GOLIKOV, A. N.

New species of gastropods of the genus Neptunea Bolten (Gastropoda, Prosobranchiata) from the Far Eastern seas of the U.S.S.R. Trudy Zool. inst. 30:3-10 '62. (MIRA 15:10)

(Pacific Ocean—Prosobranchiata)

GOLIKOV, A.N.; KUSAKIN, O.G.

Fauna and ecology of prosobranchiate gastropods in the littoral waters of the Kurile Islands. Issl.dal'nevost.mor.SSSR no.8: 248-346 '62. (MIRA 15:12)

1. Zoologicheskiy institut AN SSSR.
(Kurile Islands—Prosobranchiata)

GOLIKOV, Aleksandr Nikolayevich; [illegible], E.V., red.

[Role of the nervous system in the healing of wounds]
O roli nervnoi sistemy v zazhivlenii ran. Moskva, Meditsina, 1966. 217 p. (MIRA 19:7)

GOLIKOV, A.N.

"The Technique of Intravenous Transfusions."
SO: Veterinariya, Vol.30,No.4,March/April 1953,uncl.

GOLIKOV, A. N.

GOLIKOV, A. N. (Department of General and Special Surgery, Military Veterinary Academy of the Red Army)
Some problems of special surgery.

Source: Veterinariya; 4-5; April/May 1945 uncl
IAFGCN

GOLIKOV, A. N.

GOLIKOV, A. N. (Captain, Veterinary Service, Department of General and Special Surgery, Military-Veterinary Academy, Veterinary Service,). Elimination of secondary suture on contaminated wounds.

So: Veterinariya; 28;4; September 1951; Uncl.
TAB-N

GOLIKOV, A.N., Assistant
Moscow Veterinary Academy
"Regenerating changes in granulative wound, covered with commissure."
SO: VET. 27 (1) 1950, p. 53 c.ovd

GOLIKOV, A. N.

"Healing of a Granular Wound Closed by a Suture," edited by Lavydovskiy, I. V., Izd-vo Akad. Med. Nauk SSSR, Moscow, 1951

GONIKOV, A.N.

Author of an article, "About the Work of the Council of the Moscow Veterinary Academy".
SO:Veterinariya;Vol.29;No.6;69-73;June 1952 uncl de ;
Trans. # 61 by L.Julich card

GOLIKOV, A.N.

[Theory and practice of the surgical suture] Teoriia i praktika khirurgicheskogo shva. Moskva, Gos. izd-vo selkhoz. lit-ry, 1953. 159 p.
(MLRA 6:9)
(Veterinary surgery)

GOLIKOV, A.N. (Moskva)

Mechanism of regenerative and movement disorders following compound nerve injuries. Eksp. khir. 3 no.6:50-51 N-D '58. (MIRA 12:1)
(NERVES--WOUNDS AND INJURIES) (REGENERATION (BIOLOGY))
(MOVEMENT DISORDERS)

PLAKHOTIN, M.V., prof.; GOLIKOV, A.N., dots.

Current status of the problem of treating wounds in farm animals. Veterinariia 36 no.2:75-79 F '59. (MIRA 12:2)

1. Moskovskaya veterinarnaya akademiya.
(Wounds--Treatment)

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515720012-8"

GOLIKOV, A. N., Dr. Veter. Sci. (diss) "Features of Closing of Wounds and Some Functional-Morphological Changes in Animals from Destruction of Innervation," Mosc ow, 1961, 24 pp. (Leningrad Vet. Inst.) 3[illegible] copies (KL Supp 12-61, 281).

GOLIKOV, A.N.

Ecology of reproduction and nature of egg capsules in some gastropod species of the genus Neptunea (Bolten). Zool.zhur. 40 no.7:997-1008 Jl '61. (MIRA 14:7)

1. Zoological Institute of the U.S.S.R. Academy of Sciences, Leningrad.

(Gastropoda) (Mollusks--Eggs)

GOLIKOV, Aleksandr Nikolayevich; PAVLOVSKIY, Ye.N., akademik, glavnyy red.; STRELKOV, A.A., red.toma; BYKHOVSKIY, B.Ye., red.; GROMOV, I.M., red.; MONCHADSKIY, A.S., red.; SKARLATO, O.A., red.; SHTAKEL'BERG, A.A., red.; KONDRAT'YEVA, M.N., tekhn.red.

[Gastropoda of the genus Neptunea Bolten] Brjukhonogie molliuski roda Neptunea Bolten. Moskva, Izd-vo Akad. nauk SSSR, 1963. 217 p. (Fauna SSSR, no.85. Molliuski, vol. 5, no.1). (MIRA 16:5)
(Gastropoda)

[illegible]

[illegible] and tooth shells (Gastropoda and Scaphopoda) of the northern part of the Greenland Sea and regions north of Spitsbergen and Franz Josef Land. Trudy AANII 259: [illegible] (1963) 17:13

GOLIKOV, A.N., doktor veterinarnykh nauk

Prophylaxis and therapy of animal diseases. Veterinariia 41 no.7:63-65 Jl '64. (MIRA 18:11)

GOLIKOV, A.P., mayor meditsinskoy sluzhby

Changes in myocardial functions following disturbance of the sleep pattern. Voen.med.zhur. no.12:73 D '56. (MLRA 10:3)
(BLOOD PRESSURE) (SLEEP)

GOLIKOV, A.P. (Leningrad)

A case of pheochromocytoma. Klin.med. 37 no.6:155-157 Je '59. (MIRA 12:8)

1. Iz kafedry gospital'noy terapii No.2 (nach. - prof.Z.M. Volynskiy) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

(PHEOCHROMOCYTOMA, case reports (Rus))

VOL'FSON, T.I.; GOLIKOV, A.P.; MIKHUSHKIN, M.K.

Effect of corn oil on lipoid metabolism and the development of atherosclerosis. Kardiologiia 1 no.5:29-34 '61 (MIRA 17:4)

MIKUSHKIN, M.K.; GOLIKOV, A.P.; MINCHUK, V.M.

