L'VOV, D.K.; NAUMOV, R.L.

Transovarian transmission of tick-borne encephalitis virus antibodies in the fieldfare (Turdus pilaris L.). Med.paraz.i paraz.bol no.3:335-338 '62. (MIRA 15:9)

1. Iz Instituta poliomiyelita i virusnykh entsefalitov (dir. - prof. M.P. Chumakov) AMN SSSR i Instituta meditsinskoy parazitologii i tropicheskoy meditsiny imeni Ye.I. Martsinovskogo (dir. - prof. P.G. Sergiyev) Ministerstva zdravookhraneniya SSSR.

(ENCEPHALITIS) (ANTIGENS AND ANTIBODIES)
(THRUSHES--DISEASES AND PESTS)

LOPATIN, A.N.; L'VOV, D.K.; BABKIN, P.S.

Case of recurrent tick-borne encephalitis. Vop.virus. 7 no.6:741 N-D '62. (MIRA 16:4)

1. Krasnodarskiy meditsinskiy institut.
(ENCEPHALITIS)

L'VOV, D.K.; ZAKLINSKAYA, V.A.

Use of the hemagglutination inhibition reaction for the study of the immunogenic characteristics of formalized vaccines against tick-borne encephalitis. Vop. virus. 8 no.3:360-361 My-Je '63. (MIRA 16:10)

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR, Moskva.
(ENCEPHALITIS) (VACCINES) (BLOOD—AGGLUTINATION)

CHUMAKOV, M.P.; L'VOV, D.K.; SARMANOVA, Ye.S.; GOL'DFARB, L.G.; NAYDICH, G.N.; CHUMAK, N.F.; VIL'NER, L.M.; ZASUKHINA, G.D.; IZOTOV, V.K.; ZAKLINSKAYA, V.A.; UMANSKIY, K.G.

Comparative study of the epidemiological effectiveness of vaccinations with tissue culture and brain vaccines against tick-borne encephalitis. Vop. virus. 8 no.3:307-315 My-Je'63. (MIRA 16:10)

1. Institut poliomyelita i virusnykh entsegalitov AMN SSSR, Moskva i Kemerovskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya.. (ENCEPHALITIS—PREVENTIVE INOCULATION)

NIKIFOROV, L.P.; FASTOVSKAYA, Y.I.; LVOV, D.K.; BEKLEMISHEV, V.N. [deceased]

Quantitative indicators in the epizootology and epidemiology of tick-borne encephalitis. J. hyg. epidem. (Praha) 8 no.2:221-228 '64.

1. Martsinovsky Institute of Medical Parasitology and Tropical Medicine, Ministry of Health of the U.S.S.R., Moscow.

CHUMAKOV, M.P.; L'VOV, D.K.; ZAKLINSKAYA, V.A.; YASIN, A.Ye.; MOROZOV, K.V.

Rate of antibody accumulation in patients during the early period following vaccination and revaccination against tick-borne encephalitis. Vop. virus. 9 no.5:601-604 S-O '64.
(MIRA 18:6)

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR i kafedra epidemiologii I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova, Moskva.

L 25986-66 EWT(1)/T JK

ACC NR: AP6016097 (N) SOURCE CODE: UR/0402/65/000/006/0657/0663

AUTHOR: L'vov, D. K.--Lvov, D. K.; Zaklinskaya, V. A.; Chumakov, M. P.; Levina, L. S.

ORG: Institute of Poliomyelitis and Viral Encephalitis, AMN SSSR, Moscow (Institut poliomiyelita i virusnykh entsefalitov AMN SSSR)

TITLE: Antihemagglutinating antibody spectrum following experimental immunization with tick-borne encephalitis viruses

SOURCE: Voprosy virusologii, no. 6, 1965, 657-663

TOPIC TAGS: antibody, immunization, encephalitis, virus, rat

ABSTRACT: This study deals with the patterns of formation and dynamics of homologous and heterologous antihemagglutinins following the experimental immunization with various Eastern and Western strains of tick-borne encephalitis virus (Sof'in, Khabarovsk-17, Bars, Al'shevskiy, Pan, Khipr, No 256, No 20536) as well as with louping ill, Omsk hemorrhagic fever, Kyasanur forest, Langat, Powassan and Negishi viruses, on using white rats as the experimental animals (immunization by injection of a 10% brain suspension of suckling rats infected with the corresponding strains). The hemagglutination-inhibition reaction was carried out by the standard virus titration technique. The differences in the development of homologous and heterologous antibodies following hypo-, hyper- and reimmunization were found to be quantitative in nature.

Card 1/2 UDC: 616.155.1-007.431-097.5-02:616.988.25-095.371

L 25986-66

ACC NR: AP6016097

No essential change in the difference between homologous and heterologous antibody titers was observed in animals tested at different times. Immunization with any strain of tick-borne encephalitis virus leads to the development of antihemagglutinins for all the other strains of this virus. At the same time, antibodies for all the other representative strains of the complex are formed, but at lower titers. For Omsk hemorrhagic fever, Langat, louping ill and Negishi viruses the difference in antibody titers is not large (log 1-3) but for Kyasanur forest and Powassan viruses the difference between homologous and heterologous antibody titers is significant (log 3-5 and 5-7, respectively). Immunization with any virus of the subgroup except Powassan virus leads to the development of antibodies for all the other viruses of the complex; then the antibody titers are log 1-3 lower than for the homologous virus, and with respect to the Kyasanur forest and Powassan viruses these titers are always much lower (log 4-6). Following immunization with the last 2 viruses, and particularly with Powassan, heterologous antibody titers are much lower than homologous antibody titers. Orig. art. has: 4 figures and 1 table. [JPRS]

SUB CODE: 06 / SUBM DATE: 09Jul64 / ORIG REF: 001 / OTH REF: 007

Card 2/2

L 25985-66 EWT(1)/T JK
ACC NR: AP6016096 (N) SOURCE CODE: UR/0402/65/000/006/0649/0656

AUTHOR: Zaklinskaya, V. A.; L'vov, D. K.--Lvov, D. K.; Chumakov, M. P.; Levina, L. S.

ORG: Institute of Poliomyelitis and Viral Encephalitis, AMN SSSR, Moscow (Institut poliomiyelita i virusnykh entsefalitov AMN SSSR)

TITLE: Immunogenic and antigenic activity of inactivated cultural vaccine with respect to various viruses of the antigen complex of tick-borne encephalitis

SOURCE: Voprosy virusologii, no. 6, 1965, 649-656

TOPIC TAGS: encephalitis, vaccine, virus, mouse, immunity

ABSTRACT: The existence of various viruses of the tick-borne encephalitis complex requires developing a single effective vaccine for all these viruses. In this connection, the authors investigated the immunogenic and antigenic properties of a cultural vaccine against tick-borne encephalitis, developed at the Institute of Poliomyelitis and Viral Encephalitides. Immunogenic properties were investigated in experiments on the resistance of immunized (double subcutaneous inoculation of 0.5 cc at a time) pure-bred mice with respect to LD_{50}, following infection with the corresponding virus strain. The antigenic properties of the vaccine were determined by investigating the sera of the vaccinated and revaccinated volunteers and the agglutination reactions. The immunogenic properties of the vaccine were found to apply more or less to all the investigated eight Eastern and Western strains of tick-borne encephalitis

Card 1/2 UDC: 615.371:576.858.25]-092.22:616.998.25-085.371-07:616.15-097

ACC NR: AP6016096

virus (Sof'in, Khabarovsk-17, Bars, Al'shevskiy, Pan, No 256, Khipr, No 20536), and they are similar or lower with respect to the viruses of Omsk hemorrhagic fever, Scotland ovine encephalomyelitis and certain other viruses. Similarly, as regards antigenic properties, the virus-neutralizing activity of the sera of inoculated volunteers proved to be the same with respect to all the strains of the tick-borne encephalitis virus and nearly the same for viruses of other types. These findings warrant the assumption that the new cultural vaccine against tick-borne encephalitis virus is effective not only in Eastern but also in Western USSR. Moreover, this does not preclude the possibility of employing this vaccine in the prophylaxis of other infections caused by viruses of the antigenic subgroup of tick-borne encephalitis. Orig. art. has: 4 figures and 4 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: 09Jul64 / ORIG REF: 003 / OTH REF: 006

CHUMAKOV, M.P.; L'VOV, D.K.; GAGARINA, A.V.; VIL'NER, L.M.; RODIN, I.M.; ZAKLINSKAYA, V.A.; GOL'DFARB, L.G.; KHANINA, M.K.

Study of conditions influencing the effectiveness of immunization against tick-borne encephalitis. Report No.1: Influence of the immunogenic properties of the vaccine on the effectiveness of vaccination and revaccination. Vop. virus. 10 no.2:168-172 Mr-Ap '65. (MIRA 18:10)

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR, Moskva.

CHUMAKOV, M.P.; L'VOV, D.K.; GOL'DFARB, L.G.; ZAKLINSKAYA, V.A.; GAGARINA, A.V.; MASHKOV, V.T.; YASIN, A.Ye.; RODIN, V.I.; VIL'NER, L.M.

Effect of the length of intervals between inoculations on the efficacy of vaccination and revaccination against tick-borne encephalitis. Vop. virus. 10 no.3:266-270 My-Je '65.
(MIRA 18:7)

1. Institut poliomiyelita i virusnykh entsefalitov AMN SSSR, Moskva, i Kemerovskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya.

SOV/137-59-1-67

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 9 (USSR)

AUTHOR: L'vov, D. P.

