

KRONGAUZ, A.N.; PETROV, V.A.; LINCHEVSKAYA, G.A.; PALLADIYEVA,
N.M.; MAMIN, R.G., red.; MATVEYEVA, M.M., tekhn. red.

[Measurment and calculation of the absorbed dosages in
internal and external irradiation] Izmerenie i raschet
pogloshchenykh doz pri vneshnem i vnutrennem obluchenii.
Moskva, Medgiz, 1963. 134 p. (MIRA 17:3)

KOZLOVA, A.V.; SKALDIN, P.V.; MIKHAILOV, V.A.; LINGHEVSKAYA, G.A.

Significance of intraperitoneal introduction of colloidal
solution of radioactive gold following surgery for gastric
cancer. Trudy TSentr. nauch.-issl. inst. rentg. i rad. 11
no.1:191-200 '64. (MIRA 18:11)

ACCESSION NR: AP4012429

S/0129/64/000/002/0019/0024

AUTHOR: Yuganova, S. A.; Bondarenko, Ye. A.; Duel', N. A.; Linchevskaya, M. I.; Nesterova, M. D.

TITLE: X-ray structural and electron microscopic analysis of type 16-25 and 18-40 alloys

SOURCE: Metalloved. i term. obrab. metallov, no. 2, 1964, 19-24

TOPIC TAGS: 16-25 alloy, 18-40 alloy, alloy steel, low carbon alloy steel, ferro-chrome-nickel steel, Laves phase steel alloying, residual phase, primary Laves phase, secondary Laves phase

ABSTRACT: The phase composition and microstructure of some ferro-chromium and ferro-chromium-nickel alloy steels were analyzed. The cast alloys were water quenched from 1200C, then were aged at 700 and 800C for 1-5000 hours and at 850C up to 300hours. After heat treatment, the electrolytically isolated

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ACCESSION NR: AP4012429

residual phases and microstructure of the alloys were analyzed by conventional and electron microscopic methods. Laves phases and binary carbides can be noted in low carbon alloys on ferro-chrome-nickel base containing varying degrees of tungsten in addition to niobium carbides and titanium carbonitrides. Alloying with tungsten and niobium affects the phase formation process in different ways: an increase in tungsten concentration in the alloys greatly increases the quantity of the secondary Laves phase, but increases insignificantly the quantity of binary carbides and primary Laves phase. An increase in the niobium content as well as titanium content in the alloy is accompanied by an increase and marked consolidation of the primary Laves phase, while the quantity of the secondary Laves phase decreases. In addition, when the titanium content is increased, secondary phases that are rich in nickel, titanium and aluminum, manifest themselves. An increase of the nickel content with a decrease in iron reduces the quantity of the primary and secondary Laves phases. Orig. art. has: 6 figures and 2 tables.

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ACCESSION NR: AP4012429

ASSOCIATION: TsNITMASH (Central Scientific Research Institute of
Heavy Machine Building)

SUBMITTED: 00

DATE ACQ: 03Mar64

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SUB CODE: ML

NO REF SOV: 005

OTHER: 001

Card 3/3

KUGUKALO, I.A. [Kuhukalo, I.A.], kand. ekon. nauk; KORETSKIY, L.M. [Korets'kyi, L.M.]; LIPSKIY, V.M. [Lips'kyi, V.M.]; KOSTENKO, N.K.; SHKURATOV, O.I.; LINCHEVSKAYA, V.O. [Linchevs'ka, V.O.]; DAVIDENKO, O.P. [Davydenko, O.P.]; VOLOBOY, P.V.; PUGHKO, Yu.S.; KONSEVICH, A.I. [Konsevych, A.I.]; KOPACHINSKAYA, N.I. [Kopachyns'ka, N.I.]; LANDYSH, B.O., red.; DAKHNO, Yu.B., tekhn. red.

[Trends in the specialization and comprehensive development of the Kiev Administrative Economic Region] Napriamy spetsializatsii i kompleksnoho rozvytku Kyivs'koho ekonomichnoho administratyvnoho raionu. Kyiv, Vyd-vo Akad. nauk URSR, 1962. 308 p. (MIRA 16:3)

1. Akademiya nauk URSR, Kiev. Instytut ekonomiky. (Kiev Economic Region—Industries)

LINCHEVA '84, V.O.

The lumbering and woodworking industries of the western provinces
of the Ukrainian S.S.R. and main tasks in developing them further.
Geog. zbir. no.5:137-144 '62. (U.S.S.R. 17-18)

76
LINCHEVSKIY, B.V.
Production of steel

Oxygen Solubility in Molten Iron-Chromium and Iron-Chromium-Nickel Alloys. B. V. Linchevskii and A. M. Samarin. (*Izvestiya Akademii Nauk S.S.S.R., Otdelenie Technicheskikh Nauk*, 1933, (5), 691-704). [In Russian]. The influence of chromium on the solubility of oxygen in liquid iron was studied by determining the state of equilibrium in the system: metal-bath/oxide-film/gas phase. It was found that, depending on the chromium content in liquid iron, the oxidation products of chromium in the metal are chromite ($\text{FeO}\cdot\text{Cr}_2\text{O}_3$), chromic oxide, and chromous oxide. The results of metallographic investigations of non-metallic inclusions, the study of inclusions isolated by anodic solution of the alloys, and X-ray analysis of oxide phase, confirm that the products of oxidation of chromium dissolved in liquid iron are $\text{FeO}\cdot\text{Cr}_2\text{O}_3$ and Cr_2O_3 . In melts containing above 18% of chromium, an increase in the chromium concentration increases oxygen solubility. This is explained by the formation of chromous oxide soluble in liquid iron. It was also found that nickel increases the oxygen solubility in iron-chromium melts.—v. a.

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4

LINCHEVSKIY, B.V.

✓ Oxidation of chromium dissolved in liquid iron. B. V. Linchevskiy and A. M. Samarin. *Doklady Akad. Nauk S.S.S.R.* 89, 701-4 (1953). — The equil. condition in the system Fe-Cr-(H₂ + H₂O) was studied in the temp. range 1025-1710°. The basic equil. equation (1) $\log K = -\log(\%Cr) + x \log(p_{H_2O}/p_{H_2})$, can be applied, with correction, to 3 separate ranges of the Cr contents of Fe. With Cr contents 0-6% the equil. equation is (2) $FeO + Cr_2O_{3(s)} + 4H_{2(g)} = Fe_{(l)} + 2[Cr] + 4H_2O$, $\Delta F = 336,000 - 187.50T(x = 2)$. In the range Cr 6-16% the value of x (equation 1) is 3/2, and the equation (3) $Cr_2O_{3(s)} = 2[Cr] + 3[O]$; $\Delta F = 301,280 - 179.37T$. The value of the coeff. x drops to 4/3 for Cr contents above 16%, and the equil. is expressed by (4) $[CrO] + Cr_2O_{3(s)} = 3[Cr] + 4[O]$; $\Delta F = 382,160 - 188.87T$. The content of Cr is clearly indicated by the color of the scale forming on the steel sample: With 5 to 7% Cr in steel the color of the scale is deep violet, lilac, gray, or grayish blue. With higher Cr contents the color turns to green and reaches eventually deep green at very high Cr levels. M. O. Holowaty

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ЛИТЧЕВСКИЙ, Б. С.

