"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, A.V.

Siberian pine forests in the southwestern part of the Buryat A.S.S.R. and their regeneration. Trudy BKNII no.4:130-140 '60. (MIRA 15:3)

(Buryat-Mongolia—Pine)

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SMIRNOV, A.V.

Mountain Siberian pine forests in the southern Lake Baikal region. Trudy Tom. obl. kraeved. muz. 6 no.1:41-54 '62. (MIRA 17:11)

1. Vostochno-Sibirskiy filial AN SSSR.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, Aleksey Vladimirovich, kand. tekhn.nauk; KRAVTSOV, G.Ya., red.; SAPOZHNIKOVA, I.V., red.

[Lake sapropels, their extraction and use in agriculture] Ozernye sapropeli, ikh dobycha i ispol'zovanie v sel'skom khoziaistve. Moskva, Kolos, 1965. 157 p. (MIRA 18:7)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

KR ULIN, A.V.; SMIRNOV, A.V., prof., doktor tekhn. nauk, retsenzent

[Sulfocyaniding of steel and cast iron] Sul'fotsianirovanie stali i chuguna. Moskva, Mashinostroenie, 1965. 222 p. (MIRA 18:4)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

Smirnov, A. Ya.

USSR/ Electronics - Lighhnig arresters

Card 1/1 Pub. 133 - 5/19

Authors : Smirnov, A. Ya., and Rosenberg, Ya. G., Engineers

Title : Protecting subscribers of retransmitting radio stations from static overvoltages

Periodical : Vest. svyazi 4 (181), 9-11, Apr 1955

Abstract : Problems on the group protection of subscribers of retransmitting stations are considered. The problems deal with the static over-voltaging of receiving sets.

Institution : .....

Submitted : .....

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, N. Ya.

Bc

B-II-3

Preparation of emulsions for reversal. K. S. LIALIKOV and A. J. SMIRNOV (Photo-Kino Chem. Ind., 1934, No. 2, 22—30).—Ordinary highly-sensitive emulsions are unsuitable for reversal, since they give too high a fog in the positive. Dilution of the emulsion before coating improves the reversal image. Dilution with gelatin has the same effect as dilution with H_2O. Increase in [Br] and [Ag] or addition of KI to the finished emulsion increases the positive fog. The second ripening of the emulsion, after washing, has no effect on the reversal characteristic. Formulæ for manufacturing emulsions of the NH_3 type are given. CH. ABS. (e)

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, A. YA.; GOROKHOVSKIY, YU. N.; FEDOTOVA, V. I.

Scientific Photography Laboratory, Leningrad State Optical Institute, (-1939-).

"Research on the Optical Sensitization of Photographic Emulsions"; Part II. "The Spectrum Properties of the Emulsion, Composed of Various Silver Halides."

Zhur. Fiz. Khim., Vol. 14, No. 2, 1940.

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PHASE I BOOK EXPLOITATION SOV/4315
SOV/7-S-9

Akademiya nauk SSSR. Laboratoriya aerometodov

Trudy, tom 9 (Transactions of the Laboratory of Aerial Methods, USSR Academy of Sciences, vol. 9) Moscow, AN SSSR, 1960. 357 p. Errata slip inserted. 1,700 copies printed.

Resp. Ed.: V.V. Sharkov, Candidate of Geography; Ed. of Publishing House: D.M. Kudritskiy; Tech. Ed.: M.Ye. Zendel'.

PURPOSE: This volume is intended for geographers, geologists, geodesists, and photogrammetrists.

COVERAGE: This collection of 23 articles contains studies of the earth's surface, structure, and geological formations by means of aerial photography. The authors discuss the principles, methods and techniques used in aerial surveying to determine such factors as the petrographic composition of the soil through the measurement of the spectral brightness of surfaces, the geological structure of underwater areas through recorded photographic images, the geological composition and geomorphological structure of underlying layers through the analysis of surface plant coverings, the trends and characteristics of recent tectonic movements through the study of surface features traced photographically

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Smirnov, A.Ya.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, A.Ya.

Studying the SP-2 spectrozonal film in making aerial photographs of nature subjects. Zhur. nauch. i prikl. fot. i kin. 6 no. 3:193-202 My '61. (MIRA 14:5)

1. Laboratoriya aerometodov AN SSSR.
(Photography, Aerial--Apparatus and supplies)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, A.Ya.

Use of black-and-white development for precessing color photographic materials. Zhur.nauch.i prikl.fot. i kin. 6 no.4:259-263 Jl-Ag '61. (MIRA 14:11)

1. Laboratoriya aerometodov.AN SSSR.
(Color photography--Developing and developers)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

S/184/63/000/002/005/007
A059/A126

AUTHORS: Radzivonchik, V.F., Candidate of Technical Sciences, Borisovich, V.K., Smirnov, A.Ya., - Engineers

TITLE: Utilization of the explosion energy in the stamping of heat-exchanger plates

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 2, 1963, 34 - 36

TEXT: The Khar'kovskiy aviatsionny institut (Khar'kov Aeronautical Institute) has examined together with the UKRNIIKhIMMASh the ways of obtaining heat-exchanger plates with the aid of the energy set free in the explosion of high explosives. Usually, a reservoir with 300 mm concrete walls declined at an angle of 45° to the horizontal plane is used, with oak plates 40 mm thick as lining. The stamp placed into the reservoir is filled with the stock, and the blasting charge of the high explosive is suspended. The reservoir has been filled with water. Thus, the matrix is the only component of the stamp, while the piston is replaced by water. The stamp shown in Figure 1 was developed to obtain heat-exchanger plates, 1,400 x 500 mm, made of the steel X 18 H9 T

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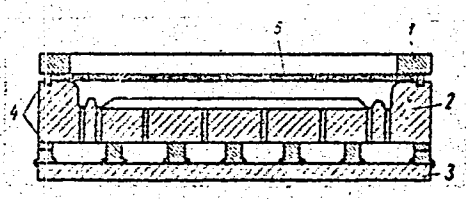
(Kh18N9T) and 1.2 mm thick, by way of explosion forming. The clamping ring made of the steel Ст.3 (St.3), 25 mm thick, serves to prevent water from getting on the working surface of the matrix. The matrix is made of cast iron СЧ 18-36 (SCh 18-36) and 60 mm thick. The bottom plate is a 20-mm steel plate with steel ribs 30 mm in width, welded to the perimeter and to the central part of the plate. Between the bottom plate and the matrix rubber gaskets are provided. Flanges should be replaced by longitudinal channeling in the matrix which would result in an increased strength of the plate and improved conditions of heat-exchanger assembling without impairing the stamping conditions. A flat shock-wave front can be obtained when a blasting charge consisting of three constituents is used, each with a different detonation velocity. Rejects in stamping heat-exchanger plates by the explosion technique are six times those with conventional pressures in stamping tools. There are 3 figures.

Figure 1: Stamp for the production of plates: 1 - clamping ring; 2 - matrix; 3 - bottom plate; 4 - gaskets; 5 - stock.