TITLE: Thermal and Aerodynamic Characteristics of Turbulent Coal Dust Burners in Reverberatory Furnaces (Teplovyye i aerodinamicheskiye kharakteristiki turbulentnykh pyleugol'nykh gorelok otrazhatel'nykh pechey)

PERIODICAL: V sb.: Materialy Soveshchaniya po vopr. raboty pechey tsvetn. metallurgii i razvitiya pirometallurg. protsessov. Moscow, 1957, pp 392-401

ABSTRACT: Results are adduced of the comparative investigation of the models of three types of burners: DMIKUMZ, VNIIMT-SUMZ and BMZ, used at present in reverberatory furnaces. The investigation was carried out on a cold aerodynamic test stand (without burning) under free-jet flow conditions in order to determine the most suitable burner. On the basis of the investigation it is recommended that VNIIMT-SUMZ burners be installed in reverberatory furnaces. These burners afford a normal fuel-combustion process with a small excess of air (α = 1.03 - 1.05) and have other advantages, also. Yu. O.

Card 1/1

SOV/137-58-11-21903
Translation from: Referativnyy zhurnal, Metallurgiya, 1958 Nr 11, p 9 (USSR)

AUTHOR: L'vov, D. P.

TITLE: The Similarity of the Fields of the Velocity Heads of Cold and Burning Pulverized-coal Flames (O podobii poley skorostnykh naporo kholodnogo i goryashchego pyleugol'nogo fakela)

PERIODICAL: Vses. n.-i. in-t metallurg. teplotekhn. Byul. nauchno-tekhn. inform., 1957, Nr 2, pp 43-46

ABSTRACT: A flame test stand, consisting of a chamber 0.6x0.6 m in cross section and 5.3 m long, is used to record the velocity head (H) fields at various sections of a cold (dustless) and burning pulverized-coal flame for jet, sheet, and turbulent burners with blades to twist the flow, the diameter of the exit section for all the burners being identical: 100 mm. A 21-mm water-cooled VTI pneumometric tube is employed for the measurements. Analysis of the data derived showed the velocity H fields of the cold and burning pulverized coal flames to be similar in section and describable by the same equation: $h/h_o = \exp[-0.74(y/h_o/2)^{2.2}]$ where h is the dynamic H at the given point, h_o is the same along the flame axis, y is the distance

Card 1/2

The Similarity of the Fields of the Velocity Heads of Cold and Burning (cont.)

from the flame axis to the given point, $y_{h_o/2}$ is the distance from the flame axis to a point at which velocity H is one-half the velocity H at the axis. The distribution of velocity H along the length of cold and burning flames is describable by the equation: $h_o/h=0.933/(a\ l/d+0.29)^2$, where d is the diameter of the burner mouth, l is the distance from the burner mouth to the section in question, a is a coefficient that comes to 0.214 for a jet burner, 0.148 for a sheet-type, and 0.552 for a turbulent burner.

N. I.

Card 2/2

TIMOFEYEV, V.N.; L'VOV, D.P.

Determining the dew point of exhaust gases containing sulfuric anhydride. TSvet.met. 33 no.5:38-43 My '60. (MIRA 13:7)

(Metallurgical furnaces)
(Combustion gases)

KUKHTAROV, V.I.; KOROLEV, A.V., kandidat tekhnicheskikh nauk, retsenzent; L'VOV, D.S., kandidat tekhnicheskikh nauk, retsenzent; TOMILENOV, A.D., kandidat tekhnicheskikh nauk, redaktor.

[Work practice of fitter A.P.Moskovskii in making dies] Opyt raboty slesaria A.P.Moskovskogo po izgotovleniiu shtampov. Moskva, Gos. nauchno-tekhn. izd-vo Mashinostroitel'noi i sudostroitel'noi lit-ry, 1954. 73 p. (MLRA 7:8)
(Dies (Metalworking))

PHASE I BOOK EXPLOITATION 755

L'vov, Dmitriy Sergeyevich, Rozhdestvenskiy, Yuriy L'vovich, Abramov, Aleksandr Vasil'yevich, Litvak, Lev Kosilevich

Shtampovka kol'tsevykh zagotovok (Pressforming of Annular Parts) Moscow, Mashgiz, 1958. 182 p. 4,500 copies printed.

Reviewer: Zvorono, B. P., Candidate of Technical Sciences; Ed.: Mezhova, V. A., Engineer; Tech. Ed.: Gerasimova, Ye. S.; Managing Ed. for literature on heavy machine building (Mashgiz): Golovin, S. Ya., Engineer.

PURPOSE: This book is intended for production engineers, designers, technicians and students specializing in pressforming and forging of metals.

COVERAGE: The authors analyze the coefficient of utilization of metals in manufacturing annular blanks for rolling-contact bearings. They present the latest work methods developed by bearing plants which aim to produce blanks of good dimensional accuracy. Advanced pressforming and forging methods used in the

Card 1/6

manufacture of precision annular blanks are described. There are 22 references of which 18 are Soviet, 3 English, and 1 German.

TABLE OF CONTENTS:

Card 3/6

Card 5/6

AVAILABLE: Library of Congress

Card 6/6

GO/wde
11-4-58

SOV/122-59-6-19/27

AUTHOR: L'vov, D.S., Engineer

TITLE: Trends of Selection of the Optimum Solution for the Specialization for Machine-building Enterprises

PERIODICAL: Vestnik mashinostroyeniya, 1959, Nr 6, pp 67-70 (USSR)

ABSTRACT: The economic reasoning behind specialisation decisions under concrete conditions is discussed in application to mechanical handling equipment manufacture. The results of reorganising the manufacture of bridge cranes are summarised in Table 1. Changing from the specialisation of shops by the production process to a specialisation by component with a simultaneous increase in numbers from 20 to 100 component sets has reduced the cost per set from 14 700 to 9 000 Roubles by cutting the average conveying distance per component from 524 to 296 m, increasing the tooling up and shortening the machining cycle, substantially. Further savings can be achieved by special machining set-ups stated to pay for themselves within one year, when the quantity is increased to 1 000 sets. With a limited quantity, special set-ups built up from standard machine tool

Card1/3

sub-assemblies are thought to offer large reserves of production-cost savings. An analytical formula for the optimum production quantity is given and its application illustrated in Figure 2 with regard to typical crane mechanism components. The complete assembly has an optimum quantity depending on that set of components whose optimum quantity ensures the greatest uniformity throughout the manufacturing process of the assembly. The four stages of specialisation from the lowest to the highest are discussed. In mechanical handling equipment manufacture, the blank producing shops require about 1.5 times more output than machining shops for best economy. Eventually, mechanical handling producers will become assembly shops. The specialisation can be achieved by appropriate territorial distribution of production. The cost of transporting can become decisive and the full cost is expressed in a formula. The graph shows the cost reduction with quantity, both for complete cranes and

for sub-assemblies (hoists and reduction gear boxes).
The cost of a complete bridge crane drops from 11 000 roubles at 100 cranes per annum to about 7 500 roubles at 1 000 cranes per annum.
There are 1 figure and 5 tables.

Card 3/3

18(5) SOV/135-59-8-6/24

AUTHORS: Astaf'yev, S.S., L'vov, D.S., Rozhdestvenskiy, Yu.L. and Slepak, E.S., Candidates of Technical Sciences

TITLE: Butt Welding of Antifriction Bearing Ring Blanks

PERIODICAL: Svarochnoye proizvodstvo, 1959, Nr 8, pp 18-21 (USSR)

ABSTRACT: At the present time the blanks of antifriction bearing rings are usually produced by hot stamping on horizontal forging machines or by turning from thick-walled pipes. The coefficient of utilization of the metal for conical bearings does not exceed 0.40-0.45. The rapid progress in mechanical engineering, however, which is urged in the resolutions of the XXI Convention of the Communist Party of the Soviet Union, requires a considerable increase in the output of bearings. It is especially important in this connection to find a more efficient technology in the production of the bearing rings. In the following part the results of an investigation are given, which was carried out in the Institute of the Bearing Industry in collaboration with the department for welding in the

Card 1/5

TsNIITMASh and which dealt with contact welding of ring blanks. The material: the bearing rings were made of chrome steels ShKh 15, ShKh 15SG, and the low-carbon steels 18 KhGT, 12Kh 2N4A, and 20Kh2N4. The steels of the first group have a high stability; they have a high resistance to fatigue and wear and are resistant during welding and mechanical treatment. The steels of the second group are cemented, and after the hardening they have a tough core, which improves their working qualities under conditions of dynamical strain. The first thing to be studied was the welding of the outer ring blanks of the bearing 310, which is made of steel ShKh15 and has a section of 30x12 mm (the welding of rings of this steel was studied under the direction of A.S. Gel'man, TsNIITMASh, in 1947). Afterwards the welding of outer ring blanks of the conical bearings 7815, 7514, 46215, and 7718 of the steel 18KhGT (Table 1) with a section of 12x34, 10x27, 8x30, and 12x43 and an outer diameter of 135, 125, 130, and 155 mm was examined. If chrome (about 1%) and manganese (0.17-0.18%) are added to the steel 18KhGT

the durability, impact resistance, and hardness of the steel is improved without impairing the plastic qualities to any considerable degree. Titanium helps to prevent a growing of the core when the steel is heated to 1000-1100°C, combines the carbon in carbides, and reduces the percentage of perlite in the steel, thus improving its plasticity. Besides, the titanium neutralizes oxygen and nitrogen, which are the cause for an ageing, in nitrides and oxides. The equipment: the test rings were welded on a butt welding machine with lever gear and a capacity of 75 KVA and on semi-automatic machines with a capacity of 150 and 300 KVA. The blanks were clamped between the electrodes of the machine with the edges or sides. The welding of the blanks: butt welding was examined with and without preheating. The welding tests with rings of steel of type ShKh15 showed that it is possible to obtain joints of good quality if the butt welding is continuous. In the experiments with this sort of steel it was found that the carbon is to a certain extent re-

 duced along the line of the seam. To get rid of this

undesirable effect an additional investigation will be necessary. The work with steel of type 18KhGT was begun with tests in butt welding with preheating. Good welded joints were obtained with this method. To get a better clamping of the rings in the machine an extention space was left in the welding zone. To compensate the shunt resistance in the welding of the rings a secondary voltage of 5.2-5.6 was taken instead of that used for welding of straight blanks which is only 4.5-5.0. It was confirmed that the best results were obtained with continuous butt welding. In some of the seams, however, flaws in form of oxides were observed. The influence of hot deformation on the mechanical qualities of the welded joints was also studied, and dilatancy tests were carried out. The high requirements to the stability of the products made it necessary to work out control methods, which do not destroy the welded joints, for conditions of mass production. The magnetic and ultrasonic methods are both used. The main advantage of the new technology is the lowering of the cost-price by considerably raising

