen to the bath during melt-down, hourly production was increased by 12-15%, fuel consumption per ton of steel falling by 14-16%. The roof did not suffer but increased dust carry-over led to the slag in the slag-pockets increasing by 25%. Metal quality deteriorated through oxygen blowing only if the blow was continued beyond a critical time depending on the type of steel.

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amg

OYKS. G. M.

Analysis of Oxygen in the Flame of a Large Open-Hearth Furnace Working on Phosphorus Pig Iron, S. A. Gerasimov, V. V. Lepinskiy, G. N. Oshin, V. I. Medvedev, A. I. Bala, M. E. Kozmin, G. T. Polak, and P. N. Alekseyev. (Zh. tekhn. fiz. 1958, 110, 878-887) (In Russian, English transl.)

... and heating, a process... of the flame has been pre-... of the... are analyzed. The... of the air up to 24-25% in the charging, heating, hot metal addition and cooling periods at "Average" load, if accompanied by conversion to progressive cooling mode, to a 20% reduction in top-to-top fuel, a 17% increase in product... reduction in standard fuel consumption... at each stage of the pro-... but the greatest effect... during charging and heating increased oxygenation up to 20% with simultaneous reduc-... in the durations of the earlier stages (charging, heating, hot metal addition) lead to continual acceleration of the pro-... reduction in specific fuel rate and increase in specific oxygen consumption; further experiments are necessary to... the desirability of regular operation with such intense oxygenation. An optimal rate of thermal loading during the charging and heating periods existed for each charging rate, the optimal value rising with increasing rate. Funda-... flame oxygenation only increased the rate of the physical chemical process without affecting either the tech-... of the overall process or the quality of rail or running steel. Because of higher working temperature and increased dust carryover in the combustion products, flame oxygenation increased wear on roofs and back and front walls.—S. Z.

4834

Handwritten signature or initials.

OYKS, G.N.

Use of oxygen in open-hearth furnaces running on high-phosphorus iron. Ya. A. Shumrov, G. N. Oks, V. V. Leporain, V. G. Shalkovskiy, A. I. Sulechay, and P. N. Serebriy (Steel Inst., Moscow). *Stal* 16, 187-90 (1961).

Expts. were conducted in a 350-ton tilting furnace introducing O into the bath from the back wall. A very detailed study of the factors involved leads to the conclusion that introduction of O into the bath is about 2.5 times more effective than adding the same amount of it to the flame. Increased adm. of the gas leads to a proportional shortening of the time of heats, and the roof life is not affected. More dust is produced. No deterioration of metal properties is observed when blowing is stopped 66 min. before deoxidizing rail steel and 30 min. before that of open steel.

*Water*

*6*

*000*

J. D. Gat

*1000*

OYKS, O.M. professor, doktor tekhnicheskikh nauk.

Principal reaction occurring during the steel smelting process.  
Sbor. Inst. stali no.35:23-69 '56. (MLBA 10:8)

1. Kafedra metallurgii stali.  
(Smelting) (Oxidation)

~~ОУКС~~ professor, doktor tekhnicheskikh nauk; KHAN-KHEB-GI [Han Hon-ki],  
kandidat tekhnicheskikh nauk.

Effect of treating the molten metal by neutral gases on changes in  
the properties of steel. Sbor. Inst. stali no.35r239-270 '56.  
(MIRA 10r8)

1. Kafedra metallurgii stali.  
(Gases in metals) (Argon) (Steel--Metallurgy)

137-58-6-11686

Translation from Referativnaia Zhurnal Metallurgiya, 1957, No. 1, p. 7, USSR

AUTHOR OXES I. N.

TITLE Use of Oxygen in the Scrap-and-ore Open-hearth Process for Making Steel from High-phosphorus Pig Iron (Ispol'zovanie kisloroda v skrap-rudnom martenovskom protsesse proizvodstva stali iz vysokofosforistogo chuguna)

PERIODICAL V sb. Primeneniye kisloroda v metallurgii. Moscow, Metallurgizdat, 1957, pp 40-50