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ACC NR: AP6027898 SOURCE CODE: UR/0368/66/005/001/0045/0050

55
54
B

AUTHOR: Dubovik, M. V.; Smirnov, A. Ya.; Borisevich, N. A.

ORG: none

TITLE: Three-pulse generation of a helium-neon laser 25

SOURCE: Zhurnal prikladnoy spektroskopii, v. 5, no. 1, 1966, 45-50

TOPIC TAGS: gaseous STATE laser, helium neon laser, LASER PULSATION, HELIUM, NEON

ABSTRACT: Three generation pulses were obtained in an He-Ne mixture during one excitation pulse. An investigation is made of the dependence of the parameters of these pulses on the amplitude and duration of the excitation pulse and the partial and total pressure of the mixture. The relationship between generation pulses, the structure of the laser beam spot, and the distribution of the discharge brightness along the diameter of the tube is established. The three-pulse generation is studied from the viewpoint of the inverse population mechanisms of the working 2s-2p levels. The authors observed, during a single excitation pulse, three generation pulses appearing correspondingly during the excitation pulse (the first generation pulse), immediately after it (the second), and far into the afterglow (the third) at 11523 Å.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

Shimov, A. Ie.

1269. Usileniye obnishchaniya rabochego klassa fmanirsii posle vroroy-mirouoy voyni (1948-1954gg.) M., 1954. 16s. 21sm. (Mosk. gos. ped. in-r V. I. Lenina). 140ekz. B. ts.--[54-53767].

SO: Knizhnaya Letopis, Vol. 1, 1955.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, A.Ye.

Eccentric clamp for fastening wooden parts. Rats.i izobr. predl.v stroi. no.50:18-19 '53. (MLRA 7:2)
(Woodworking machinery)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B., Geroy Sovetskogo Soyuza

I had friend.... Kryl. rod. 16 no.7:6-7 Jl '65. (MIRA 18:8)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B., kand.tekhn.nauk

Rational consumption norms. Sov. torg. 35 no.11:13-16 N '61.
(MIRA 14:10)

1. Direktor Nauchno-issledovatel'skogo instituta torgovli i obshchestvennogo pitaniya.
(Clothing industry)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.

Reconditioning torque rod bushings on the ZIS-151 automobile. Avt. transp.33 no.7:35 Jl'55. (MIRA 8:12)
(Motor trucks--Transmission devices)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B., inzh.

New standard specifications for cast iron manhole covers for inspection shafts. Zhil.-kom. khoz. 11 no.12:24-25 D '61. (MIRA 16:11)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

ONISHCHIK, L.I., doktor tekhn.nauk, prof.; YELKIN, A.V., dotsent; SMIRNOV, B.A., kand.tekhn.nauk; MANDRIKOV, A.P., kand.tekhn. nauk; SHLEINA, L.A., kand.tekhn.nauk; SUDARIKOV, A.A., inzh.

Increasing technical and economic effectiveness of basic designs of standard apartment houses. Trudy MIEI no.14:41-101 '59. (MIRA 13:1)

1. Moskovskiy inzhenerno-ekonomicheskiy institut. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Onishchik).
(Apartment houses) (Architecture--Designs and plans)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A., kand.tekhn.nauk, dotsent

Raising the level of prefabrication in construction by using three-dimensional assembled elements. Trudy MIEI no.15:80-96 '61. (MIRA 14:12)

1. Moskovskiy inzhenerno-ekonomicheskiy institut.
(Buildings, Prefabricated)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Industrial layout for a cord pulp factory. Bum.prom. 35
no.1:4-8 Ja '60. (MIRA 13:6)

1. Glavnyy inzhener Irkutskogo Giprobuma.
(Woodpulp)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Designing woodpulp and paper industry enterprises for Siberia and the Far East. Bum. prom. 36 no.7:3-4 Jl '61. (MIRA 14:9)

1. Glavnyy inzhener Gosudarstvennogo instituta po proyektirovaniyu predpriyatiy tsellyulozno-bumazhnoy promyshlennosti Sibiri i Dal'nego Vostoka.
(Paper industry) (Woodpulp industry)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

GESELEVICH, A.M. (Moskva, Leninskiy prospekt, 13, kv.65); GORKIN, N.S., inzh.; SMIRNOV, B.A., inzh.

Apparatus for mechanical suturing of patent ductus arteriosus and its experimental use. Grud.khir. 1 no.1:114-118 Ja-F '59. (MIRA 13:6)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov Ministerstva zdravookhraneniya SSSR (dir. M.G. Anan'yev).
(SURGICAL INSTRUMENTS AND APPARATUS) (DUCTUS ARTERIOSUS)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

GESELEVICH, A.M. (Moskva, Leninskiy prosp., d.13, kv.65); GORKIN, N.S.; SMIRNOV, B.A.

Alloplastic prostheses for replacing the semilunar aortic valves. Grud. khir. 1 no.4:96-104 Jl-Ag '59. (MIRA 15:3)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. M.G. Anan'yev).
(AORTA—SURGERY)
(PROSTHESIS)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

PREOBRAZHENSKIY, B.S., prof.; POTAPOV, I.I., prof.; BELKIN, V.R., mladshiy nauchnyy sotrudnik; GORKIN, N.S., inzh.; SMIRNOV, B.A., inzh.

Instruments for manipulations within the esophagus. Vest.otorin. no.4:92-95 '62. (MIRA 16:3)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov Ministerstva zdravookhraneniya SSSR (dir. M.G. Anan'yev), kafedry otorinolaringologii (zav. - deystvitel'nyy chlen AMN SSSR zasluzhennyy deyatel' nauki prof. B.S. Preobrazhenskiy) lechebnogo fakul'teta II Moskovskogo meditsinskogo instituta imeni N.I. Pirogova i otorinolaringologicheskoy kafedry (zav. - prof. I.I. Potapov) TSentral'nogo instituta usovershenstvovaniya vrachey.
(ESOPHAGUS—EXPLORATION)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

NALETOV, N.A., professor; TETERNIK, D.M., professor; RIKARDO, D.I., dotsent; SMIRNOV, B.A., dotsent.

"Laboratory examination methods in veterinary science". Veterinariia 32 no.3:85-90 Mr '55. (MIRA 8:4)
(VETERINARY LABORATORIES)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A., starshiy nauchnyy sotrudnik

Importance of ants in forest protection. Zashch. rast. ot vred. i bol. 7 no.9:29 S '62. (MIRA 16:8)

1. Voronezhskiy zapovednik.
(Forest insects—Biological control)
(Ants)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

KATSENBOGEN, Mikhail Solomonovich; ZUBKOV, V.D., retsenzent; SMIRNOV, B.A., retsenzent; ALEKSANDROVA, A.A., red.

[Characteristics of radar detection] Kharakteristiki obnaruzheniia. Moskva, Sovetskoe radio, 1965. 95 p. (MIRA 18:4)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A. [Smyrnov, B.A.]