Effect of corn oil on the processes of fatty degeneration of the liver and biosynthesis of cholesterol in experimental atherosclerosis. Biul. eksp. biol. i med. 53 no.4:53-56 Ap '62. (MIRA 15:4)

1. Iz kafedry voyenno-morskoy i gospital'noy terapii (nachal'nik - prof. A.M.Volynskiy) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova, Leningrad. Predstavlena akademikom N.N.Anichkovym.
(CORN OIL--PHYSIOLOGICAL EFFECT) (ARTERIOSCLEROSIS)
(LIVER--DISEASES) (CHOLESTEROL)
(SUNFLOWER SEED OIL--PHYSIOLOGICAL EFFECT)

GOLIKOV, A.P., dotsent; MIKUSHKIN, M.K., starshiy nauchnyy sotrudnik

Conference on the problem of atherosclerosis. Kardiologiia 2 no.5:90-94 S-O '62. (MIRA 15:12)
(ARTERIOSCLEROSIS--CONGRESSES)

GOLIKOV, A.P.; MIKUSHKIN, M.K. (Leningrad)

Symposium on the prevention and treatment of atherosclerosis.
Terap. arkh. 34 no.12: 118-119 D'62. (MIRA16:6)
(ARTERIOSCLEROSIS—CONGRESSES)

GOLIKOV, A.P., dotsent; MIKUSHIN, M.K. (Leningrad)

First (constituent) All-Union Conference of Cardiologists.
Kardiologiia 3 no.3:91-94 My-Je'63. (MIRA 16:9)
(CARDIOLOGY—CONGRESSES)

GOLIKOV, A.P., dotsent (Leningrad)

Work of the First All-Union (constituent) Conference of Cardiologists. Vrach. delo no.12:137-138 D '63. (MIRA 17:2)

[illegible]

[illegible]

[illegible]

VOL'FSON, T.I.; GOLIKOV, A.P.

Diagnostic value of determining sialic acids in slowly developing forms of rheumatic fever. Lab. delo 10 no.4:206-208 '64. (MIRA 17:5)

1. Kafedra voyenno-morskoy i gospital'noy terapii (nachal'nik - prof.Z.M.Volynskiy) Voyenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova, Leningrad.

GOLIKOV, A.P.

Experience with [illegible] med. abur. [illegible]. [illegible]

1. Kafedra voyennoy [illegible] pri pitbiologicheskoy [illegible] prof. [illegible] Voyenno-[illegible] imeni [illegible], Arkhangel.

GOLIKOV, A.P., dotsent

Cardiac arrhythmias; based on materials of the Plenary Session of the All-Union Cardiological Society. Sov.med. 28 no.7:149-151 Jl '65. (MIRA 18:8)

GOLIKOV, A.V., inzhener.

Eccentric sluice gate. Gidr.i mel. 8 no.4:42-45 Ap '56. (MLRA 9:8)
(Sluice gates)

GOLIKOV, A.V.

Experimental actinomycosis in 1-and 2-day-old rabbits. Zhur. mikrobiol., epid. i immun. 40 no.12137-141'63. (MIRA 16:10)

1. Iz Vsesoyuznogo instituta eksperimental'noy veterinarii.

GOLIKOV, A.V.

Fungistatic action of some antibiotics on pathogenic strains of actinomycetes and proactinomycetes. Antibiotiki 8 no.3: 212-215 Mr'63 (MIRA 17:4)

1. Laboratoriya mikologii i antibiotikov (zav. - prof. A. Kh. Sarkisov) Vsesoyuznogo instituta eksperimental'noy veterinarii.

GOLIKOV, A.V.

Concentration of some antibiotics in actinomycoma and in the blood of animals in actinomycosis. Antibiotiki 8 no. 11: 1045-1048 N '63. (MIRA 17:9)

1. Laboratoriya antibiotikov (zav. - prof. A.Kh.Sarkisov) Vsesoyuznogo instituta eksperimental'noy veterinarii.

[illegible]

[illegible] adaptation of Pro-
[illegible] antibiotiki 10
[illegible] (MIRA 18:5)

1. [illegible] Vsesoyuznaya veterinarnaya [illegible].

[illegible]

[illegible]

[illegible]

GOLIKOV, A. V., (Veterinary Surgeon, Lev Tolstoi, State Farm, Lipetsk Oblast')

The use of the biogenic stimulant with penicilline

Veterinariya vol. 38, no. 10, October 1961, pp. 81-89.

GOLIKOV, A.V., aspirant

Treatment of actinomycosis in cattle. Veterinariia 40 no.7: 15-16 Jl '63. (MIRA 16:8)

1. Vsesoyuznyy institut eksperimental'noy veterinarii.
(Actinomycosis) (Cattle--Diseases and pests)

POLYAKOV, L.V., NAZUVAYEV, V.D., GOLIKOV, A.Ye.

New method for excluding lost-circulation zones in well drilling. Buranie no.9:8-10 '65. (MIRA 18:10)

1. Konstruktorskoye byuro neftyanoy i gazovoy promyshlennosti ob"yedineniya "Saratovneftegaz".

USSR/Crystals. B-5

Abs Jour : Referat Zhur - Khimiya, No 6, 1957, 18305

Author : B.M. Golikov, V.T. Borisov.
Title : Study of Autodiffusion of α - Iron.

Orig Pub : Proel. metalloved. i fiz. metallov, sb.4, 1955, 528-542

Abstract : A modification of the absorption method is proposed for the determination of small autodiffusion factors D. This modification requires no preliminary determination of the absorption factor of the β- radiation of the radioactive indicator. The processes taking place in the active layer and on the separating boundary layer-sample are taken into consideration. The form of the absorption function does not influence the value of $I(t) / I(t_0)$ much. It is shown how to take the isotope composition of the compound into consideration. It was found that within the temperature interval from 650 to 850°, the autodiffusion of α-Fe was described by the equation $D = 5.3 \times 10^2 \exp(-67110/RT)$ $sm^2 sec^{-1}$.

Card 1/1 - 67 -

GOLIKOV, F.

New charging material for filters. Zhil.-kom.khoz. 9 no.12: 17-18 '59. (MIRA 13:4)

1. Upravlyayushchiy trestom "Vodokanal", g.Yaroslavl'.
(Filters and filtration) (Ceramic materials)

GOLIKOV, F., general armii

Some problems concerning our propaganda. Komm.Vooruzh.Sil 1 no.5:16-25 D '60. (MIRA 14:8)
(Russia--Armed forces--Political activity)

GOLIKOV, F., general armii

Let's persistently follow the party line in the work of political organizations. Komm. Vooruzh. Sil 1 no.1:17-25 O '60. (MIRA 14:7)

(Russia--Armed forces--Political activity)

PHASE I BOOK EXPLOITATION SOV/4944

Kamnev, P.V., Candidate of Technical Sciences, Docent, Ed.