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the coefficient of utilization of the metal. The authors come to the following conclusions: the possibility and practicability of producing embossed welding rings with the new technology are shown, which guarantees an utilization coefficient of the metal up to 0.65. The hot plastic deformation of the welding ring somewhat raises the plasticity of the welded joint, whereby its impact resistance is strengthened while the values of the fluctuation and stability remain fixed. An effective control of the quality of the welded joints can be achieved by distributing the rings after the welding and by using ultrasonic defect detection methods. The working ability of the embossed welding rings of steel of type 18KhGT is as high as of those of steel of type ShKh15, which were manufactured with the described technology by turning from forgings. There are 3 photographs, 2 tables, 4 graphs and 1 diagram.

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031010009-6"

L'VOV, Dmitriy Semenovich; SOSIN, Yeremey Yefimovich; TILLES, S.A., kand. tekhn. nauk, retsenzent; RUZIN, V.A., inzh., retsenzent; SALYANSKIY, A.A., red. izd-va; DOBRITSYNA, R.I., tekhn. red.

[Technological fundamentals and economic calculations of the mechanization and automation of small-lot manufacture of machinery] Tekhnologicheskie osnovy i ekonomicheskie raschety mekhanizatsii i avtomatizatsii melkoseriinogo mashinostroeniia. Moskva, Gos.nauchno-tekhn.izdvo mashinostroit.lit-ry, 1961. 246 p. (MIRA 14:11)
(Automation) (Industrial management)

BAYKOV, S.P., kand. tekhn. nauk; BELENKO, I.S., kand. tekhn. nauk; BELKOV, S.F., inzh.; BELYANCHIKOV, M.P., inzh.; BERNSHTEYN, I.L., inzh.; BOGORODITSKIY, D.D., inzh.; BOLONOVA, Ye.V., kand. tekhn. nauk; BROZGOL', I.M., kand. tekhn.nauk; VLADIMIROV, V.B., inzh.; VOLKOV, P.D., kand. tekhn. nauk; GERASIMOVA, N.N., inzh.; ZHUKHOVITSKIY, A.F., inzh.; KABANOV, M.F., inzh.; KALEVTSOV, V.M., kand. tekhn. nauk; KOLOTENKOV, I.V., inzh.; KONDRAT'YEV, I.M., inzh.; KUZNETSOV, I.P., kand. tekhn. nauk; L'VOV, D.S., kand. tekhn. nauk; LYSENKO, I.Ya., kand. tekhn. nauk; MAKAROV, L.M., inzh.; OLEYNIK, N.D., inzh.; RABINER, Ye.G., inzh.; ROZHDESTVENSKIY, Yu.L., kand. tekhn. nauk; SAKHON'KO, I.M., kand. tekhn. nauk; SIDOROV, P.N., inzh.; SPITSYN, N.A., prof., doktor tekhn. nauk; SPRISHEVSKIY, A.I., kand. tekhn. nauk; CHIRIKOV, V.T., kand. tekhn. nauk; SHEYN, A.S., kand. tekhn. nauk; NIBERG, N.Ya., nauchnyy red.; BLAGOSKLONOVA, N.Yu., inzh., red. izd-va; SOKOLOVA, T.F., tekhn. red.

[Antifriction bearings; manual] Podshipniki kacheniia; spravochnoe posobie. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1961. 828 p. (MIRA 15:2)
(Bearings (Machinery))

SOKOLOV, Nikolay Leonidovich; SAMOKHOTSKIY, A.I., inzh., ved. red.; L'VOV, D.S., kand. tekhn. nauk, red.; SOROKINA, T.M., tekhn. red.

[Economy of die steel in drop forging with mechanical forging presses] Ekonomiia shtampovoi stali pri shtampovke na krivoshipnykh kovochno-shtampovochnykh pressakh. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 11 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 5. No.M-58-202/11) (MIRA 16:3)

(Forging)

(Dies (Metalworking))--Maintenance and repair)

BOGATYREV, Yuriy Mikhaylovich; VASHUROVA, Tamara Alekseyevna; MARTYNOV, Vitaliy Petrovich; OL'SHANSKAYA, I.V., inzh., red.; L'VOV, D.S., kand.tekhn. nauk, red.; SHVETSOV, G.V., tekhn. red.

[Rapid induction heating of heat-resistant alloy ingots]Skorostnoi induktsionnyi nagrev zagotovok iz zharoprochnykh splavov. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 21 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 5. No.M-58-330/17) (MIRA 16:2)
(Heat-resistant alloys) (Induction heating)

REMEZOV, N.S., inzh., ved. red.; OL'SHANSKAYA, I.V., inzh., ved. red.; L'VOV, D.S., kand. tekhn. nauk, red.; SOROKINA, T.M., tekhn. red.

[Forging, drop forging, periodic rolling, and the extrusion of metals]Kovka, goriachaia shtampovka, periodicheskaia prokatka i pressovanie metallov. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii. Nos.1-3. 1958. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 5. Nos.M-58-13/1, M-58-14/2, M-58-144/6) (MIRA 16:3)
(Forging) (Extrusion (Metals))

SHOR, Emmanuil Romanovich, kand. tekhn. nauk; OL'SHANSKAYA, I.V., inzh., ved. red.; L'VOV, D.S., kand. tekhn. nauk, red.; SMIRNOV, B.M., tekhn. red.

[Selecting metal lubricants and equipment for their mechanized application during the forging of aluminum alloys] Vybor tekhnologicheskikh smazok i oborudovanie dlia ikh mekhanizirovannogo naneseniia pri goriachei shtampovke aliuminievykh splavov. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 30 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 5. No.M-58-43-4) (MIRA 16:3)
(Metalworking lubricants) (Aluminum forgings)

S/282/63/000/003/003/006
A052/A126

AUTHOR: L'vov, D.S.

TITLE: Investigation of the possibility of manufacturing antifriction bearing races of polyamide resins

PERIODICAL: Referativnyy zhurnal. Otdel'nyy vypusk. 47. Khimicheskoye i kholodil'noye mashinostroyeniye, no. 3, 1963, 53, abstract 3.47.381. (Tr. Vses. n.-i. konstrukt. tekhnol. in-ta podshipnik. prom-sti, no. 2 (22), 1960, 3 - 18)

TEXT: The prospects of manufacturing antifriction bearing races of plastics are discussed. Casting molds are described for a solid race of a 1007 double row ball bearing, polyamide half-races of 208 Б (208B) bearings, polyamide races of 46207Е (46207Ye) bearings. The methods and results of bench tests of bearings with races of polyamide resins are described. For manufacturing races of a number of bearing sizes by the pressure casting method, caprone and polyamide resins П-68 (P-68) and АК-7 (AK-7) without fillers can be recommended. In the future new thermoplastics should be used

Card 1/2

Investigation of the possibility of...

S/282/63/000/003/003/006
A052/A126

for manufacturing antifriction bearing races; they have a low friction coefficient and a good performance at higher temperatures than in the case of polyamide resins. There are 10 figures and 2 tables.

N. Solov'yev

[Abstracter's note: Complete translation.]

Card 2/2

KLIMENKO, K.I., doktor ekon.nauk; L'VOV, D.S., kand.ekon.nauk

Evaluating economic efficiency of new designs of equipment.
Vest.mashinostr. 43 no.9:79-81 S '63. (MIRA 16:10)

L'VOV, D.S.; BASISTOV, A.G., inzh., retsenzent; KOL'DERTSEV, M.S., inzh., red.

[Economic efficiency of machines and technological processes] Ekonomichnost' mashin i protsessov. Moskva, Izd-vo "Mashinostroenie," 1964. 188 p. (MIRA 17:7)

ANDRONOV, L.I.; LVOV, D.S., kand. ekon. nauk, retsenzent;
SOCHINSKIY, A.G., inzh., red.

[Economic efficiency of the technological reorganization of a machinery manufacturing plant] Ekonomicheskaia effektivnost' tekhnicheskogo perevooruzheniia mashinostroitel'nogo zavoda. Moskva, Mashinostroenie, 1965. 182 p. (MIRA 18:5)

L'VOV, D. V. PA 28T36

USSR/Engineering Jan 1947
Locomotives, Steam
Engines, Steam

"A New Type of Steam Drier for Locomotives," D. V. L'vov, Engr, 2 pp

"Tekh Zheleznykh Dorog" No 1

The drying of steam before it is introduced into the chamber where it is reheated is an important process in the operation of the steam engine, and it is most important to have efficient driers. Unfortunately, in recent years this branch of locomotive development has been neglected. The author presents mathematical formulas for calculating an ideal steam drier, and four diagrams of the basic construction of driers.