Changes in the reaction of salivary glands to pilocarpine due to adrenaline administration and changes in the state of the animal. Fiziol. zhur. [Ukr.] 7 no.5:592-594 S-O '61. (MIRA 14:9)

1. Kafedra normal'noy fiziologii Dnepropetrovskogo meditsinskogo instituta.
(PAROTID GLANDS) (PILOCARPINE) (ADRENALINE)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Effect of emotional conditions on secretory reactions of the salivary glands to pilocarpine. Fiziol. zhur. 47 no.4:475-478 Ap '61. (MIRA 14:6)

1. From the Normal Physiology Chair, Medical Institute, Dnepropetrovsk.
(PILOCARPINE) (SALIVARY GLANDS) (EMOTIONS)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Influence of prolonged repeated use of glucose on the mechanism of regulation of the blood sugar level. Fiziol. zhur. 47 no.9:1114-1118 S '61. (MIRA 14:9)

1. From the Department of Physiology, Medical Institute, Dnepropetrovsk.
(BLOOD SUGAR) (GLUCOSE)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Effect of adrenaline on pilocarpine and reflex secretion of the salivary glands. Fiziol. zhur. 47 no.11:1385-1390 N '61. (MIRA 14:11)

1. From the Department of Physiology, Medical Institute, Dniepropetrovsk.

(ADRENALINE--PHYSIOLOGICAL EFFECT) (SALIVARY GLANDS) (PILOCARPINE)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

GESELEVICH, A. M. (Moskva, V-71, Leninskiy prosp., d. 13, kv. 65);
GORKIN, N. S.; SMIRNOV, B. A.

Introduction of the mechanical suture in operations on the large blood vessels. Grud. khir. no.2:93-94 '62. (MIRA 15:4)

1. Iz Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. - M. G. Anan'yev) Ministerstva zdravookhraneniya SSSR.

(BLOOD VESSELS—SURGERY) (SUTURES)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Effect of atropine on carbohydrate metabolism. Fiziol.zhur. [UK:] 9 no.3:[illegible]-385 Mpade '63. (MIRA 18:1)

1. Kafedra normal'noy fiziologii Dnepropetrovskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

[illegible]

[illegible] study of transformations in steel during welding. (MIRA 18:8)
[illegible] no.6:36-39 Je '65.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

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9

PROCESSES AND PROPERTIES INDEX

Study of the properties of the base and the deposited metals at low temperatures. B. A. Smirnov and A. S. Falkevich. *Avtogennoe Delo* (U.S.S.R.) No. 1, 3-12(1936).—The main purpose of the investigation was the study of the mech. properties of metals in order to find a steel which would not become brittle at low temps. The study showed that the hardness of welds increased with the decrease of temp. L. Jacovleff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

M

2

***Properties of Metals at Low Temperatures [Iron and Copper Alloys].** A. S. Fal'kevich and B. A. Smirnov (*Khimistroi*, 1935, 7, 436–442; *C. Abs.*, 1936, 30, 707).—[In Russian.] Different iron and copper alloys, with and without electrically welded seams, were treated with boiling liquid oxygen and at − 183° to 50° C. either once or repeatedly for various periods of time, and then subjected to physical and mechanical tests. The results are given in curves and tables, and discussed.—S. G.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

Mechanical Properties of Special Steels and Non-Ferrous Metals at Low Temperatures. B. Smirnov and V. Chernjak (*Metallurg* (*Metallurgist*), 1936, (8), 88–103).—[In Russian.] Results of tests are given for brasses (I): copper 58·9, zinc 38·7, and lead 1·5%; (II): copper 57·14, zinc 40·75, lead 0·69, iron 0·90%, and traces of manganese, at room temperature and − 185° C.; and also for Duralumin (copper 4·35, magnesium 0·12, iron 0·84, manganese 0·64%) at room temperature, − 18° and − 183° C. The results are summarized below:

Material.	Temperature, ° C.	Tensile Strength, Kg./mm.².	Elongation, %.	Shrinkage, %.	Brinell Hardness.	% Resistance, Kg./cm.².
Brass I.	20	42·45	25·7	47·0	94	5·95
	− 183	58·0	36	32·35	124	5·32
Brass II.	+ 20	26·5	22·3	19·9	94	5·23
	− 183	50·8	26·9	19·2	113	5·18
Duralumin	+ 20	40·42	14·46	27·8	92	4·11
	− 18	43·5	17·5	20·8	104	4·56
	− 183	51·6	20·24	21·2	114	4·57

—N. A.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV B.A.

NGV THEORY OF DYNAMIC CREEP (K TEORII DINAMICHESKOI POLZUCHESTI). A. A. Predvoditelev and B. A. Smirnov. (Vestnik Moskovskogo U., Phys. Mat. Nat. Sci., No. 6, 1953.) U.S., NACA TM 1330, Sept., 1955. 12 pp. Translation. Analytical development based on the Becker after-effect calculations of the metallic creep deformation phenomena under dynamic loadings, taking into account theoretical instantaneous creep rate dependent on the magnitude of the instantaneous stress and on the rate of change of the stress, the effect of cyclic stresses on metallurgical changes in the acceleration of such factors as aging and recrystallization, and dynamic loads that facilitate or give rise to slip and other forms of lattice deformation.

(1)

Mat

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Category : USSR/Solid State Physics - Mechanical Properties of Crystals and Polycrystalline Compounds E-9

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3975

Author : Presvoditelev, A.A., Smirnov, B.A.

Title : Creep of Aluminum Under Dynamic Loads

Orig Pub : Vestn. Mosk. un-ta, 1956, No 3, 51-55

Abstract : Creep tests of aluminum subjected to additional impact-pulsating loads were carried out in the Scientific Research Institute for Physics of the Moscow State University equipment at medium stresses, 0.62, 0.76, 0.93 and 1.18 kg/mm^2. The impact-pulsating load, produced by an eccentric mechanism, was applied to the lower jaw, and the static load was applied to the upper one. The deformation was determined photographically using a system of mirrors. Earlier (Predvoditelev, A.A., Smirnov, B.A., Vestn. MGU, 1953, No 8) it was proposed that the creep depends on the speed of variation of the dynamic load at which the deformation of the metal becomes easier, owing to the intensification of the slippage processes at the grains of the metals. The curves obtained for the dynamic creep

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SOV/137-58-8-16697

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 66 (USSR)

AUTHORS: Smirnov, B.A., Plotvin, M.M.