Peredovoy opyt kovki (Advanced Experience in Forging) [Leningrad] Lenizdat, 1959. 246 p. 5,000 copies printed.

Ed.: Ye.V. Yemel'yanova; Tech. Ed.: I.M. Tikhonova.

PURPOSE: This collection of articles is intended for workers and engineers in die-forging shops and for personnel of affiliated branches in the machine industry.

COVERAGE: The articles deal with the advanced experience of a number of Leningrad plants in mechanizing and improving production methods in die forging. Recommendations are made concerning the specialization of forging shops, and the further development of open-die forging processes. Articles by operators-innovators in forging shops of the Novyy-Krematorskiy (New Kramatorsk) and Ural'skiy (Ural) machinery plants are included. The collection contains some of the papers which were discussed during the conference in June 1958 (P.V. Kamnev, Chairman) on open-die forging, called by the regional section for the pressworking of metals of the Leningradskoye Pravleniye nauchno-tekhnicheskogo obshchestva mashinostroitel'noy promyshlennosti (Leningrad Administration of the Scientific and Technical Society of the Machine Industry) and the Leningradskiy Dom nauchno-tekhnicheskoy propagandy (Leningrad House of Scientific and Technical Propaganda). The foreword includes a list of the participants who submitted papers to the aforementioned conference. There are no references.

AVAILABLE: Library of Congress

Card 4/4

Vkhrame/afm
4/24/61

KOCHERGIN, S.M.; GOLIKOV, G.A.

Determination of the quality of the electrode surface by measuring the contact difference of potentials. Trudy KKHTI no.30:271-276 '62. (MIRA 16:10)

KOCHERGIN, S.M.; GOLIKOV, G.A.

Evaluating the state of surfaces of zinc electrodes as dependent on the treatment and structure by measuring the contact potential difference. Izv.vys.ucheb.zav.;khim.i khim.tekh. 6 no.1:111-113 '63. (MIRA 16:6)

1. Kazanskiy khimiko-tekhnologicheskiy institut, kafedra fizicheskoy khimii.

(Electrodes, Zinc)

KOCHERGIN, S.M.; GOLIKOV, G.A.

Comparative characteristics of the state of an electrode surface determined by the measurement of contact potential difference. Zhur. fiz. khim. 37 no.5:1116-1119 My '63. (MIRA 17:1)

1. Kazanskiy khimiko-tekhnologicheskiy institut imeni S.M. Kirova.

L 12603-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD/JG

ACCESSION NR: AP3001704 S/0126/63/015/005/0784/0786

56
55

AUTHOR: Kochergin, S. M.; Golikov, G. A.

TITLE: Contact potential difference of copper and nickel treated with electrolytes

SOURCE: Fizika metallov i metallovedeniye, v. 15, no. 5, 784-786

TOPIC TAGS: contact potential difference, Cu, Ni, electrolyte, discharge energy of electron, surface condition, oxidizing solution, reducing solution

ABSTRACT: The contact potential differences of commercial copper foil and nickel sheets treated with electrolytic solutions were measured to study the metal surfaces. A capacitor with a vibrating electrode was used as measuring equipment, and a gold plate was used as comparing electrode. All measurements were made in the air. The following solutions were used: oxidizing - 0.1% $KMnO_4$, 0.1% CrO_3, 0.1% $K_2Cr_2O_7$, reducing - 0.1% Na_2S, 0.1% KI, 0.1% $FeSO_4$ in 0.01 NH_2SO_4. Oxidizing solutions caused a decrease of contact potential difference; reducing solutions caused an increase. It is concluded that a superficial layer always exists on the surface of the metal, regardless of the solution with which the surface is treated. Various solutions,

Card 1/2

L 12603-63
ACCESSION NR: AP3001704

however, affect and change the composition of the layer, and thus affect the discharge energy of electrons. Orig. art. has: 4 figures.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut im. S. M. Kirova (Kazan Institute of Chemical Technology)

SUBMITTED: 26Feb62 DATE ACQ: 11Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 003 OTHER: 000

Card 2/2

L 48989-65 EWT(m)/EWG(m)/T IJP(c)

ACCESSION NR: AP5011468 UR/0076/65/039/004/0890/0892

AUTHOR: Tsypin, M.Z.; Golikov, G. A.; Karaseva, Yu. D.

TITLE: Photogalvanic effect, electronic work function, and catalytic activity of an oxidized silver electrode

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 4, 1965, 890-892

TOPIC TAGS: electrode structure, electrode activity, silver electrode, photogalvanic effect, electron emission, electrochemical reduction, oxygen reduction, silver oxide

ABSTRACT: The purpose of this work was to study the process of electrochemical reduction of oxygen on silver oxides prepared electrochemically and possessing photogalvanic activity. The latter was determined as the difference between the electrode potential in darkness φ and under illumination φ_c: $\Delta\varphi = \varphi - \varphi_c$. The following samples were investigated: (1) silver anodically polarized in a 0.1 N NaOH solution for which $\Delta\varphi = 0$; (2) silver anodically polarized in a 0.1 N NaOH solution for which $\Delta\varphi$ was a maximum; (3) a mechanically polished silver plate. The data obtained show that the transition from Ag_2O to AgO is associated with a

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L 48989-65

ACCESSION NR: AP5011468

maximum in photogalvanic activity $\Delta\varphi$ and with pronounced changes in the value of the contact potential difference V_c (relative to a gold reference electrode). The characteristic course of the curve representing the contact potential difference (steep decline after a certain maximum was reached) led the authors to suggest the existence of a relationship between the catalytic activity of the oxidized electrode surface and the corresponding changes in the electronic work function. The highest percentage of reduced oxygen corresponds to the electrode having the maximum $\Delta\varphi$. The concordance between the changes in $\Delta\varphi$ and V_c as well as the results of experiments on the reduction of oxygen indicate that both these quantities can be used to characterize the catalytic activity of the silver oxide electrode in the electrochemical reaction of oxygen reduction. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut (Kazan' Chemical Engineering Institute)

SUBMITTED: 25Oct63 ENCL: 00 SUB CODE: GC

NO REF SOV: 006 OTHER: 000

Card 2/2 mb

TSYPIN, M.C.; GOLIKOV, G.A.; KAZANTSEVA, Ye.L.