BS 28T36

L'VOV, D.V.; MORGULIS, P.S.; ABRAMOV, S.L.; GOL'BETS, M.H.

Remarks on the question of the practical value of A.K.D'iachkov's works. Izv. AN SSSR Otd.tekh.nauk no.5:777-778 My '53. (MLRA 6:8)
(Bearings (Machinery)) (D'iachkov, A.K.)

L'VOV, D.V., inzh.

Standardization of the types of subassemblies and parts for modern locomotives. Zhel.dor.transp. 42 no.2:14-20 F '60. (MIRA 13:5)

1. Direktor Vsesoyuznogo nauchno-issledovatel'skogo teplovoznogo instituta.
(Locomotives)

LVOV, E. P. (Engineer) (TsNIITmash)

"Electrodes TsT-22 for welding of deep-austenitic steels"

Report presented at the regular conference of the Moscow city administration NTO Mashprom, April 1963.
(Reported in Avtomaticheskaya Svarka, No. 8, August 1963, pp 93-95, M. M. Popekhin)

JPRS24,651 19 May 64

GUMEROVA, M.Kh.; ARISTOVA, T.V.; GIL'MANOVA, R.G.; L'VOV, F.V.; BUKCHANTAYEVA, M.S.; MUKHAMETSHINA, M.A.; GAYNULLINA, N.M.; KHRAMOVA, N.P.; KOBRANOVA, I.N., red.; LABUDIN, N.T., red.; IBROGIMOVA, Z.A., tekhn.red.

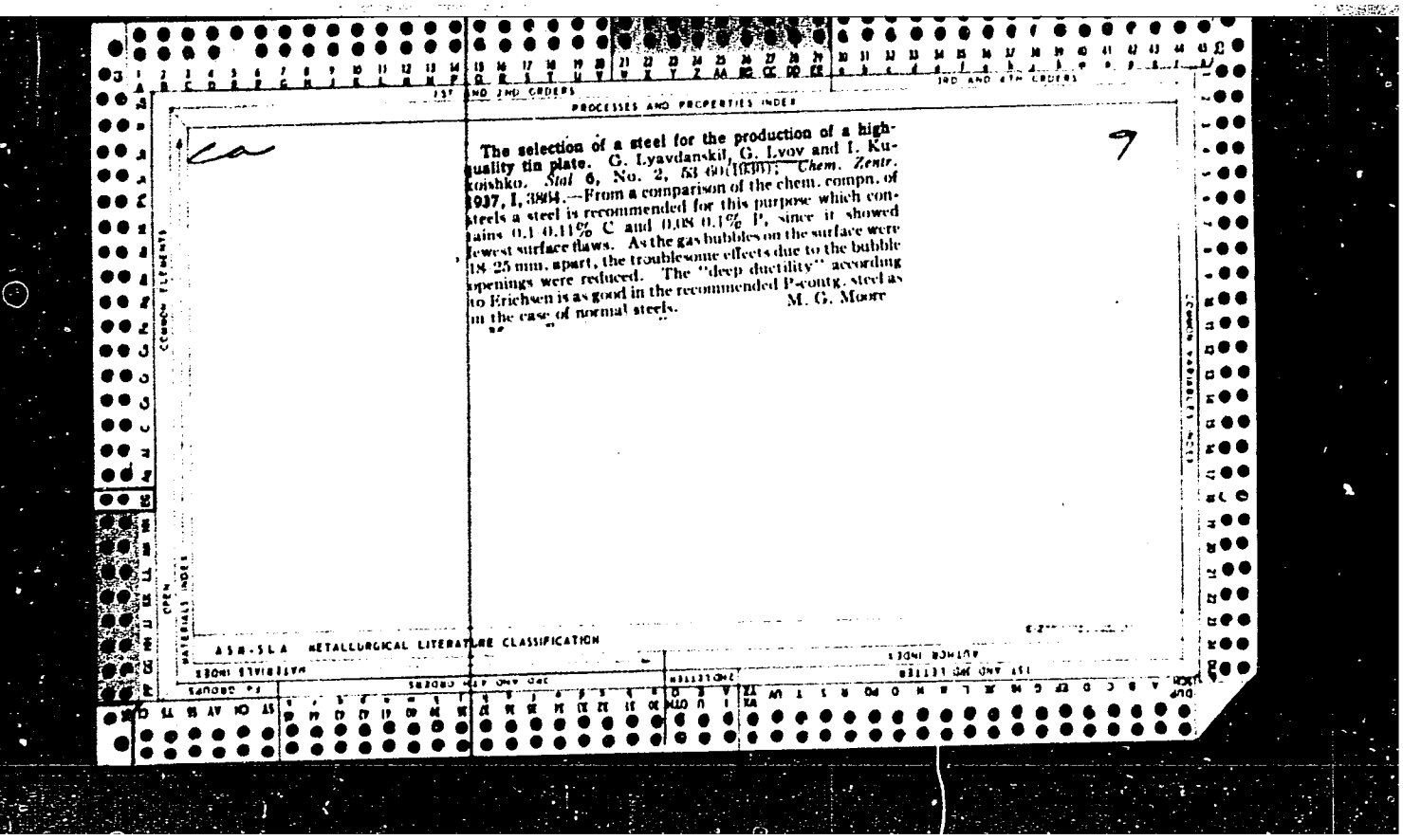
[Forty years of the Tatar A.S.S.R.; statistical collection] Tatarskaia ASSR za 40 let; statisticheskii sbornik. Kazan', Tatarskoe knizhnoe izd-vo, 1960. 171 p. (MIRA 14:3)

1. Tatar A.S.S.R. Statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo upravleniya Tatarskoy ASSR (for Kobranova). (Tatar A.S.S.R.--Statistics)

LIVOV, G.F.

Automatic multiple-point welding machines. Avt.prom. no.1:30-32 Ja '59. (MIRA 12:1)

1. Gor'kovskiy avtozavod. (Electric welding)



PROCESSES AND PROPERTIES INDEX

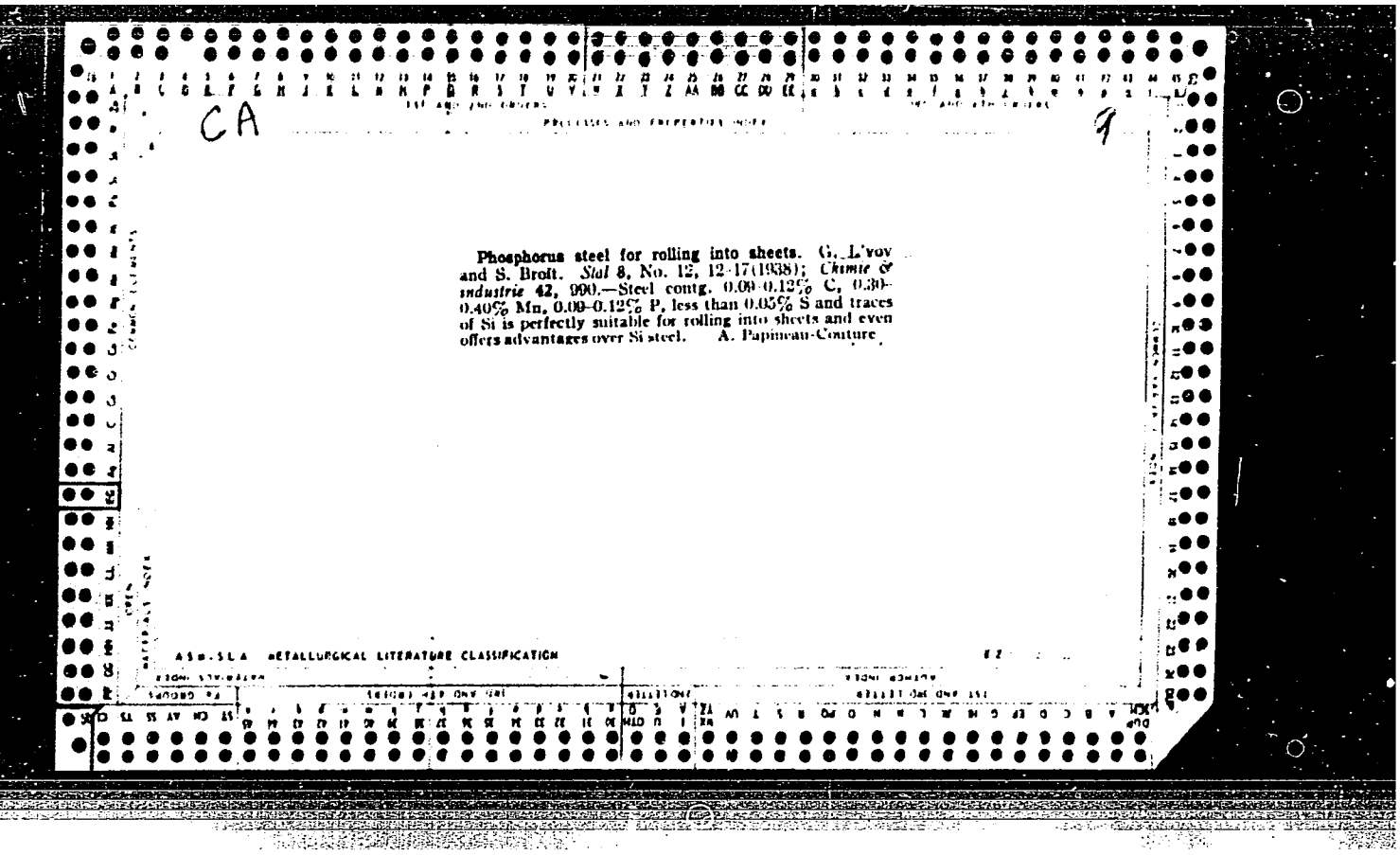
ca

9

The selection of a steel for the production of a high-quality tin plate. G. Lyavdanskii, G. Lvov and I. Kuroishko. *Stal* 6, No. 2, 53-60(1936); *Chem. Zentr.* 1937, I, 3804.—From a comparison of the chem. compn. of steels a steel is recommended for this purpose which contains 0.1-0.11% C and 0.08-0.1% P, since it showed fewest surface flaws. As the gas bubbles on the surface were 18-25 mm. apart, the troublesome effects due to the bubble openings were reduced. The "deep ductility" according to Erichsen is as good in the recommended P-contg. steel as in the case of normal steels.