TITLE: Cleaning Industrial Gases in Bag-type Filters at the Ust'-Kamenogorsk Lead-and-zinc Kombinat (Ochistka tekhnologicheskikh gazov v rukavnykh fil'trakh na Ust'-Kamenogorskom svintsovo-tsinkovom kombinate)

PERIODICAL: Sb. materialov po pyleulavlivaniyu v tsvetn. metallurgii. Moscow, Metallurgizdat, 1957, pp 273-280

ABSTRACT: The gases of sintering machines, shaft furnaces, converters, and slag-distilling furnaces of the lead plant at the Ust'-Kamenogorsk Lead-and-zinc Kombinat are cleansed of dust in 30 paired 10-compartment bag-type filters (BF), models RFG-2 and RFG-5. The entire system operates in vacuum. Data are adduced on the method of cooling the gases ahead of the SF. Structural shortcomings of the SF are noted. The life of the filter fabric is 7-8 months. Monitoring of the condition of the fabric in the SF is performed monthly by brass probes Data are presented on the dust contents of the gases at the BF inlets and outlets. The efficiency of the BF from

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Cleaning Industrial Gases in Bag-type Filters (cont.)

January to September 1955 was 91.0-95.6%. The exit dust content of the gases is monitored round the clock by semi-automatic Gintsvetmet units. The basic shortcomings of the gas-cleaning arrangement are presented: Capacity is inadequate for the given large RFG model BF, the number of electric motors and reduction gear assemblies is excessive, etc. Measures to improve the functioning of the BF are listed.

G.G.

1. Gases—Impurities 2. Gases—Cleaning
3. Particulate filters—Performance

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SOV/135-59-11-5/26

Peculiarities of Austenite Transformation During Fusion Welding

Graphs 3 and 4 discloses the process of austenitic transformation during the cooling. The speed of heating exerts a substantial influence on the processes of austenite homogenization. In steels with a small content of carbide-forming elements, a high temperature in the fusion zone furthers the growth of grains and increases the austenite stability. In steels with carbide-forming elements, a quick heating decreases the homogeneity and stability of austenite. Selection of cooling speed should be performed on the basis of the methods used by IMET-1 or MVTU which take into consideration the peculiarities of austenite transformation during fusion welding. There are 7 graphs, 6 tables and 6 references, 4 of which are Soviet, 1 English and 1 German.

ASSOCIATION: Institut metallurgii imeni A.A. Baykova AN SSSR (Institute of Metallurgy imeni A.A. Baykov, AS USSR)

Card 2/2

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

S/125/60/000/05/03/015

18.1200

AUTHOR: Shorshorov, M. Kh., and Smirnov, B. A.

TITLE: The Kinetics of Austenite-Grain Growth in Steel of Increased Strength in Arc Welding

PERIODICAL: Avtomaticheskaya svarka, 1960, No. 5, pp. 17-25

TEXT: The results of an investigation are given, in which the austenite-grain growth was observed in seven low-alloy steel grades of increased strength and of the pearlite class, in comparison with plain carbon steel "45". The chemical composition of six grades is given ("23G", "40Kh", "25N3", "20KhGS", "35KhGSA", "12KhN2"), the composition of the 7th, "18Kh2VF", is not (Table 1). "Bead specimens" formerly described (Ref. 1) and the IMET-1 method with uniformly and nonuniformly heated specimens were used. The article includes details of the experiment technique. The conclusions drawn are the following: 1) Both methods, "bead specimen" and "IMET-1" produced results differing only little; both methods proved that the grain growth in parent metal at the welds can be restrained by faster heating and shorter duration of austenization temperature, as well as by increased content of carbide-forming elements in steel. 2) Homogenization

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NAZAROV, Sergey Tikhonovich; SANCHUK, Ya.E., kand. tekhn. nauk, dots., retsenzent; SMIRNOV, B.A., inzh., dots., red.; SOBOLEVA, G.N., red. izd-va; GORDEYEVA, L.P., tekhn. red.

[Methods of welded-joint quality control] Metody kontrolia kachestva svarnykh soedinenii. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit.lit-ry, 1961. 128 p. (MIRA 14:6)
(Welding--Quality control)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SHORSHOROV, M. Kh., kand.tekhn.nauk; SMIRNOV, B.A., inzh.

Heterogeneity of austenite in the fusion welding of pearlitic steel. Svar. proizv. no.6:1-5 Je '61. (MIRA 14:6)

1. Institut metallurgii im. A. A. Baykova AN SSSR.
(Steel—Welding)
(Steel—Metallography)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

KUZNETSOV, S.I.; SEREBRENNIKOV, O.V.; DEREVYANKIN, V.A.; VOLKOVA, F.I.; PAVLOV, F.N.; YEVTYUTOV, A.A.; CHEMODANOV, V.S.; STOLYAR, B.A.; KONOVALOV, I.V.; LIVER, V.B.; MIYCHENKO, V.S.; SMIRNOV, B.A.

"Production of alumina" by A.I. Lainer. Reviewed by S.I. Kuznetsov and others. TSvet. met. 34 no.11:85-86 N '61. (MIRA 14:11)

1. Ural'skiy politekhnicheskiy institut (for Kuznetsov, Serebrennikov, Derevyankin). 2. Ural'skiy filial AN SSSR (for Volkova, Pavlov). 3. Ural'skiy alyuminiyevyy zavod (for Yevtyutov, Chemodanov, Stolyar). 4. Bogoslovskiy alyuminiyevyy zavod (for Konovalov, Liver, Miychenko). 5. Sverdlovskiy Sovnarkhoz (for Smirnov).

(Alumina)
(Lainer, A.I.)

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L 38555-66 EWT(m)/EWP(k)/T/EWP(w)/EWP(v)/EWP(t)/ETI IJP(c) JD/HM/GD

ACC NR: AT6012402 SOURCE CODE: UR/0000/65/000/000/0269/0277

54
53
B+1

AUTHORS: Shorshorov, M. Kh.; Smirnov, B. A.

ORG: none

TITLE: Phase transformations and welding characteristics of α and $(\alpha + \beta)$ titanium alloys

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 269-277

TOPIC TAGS: ALLOY PHASE DIAGRAM, WELDING TECHNOLOGY, titanium alloy, metal welding, metal property / OT4-1 titanium alloy, VT6S titanium alloy. VT14 titanium alloy, VT6 titanium alloy, VT15 titanium alloy

ABSTRACT: The authors' previous work (Kinetika fazovykh prevrashchenny i obrazovaniye kholodnykh treshchin pri svarke titana i yego splavov. Sb. Titan i yego splavy, vyp. VII, Izd-vo AN SSSR, 1962, str. 226) on the kinetics of phase transformations during welding of titanium alloys and the effects on the structure and mechanical properties of the metal near the welded seams was continued. Experiments were conducted at the Metal Welding Laboratory of the Metallurgy Institute imen. A. A. Baykov (Laboratoriya svarki metallov Instituta metallurgii) on alloys OT4-1, VT6S, VT6, VT14 and VT15. The collective results of the new as well as the previously published work are presented. A thorough discussion of the kinetics of phase transformations is presented, supported

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KLEMENTOV, V.I., kand. tekhn. nauk; SMIRNOV, B.A., kand. tekhn. nauk

Weldability of 15GL and 15GKhFL steel. Svar. proizv. no.3: 26-29 Mr '65. (MIRA 18:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta Ministerstva putey soobshcheniya (for Klementov).
2. Institut metallurgii im. A.A.Baykova (for Smirnov).