Photogalvanic effect, work function of an electron and catalytic activity of an oxidized silver electrode. Zhur. fiz. khim. 39 no.4: 890-892 Ap '65. (MIRA 19:1)

1. Kazanskiy khimiko-tekhnologicheskiy institut im. S.M.Kirova [illegible], 1963.

L 37681-66 EWT(m)/T/EWP(t)/ETI DJ/JD

ACC NR: AP6011250 (N) SOURCE CODE: UR/0413/66/000/006/0093/0093

AUTHOR: Garkunov, D. N.; Markov, A. A.; Golikov, G. A.

ORG: none

TITLE: Determining antifriction properties of materials. Class 42, No. 179975

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 93

TOPIC TAGS: antifriction property, friction pair

ABSTRACT: This Author Certificate introduces a method of determining the antifriction properties of materials. To achieve better selection of material for friction pairs, an inert metal such as gold is used as a standard for measuring the contact potential difference of each friction pair specimen; the standard and specimen are measured in various lubricants using a device for measuring the work function of capacitor electrons. Materials with the highest potential difference are selected. [LD]

SUB CODE: 11/ SUBM DATE: 21Sep64

Card 1/1 UDC: 620.178.162.2

BERKUTOV, A.N., professor; GOLIKOV, G.T.; RYBAKOVA, G.A.

Using bicillin in surgical practice and possibilities of its use in field medicine. Voen.-med.zhur.no.10:32-40 O '56. (MLRA 10:3)
(PENICILLIN) (MEDICINE, MILITARY)

BERKUTOV, A.N., professor; GOLIKOV, G.T.; RYBAKOVA, G.A.

Use of bicillin, a slow-acting penicillin preparation. Vest.khir. 77 no.10:67-73 O '56. (MIRA 9:12)

1. Iz kliniki voyenno-polevoy khirurgii (nach. - prof. A.N.Berkutov) Voyenno-meditsinskoy ordena Lenina akademii im. S.M.Kirova, Leningrad, Pirogovskaya naberezhnaya, 3, klinika voyenno-polevoy khirurgii VMOLA im. S.M.Kirova.

(PENICILLIN, rel. cpds.
benzathine penicillin G, ther. of wds., local admin.)
(WOUNDS AND INJURIES, ther.
benzathine penicillin G, local admin.)

GOL'KOV, G.T., mayor med. sluzhby

Application of primary, primary delayed, and secondary sutures in combined injuries; experimental studies. Voen.-med.zhur. no.11:15-19 N '57. (MIRA 11:4)

(WOUNDS AND INJURIES, experimental,
suture, primary, primary-delayed & secondary (Rus)
(SUTURES,
primary, primary-delayed & secondary in exper. combined wds. (Rus)

GOLIKOV, G.T.

Experimental study of the effect of biomycin, biseptin, and penicillin in treating compound involvements [with summary in English]. Eksper. khir. 3 no.1:40-43 Ja-F '58. (MIRA 11:2)

1. Iz kafedry voyenno-polevoy khirurgii (nach. - prof. A.N.Berkutov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

(ROENTGEN RAYS, inj. eff.
exper. wds., prev. of infect. with penicillin, benzathine penicillin G & chlortetracycline (Rus))
(PENICILLIN, ther. use
benzathine penicillin G & penicillin prev. of infect. in exper. x-ray induced inj. (Rus))
(CHLORTETRACYCLINE, ther. use
infect. in exper. x-ray induced inj., prev. (Rus))

17(

SOV/177-58-5-23/30

AUTHOR: Golikov, G.T., Major of the Medical Corps

TITLE: Diagnosis of an Ureterolith (K diagnostike kamnya mochetochnika)

PERIODICAL: Voyenno-meditsinskiy zhurnal, 1958, Nr 5, pp 83-84 (USSR)

ABSTRACT: For diagnosing an ureterolith, the author applies the so-called procedure of displacing the shadow of the concretion. The position of the ureter and of the calculus is changed by means of a catheter (Figure 2). The procedure is based on the calculation of this mobility of the ureterolith. It presents a useful supplement to the existing methods of instrumental and X-ray examination of patients suffering from an ureterolith. There are 2 photographs.

Card 1/1

GOLIKOV, G.T.; KHARIN, V.Yu.

Comparative evaluation of diffetent incisions of the aorta in open interventions on the aortic valve; experimental study. Grud. khir. 5 no.6:3-8 N-D'63 (MIRA 17:2)

1. Iz Instituta serdechno-sosudistoy khirurgii (direktor - prof. S.A. Kolesnikov, nauchnyy rukovoditel' - akad. A.N. Bakulev) AMN SSSR. Adres avtorov: Moskva, V-49, Leninskiy prosp., d.8. Institut sedechno-sosudistoy khirurgii AMN SSSR.

BURAKOVSKIY, V.I.; BUKHARIN, V.A.; GOLIKOV, G.T.; DOBROVA, N.B.; KISIS, S.Ya.

Prosthesis of the semilunar valves of the pulmonary artery in their isolated insufficiency. Grud. khir. 6 no.4:12-15 Jl-Ag '64. (MIRA 18:4)

1. Otdeleniya vrozhdennykh porokov serdtsa (zav. - doktor med.nauk V.I.Burakovskiy) i laboratoriya polimerov (zav. - kand.med.nauk N.B.Dobrova) Instituta serdechno-sosudistoy khirurgii (dir. - prof. S.A.Kolesnikov, nauchnyy rukovoditel' - akademik A.N. Bakulev) AMN SSSR, Moskva.

KOLESNIKOV [illegible] YEMKUZHEV, I.I.; GOLIKOV, G.T.; DOBROVA, K.S.; SMUROVA, Ye.V.; [illegible]

[illegible] of an artificial tricuspid valve in surgical treatment of a [illegible] insufficiency. Grud. khir. 6 no.5:3-8 S-O [illegible]. (MIRA 28:4)

[illegible] (Dir. - prof. S.A. [illegible] akademik A.N.Bakulev) AMN SSSR [illegible] Leninskiy prospekt [illegible] kirurgii.