M. G. Moore

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

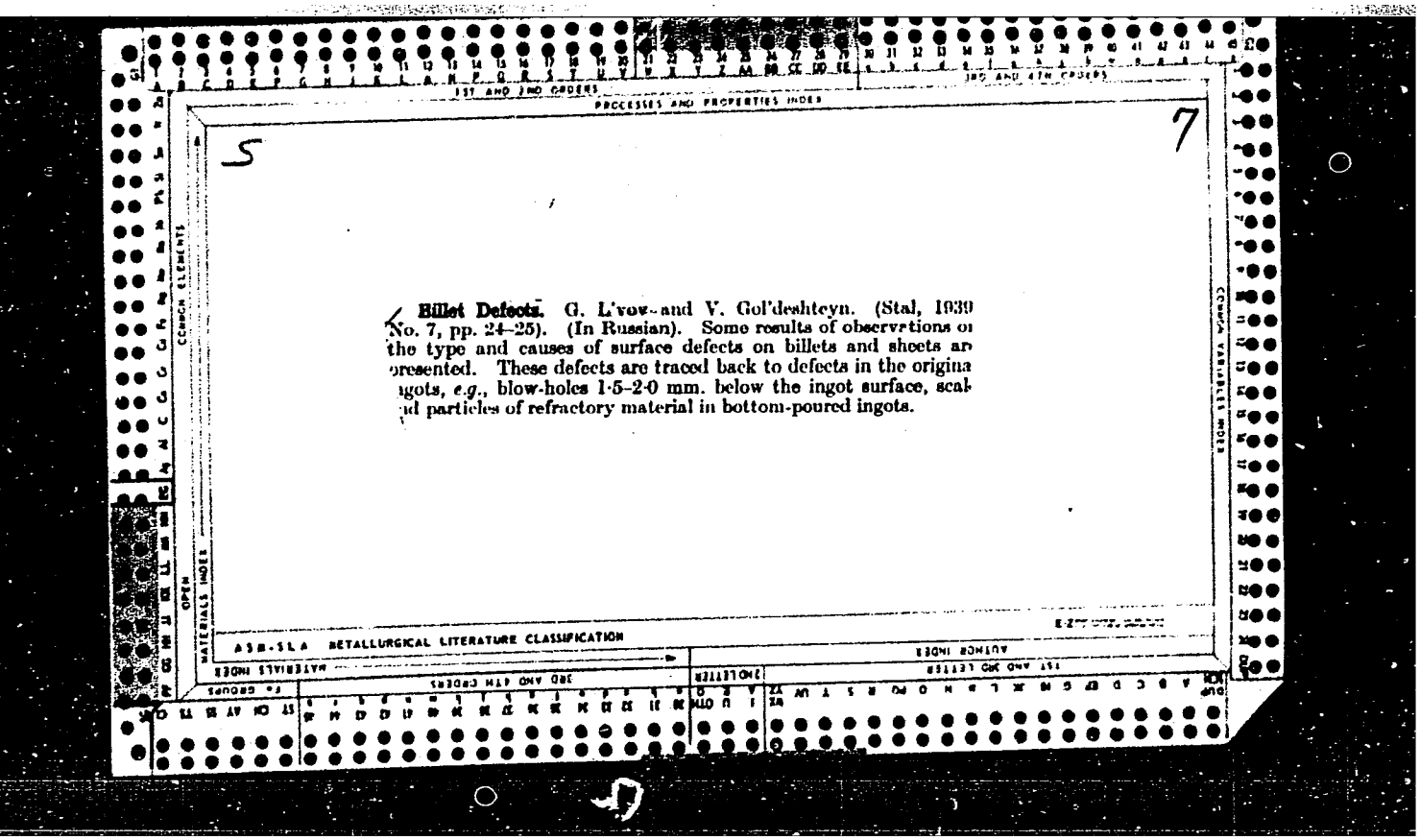


CA

9

Phosphorus steel for rolling into sheets. G. L'vov and S. Broft. *Stal* **8**, No. 12, 12–17(1938); *Chimie & industrie* **42**, 990.—Steel contg. 0.09–0.12% C, 0.30–0.40% Mn, 0.09–0.12% P, less than 0.05% S and traces of Si is perfectly suitable for rolling into sheets and even offers advantages over Si steel. A. Papineau-Couture

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



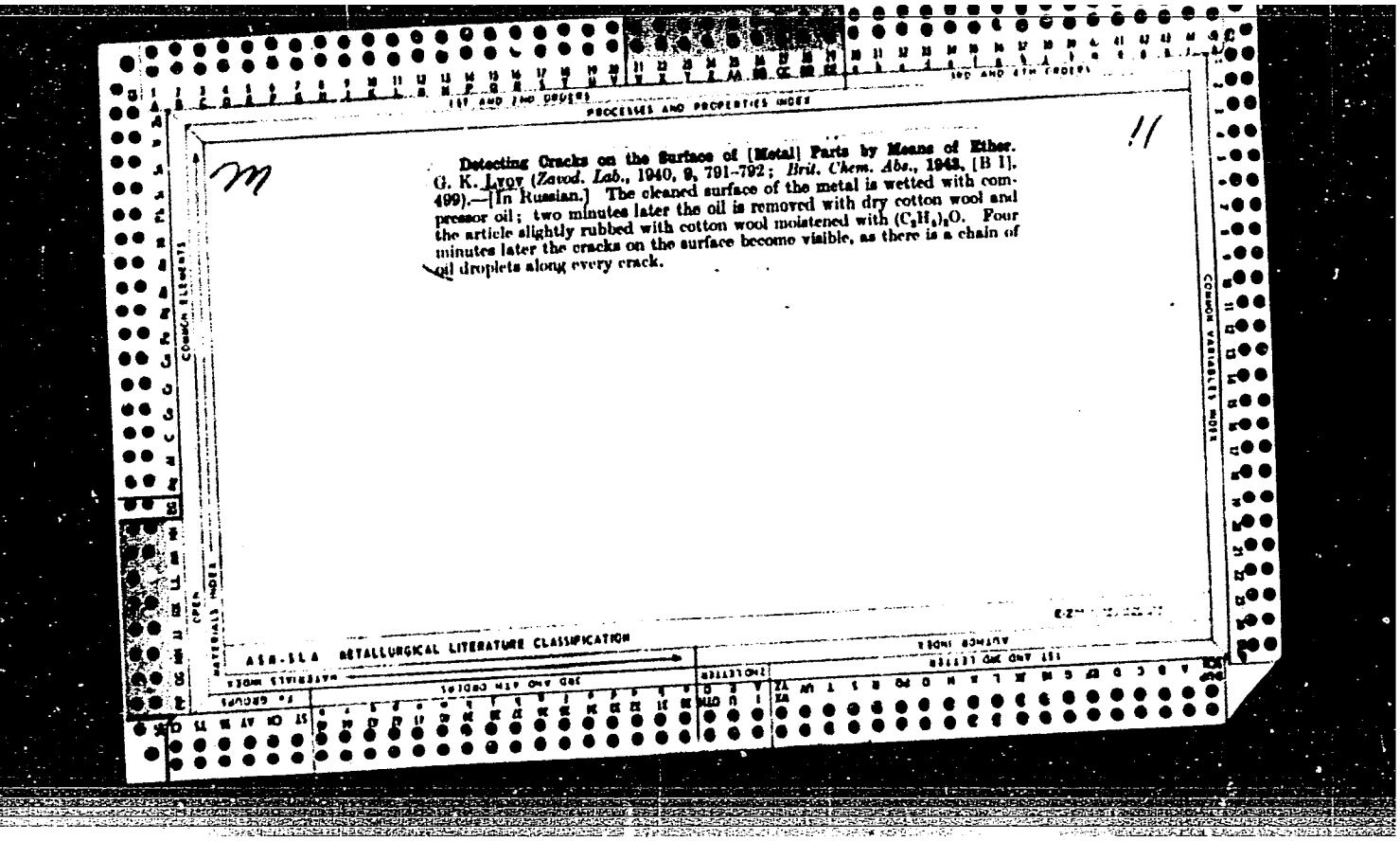
PROCESSES AND PROPERTIES INDEX

5

7

Billet Defects. G. L'vov and V. Gol'deshteyn. (Stal, 1939 No. 7, pp. 24–25). (In Russian). Some results of observations on the type and causes of surface defects on billets and sheets are presented. These defects are traced back to defects in the original ingots, *e.g.*, blow-holes 1·5–2·0 mm. below the ingot surface, scale and particles of refractory material in bottom-poured ingots.