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

ACC NR: AT6012404 SOURCE CODE: UR/0000/65/000/000/0289/0294

AUTHORS: Shorshorov, M. Kh.; Kainova, G. Ye.; Smirnov, B. A.; Meshcheryakov, V. N.

ORG: none

TITLE: Rational regimes of mechanical-thermal treatment of titanium alloy VT15 and its welded joints

SOURCE: Soveshchaniye po metallokhimii, metallovedeniyu i primeneniyu titana i yego splavov, 6th. Novyye issledovaniya titanovykh splavov (New research on titanium alloys); trudy soveshchaniya. Moscow, Izd-vo Nauka, 1965, 289-294

TOPIC TAGS: MECHANICAL PROPERTY, titanium alloy, metal property, metal welding, weld heat treatment/ VT15 titanium alloy

ABSTRACT: The effects of quenching temperature and subsequent mechanical-thermal treatment regimes on the structure and mechanical properties of titanium alloy VT15 and its welded joints were experimentally investigated on 2-mm thick specimens at the Metallurgy Institute im. A. A. Baykov (Institut metallurgii). After argon-arc welding (single pass), the specimens were quenched from 800, 1000, and 1200C in water, followed by aging (480C for 18 hrs, 560C for 15 min). Dilatometric and microstructural observations of the kinetics of phase transitions were made, and some results are presented and discussed. Based on these observations, several rational methods for increasing the strength and plastic properties of welded seams were attempted with the following

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B. A.

Defended his Candidates dissertation in the Physics Faculty of Moscow State University on 2 June 1952.

Dissertation: "Amplification of Sound in Binary Mixtures, Having Critical Temperature of Diffusion."

SO: Vestnik Moskovskogo Universiteta, Seriya Fiziko-Matematicheskikh i Yestestvennykh Nauk, No. 1, Moscow, Feb 1953, pp 151-157: transl. in W-29782, 12 April 54, [redacted]

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B. A.

USSR/Chemistry - Physics

Card 1/1

Authors : Smirnov, B. A., and Predvoditelev, A. A.

Title : Measurement of the speed of sound in a binary CH_3OH - C_6H_{14} system having a critical solubility temperature

Periodical : Zhur. Fiz. Khim., 28, Ed. 5, 906 - 913, May 1954

Abstract : The speed of sound measured in the upper and lower phases of a binary CH_3OH - C_6H_{14} system was found to be of the same nature as in a liquid-vapor system with the exception that the heavier phase in the binary system plays the role of the vapor and the much lighter phase assumes the role of the liquid. The basic features of the installation especially constructed for measuring the speed of sound in binary mixtures are described. Five references: 4-USSR and 1-USA. Graphs, drawings.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : Oct. 8, 1953

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

Smirnov, B. A.

USSR/Chemistry - Physical chemistry

Card 1/1 Pub. 147 - 8/27

Authors : Smirnov, B. A.; and Predvoditelev, A. A.

Title : Density and compressibility of a binary CH_3OH - C_6H_{14} mixture having the maximum critical solubility point and a comparison with values of these parameters in the critical zone of a liquid-vapor system.

Periodical : Zhur. fiz. khim. 28/9, 1581-1590, Sep 1954

Abstract : The change in density of a binary CH_3OH - C_6H_{14} mixture with a maxium critical blending temperature of 18 - 46°, including the critical zone, was investigated in relation to the concentration. The compressibility of the system was determined by measuring the speed of sound in the mixture. The problem regarding the analogy between the critical state of a liquid-vapor system and a binary mixture with max. critical blending temperature was discussed. The role of the thermodynamic and fluctuation factors in the critical zone of both systems is explained. Seven references: 6-USSR and 1-Canadian (1947-1954). Graphs; drawing.

Institution : The M. V. Lomonosov State University, Moscow

Submitted : December 7, 1953

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

EPSHTEYN, V.G.; SHIRNOV, B.A.

Synthetic alkylphenolaldehyde resins as accelerators for rubber. Uch.zap. Iarosl.tekhnol.inst. 2:209-210 '57. (MIRA 12:7)
(Vulcanization) (Resins, Synthetic)

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SMIRNOV B.A.

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PHASE I BOOK EXPLOITATION SOV/5469

Soveshchaniye po kriticheskim yavleniam i flyuktuatsiyam v rastvorakh. Moscow, 1960.

Kriticheskiye yavleniya i flyuktuatsii v rastvorakh; trudy soveshchaniya, yanvar' 1960 g. (Critical Phenomena and Fluctuations in Solutions; Transactions of the Conference, January 1960) Moscow, Izd-vo AN SSSR, 1960. 190 p. 2,500 copies printed.

Sponsoring Agencies: Akademiya nauk SSSR. Otdeleniye khimicheskikh nauk. Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova. Khimicheskiy fakul'tet.

Responsible Ed.: M. I. Shakhparonov, Doctor of Chemical Sciences, Professor; Ed. of Publishing House: E. S. Dragunov; Tech. Ed.: S. G. Tikhomirova.

PURPOSE : This collection of articles is intended for scientific personnel concerned with chemistry, physics, and heat power engineering.

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Critical Phenomena and Fluctuations SOV/5469

COVERAGE: The book contains 24 of the 26 reports read at the Conference on Critical Phenomena and Fluctuations in Solutions organized by the Chemical Division of Moscow State University, January 26-28, 1960. The reports contain results of investigations carried out in recent years by Soviet physicists, chemists, and heat power engineers. The Organizing Committee of the Conference was composed of Professor Kh. I. Amirkhanov, A. Z. Golik, I. R. Krichevskiy (Chairman), V. K. Semenchenko, A. V. Storonkin, I. Z. Fisher, and M. I. Shakhparonov (Deputy Chairman). References accompany individual articles.

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SOV/5469

Critical Phenomena and Fluctuations --

Roshchina, G. P. [Laboratoriya molekulyarnoy fiziki, Fizicheskiy fakul'tet, Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko -- Laboratory of Molecular Physics, Division of Physics, Kiyev State University imeni T. G. Shevchenko] Investigation of Fluctuations in Solutions by the Method of Light Scattering 109

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Shimanskaya, Ye. T., and A. Z. Golik [Laboratory of Molecular Physics, Physics Division, Kiyev State University imeni T. G. Shevchenko]. Investigation of the Critical State, Liquid-Vapor, of Solutions by Tepler's Method 161

Card 8/9

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

Critical Phenomena and Fluctuations SOV/5469

Shimanskaya, Ye. T., Yu. I. Shimanskiy, and A. Z. Golik [Laboratory of Molecular Physics, Division of Physics, Kiyev State University imeni T. G. Shevchenko]. Investigation of the Critical State of Pure Substances by Topler's Method 171

Resolution of the Conference on Critical Phenomena and Fluctuations in Solutions 189

AVAILABLE: Library of Congress (QD545.S73)

JP/dfk/jw
10-28-61

Card 9/9

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

S/020/60/131/06/42/071
B004/B007

AUTHORS: Kolbanovskiy, Yu. A., Smirnov, B. A.