TSUKERMAN, G.I.; GOLIKOV, G.T. (Moskva)

Traumatic defect of the interventricular septum of the heart. Grud. khir. 6 no.1:102-105 Ja-F '64. (MIRA 18:11)

1. Adres avtorov: Moskva, V-49, Leninskiy prospekt, dom. 8, Institut serdechno-sosudistoy khirurgii.

L 8141-66 EWT(m)/EWG(m)/EWP(t)/EWP(b) IJP(c) RDM/JD/JXT(BF)

ACC NR: AP5025728 SOURCE CODE: UR/0286/65/000/018/0080/0081

AUTHORS: Kal'manson, V. A.; Zlotnikov, G. G.; Vishnevskaya, N. P.; Petrov, G. A.; Zaytsev, Ye. N.; Golikov, I. G.; Pokrovskiy, I. V.

ORG: none

TITLE: Reading-copying apparatus. Class 42, No. 174810 [announced by Laboratory for Electromodulation of the All-Union Institute for Scientific and Technical Information, AN SSSR (Laboratoriya elektromodelirovaniya vsesoyuznogo instituta nauchnoy i tekhnicheskoy informatsii AN SSSR)]

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 18, 1965, 80-81

TOPIC TAGS: microreader, microcopying device, selenium copying device

ABSTRACT: This Author Certificate presents a reading-copying apparatus. The device contains an optical system which permits reading and copying of micro-images. To make the device more convenient to use and to improve its performance during selective copying, the device is equipped with a charge-developing electrographic installation (see Fig. 1). The selenium plate of the latter coincides with a transparent screen situated within the depth limits of the sharpness of the objective. A modification of the above device for the complete copying of exposure onto the selenium plate contains a concave mirror.

Card 1/2 UDC: 778.148.2.778.275

L 8141-66

ACC NR: AP5025728

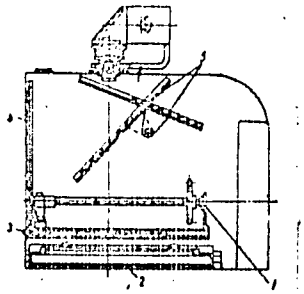

Fig. 1. 1- charging installation; 2- developing installation; 3- selenium plate; 4- transparent screen; 5- mirror

Orig. art. has: 1 figure.

SUB CODE: EC, NP/ SUBM DATE: 22Sep64

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[illegible], I. I.

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[illegible]

Abnormality in nickel-chrome carburizing steels. I. N. Gokkov. *Metallurg* 9, No. 7, 30-37 (1934). Specimens of steels from 100 heats contg. C 0.10-0.16, Cr 0.65-0.90 and Ni 2.8-3.4% were carburized and examd. micrographically. A few of the specimens were slightly abnormal, as indicated by small grain size and the presence of nodular cementite. Disintegration of pearlite in the hypereutectoid areas did not occur. The elastic limit and ultimate strength of the abnormal steels were slightly less than those of the normal steels. To det. the cause of abnormality samples were taken during subsequent heats and examd. The addn. of Ni up to 3% did not reduce abnormality but the addn. of Cr (more than 0.4%) did. Abnormality of steels is caused not by the presence of oxides (*C. A.* **16**, 2291; **23**, 3360) but by the presence of dissolved CO or CO_2, which during cooling reacts with Fe, depositing carbides on the existing centers of crystn. Elements such as Cr and Mn which readily form carbides reduce abnormality. H. W. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Grain size in alloyed and unalloyed steels [illegible] Golikov and M. I. Vinograd [illegible] 4, [illegible] 19-19.6); *Chem. Zentr.* 1937, I, [illegible] A review is given of the effect on strength of the grain size of alloyed steels Ni, Cr-Ni-W and Cr-Ni-Mo) and unalloyed tool and structural steels contg [illegible] Data are given on various methods of treating for the [illegible] effect of a coarse structure [illegible]

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

Mass control of the granular structure of carbon and alloyed steels. S. A. Bernasovskaya and I. N. Golikov. *Zavodskaya Lab.* 5, 606-11(1936); cf. *Ibid.* 4, 1299 (1935). A discussion with graphs and 26 photomicrographs. Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

The principles of steel classification

H. W. Fahlmann

S

The Relation Between the Grain Size and the Properties of Tool Steels. I. N. Golikov. (Kachestvennaya Stal, 1937, No. 7, pp. 14-20). (In Russian). The author describes the results of observations of the effect of grain size on the properties of four groups of tool steels, namely, carbon steels and low alloy tungsten or vanadium steels, steels alloyed with chromium or with chromium plus other elements in amounts of 0.5-4.0%, high alloy steels and the steels. The results of this research indicated the advantages of estimating the quality of tool steel from its quenching properties rather than from its grain size. The McQuaid Ehn grain size could be related to the properties of shallow-hardening tool steels, but in deep-hardening steels the grain size had no influence on the properties of the treated steel. Grain size control could therefore be used as a method of regulating the depth of hardening produced by quenching only in the case of the first group of steels.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES

S

The Melting of Alloy Steels to Produce a Given Grain Size. F. Filipycheva and I. N. Golikov. (Kachestvennaya Stal, 1937, No. 9, pp. 4-18). (In Russian). In the introduction the authors refer to previous work which has shown that in the case of some steels, grain size has no direct relation to the physical properties and that consequently there is no object in trying to obtain any given grain size. Grain size is, however, of importance in a number of chromium-bearing tool steels, in structural steels containing considerable additions of chromium, nickel, or tungsten with chromium, nickel or molybdenum, as well as in the low-alloy structural steels which are not subjected to case-hardening. The object of the investigation, which was carried out on a large scale, was to study methods of obtaining that grain size in the particular steel which would impart the best properties. To do this the influence of various factors relating to the melting, refining, deoxidising and pouring practice was studied. In conclusion a number of "minute-by-minute" melting instruction schedules are described, in which the exact composition of the furnace charge is given and all the additions and treatments during melting are listed. These instructions show the melting procedure to be adopted to obtain a given grain size in low chromium and nickel steels.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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The Determination and Meaning of Grain Size. S. A. Barsukov-skaya and L. N. Golikov. (Kachestvennaya Stal, 1938, No. 1, pp. 31-37) (In Russian). Practical tests of various accelerated methods of determining grain size as well as considerations of the principles involved lead the authors to the conclusion that the McQuaid-Ehn cementation method should be regarded as the best for routine test purposes. A number of examples of grain size determinations in structural steels are presented and illustrated by micrographs.