ABSTRACT An investigation is made of the use of O<sub>2</sub> to speed the combustion of the fuel and for direct oxidation of impurities in the metal, in the 550-t tilting furnaces of the Azovstal plant. An increase in output is observed in both respects. The effectiveness of O<sub>2</sub> is considerably greater when used to blow the metal than when it is delivered in the flame. When the O<sub>2</sub> flow was up to 6 m<sup>3</sup> t, the hourly output of the furnace rose by as much as 16% and fuel consumption dropped by as much as 15%. If the oxygen plant is of limited capacity, it is desirable to raise the pressure by diluting the O<sub>2</sub> with compressed air. The rate of carbon removal when blast procedures are used attains

Card 1.2

137-58-0-11700

Translation from Referativny zhurnal, Metallurgiya, 1958, No. 6, p. 78 (USSR)

AUTHORS Trubin, K.G., Oyks, G.N.

TITLE Choosing the Mode of Conversion of Kerch Pig Iron (Opyt pereдела kerchenskogo chuguna)

PERIODICAL V sb. Primeneniye kisloroda v metallurgii. Moscow, Metallurgizdat, 1957, pp 160-164

ABSTRACT Two methods are suggested for conversion of the high-phosphorus pig iron obtained by smelting Kerch ores. The duplex process is used in either process. Under the first procedure the iron is blown briefly (2-3 min) in a basic converter by air enriched with oxygen, to convert the V to slag. After slagging off the vanadium slag, the converter is charged with lime and the metal is blown further to produce a low-carbon half-finished metal with 0.1% P. After slagging off the phosphate slag, to which silicon is added to produce conditioned fertilizer, the semifinished product is processed in the open hearth, to which a solid carburizer is added. The second method provides that after the short blow with an O<sub>2</sub>-enriched blast to obtain the vanadium slag, an iron-and-lime slag made in a special

Card 1 2



SOV 137-58-1-18762

Translation from Referativnyy zhurnal. Metallurgiya, 1958, No. 9, p. 72, USSR

AUTHORS Oyks, G N., Sokolov, G A

TITLE A Slag Collector (Shlakovyy kollektor)

PERIODICAL V sb. Primeneniye kisloroda v metallurgii. Moscow: Metallurgizdat, 1957, pp 165-172

ABSTRACT The design of a collector furnace to smelt synthetic slag (S) for use in conversion of high-phosphorus pig iron is presented. The major component of the assembly is a rotating lined tube which constitutes the melting space (MS). The rate of rotation chosen is such that the charge materials will be retained on the tube walls by centrifugal force and will form a cylindrical bath. The pulverized, mixed charge is introduced at one end of the tube, while a high-temperature jet formed by the combustion of coke gas with heated O<sub>2</sub>-enriched air is introduced at the other end. The jet gases passing through the CS yield heat to the charge and then pass through a slag pocket and a recuperator and finally are discharged into the atmosphere. The incline of the MS tube is such as to assure slow flow of the melted S. The finished S is collected in a collector from which it flows into a

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SOV/137-58-9-18662

A Slag Collector

slag pot periodically by the incline of the collector. The hot zone of the MS is lined with dolomite blocks over pitch, the cold portion with fireclay brick. The shell of the MS has a boxlike structure to provide the necessary rigidity. Coolant air is pumped into the space between shell and rotary furnace. The charge for dephosphorizing S consists of final open-hearth S, limestone, and scale. The components are chosen so as to obtain a low-melting (m.p. 1300-1350°C) S having the following % contents: SiO<sub>2</sub> 9-10, CaO 32-40, FeO 27-45

G.S.

1. Slags--Synthesis
2. Slags--Processing
3. Furnaces--Design
4. Furnaces--Operation

Card 2/2



PHASE I BOOK EXPLOITATION 304

Trubin, Konstantin Georgiyevich, Doctor of Technical Sciences, Professor,  
and Oyks, Grigoriy Naumovich, Doctor of Technical Sciences, Professor

Metallurgiya stali. Martenovskiy protsess; chast' tekhnologicheskaya  
(Metallurgy of Steel. The Open-hearth Process; Technical Section) 2d ed.,  
rev. and enl. Moscow, Metallurgizdat, 1957. 714 p. 9,000 copies printed.

Ed.: Miller, A. I.; Ed. of Publishing House: Rozentsveyg, Ya. D., Tech. Ed.:  
Mikhaylova, V. V.

PURPOSE: This is a textbook for students of higher educational institutions  
and may also be used by production engineers at metallurgical and  
machine-building plants.