TITLE: Calculation of the Yields of the Radiolysis Products of Alkanes

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1380 - 1382

TEXT: The aim of the present paper is the setting up of equations for the determination of the yield of the various fractions formed in the radiolysis of alkanes. Equations (1) - (5) are written down, which represent the concentration of the individual fractions (hydrogen, mono-olefines, alkanes with a smaller and a greater molecular weight than the initial substance). A special investigation in the linear and nonlinear part of the radiolysis leads to equations (6) and (7). That range is defined as linear, in which no products of secondary reactions as yet occur. As an example, the fractions of n-heptane are calculated. In the linear range the following is assumed for 100 ev of absorbed energy: $G(H_2) = 4.9$, G (saturated decay products) $\approx$ G (unsaturated decay products) = 0.7, G (mono-olefines with $C_{x \geq n}$) = 2. (n = number of carbon atoms in the initial product). For 1 ml of n-heptane and a dose of 10^{19} ev/ml the result of the calculation for

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

Calculation of the Yields of the Radiolysis Products of Alkanes S/020/60/131/06/42/071 B004/B007

the linear and the nonlinear range is given in table 1. The data for calculating the decay products in the nonlinear range were obtained from table 2. The authors thank G. D. Gal'pern for their advice. There are 2 tables and 2 Soviet references.

ASSOCIATION: Institut neftekhimicheskogo sinteza Akademii nauk SSSR (Institute of Petroleum-chemical Synthesis of the Academy of Sciences, USSR)

PRESENTED: November 6, 1959, by A. V. Topchiyev, Academician

SUBMITTED: November 6, 1959

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

S/204/61/001/004/001/005
E025/E185

AUTHOR: Smirnov, B.A.

TITLE: On some algebraic relations in chemistry. A system of equilibrium equations for hydrocarbon mixtures and its consequences

PERIODICAL: Neftekhimiya, v.1, no.4, 1961, 449-458

TEXT: Cases of chemical transformation of closed hydrocarbon mixtures are analysed and equations derived expressing the conservation of valency. This is applied to the determination of the number of unsaturated bonds in a mixture and to the calculation of the number of molecules in a given empirical group of compounds. The equations are applied to a number of particular problems, conditions for the presence of paraffins in a mixture are derived and limits obtained for the concentration of paraffins of various types. The transformation of a particular hydrocarbon of the paraffin series is studied and it is pointed out that the number of saturated molecules can be determined if the unsaturated components of the mixture are known. An application of the

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

sensitivity still further. The method also applies to the description of hydrocarbons in terms of the numbers of C-C, C=C and C≡C bonds in the molecule, and it is shown that all the fundamental classes: paraffins, cyclopropanes, olefines, etc. and also the separate branches within the classes: α-olefines and olefines with internal C=C bonds, are thereby distinguished. Another method of classifying hydrocarbons by their group properties is described, the corresponding equilibrium equations given and deductions made from them. In this case the method has unsatisfactory features as it fails to distinguish between structural groups connected by single or multiple bonds. The generalisation of the results to mixtures consisting of any molecules of arbitrary composition is briefly sketched. Acknowledgments are expressed to G.D. Gal'pern for advice and interest in the work.
There is 1 Soviet-bloc reference.

ASSOCIATION: Institut neftekhimicheskogo sinteza AN SSSR (Institute of Petrochemical Synthesis, AS USSR)

SUBMITTED: November 4, 1960

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A. (Moscow)

Effect of experimental conditions on the transition of a binary layering mixture through the critical region. Zhur.fiz.khim. 35 no.10:2249-2255 O '61. (MIRA 14:11)

1. Akademiya nauk SSSR, Institut neftekhimicheskogo sinteza. (Systems (Chemistry))

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A. (Moscow)

Nature of the transition of a binary demixing system through the critical region. Zhur.fiz.khim. 35 no.11:2429-2436 N '61. (MIRA 14:12)

1. Akademiya nauk SSSR, Institut neftekhimicheskogo sinteza. (Phase rule and equilibrium)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B. A.

Khudozhestvennoye steklo i yego primeneniye v arkhitekture (Ornamental glass and its use in architecture, by) E. A. Levinson, B. A. Smirnov (et al) Leningrad, Gos. Izd-vo Lit. po Stroitel'stvu i arkhitekture, 1953.
166 p. illus., tables.
Bibliographical footnotes.

SO: N/5
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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

USSR/Miscellaneous

Card 1/1 : Pub. 104 - 5/14

Authors : Smirnov, B. A.

Title : Artistic possibilities of glass

Periodical : Stek. i ker. 10, 9-10, Oct 1954

Abstract : Brief discussion on the artistic possibilities of glass - glitter, transparency, light reflection and refraction, etc. is presented.

Institution : ...

Submitted : ...

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B. A.

"Use of Foam Glass in Exterior Walls of Manystoried Frame Buildings." Academy of Architecture USSR, Sci. Res. Inst. of Construction Techniques, Moscow, 1955. (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No. 22, 1955, pp 93-105

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SHIRNOV, B.A.

Uniform thickness cell for infrared spectrum analysis. Zav. lab. 23 no.5:633-634 '57. (MLRA 10:8)

1. Institut nefti Akademii nauk SSSR.
(Spectrum, Infrared)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Applying the method of infrared spectroscopy to the study of the hydrocarbon composition of crude petroleum and petroleum products. Itogi nauki: Khim.nauki no.2:414-449 '58. (MIRA 12:4)

(Petroleum products--Analysis)
(Spectrum analysis)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

S/051/60/008/04/030/032
E201/E691

AUTHOR: Smirnov, B.A.

TITLE: On the Method of Structure-Group Analysis Using Infrared Spectra. Determination of Mono-Olefin Structures of the Products of γ-Radiolysis of n-Heptane

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 4, pp 579-580 (USSR)

ABSTRACT: The author reports a quantitative determination of the mono-olefin types in the products of γ-radiolysis of n-heptane, supplied by Yu. A. Kolbanovskiy (Ref 1). A double-beam spectrophotometer IKS-14 with an NaCl prism was used in the region 9-16 μ. Characteristic frequencies of the mono-olefin structures taken from published work (Ref 2) are listed in a table on p 580. In a sample of n-heptane which received a dose of 1.8×10^{22} eV/millilitre the following four types of unsaturated structures were found: trans-olefins, α-olefins, vinylidene structure and RCH=CR'R"; the quantities of these components

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

S/051/60/008/04/030/032
E201/E691

On the Method of Structure-Group Analysis Using Infrared Spectra. Determination of Mono-Olefin Structures of the Products of γ-Radiolysis of n-Heptane

were in the ratio of 9:3:2:1 and the total content of unsaturated compounds was $63.3 \pm 3.5 \times 10^{-5}$ mole/millilitre or 8.9 ± 0.5 molar % based on C_7. Acknowledgment is made to Yu.A. Kolbanovskiy for help in this work. There are 1 table and 2 references, 1 of which is English and 1 French.