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS

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The Working of "ER" High-Speed Tungsten Steel. P. Karyazin and I. Golikov. (Stal, 1938, No. 4, pp. 67-70). (In Russian). The authors summarise the difficulties encountered on a previous occasion during an attempt to draw this type of steel. The difficulties were partially solved at the time, and the present article describes further investigations on the subject with particular reference to the preliminary and intermediate heat treatments. Two heats of steel were used in the experiments, the first having the composition: Carbon 0·69%, silicon 0·18%, manganese 0·23%, phosphorus 0·017%, tungsten 17·63%, chromium 4·20%, nickel 0·20% and vanadium 0·70%. The second steel differed only in its carbon and silicon contents, which were 0·76% and 0·23% respectively, the remaining alloying constituents being practically the same. Good results were obtained by annealing the rolled 0·2 mm.-dia. rod at 860° C., followed by cooling in stages, the steel being maintained for some time at 760° C., with a subsequent "carbide tempering" at 720° C. Scale, which caused pitting during pickling, was removed by drawing the material through a die with a diameter 2-3 mm. greater than that of the rod. Deformations of up to 20% could be obtained with suitably pre-treated steel. For recrystallisation heat treatment a temperature of 780° C. for 1 hr. followed by cooling in water was found to be the most suitable.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

The Annealing of Tool Steels. I. Gonkov. (Stal, 1939, No. 6, pp. 32-39). (In Russian). The author makes a detailed examination of the annealing treatment for tool steels and considers the conditions under which it is carried out. In view of the importance of the original structure in deciding the annealing schedule, he lists the structures generally present in standard Russian alloy tool steels after hot working. In considering the Ac_1 transformation, particular reference is made to the behaviour of the carbides and to the form of the residual dispersed carbides. Taking all the available data, the author amplifies the statement originally made by N. T. Belaiew that the formation of lamellar pearlite must be preceded by the complete solution of the cementite on heating by the statement that a pre-requisite for the crystallisation of granular carbide during the pearlite transformation is the presence in the bulk of the original austenite of regions of residual dispersed carbide. In connection with the effect of annealing temperature, it is pointed out that if annealing is required to produce granular pearlite, then for any given steel the annealing temperature should be between that at which the Ac_1 transformation is complete and that above which the first regions of lamellar pearlite are formed. The deciding factor in obtaining a given structure of the pearlite is the state of the austenite before the cooling of the steel. The rate of cooling, while it affects the hardness, has little influence on the structure of the pearlite. Finally, some reference is made to annealing practice at the Elektrostal works.

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Causes of "Layer Formation" in the Fracture of Structural Steels. I Golikov and P Karyazin (Stal, 1939, No 7, pp 44-51) (In Russian). "Layer formation" in the bending and impact fractures of a large number of structural chromium-nickel steels was studied, the results being illustrated by numerous macrographs and micrographs. The influence, in this connection, of various heat treatments was also investigated. The general conclusion arrived at is that the phenomenon of "layer formation" is not the result of any pre-existing defect in the metal, but that it occurs actually during fracture. It is due to differences in the properties of different fibres of the steel. These differences are particularly marked after quenching and after low temperature tempering. As a result of these differences, some of the fibres in bending are still undergoing plastic deformation, while the others are already fractured. This results in one group of fibres slipping over the other and thus gives rise to the characteristic appearance of the fracture. The differences in mechanical properties between the fibres are due to differences in chemical composition, which in turn are caused by primary dendritic heterogeneity.

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

The Standardisation of a Method of Evaluating Non-Metallic Inclusions in Steel. I. N. Gokhov and M. I. Vinograd. Zavodskaya Laboratoriya, 1949, No. 7, pp. 810-814. (In Russian. Russian)

of introduction the nature of the non-metallic inclusions to be considered is discussed and a brief critical survey is made of the existing "scales" for their evaluation. The scale developed by the authors (which is illustrated) is applicable to wrought, plain, low-alloy and high-alloy structural and tool steels. The scale is divided into three groups according brittle oxides, sulphides, plastic oxide inclusions and carbides. The first two groups are sub-divided into fine and coarse inclusions, the amount being indicated by a 1 to 5 system of marking. In practice, evaluation may exclude subdivision into fine- and coarse-grained inclusions as the areas are arranged to correspond either to a large number of small, or to an equivalent number of large, inclusions. The surface of the polished section must be in the direction of the grain and the area examined should not be less than 3 sq. cm.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Standardisation of the Evaluation of the Depth of the Decarburised Surface Layer in Steel. I N Gobkov and M I Vinogr[illegible] (Zavodskaya Laboratoriya, 1939, No 7, pp 713-715) (in Russian). Conditions are laid down for the preparation of sections and for the microscopic measurement of the depth of decarburisation of both the completely and the partially decarburised zones of steel specimens. The method is applicable to all carbon and alloy steels, but not to steels of the ledeburitic class.

Factors affecting the development of flakes in high alloyed structural steel. A. P. Tsiren and I. N. Gobiron. *Stal* 3, No. 9/10, 42-6(1943).—Everything else being equal, basic Martin steel is more susceptible to flaking than is basic electro steel. Basic electro steel completely degassed is less likely to flake than remelted steel. Homogenization greatly reduces the susceptibility to flaking. There is a min. cooling period for obtaining a flakeless metal. The duration of this period varies depending on the origin of a given steel. Thus, for a 16×2.5 sq. in. martensitic structural steel the min. period is 80 hrs. for a homogenized electro metal and 150 hrs. for a nonhomogenized open-hearth metal. In a no. of cases the investigated steels formed no flakes, notwithstanding a faster rate of cooling. This is attributed to the absence of conditions favorable to localized concn. of H. The lower temp. limit for the formation and development of flakes lies within the range of room temp. In structural highly alloyed martensitic steels, if the cooling period is not sufficiently long, flakes may develop after considerable lapse of time from the end of cooling. To inhibit the formation of flakes, steel of this kind, after being hot-worked, then cooled, should be subjected immediately to a softening thermal treatment. The need for this thermal treatment diminishes as the cooling period preceding it grows longer. Photomicrographs are given. M. Hasch.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROCESSES AND PROPERTIES INDEX