COVERAGE: The book gives a systematic presentation of the theoretical basis and  
practical aspects of the basic and acid open-hearth processes; it also  
treats pouring methods and properties of ingots. This second edition  
contains additional material on recent technological advances in open-  
hearth production, new methods of processing molten steel in a vacuum,

Card 1/4

O/S, G. N.

18 18  
Intensification of decarburization in the melting period during conversion of pig iron with a high-phosphorus content. E. A. Turkebay and G. N. Oik. *Vestnik Akad. Nauk Kazakh. S.S.R.* 13, No. 8, 21-41 (1957) (in Russian).— Operating data from 180 open-hearth heats made from high-P (approx. 1.5%) pig iron with addn. of O to the bath were compared with similar heats made without O. Use of O shortened the melting period, increased the rate of oxidation of C and P, and increased greatly the  $P_2O_5$  content of the slag in the early part of the heat. H. W. Rathmann

5  
1-4822

DANIKHELKA, A., doktor, inzh.; MIKHAYLOV, O.A., kand. tekhn. nauk;  
GONCHARENKO, N.I.; KLIMASENKO, L.S.; OYKS, G.M., prof., doktor  
tekhn. nauk; SEMENENKO, P.P.; MOROZOV, A.M., prof., doktor tekhn.  
nauk; GLINKOV, M.A., prof., doktor tekhn. nauk; KAZANTSEV, I.G.,  
prof., doktor tekhn. nauk; KOCHO, V.S., prof., doktor tekhn. nauk;  
KNEKESH, Sh., kand. tekhn. nauk; MOROZENSKIY, L.I., kand. tekhn.  
nauk; GURSKIY, G.V.; SPERANSKIY, V.G.; NOVIK, L.M., kand. tekhn.  
nauk, starshiy nauchnyy sotrudnik; SHNYKEROV, Ya.A., kand. tekhn.  
nauk; PAPUSH, A.G., kand. tekhn. nauk; MAZOV, V.F.; SAMARIN, A.M.

Discussions. Biul. TSNIICDM no. 18/19:17-35 '57. (MIRA 11:4)

1. Glavnyy staleplavil'shchik Ministerstva metallurgicheskoy pro-  
myshlennosti i rudnikov Chexoslovatskoy respubliky (for  
Danikhelka). 2. Direktor Tsentral'nogo instituta informatsii chernoy  
metallurgii (for Mikhaylov). 3. Direktor Ukrainskogo instituta  
metallov (for Goncharenko). 4. Glavnyy staleplavil'shchik  
Kuznetskogo metallurgicheskogo kombinata (for Klimasenko). 5. Zave-  
duyushchiy kafedroy metallurgii stali Moskovskogo instituta stali  
(for Oyks). 6. Zamestitel' glavnogo inzhenera zavoda im. Serova  
(for Semenenko). 7. Zaveduyushchiy kafedroy metallurgii stali  
Chelyabinskogo politekhnicheskogo instituta (for Morozov). 8. Zave-  
duyushchiy kafedroy metallurgicheskikh pechey Moskovskogo instituta  
stali (for Glinkov). 9. Zaveduyushchiy kafedroy metallurgii stali  
Zhdanovskogo metallurgicheskogo instituta (for Kazantsev). 10. Zave-  
duyushchiy kafedroy metallurgii stali Kiyevskogo politekhnicheskogo  
instituta (for Kochko).  
(Continued on next card)

DANIKHELIKA, A.---(continued) Card 2.

11. Nachal'nik tekhnicheskog' otdela Ministerstva chernoy metallurgii Vengerskoy Narodnoy Respubliki (for Enakesh). 12. Zamestitel' direktora Novotul'skogo metallurgicheskogo zavoda (for Gurskiy). 13. Nachal'nik tekhnicheskogo otdela zavoda "Dnepropetsstal" (for Speranskiy). 14. Institut metallurgii im. Baykova AN SSSR (for Novik). 15. Nachal'nik staleplavil'noy laboratorii Ukrainskogo instituta metallov (for Shneyerov). 16. Nachal'nik laboratorii po nepreryvnoy razlivke stali Zhdanovskogo filiala Tsentral'nogo nauchno-issledovatel'skogo instituta Ministerstva stroitel'noy promyshlennosti (for Papush). 17. Nachal'nik martenovskogo tsekha zavoda "Zaporozhstal" (for Mazov). 18. Zamestitel' direktora Instituta metallurgii im. Baykova AN SSSR, chlen-korrespondent AN SSSR (for Samarin).