SUBMITTED: November 9, 1959

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.A.

Recording the intensity of scattered light in a spectrophotometer (Operating experience with the IKS-14). Zav.lab. 27 no.7:827-830 '61. (MIRA 14:7)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Spectrophotometer)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

LUKOMSKIY, G.I., dotsent; BELKIN, V.R.; SMIRNOV, B.A.

Technique of bronchoscopic biopsy. Khirurgiia no.10:122-126 '64. (MIRA 18:8)

1. Kafedra fakul'tetskoy khirurgii sanitarno-gigiyenicheskogo fakul'teta (zav. - zasluzhennyy deyatel' nauki prof. I.S.Zhorov) I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova i Nauchno-issledovatel'skiy institut eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. M.G.Anan'yev).

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

KHITRIN, L. N.; MOIN, F. B.; SMIRNOV, B. B.; SHEVCHUK, V. U.

"Peculiarities of laminar and turbulent flame-backs."

report submitted to 10th Intl Symp on Combustion, Cambridge, UK, 17-21 Aug 64.

Inst Chemical Physics, AS USSR, Moscow.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B. G.

"Status of the blood in horses stricken with infectious anemia", (CVS, Department of Pathology anf Therapy of Internal Noncommunicable Diseases of Agricultural Animals). Collested Works No. 14, of leningrad Veterinary Institute USSR Ministry of Agriculture, p 25, Sel'khozgiz, 1954.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

USSR/Physics - Work Function, Electron Emission Jun 52

"The Work Function of Electrons on Certain Faces of a Tungsten Monocrystal," B. G. Smirnov, G. N. Shuppe, Phys-Tech Inst, Acad Sci Uzbek SSR

"Zhur Tekh Fiz" Vol XXII, No 6, pp 973-980

The work functions of electrons on the various faces of a single W crystal, fused into a spherical shape with a diam of the order of a few microns, were measured by means of self-emitted electrons. Ratio of max to min work function was found to be around 1.3; the values of work functions of faces

219T87

were found within limits of 4.2 - 5.5 ev, i.e., the difference in the work functions of various faces was over 1 ev. Indebted to N. B. Ayzenberg and B. I. Vaysberg. Received 1 Feb 52.

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SMIRNOV, B.G.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.G.

AUTHORS: Gofman, I.I., Smirnov, B.G., Spirin, G.S., Shuppe, G.N. 57-11-29/33

TITLE: On Electrostatic Electron Emission of Semiconductors. (K voprosu ob elektrostaticheskoy elektronnoy emissii poluprovodnikov.)

PERIODICAL: Zhurnal Tekhn.Fiz., 1957, Vol. 27, Nr 11, pp. 2662-2663 (USSR)

ABSTRACT: Here the results of the investigation of electrostatic electron-emission on the occasion of a statical process with a non-purely metallic point of tungsten, but covered by carbide, are given. All volt-ampere characteristics of the electro-static electron-emission were of the same character. It is demonstfated that the characteristic of the emission-current in dependence on the potential is in accordance with the theory. It can be maintained that the theory of R.Stratton (Proc.Phys.Soc.,B,68,746,1955) is qualitatively confirmed: the flections of the emission-curve characteristical for this theory have appeared in all curves of the experiments here described. There are 5 figures and 1 Slavic reference.

ASSOCIATION: Department of Electrophysics of the Central Asia State University V.I.Lenin (Kafedra elektrofiziki Sredneaziatskogo gosudarstvennogo universiteta im.V.I.Lenina)

SUBMITTED: February 8, 1957

AVAILABLE: Library of Congress.

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.G.

The Physics faculty of the V.I.Lenin Tashkent State University. Nauch. trudy TashGU no.262 Fiz. nauki no.22:3-12 '64.

The SI system of units of physical quantities. Ibid.:13-55 (MIRA 18:5)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.G.

Linearized equation of an electronic relay-type amplifier with aperiodic feedback. Izv. vys. ucheb. zav.; elektromekh. 7 no.6: 730-736 '64. (MIRA 17:7)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

TIMOFEYEV, B.I., inzh.; SMIRNOV, B.G., inzh.; GALINSKAYA, M.N., inzh.

Testing experimental equipment for the automatic control of guides in vertical mine shafts. Ugol' 40 no.12:58-59 D '65. (MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut gornoy geomekhaniki i marksheyderskogo dela.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

BERDYSHEV, K.A.; SMIRNOV, B.I.

Automatic control of two-stage wet grinding. Biul. TSIICHM no.2:45 '61. (MIRA 14:9)
(Crushing machinery--Patents)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

BIRYUK, Vladimir Sergeyevich; GLUSHCHENKO, G.G., inzh., retsenzent; SMIRNOV, B.I., inzh., retsenzent; POPILOV, L.Ya., nauchn. red.; NIKITINA, R.D., red.; KOROVENKO, Yu.N., tekhn. red.

[Repair shops aboard ships] Sudovye masterskie. Leningrad, Sudpromgiz, 1963. 138 p. (MIRA 16:9)
(Ships—Maintenance and repair)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SHIRNOV, E.I., Cand Tech Sci—(diss) "Substantiation of the thickness of the babbit layer of slide bearings of steam engines, compressors, and other machines and mechanisms." [illegible], 1956. 21 pp with drawings (State Committee of the Council of Min USSR on Shipbuilding. Central Sci Res Inst), (KL,45-58, 149)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SEMIOKHIN, I.A.; AGEYEV, Ye.P.; PANCHENKOV, G.M.; SMIRNOV, B.I.

Separarion of oxygen isotopes by the thermodiffusion method. Zhur. fiz. khim. 36 no.1:124-129 Ja '62. (MIRA 16:8)

1. Moskovskiy gosudarstvennyy universitet im. Lomonosova.
(Oxygen—Isotopes) (Diffusion)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

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L 29956-65 EWT(m)/EWP(e)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b) Pf-4

S/0125/64/000/010/0047/0052

ACCESSION NR: AP5008000

34
32
B

AUTHOR: Kashchenko, F. D.; Garyayev, A. L.; Smirnov, B. I.

TITLE: New powder rod for surfacing rollers

SOURCE: Avtomaticheskaya svarka, no. 10, 1964, 47-52

TOPIC TAGS: rolling mill, powder metallurgy, powder metal, metal surfacing

Abstract: The object of this study was the development of a new grade of powder rod for surfacing rollers of hot rolling mills which would make it possible to produce a surfacing metal with more favorable operational engineering characteristics.

The work was conducted by the welding laboratory and the Central Plant Laboratory of the Magnitogorsk Metallurgical Combine. Taking part in the work were Engineers G. A. Shadrin, L. V. Simonov, G. A. Denisova and N. P. Kashirin.