Influence of nickel on the solubility of oxygen in molten iron and chromium. B. V. Litchevskii and A. M. Sidorin (Dokl. Akad. Nauk. SSSR, 1953, 88, 887-888). Solubility of O₂ in molten Fe-Cr-Ni steels containing 4-20% of Cr and 3-22% of Ni is determined at 1625° by assuming that the equilibrium between the gas phase composed of H₂O + H₂ and the molten metal is established when an oxide film forms on the surface of the melt. In spite of a considerable scatter of the experimental points it is possible to conclude that substitution of Ni for Fe at constant Cr content increases the solubility of O₂ in the metal. S. K. LACHOWICZ.

B-76505, 25 June 54

LINCHEVSKIY, B. V.

USSR/Chemistry

Card 1/1

Authors : Zhuk, N. P., and Linchevskiy, B. V.

Title : Oxidation of iron and steel at high temperatures

Periodical : Zhur. Fiz. Khim, 28, Ed. 3, 440-452, March 1954

Abstract : Applying the method of continuous suspension of species the authors investigated the kinetics of oxidation of electrolytic and Armco-iron, steel 3, DS, 20x3 and U9 in the atmosphere at temperature ranges of 400 - 1100°C. It was established that the temperature-rate of oxidation curve of the investigated materials undergoes changes in the temperature range of 480 - 580°C which is connected with the formation of wuestite in the oxidation layer, in the temperature range of 730 - 770°C which is connected with the magnetic and eutectoid conversions and at temperature of 850 - 880°C where an allotropic conversion takes place. Thirty references. Tables, graphs.

Institution : The I. V. Stalin Moscow Steel Institute

Submitted : June 2, 1953

B-80678, 27 Nov 54

USSR/Chemistry - Physical chemistry

Card 1/1 : Pub. 147 - 26/27

Authors : Linchevskiy, B. V., and Zhuk, N. P.

Title : Use of Fe⁵⁹ for the study of the Fe oxidation mechanism

Periodical : Zhur. fiz. khim. 28/12, 2265-2267, Dec 1954

Abstract : A new method is introduced for the study of the Fe oxidation mechanism by means of the radioactive Fe⁵⁹ isotope. The isotope activity distribution was investigated in slag obtained on the iron enriched with Fe⁵⁹. The presence of two activity maxima - in the internal and external slag layers - were established. The oxidation process in the presence of Fe⁵⁹ is explained. Five references ; 3 USSR and 2 USA (1945-1954). Table; diagrams.

Institution : The I. V. Stalin Steel Institute, Moscow

Submitted : July 9, 1954

LINCHEVSKIY, B. V.(Engr.); ZHUK, N. P.;

"The Application of the Isotope Fe⁵⁹ For the Investigation of the Mechanism of Iron Oxidation," in book The Application of Radioisotopes in Metallurgy, Symposium XXXIV; Moscow; State Publishing House for Literature on Ferrous and Nonferrous Metallurgy, 1955.

B. V. Linchevskiy, Engr.; N. P. Zhuk, Assistant/Chair of Metal Corrosion, Moscow Inst. of Steel im I. V. Stalin.

LINCHEVSKIY, B. V.

LINCHEVSKIY, B. V.: "The solubility of oxygen in liquid iron and in iron fused with manganese". Moscow, 1955. Min Higher Education USSR. Moscow Order of Labor Red Banner Inst of Steel imeni I. V. Stalin. (Dissertations for the degree of Candidate of Technical Science.)

SO: Knizhnaya Letopis' No. 50 10 December 1955. Moscow.

LINCHEVSKIY, B.V., inzhener; ZHUK, N.P., dotsent, kandidat khimicheskikh nauk.

Use of the Fe⁵⁹ isotope for investigating the oxidation mechanism of
iron. Sber.Inst, stali 34:341-346 '55. (MIRA 9:7)

1.Kafedra korrozii metallov.
(Iron--Isotopes)

LINCHEVSKIY, B.V., kandidat tekhnicheskikh nauk.

Vacuum technique used in metallurgy. Metallurg no.7:3-6 J1 '56.
(MLRA 9:9)

1. Institut metallurgii Akademii nauk SSSR.
(Smelting) (Vacuum)

KASHIN, V., referent.; LINCHEVSKIY, B.

Effect of vacuum smelting on the properties of metals. (From foreign
journals). Stal' 16 no.9:858-860 S '56. (MIRA 9:11)
(Smelting)

LINCHEVSKIY, B.V., kandidat tekhnicheskikh nauk.

Experimental practice and methods for high-temperature research
(conference at the A.A.Baikov Institute of Metallurgy). Vest.
AN SSSR 26 no.9:107-109 S '56. (MLRA 9:11)
(Smelting)

LINCHEVSKIY, B.V.

SUBJECT USSR / PHYSICS CARD 1 / 2 PA 1548
 AUTHOR LINČEVSKIJ, B.V., SAMARIN, A.M.
 TITLE The Oxidation of Manganese which was Dissolved in Liquid Iron.
 PERIODICAL Dokl. Akad. Nauk, 110, fasc. 2, 209-211 (1956)
 Issued: 11 / 1956

The present work deals with the results obtained when determining the equilibrium of the solution of manganese in iron with a mixture of steam and hydrogen at 1565 and 1605°. The fact that equilibrium is established is ascertained by the appearance of an oxide film on the surface of the metal. Results are considered to be satisfactory if the position of the film on the metal remains steady for a period of from 5 to 10 minutes.

In a diagram (abscissa $\lg(\% \text{ Mn})$, ordinate $\lg(P_{\text{H}_2\text{O}}/P_{\text{H}_2})$) the dependence of the oxidation potential of the gaseous phase of the manganese content in the solution is represented. A further diagram shows the dependence of the composition of the oxidation products of manganese on the manganese content in the solution. In the case of a manganese content of more than 1.8% the following reaction takes place: $\text{MnO}_{\text{sol}} + \text{H}_2(\text{gas}) = \text{H}_2\text{O}(\text{gas}) + [\text{Mn}]$, $\Delta F_1^0 = 72.150 - 36.83 T$,

$\lg K_1 = - (15570/T) + 8.05$. For the experiment the thermodynamic functions of the interaction reaction of the steam with the liquid iron are determined. By adding the values obtained on this occasion to those just mentioned, the reaction equation of the oxidation of the manganese dissolved in iron is ob-

Dokl. Akad. Nauk, 110, fasc. 2, 209-211 (1956) CARD 2 / 2

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tained: $\text{MnO}_{\text{sol}} = [\text{Mn}] + [\text{O}]$; $\Delta F_3^0 = 115600 - 57,42 T$, $\lg K_3 = -25270/T + 12,65$.

The dissociation pressure of manganous oxide at 1600° is $P_{\text{O}_2(r)}^{1/2} = 4,57 \cdot 10^{-7}$ atm.