(Steel Metallurgy)

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.M., prof., doktor tekhn. nauk; GERBER, M.S.; BIGEYEV, A.M., kand. tekhn. nauk, dots.; LIPSHITS, S.I., kand. tekhn. nauk; POLYAKOV, A.Yu., kand. tekhn. nauk, starshiy nauchnyy sotrudnik; FOPANOV, 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; APANAS'YEV, S.G., kand. tekhn. nauk; SHUMOV, M.M., starshiy nauchnyy sotrudnik; IVANOV, Ye.V.; EPSHTEYN, Z.D., starshiy nauchnyy sotrudnik.

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

1. Nachal'nik konvertznoy 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 metallurgicheskii institut (for Baptizmanskiy, Levin). 5. Zaveduyushchiy kafedroy metallurgii stali Moskovskogo instituta stali (for Oyks). 6. Zaveduyushchiy laboratoriyey Yenakiyevskogo metallurgicheskogo tekhnika (for Gerber). 7. Kafedra metallurgii stali Magnitogorskogo gorno-metallurgicheskogo instituta (for Bigeyev). 8. Rukoboditel' konvertznoy gruppy Tsentral'noy zavodskoy laboratorii zavoda im. Petrovskogo (for Lipshits). 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, Bpahteyn).
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 ogneporov (for Ivanov).

(Bessemer process)

SOV 19758 11 1027

Translation from: Referativny zhurnal Metalurgiya 1958, No. 11, p. 151, USSR

AUTHORS: Oyks, G. N., Kryakovskiy, Yu. V., Grigor'ev, V. P.

TITLE: Intensifying Open-hearth Conversion of High-phosphorus Pig Iron by Introducing Oxygen into the Bath. Intensifikatsiya predela vysokofosforistogo chuguna v martenovskiy pech. svedeniyem kisloroda (annul)

PERIODICAL: Sb. Mosk. in. stal. 1957, Vol. 37, pp. 138-151.

ABSTRACT: Heats in which the bath was blown with technically pure  $O_2$  are run in tilting 350-t open-hearth furnaces at the Azovstal' plant utilizing the high molten pig-iron practice with consumption of 25% of the pig iron (P 1.6%). The  $O_2$  is introduced by lance from the backwall of the furnace primarily during the melting period. Each 1000  $m^3$  of  $O_2$  consumed in the blow reduces the duration of the melting and working period by 57 minutes and increases the rate of P and C elimination by 25% while reducing fuel consumption. When 5-8  $m^3$   $O_2$  is used to blow the metal, furnace output rises by 15%. As a result of the accelerated burning out of the impurities, the temperature of the metal (Me) is 50-70°C higher in heats with oxygen blow than in heats when the  $O_2$  is delivered into the burner jet. The

Card 1.2

SOV 147 58 1 107

Intensifying Open-hearth Conversion of High phosphorus Pig Iron

formation of reactive basic slag is accelerated. When the  $O_2$  is delivered into the Me during the finishing period, reduction in the finishing and pure-bull periods is 38 minutes in the case of rail and 44 minutes in the case of rimmed St per 1000 m<sup>3</sup> of  $O_2$ . When the rate of delivery of  $O_2$  during the melting period is increased to 1200 m<sup>3</sup>/hr, an increase in the burning off of C and P occurs. When the hourly consumption of  $O_2$  is increased to above 1200 m<sup>3</sup>/hr, the rate of P removal diminishes. This is explained by the fact that the rates of formation of reactive slag and the rate of temperature increase differ. This does not occur during the finishing period when formed slag is already present. Further improvement of furnace output rate should be sought in the direction of increasing the consumption of  $O_2$  used in the blow, accompanied by changing those factors in the process that govern and speed slag formation.

Y. K.

Card 2 2

SOV/137-58-10-20550

Translation from Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 29 (USSR)

AUTHORS: ~~Oyko, G.N.~~ Kryakovskiy, Yu.V., Kapustin, Ye.A.,  
Grigor'yev, V.P.