Studies of the surface layer of rollers which had been surfaced with PP-3KhV28 powder rod indicated that a large quantity (50% and more) of extremely stable retained austenite is contained in this metal. Such a structure makes it impossible to fully realize the favorable effect of tungsten and chromium. Guided by these considerations and also by the

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ACCESSION NR: AP5008000

research which was done, the authors developed grade MMK-61 powder rod for surfacing rollers of hot rolling mills. This rod made it possible to produce a surfacing metal with high carbon contnet and a relatively small amount of alloying elements. The chemical content of the metal which is deposited depends on type of flux and on surfacing conditions. Flux 48-OF-6 is the most neutral with respect to chemical action on the surfacing metal. This flux has good engineering properties, but has two disadvantages-- it quickly absorbs moisture from the air which leads to the formation of pores in the surfacing metal, and it is easily pulverized. Flux AN-20, which is widely used for surfacing, partially oxidizes the carbon, manganese and chromium, which silicon is reduced from the flux.

A comparatively hard deposit of metal is produced by surfacing with MMK-61, PP3Kh2V8 and PP-5Kh4V3F powder rods. The metal produced in surfacing with MMK-61 rod is softer and has two maximums which correspond to tempering temperatures of 350 and 500°C. This is explained by the different mechanisms of retained austenite decomposition during tempering.

Production tests of the deposited metal were carried out in the wire-strip shop of the Magnitogorsk Metallurgical Combine. The heavily loaded rollers of the second stand on the "300-2" strip mill were selected for surfacing. Surfacing was done on a roller surfacing machine with AN-20 flux, using MMK-61 powder rod with a diameter of 3.5 mm, I_w--300-320

Card 2/3

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

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ACCESSION NR: AP5008000

amps, U--30-32 volts, V_s--38 meters per hour. In order to eliminate crack formation, the rollers were preheated by induction to 420-450°C using current of industrial frequency. After surfacing, the rollers were tempered at 500-550°C. They were then pack cooled for 48 hrs to 60°C with asbestos powder. This technique made it possible to produce a surfaced metal without cracks.

Determined in tests of the surfaced rollers were: wearability (tons/mm), durability for a single installation (days), absolute wear (mm) for a single installation, type of wear and work capacity of the rollers with respect to mechanical treatment. From the characteristics of the rollers surfaced with MMK-61, PP-3Kh2V8 and PP-5Kh4V3F powder rods, it is apparent that the durability of rollers surfaced with MMK-61 powder wire is higher than that of rollers surfaced with PP-3Kh2V8 and PP-5Kh4V3F. Orig. art. has 1 graph, 4 figures, and 2 tables.

ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine)

SUBMITTED: 11Dec63 ENCL: 00 SUB CODE: MM

NO REF SOV: 005 OTHER: 000 JPRS

Card 3/3

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SMIRNOV, B.I., inzhener.

Sleeve bearings with reduced thickness of babbitt layers. Vest. mash. 36 no.10:17-18 O '56. (MLRA 9:11)
(Bearings (Machinery))

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

KOZLOV, F. V., Engineer and B. I. SMIRNOV, Engineer

"Methods of Determining the Productive Capacity of Shipyards."

Determining Productive Capacities in Machinery Manufacturing) Moscow, Mashgiz, 1957. 185 pp.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SOV/122-58-6-8/37

AUTHOR: Smirnov, B.I., Engineer

TITLE: Substantiation of the Required Thickness of the Babbit Metal Layer in Plain Bearings (Obosnovaniye tolshchiny sloya babbita podshipnikov skol'zheniya)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 6, pp 26 - 28 (USSR)

ABSTRACT: The author argues that the shaft diameter should not affect the design thickness of the babbit layer. This should be determined by the sum of three terms, namely, the thickness required for adequate strength, the thickness corresponding to the maximum permitted wear and the thickness needed to compensate for inaccuracies in the manufacture of the bearing liner. The first contribution includes the maximum surface unevenness and must take account of the maximum particle size allowed through oil filters. In all, a value of 0.1 mm is recommended. The maximum permitted wear is determined by the available clearances in the machine. In various instances of ship's propulsion and auxiliary machinery values between 0.5 and 0.8 mm are found. Examination of the manufacturing tolerances in existing ships machinery leads to a maximum manufacturing inaccuracy of 0.8 mm. Test rig and service

Card 1/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SOV/122-58-6-8/37

Substantiation of the Required Thickness of the Babbit Metal Layer in Plain Bearings

experience with bearings designed on these principles has confirmed their superior structure, fatigue strength and performance, together with an economy of babbit metal. There are 2 figures.

1. Bearings--Design 2. Bearing liners--Materials 3. Tin alloys --Applications

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001651520002-9

SOV/135-59-1-11/18

AUTHOR: Smirnov, ~~B.I.,~~ Engineer

TITLE: The Arc Welding of Copper-Nickel Alloy Pipes (Dugovaya svarka truboprovodov iz mednonikelevykh splavov)

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 1, pp 35-37 (USSR)

ABSTRACT: To reduce material and labor consumption in the production of high corrosion resistant pipes, used for shipbuilding, a series of plants replaced the gas soldering of "MNZh 5-1" alloys (composition: 4.4 - 5% Ni; 1 - 1.5% Fe; plus cu; addition of not over 0.01% As; 0.005% Sb; 0.01% S; 0.002% Bi; 0.01% Pb; 0.01% P; 0.03% C; 0.1% O_2) by the arc welding process. A substantial characteristic in welding copper-nickel alloys is the separation of iron from the solid solution, thus increasing the corrosion resistance of the alloy. Contrary to usual welding processes, the welding of copper-nickel alloys

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The Arc Welding of Copper-Nickel Alloy Pipes

must be perfomed by a high-speed continuous single-pass operation, with strict observation of the angle between the electrode and the work. A detailed technological description of the method is given. It has the following advantages: reduced costs, raised labor efficiency, improved quality of the weld joints and reduced spoilage. There are 3 diagrams, 2 tables and 2 photos.

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AUTHOR: Smirnov, B.I., Engineer

TITLE: Experience in the Use of Oxygen-Flux Cutting of Stainless Steel in Shipbuilding

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 5, pp 27-30 (USSR)

ABSTRACT: The article describes experience in the use of oxygen-flux cutting of stainless steel in shipbuilding. For this purpose VNIIAVTOGEN has developed the URKhS-3 unit for manual and machine oxygen-flux cutting of high-alloy chrome and chrome-nickel steels. It consists (Fig 1) of a flux feeder and container, a reducer with two pressure gages for regulating the oxygen pressure in the container and an injection regulation device for the regular supply of the flux-oxygen mixture to the cutting torch, whose special feature is that it has the nozzle of the additional injector in its head. To mechanize the manual cutting process the plant designed and produced a special machine oxygen-flux cutting torch for type ZRA portable gas-cutting machines (illustrated in Figures 2 and 3). In contrast to the machine

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