The investigation of non-metal inclusions, of the particles of the oxidation products of manganese and of the products deposited in the course of the anodic dissolution of the metal confirms the correctness of the conclusions arrived at. If the concentration of the manganese in the solution is increased, the particles of the inclusions become finer, and round particles become polygonal. At high concentrations of manganese dendrite-shaped inclusions occur. Several photographs show the particles of various inclusions. At moderate manganese concentrations liquid solutions with an increased content of ferrous oxide are formed on the occasion of the concentration of the molten metal. If the concentration of the manganese is increased, the composition of the oxide inclusions corresponds to the two-phase domain of the state diagram of the system $\text{MnO} - \text{FeO}$. Within this domain liquid and solid particles can form simultaneously. In the case of a considerable increase of the manganese content only solid solutions which do not melt easily, are created, or else the pure manganous oxide is precipitated from the solution. In the course of the chemical examination of the oxidation products of manganese it was found that they contain 98,2% manganous oxide. X-ray analysis furnished the lattice parameter $a = 4,43$.

INSTITUTION:

LINCHEVSKIY, B. V.

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27 ALAC

The stability of oxygen in fused iron and manganese.
 B. V. Linchetskii and A. M. Samarin. *Izv. Akad. Nauk S.S.S.R., Ucheb. Tekh. Nauk* 1957, No. 3, 9-18. The oxidation of Mn dissolved in fused Fe was investigated by detg. the equil. conditions in the system alloy-oxide- H_2O . The liquid or solid soln. of the Mn oxidation products were of the general type $A \cdot Mn \cdot O_x$. As temp. changed their compn. gradually, and became enriched in MnO . At 1665° and at Mn concn. exceeding 1.8%, pure MnO was formed. The dissoen. pressure of MnO at 1600° was calcd. as 4.57×10^{-4} . The Mn effect upon the activity coeff. of O dissolved in the Fe-Mn alloy varied between 1.2 and 0.02, with 0.5-0.6% Mn, while with 2.5-6% Mn the activity coeff. reached 1.33. W. M. Sternberg

Frank
M.T.

LINCHEVSKIY, B. V.

30-9-38/48

AUTHOR: Linchevskiy, B. V., Candidate of Technical Sciences.

TITLE: The Physico-Chemical Foundations of Steel Production (Fiziko-khimicheskiye ~~essnoy~~ proizvodstva stali).

PERIODICAL: Vestnik AN BSSR, 1957, Vol. 27, Nr 9, pp. 119-121 (USSR)

ABSTRACT: The IV conference on the physico-chemical foundations of steel production took place in the Baykov-Institute for Metallurgy of the AN on July 1-5. More than 200 participants from 20 research institutes and 27 metallurgical enterprises were present. Some papers dealt with the research data of the mutual action of carbon, dissolved in α -iron with admixture of CO and CO₂. Much room was occupied by: the reports on the desulphurization of metal, such as the electrochemical steel-desulphurization in the induction-furnace. Other papers dealt with the results of the investigation of the distribution of Cr, Mo, W between iron and iron-containing slags by means of radioactive isotopes. The papers read by the participants from abroad were listened to with great interest. Dzh. Chipman: "The activity of oxygen in liquid iron" and "the diffusion of Ca and Si in the slags of the

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The Physico-Chemical Foundations of Steel Production 30-9-38/48

system $\text{CaO} - \text{Al}_2\text{O}_3 - \text{SiO}_2$ ". F. Richardson: "The activity in the triple silicate slags", N. Grant: "The equilibrium between liquid iron and the slag of the system $\text{CaO} - \text{Al}_2\text{O}_3 - \text{SiO}_2$ and "On the mechanism and the reaction-process of the transmission of sulfur". T. Negresku: "The thermodynamics of the metallurgical slags.

AVAILABLE: Library of Congress.

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LINCHEVSKIY, B.V.

18(0)

PHASE I BOOK EXPLOITATION

SOV/2182

Vertman, Aleksandr Abramovich, and Boris Vadimovich Linchevskiy

Vakuumnaya metallurgiya (Vacuum Metallurgy) Moscow, 1958. 27 p.
(Series: Stenogramma lektsii. Seriya "Metallurgiya," vyp. 1)
3,000 copies printed.

Sponsoring Agencies: Obshchestvo po rasprostraneniyu politicheskikh
i nauchnykh znaniy RSFSR. Moskovskiy dom nauchno-tekhnicheskoy
propagandy imeni F.E. Dzerzhinskogo.

Tech. Ed.: R.A. Sukhareva.

PURPOSE: This book is intended for technical personnel in the
field of metallurgy.

COVERAGE: The author describes several types of vacuum-melting
induction and arc furnaces and discusses the effect of vacuum-
melting on the properties of metals. He also describes the
process of obtaining metal by reduction in vacuum. No personali-
ties are mentioned. There are 4 Soviet references.

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Vacuum Metallurgy SOV/2182

TABLE OF CONTENTS: None given. The book is divided as follows:

Introduction	3
Vacuum-melting Induction Furnaces	4
Vacuum-melting Arc Furnaces and Furnaces With Automatic Crucible	10
Degassing of Molten Steel in a Ladle	17
Effect of Vacuum-melting on Properties of Metals	18
Obtaining Metals by Reduction in Vacuum	24
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AVAILABLE: Library of Congress

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8-6-59

SOV/30-58-11-40/43

18(3)

AUTHOR:

Linchevskiy, B. V., Candidate of Technical Sciences

TITLE:

The Use of Vacuum in Metallurgy (Primeneniye vakuuma v metallurgii) Conference in Moscow (Soveshchaniye v Moskve)

PERIODICAL:

Vestnik Akademii nauk SSSR, 1958, Nr 11, pp 124-126 (USSR)

ABSTRACT:

This conference was held in the Institut metallurgii im. A. A. Baykova Akademii nauk SSSR (Institute of Metallurgy imeni A. A. Baykov of the AS USSR) in Moscow July 1 to 4. 280 delegates were present, among them representatives of foreign scientific research institutions and industrial enterprises. Fifty lectures were given, dealing with problems of melting steel and alloys in vacuum furnaces as well as with the vacuum treatment of liquid steel. Reports were given by: G. N. Okorokov, A. Yu. Polyakov, A. M. Samarin on the attempt of remelting ball-bearing steel in a vacuum arc furnace. A. Aksoy (USA) on remelting at first in a vacuum induction furnace and subsequently in a vacuum arc furnace as the best method of purifying steel. E. Johnson (USA) on the melting of ingots weighing up to 5.85 tons in arc furnaces of American plants.

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SOV/30-58-11-10/48

The Use of Vacuum in Metallurgy. Conference in Moscow

L. A. Belyanchikov on the heterogeneity of ingots from vacuum arc furnaces with respect to their oxygen content.

M. S. Makunin, A. Yu. Polyakov on carbon thermal production of vanadium in vacuum.

P. V. Gel'd, G. P. Shveykin on the regeneration of niobium pentoxide through carbon in vacuum at a temperature of 1050-1150°. In industry the method of vacuum treatment of liquid steel in ladles and in casting is widely used, and was first suggested by G. M. Novik and A. M. Samarin.

Zd. Eminger (Czecho-Slovakia) on the vacuum treatment of aluminum in ladles.

V. T. Burtsev, R. A. Karasev on the possibility of separating sulfur from liquid iron melts.

A. F. Vishkarev, V. V. Kondakov on the interaction between carbon and the non-metallic oxidizing enclosures in vacuum melting.

V. A. Mchedlishvili, A. A. Markar'yants noted that the hypothesis on the interaction between the carbon solved in the metal in vacuum and the pure chromium and manganese oxides cannot be accepted.