TITLE: The Efficiency of Oxygen in Enriching the Blow in Conversion  
of High-phosphorus Pig Iron in Open Hearths (Effektivnost  
primeneniya kisloroda dlya obogashcheniya vozdukha pri pere-  
dele vysokofosforistogo chuguna v martenovskikh pechakh)

PERIODICAL: Sb. Mosk. in-t stali, 1957 Vol 37, pp 152-165

ABSTRACT: O<sub>2</sub> is delivered through water-cooled tuyeres and at an angle  
of 12-13° into the flame jet of the 350 t furnaces at the Azovstal  
Plant. Analysis of data as to the efficiency of the effect of en-  
riched air at various thermal loads shows that enrichment of  
the air up to 27% during charging and melting down and up to  
25% during hot-metal addition and melting makes it possible to  
shorten the melt by 44 min. An increase in the heat input (at  
identical degrees of enrichment of the air) to 32 mill kcal/hr  
reduces the melt by 1 hr. 20 min. Subsequent increase in the  
heat input reduces the time saving apparently due to overheat-  
ing of the charge. In determining the efficiency of O<sub>2</sub> it is

Card 1/2

SOV/137-58 10-20550

## The Efficiency of Oxygen in Enriching the Blow (cont.)

found that rates of delivery up to 500 m<sup>3</sup>/hr do not shorten the melt. An increase in O<sub>2</sub> consumption of up to 2500 m<sup>3</sup>/hr induces reduction in melt time. The consumption of fuel, in conventional units, is reduced, and the unit consumption of O<sub>2</sub> is increased. At another percentage of oxygen, the maximum efficiency is attained by the use of O<sub>2</sub> during the periods of charging, melting down, and hot-metal addition, when there is a considerable temperature drop between the loaded charge and the flame. In all variants, reduction in melt time is primarily in the melt-down and working periods, as the other periods undergo little change. It is emphasized that the maximum possible and the optimum values for enrichment of the air have not been found, and these are most important for the charging and melting-down periods. Delivery of O<sub>2</sub> into the flame speeds the heating and melting down of the charge and makes for more rapid processes of slag formation and dephosphorization.

Ye. T.

1. Iron--Production effects
2. Open hearth furnaces--Operation
3. Oxygen--Thermal effects

Card 2/2

SOV 137-58-8 16492

Translation from *Referativnyi zhurnal: Metallurgiya*, 1957, No. 8, p. 1111, 55p.

AUTHOR Ovks, G.N.

TITLE The Selection of Correct Technological Procedures for Open-hearth Processing of Cast Iron. (Abstract in English) (O vybere pravil'nykh tekhnologicheskikh protsessov pri razrabotke soderzhaniiya i struktury armirovskoy pechali)

PERIODICAL Sb. Mosk. inst. stali, 1957, Vol. 37, pp. 166-171

ABSTRACT The existing sequence and distribution of charge materials during the scrap-ore process does not create favorable conditions for early dephosphorization and slag formation. It is therefore advisable that a portion of fines,  $CaO$  and  $Fe_2O_3$  when the total content of the latter is increased, be placed on top of the scrap, and that  $CaO$  be blown through the hearth after the cast iron has been introduced into the furnace. The surface of the ore and metal cast iron will contribute to active oxidation of  $P$ . A blast of  $O_2$  will in addition speed up the processes of decomposition of ore and fluxes, and the reduction of  $P$  and  $C$ , and will also increase the rate of heating of the hearth. Experimental smelting curves are

Card 1 2

SOV 157-10-5-10472

The Selection of Correct Technological Procedures in  
this manner have demonstrated that a 0.2% P content can be achieved an  
hour earlier than in standard smelting processes, and that almost no sulfur  
needs be added during the period of fusion. The novel technology makes it  
also possible to remove a greater quantity of slag during the first half of the  
fusion period.

10.1

Card 2.2

SOV 137-58-8-16423

• Translation from Referativnyy zhurnal Metallurgiya 1958, Nr 8, p. 37 (USSR)

AUTHORS Aleksandrova, A. I., Ovsy, G. N., Babayev, N. P.