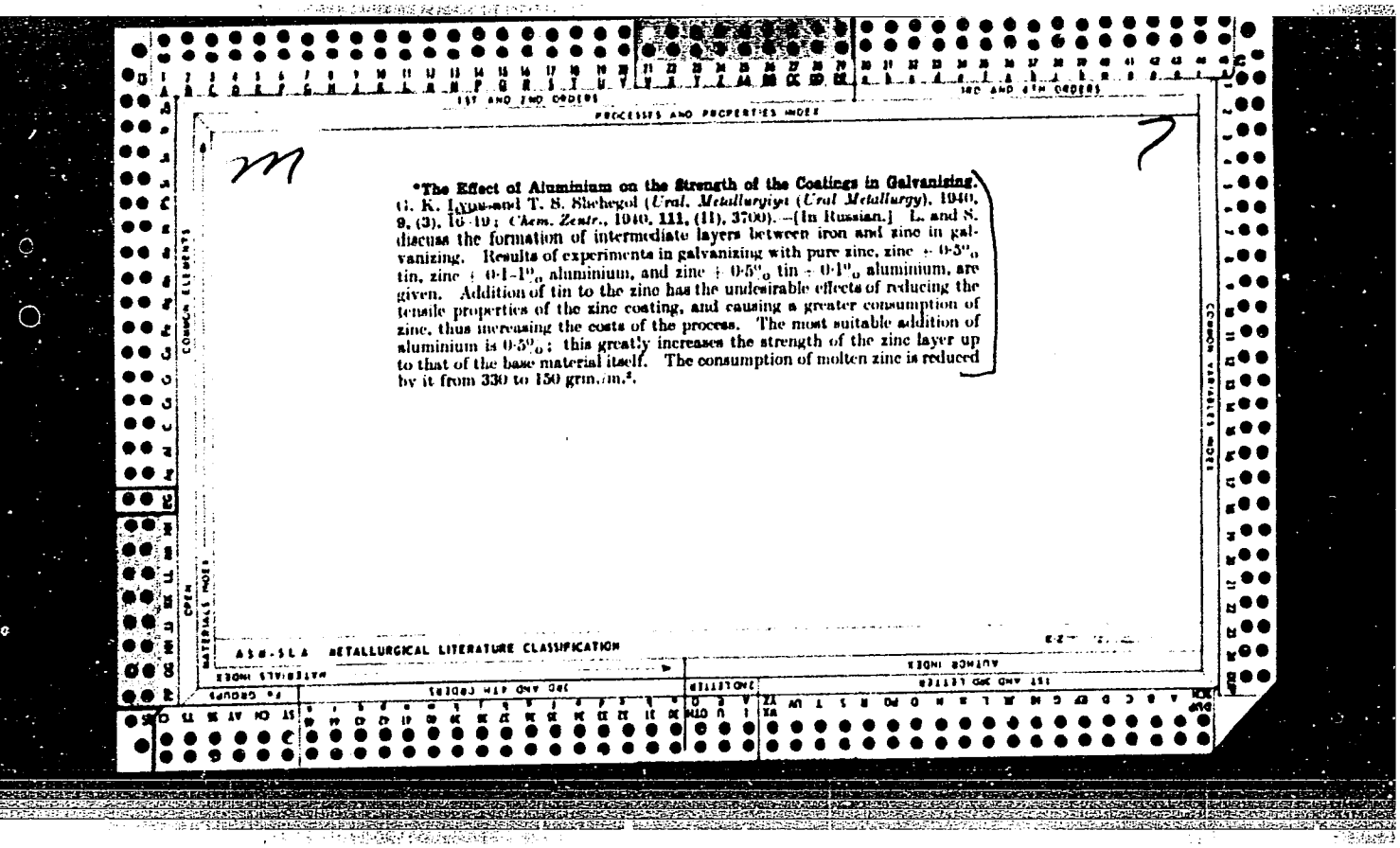
ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

Detecting Cracks on the Surface of [Metal] Parts by Means of Ether. G. K. Lyov (*Zavod. Lab.*, 1940, **9**, 791–792; *Brit. Chem. Abs.*, 1943, [B I], 499).—[In Russian.] The cleaned surface of the metal is wetted with compressor oil; two minutes later the oil is removed with dry cotton wool and the article slightly rubbed with cotton wool moistened with $(C_2H_5)_2O$. Four minutes later the cracks on the surface become visible, as there is a chain of oil droplets along every crack.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



PROCESSES AND PROPERTIES INDEX

***The Effect of Aluminium on the Strength of the Coatings in Galvanising.** G. K. Lyon and T. S. Shchegol (*Ural. Metallurgiya* (*Ural Metallurgy*), 1940, 9, (3), 16–19; *Chem. Zentr.*, 1940, 111, (11), 3700).—[In Russian.] L. and S. discuss the formation of intermediate layers between iron and zinc in galvanizing. Results of experiments in galvanizing with pure zinc, zinc + 0·5% tin, zinc + 0·1–1% aluminium, and zinc + 0·5% tin + 0·1% aluminium, are given. Addition of tin to the zinc has the undesirable effects of reducing the tensile properties of the zinc coating, and causing a greater consumption of zinc, thus increasing the costs of the process. The most suitable addition of aluminium is 0·5%; this greatly increases the strength of the zinc layer up to that of the base material itself. The consumption of molten zinc is reduced by it from 330 to 150 grm./m.².

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

L'VOV, G. K.

L'Vov, G. K. "On the mechanism of flake formation," Izvestiya Kiyevsk. politekhn. in-ta, Vol VIII, 1948 (on cover: 1949), p. 195-204

SO: U-5241, 17 December 1953, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949)

KAMENICHNYY, I.S.; L'VOV, G.K., dotsent, kandidat tekhnicheskikh nauk, otvetstvennyy redaktor; SERDYUK, V.K., inzhener, vedushchiy redaktor; RUDENSKIY, Ya.V., tekhnicheskiy redaktor.

[Brief manual for the metalworker specializing in heat treatment] Kratkii spravochnik termista. Kiev, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, Ukrainskoe otd-nie, 1954. 207 p. (Metals—Heat treatment) (MLRA 8:3)

L'VOV, G.K.

"The Conditions for the Production of the Properties of Metalloceramic Aluminum", from the monograph Questions on Power Metallurgy and the Strength of Materials, N. III, Institute of Metalloceramics and Special Alloys, Academy of Sciences Ukrainian SSR, Kiev, I956, I45 pages

Sum. I287

L'Vov, G.K.

3

"Conditions of Production and the Properties of Powder-Metallurgy Products in Aluminum." G. K. L'Vov (*Problems of Powder Metallurgy and Strength of Materials (Akad. Nauk Ukrain. S.S.R.)*, 1956, 3, 97–107).—[In Russian]. Articles from Al powder with a relative *d* of the order of 99% may be prepared by compacting at 6–8 tons/cm.² followed by sintering. A higher strength is obtained by sintering at 600° C. for 30 min. A fine powder gives greater strength than a coarse one. Compacts having a *d* approaching that of ordinary Al may be exposed to temp. changes without using a protective atm. Al alloys with special properties may be prepared by powder-met. techniques.—N. E. B.

MO IIK

L'VOV, G.K.

L'VOV, G.K.

Some methods for determining the temperatures of recrystallization.
Zav.lab. 22 no.10:1198-1200 '56. (MLRA 10:5)

1.Kiyevskiy politekhnicheskiy institut.
(Crystallization)

L'VOV, G.K., kand.tekhn.nauk, dotsent; PAVLYUKOV, A.A., inzh.

Thermokinetic diagram of recrystallization of 08kp steel. Izv. vys. ucheb. zav.; chern. met. no.3:118-123 Mr '58. (MIRA 11:5)

1.Kiyevskiy politekhnicheskiy institut.
(Steel--Heat treatment)
(Solidification)

L'VOV, G.K., dots., kand.tekhn.nauk

Methods of studying recrystallization. Izv.vys.ucheb.zav.; chern. met. no.10:125-133 O '58. (MIRA 11:12)

1. Kiyevskiy politekhnicheskiy institut.
(Metallography) (Crystallization)

18(3), 18(7)
AUTHOR: L'vov, G. K. SOV/163-59-1-39/50

TITLE: Typical Transformation Features in the Rapid Recrystallization of Steel (Osobennosti prevrashcheniy pri skorostnoy rekristallizatsii stali)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1959, Nr 1, pp 203-205(USSR)

ABSTRACT: This is an investigation of the modifications of the structure and of the properties of cold-worked low-carbon steel during heating at a rate exceeding 200 degrees per second, and a discussion of the typical features connected with these processes. The sample was cold-worked steel sheet 08kp. It was rolled down to a thickness of 1 mm with a reduction of 60%. The samples were heated in a special apparatus by a high-frequency generator at a frequency of 200 kcy. The halting time did not exceed 6 seconds and was determined with an accuracy of 0.1 seconds. After the halting time the samples were cooled in a water shower. A diagram illustrates the variation of the mechanical properties, connected with a heating of the samples to 650° at a rate of 1500 degrees/second as a function of the halting time. The process of modification can be subdivided

Card 1/3

into three stages: 1) A halting time of 0.5 - 0.6 seconds at 650°. Insignificant modifications, caused by crystal regeneration. 2) Halting time from 0.6 to 1.2 - 2.4 seconds. Extensive modifications of structure and of the properties caused by recrystallization. 3) In the third stage the insignificant modifications of the properties and the coarsening of the structure are caused by crystal coalescence. If the temperature is increased the duration of the first and second stage of the halting time is reduced. This is independent of the fact, whether the halting temperature is below or within the critical range. The third stage lasts 1.5 - 2 seconds after which a fourth stage of the halting time in the modification of the properties follows. This stage is characterized by an increase in strength and a reduction of the plasticity of the steel. It becomes clearly manifest in the heating curves at temperatures within the critical range. In the microanalysis it turned out that during the third stage the structure is composed of recrystallized ferrite grains and of carbides. In the fourth stage a new structural component of a needleshaped type appears forming around the carbide inclusions. If halting

Typical Transformation Features in the Rapid Recrystallization of Steel SOV/163-59-1-39/50

times are extended to the fourth stage the needle-type component grows and the carbide phase vanishes. The solidification found in the fourth section corresponds to the growth of the needle-type component. The results of the investigation show the way of bringing about a new recrystallization process in cold-worked steel. This process is essentially a rapid heating of short duration to a high temperature and a subsequent rapid cooling. There are 2 figures.