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SOV/30-58-11-40/48

The Use of Vacuum in Metallurgy. Conference in Moscow

J. Elliot (USA) on the solubility of nitrogen in iron-nickel-chromium melting.

A. A. Fogel' on equipment for melting of metal in a suspended state.

V. S. Baykov on a method of determining hydrogen in steel and iron alloys.

A. B. Tseytlin, V. I. Kuznetsov on a new series of steam-oil and mechanical buster pumps.

Ya. Gurevich on the rolling in vacuum of cast chromium, armco iron and steel X27.

J. Moore (USA), X. Gruber (Federal Republic of Germany), M. Auverter (Liechtenstein) on problems of developing and using metallurgic vacuum equipment.

In his closing speech, A. M. Samarin analyzed the theoretical problems of vacuum metallurgy that are still to be solved.

Card 3/4

LINCHEVSKIY, B.V.

Ferrous metallurgy in capitalistic countries in 1958. Biul.
tekhn.-ekon.inform. no.12:75-79 '59. (MIRA 13:4)
(Iron industry) (Steel industry)

18.1130

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67910

AUTHORS:

Linchevskiy, B. V., Romanov, V. V.

SOV/20-129-5-16/64

TITLE:

The Corrosion-dependent Formation of Cracks in Low-carbon
Stainless Steel

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 5, pp 1020-1023
(USSR)

ABSTRACT:

The present paper deals with a complex investigation of the mechanical corrosive properties and the resistivity of low-carbon stainless steel of the type X18N9 (which had been melted in a vacuum-induction-furnace) to corrosion cracking. Stainless steel of the type IX18N9 served as furnace charge. The castings were rolled into a work-piece of 15 mm diameter and to a band of 25.5 mm, from which the work-pieces for the mechanical- and corrosion tests were then punched out. One part of these samples (1100°) was quenched in water, the other was also quenched and tempered for a further two hours at 650°. The corrosion test was carried out in boiling 55% nitric acid in four cycles and lasted 25 hours. The corrosion cracking of steel was also investigated in a boiling 42% solution of MgCl₂. The highest degree of resistivity to corrosion is found in quenched

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The Corrosion-dependent Formation of Cracks in Low-carbon Stainless Steel

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steel; the resistivity of tempered metal is from twice to three times as low. The rate of corrosion of tempered steel is by 75 times lower than that of the initial metal IX18N9 (0.10% C). The rate of corrosion and the tendency to inter-crystalline corrosion begin to increase considerably with an increase of carbon concentration above 0.02%. Within the concentration interval between 0.014 and 0.10% C the metal is prone to corrosion cracking if quenched or tempered. In the case of a constant concentration of carbon (0.015%), a variation in oxygen concentration in the metal (from 0.0049 to 0.035%) does not influence its resistivity to corrosion cracking. The results obtained concerning the influence of carbon on the rate of corrosion of steel in boiling nitric acid and upon the tendency of the metal to corrosion between the crystallites thus permit a more exact determination of the minimum carbon concentration at which the steel becomes corrosion-proof. A decrease in the concentration of carbon from 0.1 to 0.014% exerts no essential influence upon the resistivity of steel of the type X18N9 to corrosion cracking in

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The Corrosion-dependent Formation of Cracks in Low-carbon Stainless Steel

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a boiling 42% $MgCl_2$ - solution. There are 1 figure, 2 tables, and 7 references, 3 of which are Soviet.

ASSOCIATION: Institut metallurgii im. A. A. Baykova Akademii nauk SSSR
(Institute of Metallurgy imeni A. A. Baykov of the Academy of Sciences of the USSR)

PRESENTED: August 14, 1959, by I. P. Bardin, Academician

SUBMITTED: August 12, 1959

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18(5)

PHASE I BOOK EXPLOITATION

SOV/3388

Linchevskiy, Boris Vadimovich and Aleksandr Abramovich Vertman

Primeneniye vakuuma v proizvodstve stali (Use of Vacuum in Steel Making), Moscow, Metallurgizdat, 1960. 125 p. Errata slip inserted. 3,700 copies printed.

Ed.: A. Ye. Khlebnikov, Doctor of Technical Sciences, Professor;
Ed. of Publishing House: Ya. D. Rozentsveyg; Tech. Ed.:
L. V. Dobuzhinskaya.

PURPOSE: This book is intended for technical personnel at plants and scientific institutions. It may also be used by students of metallurgy and machine design.

COVERAGE: Theoretical principles and practical aspects of the vacuum production of steel and alloys in induction and arc furnaces are explained. Problems connected with the vacuum treatment of molten steel in the ladle and during teeming are discussed. Equipment for which design data are given includes degassing and teeming chambers, pumps, and instruments for measuring vacuum. Laboratory and field data are analyzed to

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Use of Vacuum in Steel Making

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show the effect of vacuum melting and teeming of large ingots and vacuum treatment of molten steel on the properties of the finished metal. There are 60 references: 21 Soviet, 31 English, and 8 German.

TABLE OF CONTENTS:

Principles of Vacuum Melting	5
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Use of Vacuum in Steel Making	SOV/3388	
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AVAILABLE: Library of Congress		

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VK/mg
4-25-60

LIVCHEDSKIY, B.V.

TABLE I BOOK EXPLOITATION 807/458

Abadatsya nauk SSSR. Kontselye po fiziko-khimicheskim osnovam proizvodstva stali
Primeneniya vakuum v metallurgii (Use of Vacuum in Metallurgy) Moscow, Izdat-
so SSSR, 1960. 314 p. First slip inserted. 4,500 copies printed.

Sposobiye Arseniya Abadatsya nauk SSSR. Institut metallurgii Ispol. A.A. Baykova.
Kontselye po fiziko-khimicheskim osnovam proizvodstva stali.

Bezp. Ek. A.M. Sazarin, Corresponding Member, Academy of Sciences USSR; Ed. of
Publishing House G.M. Makovskiy Tech. Ed. S.D. Kertovskiy.

PREFACE: This collection of articles is intended for technical personnel interested
in present studies and developments of vacuum steelmaking practice and equip-
ment.

CONTENTS: The book contains information on steel making in vacuum induction fur-
naces, and vacuum arc furnaces, reduction processes in vacuum, and degassing of
steel and alloys. The functioning of apparatus and equipment, especially
vacuum furnaces and vacuum booster pumps is also analyzed. Personnel are
mentioned in connection with some of the articles and will appear in the table
of contents. Three articles have been translated from English. Some of the
English authors are: Y.N. Aronovskiy and I.S. Bolgov. Melting and Pouring of
High-Base Alloys in Vacuum (Y.A. Zhabitskiy, B.F. Lashin, V.A. Ashabala,
A.P. Balashov and V.V. Pukhin participated in the work).

Kaluzhskiy, Yu.I., and N.Ye. Rezhnikov. Casting of Oxide-Film-Forming Alloys
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LINCHEVSKIY, B.V.

2/167/60/000004/001/003
MOSS/001

AUTHORS: Shuripolov, B. S., Barin, O. A., Gorbunov, I. V., Zudin, I. P.,
Lukovskiy, B. V., Prokhorin, D. A.