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Mechanical properties of open-hearth and electric-furnace metal. I. N. Gelikov and Z. M. Kalinina (Zlatoust Plant, Zlatoust, Russia). *Stal* 7, 215-20(1947). The mech properties of steel made by the 2 processes were studied comparatively. Generally, the differences between the 2 kinds of steel were more pronounced in low-C steels than in medium C steel. The differences primarily were in the tensile strength and in sec. viscosity. The differences were more pronounced crosswise than lengthwise. The differences are due primarily to S and O in open-hearth steel. The S and O are both in soln. and as nonmetallic inclusions. The low C content in open-hearth steel before deoxidation causes greater oxidation of the metal which results in lower viscosity. With certain precautions the differences were largely eliminated. This was achieved by using an open hearth charge consisting not over 0.6% of Cr and 0.5% of Si, using pig iron with less than 0.05% of S and mazut with not over 0.2% of S (the S content in the melt is thereby reduced to 0.04 and in the ready metal to 0.02%, or lower), running the furnace hot and giving the bath an intense boil while the C content toward the end of the run is not below 0.11% even for low C steels, and giving the melt a preliminary deoxidation with blast-furnace FeSi and a final deoxidation with 0.3-0.4 kg. per ton of Al. M. Hosch

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Determination of the temperature range of the Ac transition in steels. I. N. Goikov. *Zavodskaya Lab.* 13, 1435-10 (1947). Specimens of 8 constructional steels (primarily Cr and Cr-Ni) were heated in a tube furnace with one end of the specimen at the center and the other end outside of the furnace. Thermocouples were inserted into the specimen at 4 locations and the specimen was heated to const. temp. (to 3-6 hrs.) and quenched in water. Hardness and microstructure were det'd along longitudinal axis to det. location and temp. by interpolation of thermocouple readings at which transformation to austenite had started. Each percentage of Ni present lowered the Ac_1 point 21°. H. W. Rathmann

137-58-1-661

Translation from: Referativnyy zhurnal. Metallurgiya 1958, Nr 1, p 103 (USSR)

AUTHOR: Golikov, I. N.

TITLE: Modern Methods of Control in Rolling Shops (Sovremennyye metody kontrolya v prokatnykh tsekhakh)

PERIODICAL: Tr. Nauchno-tekhn. o-va chernoy metallurg., 1956, Vol 10, pp 269-275

ABSTRACT: All control in rolling shops resolves itself fundamentally to the control of the deformation process temperature, the dimensions, and the surface and internal defects in the metal. In accordance with the system that has been adopted at the Zlatoust Iron and Steel Mill, there is conducted, in addition to constant monitoring of the condition of the surface of the finished products on the cooling beds or the pile, regular inspection of samples removed for this purpose in the course of rolling. One or two specimens of each grade and heat are taken, and they are used to monitor the dimensions of the cross section. The major control of the surface is performed during adjustment before cleaning.

B. Ye.

Card 1/1

1. Rolling mills--Control systems

GOLIKOV, I. N.

The evaluation of the extent of dendritic segregation [illegible] in steel by microhardness measurements [illegible] and [illegible] Moscow (Met. Plant, Zhitomir) [illegible] 22, 7082 (1956).—The hardness of [illegible] related to its C content, and is independent of the presence of other alloying elements. This property of [illegible] used as a basis for the det. of the extent of [illegible] in the C distribution in steel. Longitudinal plates were cut from 0.2-4.0 tons ingots, polished, and [illegible] Samples were selected with the best former and [illegible] drites, and microhardness were [illegible]. The total av. C content was det. chemically, and by [illegible] temp. of the eutectic components. The structure consisted of martensite with, possibly, some residual austenite. The martensite transformation was completed by treating it twice with liquid air, and the microsections were polished. The cold-working distortion was prevented by careful grinding and a final polishing by hand. The dendritic structure was revealed by slight etching. The av. values (10 [illegible] each) of Vickers hardness of 2 steel samples were [illegible] and 483 along the dendrite axis and in the interaxial space in steel 1, with 0.175 and 0.201% C, resp., and 472.5 and 448.7 in the corresponding sections of steel 2, with 0.316% C, resp. The accuracy of the method decreases with higher C content, and should not be used with over 0.45% C. It is recommended for the study of diffusional homogenization processes.

W. M. [illegible]

PHASE I BOOK EXPLOITATION 893

Golikov, Igor' Nikolayevich

Dendritnaya likvatsiya v stali (Dendritic Liquation in Steel) Moscow, Metallurgizdat, 1958. 206 p. 4,200 copies printed.

Ed.: Lebedev, A.I.; Ed. of Publishing House: Golyatkina, A.G.; Tech. Ed.: Karasev, A.I.

PURPOSE: This book is intended for engineers and scientific personnel in the fields of ferrous metallurgy and machinery manufacture.

COVERAGE: The author describes the basic pattern of development of dendritic liquation during the crystallization of steel. One section of the book deals with the quantitative determination of the degree of dendritic chemical heterogeneity in the ingot and the effect of this phenomenon on manufacturing characteristics of the

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ingot and on final properties of the steel. Considerable attention is devoted to the effect of dendritic liquation on the quality of structural and tool steels. Methods of controlling the degree of heterogeneity during the production of ingots are recommended. Experimental data gathered by the author over a period of years at plants producing high-grade metal have been systematized and generalized. According to the author, this book represents the first attempt to generalize the large accumulation of experimental data in this field, previously published piecemeal in technical literature. The author expresses his belief that a more thorough understanding of dendritic liquation may lead to new ways of improving the quality of steel. Acknowledgements are made to Ivan Pavlovich Bardin, Academician, and Mikhail Vasil'yevich Pridantsev, Doctor of Technical Sciences, for their suggestions on the preparation of the book. There are 300 references, of which 249 are Soviet, 31 English, 12 German, 7 French, and 1 Swedish.

133-1-17/24

AUTHORS: Golikov, I.N., Candidate of Technical Sciences, and Litvinov, B.M., Engineer.

TITLE: Weldability of Flakes in Alloy Steels During Rolling (Zavarivayemost' flokenov v legirovannoy stali pri prokatke)

PERIODICAL: Stal', 1958, No.1, pp. 67 - 70 (USSR).