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnical Institute).

SUBMITTED: April 21, 1958

Card 3/3

SOV/129-59-4-2/17

AUTHOR: G.K. L'vov (Candidate of Technical Sciences)

TITLE: High Speed Recrystallization of Low Carbon Steel (Skorostnaya rekristallizatsiya malouglerodistoy stali)

PERIODICAL: Metallovedeniye i Termicheskaya Obrabotka Metallov, 1959, Nr 4, pp 8-14 (USSR)

ABSTRACT: Most authors who investigated the process of softening heat treatment of low carbon steel deformed in the cold state have assumed that it is necessary to heat only to temperatures below the A_1 point and this is to be followed by slow cooling. Only Pomp (Ref 4) assumes the possibility of annealing at 800°C. He points out that this leads inevitably to an unfavourable change in the hardness. According to Sachs et alii (Ref 16), the increase in hardness will be the larger the more the heating temperature exceeds the A_1 point and the higher the speed of cooling. The observations of the author of this paper confirm these data. The aim of the work described in this paper was to study the features of the transformations which take place in low carbon steel deformed in the cold state in the case of high speed recrystallization annealing. The investigations were made on 1.0 mm thick specimens of the steel 08 KP cut from strip, rolled with

Card 1/3

High Speed Recrystallization of Low Speed Steel

a reduction of 60%. The specimens were heated in molten salts or in a high-frequency inductor. In investigating the influence of the heating speed and the heating temperature, strips 500 mm long and 40 mm wide were heated with speeds of 1250, 1400, 1600 and 2500°C/sec and cooled in still air. The changes in the properties as a function of the temperature at a heating speed of 1500°C/sec are graphed in Fig 1 (p 9). In Fig 3 the changes in the properties are graphed as a function of the duration of the recrystallyzation annealing at 650°C; heating speed 1500°C/sec, cooling by means of a spray. In Fig 6 similar results are graphed for an annealing temperature of 850°C. On the basis of the obtained results, the following conclusions are arrived at: (1) It was established that it is possible to speed up considerably the process of recrystallization annealing of low carbon steel by applying higher heating speeds, exceeding 1000°C/sec, and elevated temperatures within the limits of the critical temperature range. (2) Maintaining for a few seconds the heating temperature after a high-speed high-temperature heating, ensures

High Speed Recrystallization of Low Speed Steel

completion of the recrystallization treatment, obtaining a fine grain structure and good mechanical properties. Fast cooling (for instance, in water) after such heating, prevents the tendency of the steel to become brittle during subsequent ageing, whilst maintaining a high ductility and strength. (3) In order to achieve a rational high speed recrystallization annealing of low carbon steel, it is necessary to take into consideration the kinetics of transformation during high speed heating and cooling.

Card 3/3 There are 8 figures and 17 references, of which 10 are Soviet, 5 English, 1 German and 1 Czech.

ASSOCIATION: Kiyevskiy Politekhnicheskiy Institut (Kiyev Polytechnical Institute)

18(3), 24(2)

AUTHOR: L'vov, G. K. SOV/126-7-2-33/39

TITLE: Recrystallization Characteristics During Fast Heating (Osobennosti rekristallizatsii pri skorostnom nagreve)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1959, Vol 7, Nr 2, pp 310-311 (USSR)

ABSTRACT: As the result of observations of changes in structure and properties of low carbon cold deformed steel during fast heating through the critical temperature range, a number of characteristics have emerged, the exploitation of which in industry may be very profitable. Specimens of steel 08KP, 1 mm thick, cold-rolled with a reduction of 60%, were heated in the inductor of a high frequency apparatus at speeds of 1250-2500°C per second, held for a short time at various temperatures, and cooled by a water spray. The maximum possible error in soaking time readings was considerably less than 0.1 second. Isothermal soakings in the range 500-850°C showed a considerable intensification of the process as the temperature was raised, which is in agreement with the theories of exponential dependence of the process speed

Card1/3

on temperature. On fast heating and soaking in the critical temperature range, recrystallization is complete in less than 1 sec (Fig 1), and the metal acquires properties inherent in the recrystallized state. Further increase in soaking time under conditions of fast cooling leads to repeated strengthening of the specimens. By investigating the structure it has been established that the ferrite-carbide structure formed on completion of recrystallization is replaced by a new one, characterized by the presence of a needle-like component (Fig 2), which is formed as the result of diffusion solutionizing of carbides during a lengthier soaking of specimens in the critical temperature range. Specimens heated and soaked for shorter times than required for the beginning of carbide solution, do not tend to subsequent ageing. The results of the investigation give us to assume that on fast heating to temperatures within the critical range, the recrystallization process can be considerably accelerated, that the recrystallization and carbide solution processes can be cut down in time and that an unageing metal can be

SOV/126-7-2-33/39

Recrystallization Characteristics During Fast Heating

obtained if recrystallization with accelerated cooling is rapidly applied.
There are 2 figures.

(Note: This is a complete translation except for the figure captions)

ASSOCIATION: Kiyevskiy politekhnicheskiy institut (Kiyev Polytechnical Institute)

SUBMITTED: April 9, 1958

Card 3/3

L'VOV, G.K.

PHASE I BOOK EXPLOITATION SOV/5789

Nauchno-tekhnicheskaya konferentsiya po razvitiyu proizvoditel'nykh sil Kiyevskogo ekonomicheskogo rayona

Goryachaya obrabotka metallov; trudy konferentsii. vyp. 2. (Hot Working of Metals; Transactions of the Scientific Technological Conference on the Development of the Productive Forces of the Kiyev Economic Region. no. 2) Kiyev, Izd-vo AN UkrSSR, 1960. 142 p. 1000 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Sovet po izucheniyu proizvoditel'nykh sil UkrSSR. Institut liteynogo proizvodstva. Sovet narodnogo khozyaystva Kiyevskogo ekonomicheskogo rayona. Tekhniko-ekonomicheskiy sovet.

Editorial Board: Resp. Ed.: A.A. Gorshkov, Corresponding Member, Academy of Sciences UkrSSR, B.B. Tsinin, Engineer, and F.A. Novikov, Engineer; Ed. of Publishing House: T.K. Remennik; Tech. Ed.: O.A. Kadashevich.

PURPOSE: This collection of articles is intended for technical personnel in machine plants and planning organizations, scientific workers, and teachers in technical schools of higher education.

Card 1/6

COVERAGE: The book is devoted to problems of the introduction of advanced technology and processing in founding and pressworking. Problems in powder metallurgy are also analyzed. No personalities are mentioned. References accompany some of the articles. There are 56 references, mostly Soviet.

TABLE OF CONTENTS:

Hot Working of Metals (Cont.)

Card 4/6

S/137/62/000/007/047/072
A057/A101

AUTHOR: L'vov, G. K.

TITLE: The principles of the rapid recrystallization of low-carbon steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 49, abstract 7I282 (In collection: "Metallovedeniye i term. obrabotka", Moscow-Kiyev, Mashgiz, 1961, 106 - 113)

TEXT: A steel with the composition (in %): C 0.06, Mn 0.33, P 0.012, Si - traces, was investigated. The process of recrystallization at a high-frequency heating started 0.5 - 0.6 sec. after attaining the temperature of 650°C and ended in the interval from 1.2 to 2.4 sec. At speed heating to the temperature of about 850°C, it is possible to separate the processes of recrystallization and dissolving of carbides, to attain properties inherent to an annealed metal with stable structure, to eliminate the dissolving of a perceptible quantity of C in ferrite at short holding times during the heating time within 1 sec., and thus to secure the production of articles without tendency to subsequent aging.

T. Rumyantseva

[Abstracter's note: Complete translation]

Card 1/1

S/137/62/000/007/018/072
A052/A101

AUTHORS: L'vov, S. N., Nemchenko, V. F., Samsonov, G. V.

TITLE: The heat conductivity of refractory borides, carbides and nitrides

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 7, 1962, 45, abstract 7G316 ("Poroshk. metallurgiya", no. 6, 1961, 70 - 74; English summary)

TEXT: An installation for determining the heat conductivity by a stationary method is described. The heat conductivity values of borides, carbides and nitrides of a number of transition metals are specified. The porosity of the samples was eliminated according to the additivity rule. The Wiedemann-Franz ratio for refractory compounds has about the same order as for metals, with the exception of Nb monomitride, Mo seminitride and Cr nitride. The heat conductivity characteristics of refractory compounds are discussed in connection with their structure. There are 15 references.