TITLE: The Effect of Chromium and Manganese in Phase Transformations of
Cr-Mn-Manganese Steels

REPRODUCED: Met. Eng. 1959, No. 4, pp. 62-69

NOTE: In developing chromium-manganese stainless steels by replacing the nickel by manganese, investigators F. Okamoto, P. M. Becket (Ref. 1, 2, 7) and previously by A. V. Shulgin, T. Orlov, V. D. L. Kuznetsov (Ref. 3, 6) and O. V. Kuznetsov (Ref. 3, 6, 10). In the present article information is given on the effect of manganese and chromium on phase transformations in steel. In a series of experiments the authors have studied the effect of manganese content on the transformation of austenite to ferrite and martensite in 12-14% chromium steels. It is shown that the effect of manganese on the transformation of austenite to ferrite and martensite is more pronounced in steels with higher chromium content and can change at 800, 900, 1,000, 1,100 and 1,200°C. After quenching at these temperatures the hardness is shown in Table 1. The dependence of the hardness on temperature is shown in Table 3.

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The specimens were subjected to an analysis of the microstructure. The steels were tempered at 550, 700, 750 and 800°C. Changes in H_{RC} depending on the tempering time of steels with 12% Cr quenched at 1,100°C are given in Table 4. The composition of a steel with 12% Cr and 1% Mn is given in Table 5. The steel was investigated on an M. S. Ankor type microscope at 20x, 40x, 100x, 200x and 400x magnification. The magnetic properties of the steel. Specimens of all steel with 12% Cr for 10 hours. The amount of a ferromagnetic phase changes depending on the temperature. Dilatometric analysis was made at 250°C for various specimens quenched at 1,100°C with subsequent annealing at 750°C for 10 hours. Curves of temperature versus linear expansion were made for steels with 10% Cr and 1% Mn. A phase analysis was made of precipitates out of an electrolyte on saturated potassium dichromate solution at a current density of 0.6 - 1.0 amp/cm² and a temperature not over 20°C. A copper cylinder was used as a cathode. 9 to 15 ml of the filtered electrolyte. The precipitates were filled with 100 - 150 ml of the filtered electrolyte. The precipitates were

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exposed from the electrolyte, washed and dried at 100°C in hydrogen atmosphere for 20 to 30 minutes on Cr radiation without using a filter. Exposure time was 10 to 18 hours. An elemental analysis was made of precipitates prepared out of a 1% Mn (MnO) in an electrolyte composed of 250 g/l 2% sodium chlorate, 5 g/l 1% to 18 hours. In an electrolyte composed of 250 g/l 2% sodium chlorate, 5 g/l 1% to 18 hours. The investigations performed yielded the following results: At a content of 1% Mn in steels with 12% Cr the amount of ferrite is independent of the chromium content. The steel contains in its structure martensite as well as ferrite. It is not possible to convert the steel into a martensitic state by heat treatment. Steel with 12% Cr and 1% Mn is transformed at a temperature over 210°C. The steel with 16 - 26% Mn and 8 - 16% Cr transformed at a temperature over 210°C. The presence of the Cr₂₃C₆ precipitates in steel with 27% Mn. In steels with 12% Cr and 1% Mn the amount of ferrite is independent of the chromium content. The amount of ferrite in the steel group with 1% Cr is considerably higher than

Card 4/A

that of steels with 1% Cr. After heating to 600 - 900°C, the ferrite is decomposed and the f₁ phase is formed (except Mn11 (MnO) and Mn71 (MnO) type white steels), composed by the formula (Fe, Mn, Cr)₂₃C₆. There are 5 tables, 2 figures and 11 references, 6 Soviet, 2 English and 3 German.

ASSOCIATION: Institute Metallurgii AN SSSR (Institute of Metallurgy AN USSR)
Genyry ovali AN USSR (Mining Department of AN USSR)

REPRINTED: December 21, 1959

LINCHEVSKIY, B.V.

Using vacuum techniques in steel metallurgy in capitalist countries.
Biul.tekh.-ekon.inform. no.4:83-88 '60. (MIRA 13:11)
(Vacuum metallurgy)

LINCHEVSKIY, B.V.

Equipment used in vacuum metallurgy in capitalist countries.
Biul.tekh.-ekon.inform. no.3:78-82 '61. (MIRA 14:3)
(Vacuum metallurgy)

18.8300

27916
S/080/61/034/010/016/016
D217/D301

AUTHORS: Linchevskiy, B. V., and Romanov, V. V.

TITLE: Influence of the carbon content on the resistance of
X18H9 (Kh18N9) stainless steel to stress corrosion
cracking

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 10, 1961, 2356-2359

TEXT: Melts of 18Cr-9Ni-type stainless steel with different carbon contents were prepared. The ingots obtained were forged into strip, 25 x 5 mm which was processed on a planing machine, after which it was cold-rolled down to a thickness of 1 mm. Standard tensile specimens were cut from the sheets thus obtained. All specimens were water-quenched from a temperature of 1100°, and one half of the quenched specimens were annealed at 650° for 2 hours. It was found that those of the above Cr-Ni stainless steels, containing between 0.01 and 0.1% carbon, are liable to fail by intercrystalline cracking (see Fig. 1). At practically all carbon concentrations, the annealed specimens failed more rapidly than the quenched ones. At carbon concentrations of 0.05 - 0.07%, a considerable retardation

Card 1/2

27916
S/080/61/034/010/016/016
D217/D301

Influence of the...

of cracking was observed; this was greater for annealed than for quenched material. Annealing did not produce intercrystalline crack formation. There are 2 figures, 1 table and 3 references: 2 Soviet-bloc and 1 non-Soviet-bloc.

SUBMITTED: October 28, 1960

Fig. 1. Influence of carbon content on the rate of stress corrosion cracking of 18-9 Cr-Ni steel in a 42%-m boiling solution of MgCl₂

A - time taken for cracking to occur (mins.)
B - carbon content (%)

Heat treatment: 1 - anneal, 2 - quench

Card 2/2

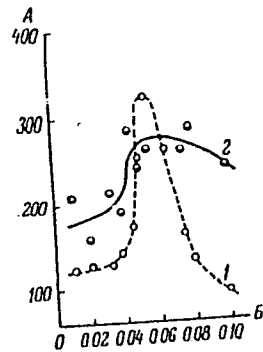


Рис. 1. Влияние углерода на скорость коррозионного расгрескивания стали X18H9 в 42%-м кипящем растворе MgCl₂.

LINCHEVSKIY, B.V.

PHASE I BOOK EXPLOITATION

SOV/6270

Samarin, A. M., ed., Corresponding Member, Academy of Sciences USSR.

Vakuumnaya metallurgiya (Vacuum Metallurgy). Moscow, Metallurgizdat, 1962. 515 p. Errata slip inserted. 3200 copies printed.

Ed. of Publishing House: V. I. Ptitsyna; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This book is intended for engineering personnel of metallurgical and machine-building plants, scientific research workers and teachers, and aspirants and students at schools of higher technical education.

COVERAGE: Thermodynamic fundamentals of vacuum application in various metallurgical processes and problems of melting in vacuum induction and arc furnaces are discussed. Procedures of casting large ingots and vacuum degassing of steel in ladles are described, along with designs of metallurgical vacuum equipment. Problems connected with the use of mechanical and steam-ejector vacuum pumps, and with the

Card 1/7

Vacuum Metallurgy

SOV/6270

designing, calculation, and operation of vacuum systems, are reviewed in detail, along with vacuum-measuring techniques. No personalities are mentioned. Each article is accompanied by references, mostly Soviet.