TITLE Manufacture of Steel From High P Cast Iron (Proizvodstvo stali iz vysokofosforistogo chuguna)

PERIODICAL Sb. Mosk. inst. stali 1957, Vol. 37, pp. 23-34

ABSTRACT An analysis of 120 experimental smeltings performed in metallurgical furnaces employing air with 25-30% of O<sub>2</sub>. By employing O<sub>2</sub> the duration of the smelting process is reduced by 8% in the case of silica-brick furnace crowns (SC) and by 33% in the case of furnaces with basic crowns (BC); this reduction in time is accomplished primarily through a fore-shortening of the melting and finishing stages. As the content of O<sub>2</sub> is increased from 25 to 30% the duration of the smelting process diminishes continuously by 6.5-10.7% (in case of SC) and 14-36% (in the case of BC). Introduction of O<sub>2</sub> into the flame, increasing the amount of ore in the upper layers of friable ingredients, smelting procedures which allow slag to remain on the bottom of the hearth - all these measures speed up the processes of slag formation, dephosphorization, and

Card 1 2



SOV. 137-58-8-16493

Manufacture of Steel From High-P Cast Iron

saturation of slag with  $P_2O_5$ . Compared with smelting operations performed without oxygen in furnaces with SC's, the introduction of  $O_2$  into the flame reduced the fuel consumption in furnaces with BC's by 15-18%. Annual output of furnaces employing  $O_2$  increased by 5% in the case of SC furnaces and by 30.8% in the case of BC furnaces in comparison with BC furnaces employing no oxygen. The production cost of steel smelted in BC furnaces employing  $O_2$  is less by 3 rubles than the cost of regular steel. Employment of phosphate slags will reduce the production costs by 17 t rubles. Additional capital expenditures connected with the employment of  $O_2$  can be recovered within approximately four years.

Y. 1

1. Steel--iron alloy. 2. Furnace--iron. 3. Blast furnace. 4. Oxidation.

Card 2/2

OYKS, Grigoriy Naumovich, doktor tekhn.nauk; POLYAK, I.B., red.; SUKHAREVA,  
E.A., tekhn.red.

[Using oxygen in open-hearth steelmaking] Primenenie kisloroda  
v martenovskom proizvodstve stali. Moskva, 1958. 67 p. (Steno-  
gramma lektzii. Seriya "Metallurgiya," nos.5/6) (MIRA 12:4)  
(Open-hearth process) (Oxygen--Industrial applications)

LAPITSKIY, V.I., doktor tekhn. nauk, prof.; MARINOV, A.I., inzh.; OYKS, G.N.,  
doktor tekhn. nauk, prof.; OLEKSEENKO, V.V., inzh.; ORLOV, V.I.,  
kand. tekhn. nauk; MUDICHEV, K.P., inzh.; STUPAR', N.I., kand.  
tekhn. nauk, dots.

Reducing the inhomogeneity of large rimming steel ingots (up to  
18 t.). Izv. vys. ucheb. zav.; Chern. met. no.2:19-33 P '58.  
(MIRA 11:5)

1. Dnepropetrovskiy metallurgicheskiy institut, Moskovskiy institut  
stali i zavod "Zaporozhstal'."  
(Steel ingots)

AUTHORS: Sobolev, S. K., Oyko, G. N. SOV. METAL. 1969, 10, 11

TITLE: Desulfurization of Cast Iron by Means of Lime (Desulfurization of Cast Iron by Means of Lime) (Desulfurization of Cast Iron by Means of Lime)

PERIODICAL: Naukovo-dokladnyy zhurnal. Metallurgiya, 1969, No. 11, pp. 10-11 (USSR)

ABSTRACT: Experiments for the desulfurization of cast iron by means of lime are described. Lime was blown in by means of a nitrogen current as a carrier; the factors causing the optimum conditions of this process are discussed. Cast irons of different chemical composition were investigated. Finely ground lime was used as desulfurization agent. The best results were achieved with lime of a granular size of 0,16 mm. The method of blowing of polyvalent lime and aluminum with nitrogen is described. Cast iron is well suited for desulfurization. At a lime content of 1,5-3% and an aluminum content of 0,12% in the cast iron the consumption of nitrogen is 1 liter per 1 kg of cast iron. The desulfurization amounts to 70-90%. When the aluminum content in the cast iron mixture is increased the desulfurization amount increases, too. An increase of the intensity of blowing of lime (more than 1,2 l/min. per 1 kg cast iron) does not affect the desulfurization amount.

Card 1/2