ABSTRACT: In order to prevent the formation of flakes, merchant blooms of structural and tool steels are usually either slow-cooled (during a few days in unfired soaking pits) or submitted to a prolonged thermal treatment. If, on the other hand, blooms are further rolled on the same works, their cooling may be simplified as the flakes formed can be welded in subsequent rolling. This investigation was carried out in order to determine the minimum degree of deformation necessary for the welding of flakes in structural steels. The experimental procedure was as follows: experimental ingots were charged hot into soaking pits, heated in the usual way and rolled on a mill 950 into semis of a cross-section 190-220. From these, one bloom was cut out from the top part of the ingot and without additional heating rolled on a mill 750 to square semis of 125 - 140 mm wide and 3 - 3.5 m long, which were then cooled in air. 20 - 30 days after rolling, a few longitudinal and

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133-1-17/24

Weldability of Flakes in Alloy Steels During Rolling

transverse plates were cut out from each of the experimental semis. The following steels were tested: 38ХМЮА, 30Х2Н2А, ХНМ3, 40ХНМА, 45ХНМФА, 60Х2М, 60ХНМ and 30ХГСНА (flakes were absent in these steels), 50ХФА, 45Х12М, 60С2, 30ХГСНА, 37ХН3А (possessed longitudinal flakes), ШХ15, 9ХС and 30ХГСНА (possessed transverse and longitudinal flakes, Fig.1). The influence of cooling semis with water on the orientation of flakes was also checked. In two semis of steels 30ХГСА and 4ХВ2С cooled after rolling with water, flakes were not found; in steel 40ХН, longitudinal flakes were found and in steel ШХ15 and 60 ХНМ - both longitudinal and transverse flakes were found. Transverse flakes were also obtained artificially, stressing rolled warm semis, as shown in Fig.2. In order to investigate the conditions under which flakes are welded, the above semis were cut into 2-3 parts and after heating by an appropriate method for a given steel practice, rolled on mills 750 and 400 with rolls with rhomboidal passes into bars 83 x 83 and 60 x 60 mm (some into bars 120 x 120, 112 x 112 and 105 x 105) which were then slowly cooled and thermally treated in order to prevent the formation of new flakes. A large number of longitudinal and transverse macro-sections were prepared and examined. Examples of sections with open flakes

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Weldability of Flakes in Alloy Steels During Rolling

are shown in Figs. 4, 5 and 6. Conclusions: 1) Longitudinal flakes and longitudinal sectors of flakes are welded under a small deformation (coefficient of elongation 2-3). 2) Transverse flakes and transverse sectors of flakes open during rolling forming cavities. With further deformation of metal these cavities elongate and close. 3) Transverse flakes of up to 25 mm in size in square semis of the size, 125 - 140 mm weld on rolling into a bar, 40 x 40 mm, thus, the minimum coefficient of elongation necessary to weld such flakes is 10-12. K.M. Petukhova participated in the work. There are 6 figures and 6 Russian references.

ASSOCIATION: Zlatoust Metallurgical Works (Zlatoustovskiy metallurgicheskiy zavod)

AVAILABLE: Library of Congress

Card 3/3

26579
S/129/61/000/008/012/015
E111/E335

24.2200

AUTHORS: Molotilov, B.V., Engineer and Golikov, I.N., Doctor of Technical Sciences

TITLE: Influence of Non-metallic Inclusions on the Structure of Magnetically-soft Materials

PERIODICAL: Metallovedeniy i termicheskaya obrabotka metallov, 1961, No. 8, pp. 46 - 51

TEXT: The presence of nonmetallic inclusions or other finely-dispersed phases in alloys leads to considerable reduction in permeability and an increase in the coercive force. Kondorskiy (Ref. 4 - Dokl. Ak. nauk SSSR, Vol. 63, 1948) has linked coercive force with the number and size of nonmetallic inclusions and it has been shown (Ref. 5 - Ya.S. Shur, V.R. Abel's - Fizika metallov i metallovedeniye, 1955, Vol. 1, No. 1) that the inclusions "fix" domain boundaries, whose further movement then requires additional energy. The authors have investigated some new cases of interaction between inclusions and domain structure of magnetically-soft materials consisting of iron-silicon alloys with the following final

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Influence of ....

range of impurities: 0.005-0.010 C, 0.05 - 0.07% Mn, 0.007-0.015% S, 0.002-0.004% P, 0.15-0.18% Cu, 0.01-0.03% Al and traces Cr. The alloys were induction-melted from commercial-purity iron and crystalline silicon. The ingots were forged and then rolled (500 °C) to a thickness of 0.35 mm. Heat-treatment consisted of vacuum-annealing at 1 100 °C for 4 hours and cooling at 50 °C/hour. The silicon contents and magnetic properties (after heat-treatment) are shown in the table. The domain structure was observed by the magnetic-suspension method (Ref. 6 - W. Elmore - Phys. Rev., 1938, Vol. 54) on 10-12 mm diameter discs cut from coarse grains whose surface coincided to an accuracy of 2-3° with the (110) plane. With alloys having up to and including 7.0% Si, the zone disturbed by inclusions had the form of two triangles lying on either side of the inclusion along the direction of easy magnetization; with the 7.5% Si alloy the triangles are perpendicular to this direction. Numerous observations convinced the authors that the inclusions are surrounded by a strained zone due to a difference in the values of the coefficient of expansion; the stresses on

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[illegible] metal can be calculated (Ref. [illegible] - Strengthening of carbon-free Iron Alloys During Phase Transformation. [illegible]etallurgizdat, 1951)

[illegible] the aid of a simple model [illegible] [illegible]nitude of the critical value of [illegible] for [illegible] [illegible] are rearrangement, the size [illegible] [illegible]ted. [illegible] alloys with positive magn[illegible] [illegible] [illegible]netic structure must lie along [illegible] [illegible] [illegible]ry.tal (Fig. 4, lefthand sid[illegible] [illegible] [illegible] magnetostriction the [illegible] [illegible] are reversed (Fig. 4, [illegible] [illegible] [illegible] calculation, allowing for [illegible] [illegible]netic [illegible] of the inclusions on the [illegible] [illegible] [illegible] picture of the geometry of [illegible] [illegible] [illegible] well with the observed eff[illegible] [illegible] [illegible] experiments show the harmful effect [illegible] [illegible] inclusions, which [illegible] [illegible] [illegible] their own size. The critical [illegible] [illegible] [illegible] alloy becomes magn[illegible] [illegible]

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