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Card 3/7

L 13390-63

ENP(q)/ENT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AP3000903

S/0279/63/000/002/0028/0032

AUTHOR: Linchevskiy, B. V. (Moscow)

53

TITLE: Desulfuration of ball-bearing steel in a vacuum induction oven

SOURCE: AN SSSR. Izv. otd. tekhn. nauk, Metallurgiya i gornoye delo, no. 2, 1963, 28-32

TOPIC TAGS: desulfuration, ball-bearing steel, slag, ball bearings

ABSTRACT: The objective of the present investigation was to study the effect of added slag mixtures on the desulfuration of ball-bearing steel in a vacuum induction oven. The slag materials were calcium oxide, magnesium oxide, and aluminum oxide, which were applied in paste form to coat the crucibles containing the steel samples. In some cases 4% of a mixture consisting of 4:1 lime and fluorite was placed in the crucibles. Samples of steel with a 0.015%-0.019% sulfur content were placed in the crucibles and set in the induction oven having a vacuum of 1.5-0.02 mm mercury. The metal was melted, and samples were taken for analysis at five intervals within an hour, beginning with 2-5 minutes after the start. The results showed that the lowest sulfur content of 0.002% was obtained within 2 minutes in a MgO coated crucible with added lime and fluorite. Pilot plant tests under these optimal conditions gave 90% desulfuration within 10-20 minutes.

Card 1/1

S/148/63/000/003/003/007
E111/E435

AUTHOR: Linchevskiy, B.V.

TITLE: Behavior of the components of stainless steel during vacuum melting

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no.3, 1963, 70-76

TEXT: The influence of the crucible lining on the behavior of oxygen, nitrogen, carbon, chromium, manganese, silicon, titanium, aluminum and nickel in the vacuum melting of type X17 (Kh17) and X18H9T (Kh18N9T) stainless steels was studied. Melting was effected at 1500 and 1600°C and at pressures of 50, 1.0 and 0.02 mm Hg (some at 50 mm Hg pressure of argon) in a 5 kg induction vacuum furnace. Sampling at various stages was carried out with silica crucibles without opening the furnace. For decarburization a magnesia crucible was found to be better than alumina or zirconia crucibles, the optimum temperature and pressure being 1600°C and 1 mm Hg respectively. With any of these crucibles the oxygen content reached a minimum (through reaction with the carbon contained in the melt) 20 to 30 minutes from the start of melting. Starting with 0.07% N most of the nitrogen was eliminated within
Card 1/2

Behavior of the components ...

S/148/63/000/003/003/007
E111/E435

30 to 40 minutes, the lower pressures increasing the rate of removal; at 1500°C and 1.0 mm Hg an alumina gave a faster rate of removal than a zirconia crucible. The nitrogen content under all the test conditions remained above the equilibrium values calculated from a published equation. The evaporation of chromium in absolute magnitude is approximately the same in magnesia, alumina and zirconia crucibles: the rate is sufficient to affect composition appreciably with long (e.g. 60 minutes) holding times. Silicon concentration did not change in any of the crucibles under the test conditions. Holding the metal under vacuum in alumina crucibles caused the aluminum content to rise from 0.02 to 0.08% in 60 to 80 minutes. At 1600°C and 0.02 mm Hg the manganese concentration fell from 1.32 to 0.3%, through volatilization when chromium-nickel steel scrap was melted in zirconia crucibles; the titanium concentration fell through oxidation while the nickel concentration remained virtually unchanged. There are 6 figures and 3 tables.

ASSOCIATION: Institut metallurgii im. Baykova
(Metallurgical Institute imeni Baykov)
Card 2/2 SUBMITTED: October 31, 1961

L 13597-63

EWP(q)/EWT(m)/BDS AFPTC/ASD JD

ACCESSION NR: AP3002387

S/0279/63/000/003/0076/0082 56

AUTHOR: Afanas'yev, Yu. M. (Moscow); Linchevskiy, B. V. (Moscow); Polyakov, A. Yu. (Moscow); Samarin, A. M. (Moscow)

TITLE: Use of slag for steel desulfurization in vacuum induction furnaces

SOURCE: AN SSSR. Izv. Otd. tekhnicheskikh nauk. Metallurgiya i gornoye delo, no. 3, 1963, 76-82

TOPIC TAGS: induction melting, vacuum, nitrogen atmosphere, high-carbon steel, medium-carbon steel, low-carbon steel, desulfurization, synthetic slag, ferrous oxide content, optimum holding time

ABSTRACT: In order to determine the feasibility of deep desulfurization of steel in a vacuum induction furnace with highly desulfurizing synthetic slag, several steels containing 0.035, 0.41, and 1.19% C and from 0.09 to 0.128% S were treated with two synthetic slags. One slag contained 53.8% CaO, 6.6% SiO₂, 40.7% Al₂O₃, and 0.32% FeO; the other slag, 60.4% CaO, 28.8% SiO₂, 10.9% Al₂O₃, and 0.06% FeO. Three variants of treatment were tested: without synthetic slag, vacuum with synthetic slag, and nitrogen atmosphere at 1.1 atm with synthetic

L 13597-63

ACCESSION NR: AP3002387

slag. The slag (6-10 wt% of the metal charge) was put on the crucible bottom under the metal charge; the molten metal was held under liquid slag for 30-50 min at 1600-1700C in a vacuum of 0.05-1.0 mm Hg. Test results showed that regardless of the carbon content, the desulfurizing effect of vacuum alone is very low. Treatment with synthetic slag in combination with nitrogen atmosphere or vacuum reduced the sulfur content in the high-carbon (1.19% C) steel from about 0.2 to 0.02% within the first 15-20 min of the holding time, with practically no change after longer holding. In medium-carbon (0.41% C) or low-carbon (0.035% C) steel, a sharp drop in the sulfur content from 0.12 to 0.01% or even less occurred in the first 10 min, followed by a slight reverse influx of sulfur into the metal during prolonged holding. The different effect of the furnace pressure on desulfurization of low-, medium-, and high-carbon steels is associated with the effects of the FeO content in the slag. The lower the FeO content, the lower the sulfur content in the metal bath. However, in melting steels with a carbon content over 1% the FeO content of the slag does not depend much on the furnace pressure; while in melting low-carbon steels deeper vacuum results in a lower FeO content. The desulfurizing effect of other slag components is much weaker than that of FeO. The highest desulfurization (77% for low-carbon and

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ACCESSION NR: AP3002387

95% for high-carbon steel) was achieved by vacuum melting under a synthetic slag. Melting under a synthetic slag in nitrogen resulted in a desulfurization of 13% for low-carbon and 84% for high-carbon steel, while vacuum melting without a slag reduced the sulfur content by 11 and 23% for the low- and high-carbon steels, respectively. The optimum holding time should not exceed 15-25 min. Orig. art. has: 6 figures, 4 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 13Sep62

DATE ACQ: 12Jul63

ENCL: 00

SUB CODE: ML

NO REF SOV: 000

OTHER: 000

Card 3/3

L 11335-65 EPA(s)-2/ENT(e)/EPF(n)-2/EWA(d)/EWP(t)/EWP(b) Pt-10/Pu-4 MJW/
S/0279/64/000/004/0047/0051

JD/SH/JG
ACCESSION NR: AP4043916

AUTHOR: Volkov, S. Ye. (Moscow); Linchevskiy, B. V. (Moscow);
Polyakov, A. Yu. (Moscow); Samarin, A. M. (Moscow) B

TITLE: Use of solid slag reagents for desulfurizing metal in vacuum induction furnaces

SOURCE: AN SSSR. Izv. Metallurgiya i gornoye dolo, no. 4, 1964, 47-51

TOPIC TAGS: 1Kh18N9, stainless steel, ShKh15, ball bearing steel, steel vacuum induction melting, metal desulfurization, steel desulfurization, stainless steel desulfurization, ball bearing steel desulfurization

ABSTRACT: Experiments have been conducted to determine the effectiveness of solid slag-forming desulfurizers, such as lime, a mixture of fluorspar and alumina, lime with fluorspar, or lime with fluorspar and quartz sand, in vacuum induction melting of 1Kh18N9 stainless steel and ShKh15 ball-bearing steel. Best results were obtained with a lime + 10% fluorspar mixture, which had a grain size of 2--5 mm and

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ACCESSION NR: AP4043916

was used in an amount of 3% of the charge weight and placed on the bottom of the furnace crucible. The sulfur content of the stainless steel dropped from 0.0055--0.030% to 0.002--0.003%. The desulfurization occurs in the first 8--10 min; longer holding causes no additional drop. A fresh mixture must be used for each heat. In the case of ball-bearing steel, prolonged holding of liquid metal in contact with a slag mixture had a beneficial effect. With holding for 35 min the sulfur content was reduced from an original 0.01% to 0.0015--0.0035%. The use of solid desulfurizers had no adverse effect on the melting process, nor on the economic indices of the process. Orig. art. has: 4 figures.

ASSOCIATION: none

SUBMITTED: 21Nov63

ATD PRESS: 3100

ENCL: 00

SUB CODE: MH

NO REF SOV: 003

OTHER: 000

Card 2/2

VOLKOV, S.Ye.; LINCHEVSKIY, B.V.; POLYAKOV, A.Yu.; SAMARIN, A.M.

Desulfuration of steel in vacuum induction furnaces. Stal'
25 no.2:129-132 F '65. (MIRA 18:3)

LINCHEVSKIY, E.E.

Work of the psychoneurological department in a district hospital. Zdrav. Res. Feder. 7 no.7:20-23 J1'63. (MIRA 16:9)

1. Iz 3-y psikhiatricheskoy kliniki (nauchnyy rukovoditel' prof. Ye.S. Averbukh) Leningradskogo nauchno-issledovatel'skogo psikho-nevrologicheskogo instituta imeni V.M.Bekhtereva (dir. B.A.Lebedev).

(PSYCHIATRIC CLINICS)

LINCHEVSKIY, F.V.; SIMONOVA, R.S.

Esterification of higher synthetic fatty acids by methyl alcohol
in the presence of sulfuric acid. Trudy NIISZHIMSa no.3:26-29
'62. (MIRA 16:12)

VESELOV, V.V.; LINCHEVSKIY, F.V.; MORINA, V.I.

Thermal esterification of synthetic fatty acids under
pressure. Khim.prom. no.9:558-560 Ag '62. (MIRA 15:9)
(Acids, Fatty) (Esterification)

VESELOV, V.V.; LINCHEVSKIY, F.V.; MORINA, V.I.

Effect of the molecular weight of higher fatty acids on their capacity of being reduced to alcohols. Khim. i tekhn. topl. i masel. 8 no.3:11-15 Mr '63. (MIRA 16:4)

1. VNIISINZh.

(Acids, Fatty) (Alcohols) (Reduction, Chemical)

VESELOV, V.V.; LINCHEVSKIY, F.V.; MORINA, V.I.

Transformations of higher fatty acids during their reduction
process. Khim. i tekhn. topl. i masel 10 no.3:19-22 Mr '65.
(MIRA 18:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy
institut sinteticheskikh zhirozameniteley.

BINKEVICH, V.A.; LINCHEVSKIY, G.V.

Introducing grizzlies with electrically heated screens. Ger.zhur.
no.4:52-54 Ap '56. (MIRA 9:7)

1.Glavnyy zbegatitel' Glavrudy Ministerstva chernoy metallurgii
USSR (for Binkevich).2.Nachal'nik tekhnicheskogo otdela Krive-
rezhskogo zavoda burovykh stankov (for Linchevskiy).
(Screens (Mining))

PIROZHENKO, V.Kh.; LINCHEVSKIY, G.V.; NIKOLAYENKO, N.T.

Automatic mine traction substation equipped with semiconductors.
Avtom. i prib. no.4:10-13 O-D '63. (MIRA 16:12)

1. Krivorozhskiy gosudarstvennyy institut po proyektirovaniyu
oborudovaniya po dobyche i obogashcheniyu rud.

LINCHEVSKIY, I. A.

Linchevskiy, I. A.- "New species of the genus Cicer L. from Central Asia, " Botan.
materialy Gerbariya Botan. in-ta i . Komarova Akad. nauk SSSR, Vol. XI, 1949,
p. 108-13

SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

LINCHEVSKIY I. A.

Linchevskiy, I. A. "On the history of the discovery of the genus *Phagnalon* Cass
in the territory of the USSR," Botan. materialy Gerbariya Botan. in-ta im.
Komarova Akad. nauk SSSR, Vol. XI, 1949, p. 173

SO: U-4934, 29 Oct 53. (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

LINCHEVSKIY, I.A.

Herbs - Iran

Two species of the genus *Acantholimon* Boiss. from India and Iran, Bot. mat. Gerb., 14, 1951.

Monthly List of Russian Accessions, Library of Congress November 1952. UNCLASSIFIED.

LINCHEVSKIY, I.A.

Herbs

New species of the genus *Ipomoea* L. in the U.S.S.R. Bot. mat. Gerb., 14, 1951.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

PYATAYEVA, A.D.; LINCHEVSKIY, I.A.

Cherry Tree - Tien Shan

New species of small-fruited cherry tree from western Tien Shan. Bot. mat. Gerb. 14, 1951.

Monthly List of Russian Accessions, Library of Congress, November 1952. UNCLASSIFIED.

LINCHEVSKIY, I.A.

Plumbaginaceae family with the exception of the genera Plumbagella, Armer-
ia, and Psylliostachys. Flora SSSR 18:292-297; 298-408; 411-467 '52.

(MLRA 6:5)

(Plumbaginaceae)

LINCHEVSKIY, I.A.

New species of the genus *Tricholepis* DC. from Central Asia.

Bot.mat.Gerb. 16:479-485 '54. (MIRA 8:9)

(Asia, Central--Carduaceae)

BORISOVA, A.G.; BOCHANTSEV, V.P.; BUTKOV, A.Ya., dotsent; VASIL'KOVSKAYA, A.P.;
VVEDENSKIY, A.I., dotsent; GOLODKOVSKIY, V.L.; GONCHAROV, N.F.
[deceased]; DROBOV, V.P., professor; KOROTKOVA, Ye.Ye.; KOSTINA, K.F.;
KUDRYASHEV, S.N. [deceased]; LAKHINA, M.M.; LINCHEVSKIY, I.A.;
MIRONOV, B.A. [deceased]; PAZIY, V.K.; POYARKOVA, A.I.; PROTOPOPOV,
G.F.; SUMNEVICH, G.P. [deceased]; KHAL'ZOVA, K.P.; YUZEPCHUK, S.V.;
KOROVIN, Ye.P., professor, glavnyy redaktor; ZAKIROV, K.Z., professor,
redaktor; SHIPUKHIN, A.Ya, redaktor izdatel'stva

[The glora of Uzbekistan] Flora Uzbekistana. Glav. red. E.P.Korovin.
Tashkent, Izd-vo Akademii nauk UzSSR. Vol.3. 1955. 825 p. (MLRA 9:10)

1. Deystvitel'nyy chlen AN UzSSR (for Korovin)
(Uzbekistan--Botany)

LINCHEVSKIY, I.A.

Two new species of the genus *Valerianella* Mill. Bot.mat.Gerb.
17:383-385 '55. (MIRA 9:5)

(Cornsalad)

FEDOROV, AN.A.; LINCHEVSKIY, I.A.; KIRPICHNIKOV, M.E.

In the tropics and subtropics of China. Bot.zhur.41:1235-1262 Ag
'56. (MLRA 9:12)

1. Botanicheskiy institut imeni V.I. Komarova Akademii nauk SSSR,
Leningrad.

(Yunnan Province--Phytogeography)

LAN'YAU, I. [Lanjouw, J.]; PROKHANOV, Ya.I. [translator]; SHISHKIN, B.K., obshchiy red.; LINCHEVSKIY, I.A., otv.red.; YAKOVLEVA, V.M., red.izd-va; SMIRNOVA, A.V., tekhn.red.

[International code of botanical nomenclature adopted by the Eighth International Botanical Congress, Paris, July 1954]
Mezhdunarodnyi kodeks botanicheskoi nomenklatury, prinyati
vos'mym Mezhdunarodnym botanicheskim kongressom, Parizh, iul'
1954 g. Pdogotovlen i izdan: I.Lan'iau, i dr. Pod red. B.K.
Shishkina i I.A.Linchevskogo. Moskva, 1959. 90 p.

(MIRA 12:10)

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KOROVIN, Ye.P., akademik; KOROTKOVA, Ye.Ye.; KUDRYASHEV, S.H.
[deceased]; LINCHEVSKIY, I.A.; MAUER, F.M.; PAZIY, V.K.; POPOV,
M.G. [deceased]; RUSANOV, F.N.; SUMNEVICH, G.P. [deceased]; ZAKIROV,
K.Z., glavnyy red.; MUZAFAROV, A.M., red.; CHERNYAVSKAYA, A.B.,
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BOBROV, Ye.G., doktor biol.nauk, prof.red.; VASIL'CHENKO, I.T.,
red.; GORSHKOVA, S.G., red.; GRIGOR'YEV, Yu.S., red.; GRUBOV, V.I.,
red.; DOROFYEV, P.I., red.; IL'INSKAYA, I.A., red.; KLOKOV, M.V.,
red.; KUPRIYANOVA, L.A., red.; LINCHEVSKIY, I.A., red.; NOVOPOKROV-
SKIY, I.V., red.; POBEDIMOVA, Ye.G., red.; POPOV, M.G., red.;
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BOBROV, Ye.G., doktor biolog.nauk, prof.; BOCHANTSEV, V.P.;
IL'IN, M.M.; LINGHEVSKIY, I.A.; LIPSHITS, S.Yu.;
SERGIYEVSKAYA, Ye.V.; CHERNEVA, O.V.; CHEREPANCY, S.K.;
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(DICOTYLEDONS)

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Sost. V.I.Grubov. Moskva, Izd-vo AN SSSR. No.1. [Preface.
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TAMAMSHYAN, S.G.; KHARADZE, A.L.; TSVELEV, N.N.; CHEREPANOV, S.K.;
SHOSTAKOVSKIY, S.A.; BOEROV, Ye.G., doktor biol. nauk, prof.,
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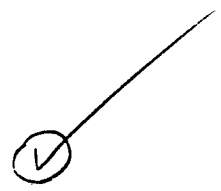
S/107/60/000/05/030/047
D047/D006

AUTHORS: Kudinov, A., Assistant to the Minister of Communications
of the Uzbek SSR, Linchevskiy, M., Chief Engineer DRTS

TITLE: Two Programs Over the Wires

PERIODICAL: Radio, 1960, Nr 5, p 43 (USSR)

ABSTRACT: This is a description of a diffusion^o network for two programs set up by Uzbek radio workers in Tashkent and other towns. Of the two programs transmitted by the receiving center, one is rediffused by the usual method and for the other a special transmitter, assembled on the basis of a TU-600 amplifier, is used. Among other parts used in the equipment are a line transformer from a KVH-49 television set, PlB, P2B and P3B triodes and DGTs23 diodes. There is 1 diagram.



Card 1/1

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24 no.5:18-19 My '64. (MIRA 17:6)

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ARKHANGEL SKIY N.M.; SEREBRIN, L.A.; SAZONOV, I.I.; PESHKO, M.K.;
SHANURENKO, V.I.; PAYNGERSH, N.S., inzh.; KLYUCHEV, V.M., inzh.;
PARADNYA, P.F.; LINCHEVSKIY, M.A.; PARSHIN, A.P.

Additional potentials in the development of multiprogramm
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(MIRA 18:2)

1. Nachal'nik Karagandinskoy direktsii radiotranslyatsionnoy seti (for Arkhangel'skiy). 2. Nachal'nik Odesskoy oblastnoy direktsii radiotranslyatsionnykh setey (for Serebrin). 3. Glavnyy inzh. Rizhskoy direktsii radiotranslyatsionnykh setey (for Sazonov). 4. Starshiy inzh. Rizhskoy direktsii radiotranslyatsionnykh setey (for Peshko). 5. Nachal'nik laboratorii Nauchno-issledovatel'skogo instituta Ministerstva svyazi SSSR (for Shanurenko). 6. Gor'kovskaya direktsiya radiotranslyatsionnykh setey (for Fayngersh, Klyuchev). 7. Nachal'nik Kiyevskoy gorodskoy direktsii radioseti (for Paradnya). 8. Glavnyy inzh. Uzbekskoy respublikanskoy direktsii radiotranslyatsionnykh setey (for Linchevskiy). 9. Nachal'nik Ufimskoy gorodskoy radiotranslyatsionnoy seti (for Parshin).

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SO: U-4934, 29 Oct 53, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949).

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Kazakhstan. Trudy Alma-At. bot. sada 4:76-89 '59.

(MIRA 12:12)

(Kazakhstan--Stone fruit)

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(Alma-Ata--Apple--Varieties)

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SOLOMINOVA, I.N.; BRAILOVSKAYA, M.Ya., red.; OSTROVERKHOV,
A.P., red.; MUSHEGYAN, A.M., prof., doktor biol.nauk, red.; ROROKINA, Z.P.,
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LINCHEVSKIY, V;

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