R. Andriyevskiy

[Abstracter's note: Complete translation]

Card 1/1

36832
S/137/62/000/004/151/201
A060/A101

1,1710

AUTHOR: L'vov, G. K.

TITLE: New heat-treatment processes for steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 4, 1962, 112, abstract 4I691 (V sb. "Goryachaya obrabotka metallov. No. 2". Kiyev, AN USSR, 1960, 116 - 121)

TEXT: The article considers the advantages of new heat-treatment processes for steel: high-temperature cementation (at a temperature > 1,000°C), bright hardening, electric tempering, and high-speed recrystallization. It is noted that high-temperature cementation of steel 18 ХГТ (18KhGT) with an admixture of 0.1% Cr at 1,080°C for 45 - 50 min produces a cementation layer of ~1 mm depth in the article. When this process is used the specific cost of cementation is reduced by 40%. The research on the cementation and nitriding of steel in liquid methyl alcohol or NH_3 by induction heating deserves notice. The electric tempering of steel may be applied in industry as a high-productivity method, making it possible to obtain better combinations of the mechanical characteristics of articles

Card 1/2

S/137/62/000/004/151/201
A060/A101

New heat-treatment processes for steel

than after extended tempering in a furnace. The possibility was established of considerably intensifying the recrystallization process of cold-worked low-carbon steel and to obtain a non-aging metal with a minimal time-expenditure. According to preliminary data, in order to obtain non-aging articles under heating up to 750°C, it is necessary to employ rates $\geq$ 950 deg/sec, and for heating up to 800°C - 1,100 deg/sec. There are 10 references.

A. Babayeva

[Abstracter's note: Complete translation]

Card 2/2

L'vov, G. K.

PHASE I BOOK EXPLOITATION SOV/5511

Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Kiyevskoye oblastnoye pravleniye.

Metallovedeniye i termicheskaya obrabotka (Physical Metallurgy and Heat Treatment of Metals) Moscow, Mashgiz, 1961. 330 p. Errata slip inserted. 5,000 copies printed.

Sponsoring Agency: Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov UkrSSR. Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti. Kiyevskoye oblastnoye pravleniye.

Editorial Board: M. P. Braun, Doctor of Technical Sciences, I. Ya. Dekhtyar, Doctor of Technical Sciences, D. A. Drugov, Doctor of Technical Sciences, I. S. Kamanichnyye, Engineer, Ye. A. Markovskiy, Candidate of Technical Sciences, V. G. Pervyakov, Doctor of Technical Sciences, and A. V. Chernovol, Candidate of Technical Sciences; Ed.: M. S. Dorosatapol'skaya; Chief Ed., Mashgiz (Southern Dept.): V. K. Serdyuk, Engineer.

Card 1/10

PURPOSE: This collection of articles is intended for scientific workers and technical personnel of research institutes, plants, and schools of higher technical education.

COVERAGE: The collection contains papers presented at a convention held in Kiyev on problems of physical metallurgy and methods of the heat treatment of metals applied in the machine industry. Phase transformations in metals and alloys are discussed, and results of investigations conducted to ascertain the effect of heat treatment on the quality of metal are analyzed. The possibility of obtaining metals with given mechanical properties is discussed, as are problems of steel brittleness. The collection includes papers dealing with kinetics of transformation, heat treatment, and properties of cast iron. No personalities are mentioned. Articles are accompanied by references, mostly Soviet.

TABLE OF CONTENTS:

Card 3/10

Card 6/10

L'VOV, G.K. (Kiyev)

Kinetics of low-carbon steel recovery and its effect on the process of recrystallization. Izv. AN. SSSR. Otd. tekh. nauk. Met. i topl. no.2:95-98 Mr-Ap '61. (MIRA 14:4)
(Steel alloys--Metallography)
(Crystallization)

FEDORCHENKO, Ivan Mikhaylovich, akademik; L'VOV, G.K.[L'vov, H.K.], otv. red.; TEPLYAKOVA, A.S., red.; MATVIICHUK, O.A., tekhn. red.

[Ceramic metal products in the national economy]Metalokeramichni vyroby u narodnomu hospodarstvi. Kyiv, 1962. 30 p. (Tovarystvo dlia poshyrennia politychnykh i naukovykh znan' Ukrains'koi RSR. Seriia 7, no.7) (MIRA 15:12)

1. Akademiya nauk Ukr. SSR (for Fedorchenko).
(Ceramic metals) (Metal powder products)

L 17545-63 EWP(q)/EWT(m)/BDS AFFTC/ASD JD

ACCESSION NR: AP3004433 S/0020/63/151/004/0902/0903

55

AUTHOR: L'vov, G. K.

TITLE: The rates of recrystallization and dissolution of carbon in ferrite at high temperatures

SOURCE: AN SSSR. Doklady, v. 151, no. 4, 1963, 902-903

TOPIC TAGS: recrystallization, low-carbon steel, carbide, carbon steel.

ABSTRACT: When high rates of heating (1000 + or - 20C/sec) and cooling (about 2500C/sec) are used in high-temperature recrystallization of low-carbon steel, the carbide phase remains unchanged after regeneration of the ferrite is complete. Author experimentally found that the recrystallization can be completed much sooner than the dissolution of carbon. This offers the possibility of obtaining low-carbon unalloyed steel, not prone to aging, by high temperature recrystallization at rapid rates of heating and cooling. Orig. art. has: 1 figure and 2 formulas.

ASSOCIATION: Kievskiy politekhnicheskiy institut (Kiev Polytechnic Institute)

SUBMITTED: 06Feb63 DATE ACQ: 21Aug63 ENCL: 00

SUB CODE: CH NO REF SOV: 002 OTHER: 000

Card 1/1

L'VOV, G.K.; MOTYAZHEV, V.I.

Kinetics of the dissolving of carbon and the recrystallization of commercial iron. Izv. vys. ucheb. zav.; chern. met. 6 no.8:128-131 '63. (MIRA 16:11)

1. Kiyevskiy politekhnicheskiy institut.

L'VOV, G.K.

Critical speed of heating with recrystallization of steel. Fiz. met. i metalloved. 16 no.3:486-489 S '63. (MIRA 16:11)

1. Kiyevskiy politekhnicheskiy institut.

L'VOV, G.K.

Connection between softening and structural changes during the recrystallization of commercial-grade iron. Metalloved. i term. obr. met. no.8:12-13 Ag '64. (MIRA 17:10)

1. Kiyevskiy politekhnicheskiy institut.

ACC NR: AP7003613 SOURCE CODE: UR/0185/66/011/012/1338/1340

AUTHOR: L'vov, H. K.—L'vov, G. K.; Petrov, Yu. N.; Yaremchuk, V. V.

ORG: none

TITLE: The dislocation structure changes originating with rapid heating of low-carbon steel

SOURCE: Ukrayins'kyy fizychnyy zhurnal, v. 11, no. 12, 1966, 1338-1340

TOPIC TAGS: low carbon steel, CRYSTAL dislocation, RECRYSTALLIZATION, heating, /08Kp steel LOW CARBON

ABSTRACT: Specimens, 0.28 x 21 x 65 mm, of low-carbon 08kp steel cold rolled with a 61% reduction were heating at a rate of 880 C/sec to a near-recrystallizatic temperature and then cooled at a rate of 1000 C/sec, or slowly heated at a rate of 0.13 C/sec to the same temperature and quenched. Test specimens, 3 mm in diameter and less than 0.11 mm thick, were investigated for the dislocation structure changes originated with rapid and slow heating of the steel. The as-rolled steel structure consisted of grain fragments with a complex system of intertwined dislocations. Rapidly heated steel had a similar structure. The structure of slowly heated steel contained light-colored regions with a relatively small number of dislocations. With slow heating to a temperature higher than that of recrystallization, the steel structure

Card 1/2 UDC: none

ACC NR: AP7003613

resembed the structure of the annealed steel, regardless of the cooling rate. The steel specimens, rapidly heated to temperatures which ensured complete recrystallization and then cooled in water or slowly cooled in air, had an identical structure. The results showed that the dislocation structure of completely recrystallized 08kp steel does not depend on the rate of heating for recrystallization and is free from the defects originating from previous cold working. Orig. art. has: 4 figures.

SUB CODE: 11/ SUBM DATE: 14Apr66/ ORIG REF: 004

Card 2/2

L'VOV, G.M.

Investigating theoretically the motions of a free body in an unsteady flow. Trudy TSAO no.22:22-31 '57. (MIRA 11:4)

1. TSentral'nyy aerogidrodinamicheskiy institut im. prof. N.Ye. Zhukovskogo.

(Fluid dynamics)

KRESTOV, M.A., kand. arkh.; MAKOTINSKIY, M.P., kand. arkh.; TSILLI, L.B., kand. arkh.; Prinimali uchastiye: BOGUSLAVSKIY, A.I., inzh.; DOBRYAKOVA, L.I., kand. tekhn. nauk; LIVSHITS, A.M., inzh.; MUNTS, V.O., kand. arkh.; L'VOV, G.N., inzh., retzenzent; POPOV, A.N., retsenzent; GURVICH, E.A., red.izd-va; TEMKINA, Ye.L., tekhn. red.

[Catalog of finishing materials and elements] Katalog otdelochnykh materialov i izdelii. Moskva, Gosstroiizdat. Pt.6.[Concrete and mortars] Betony i rastvory. 1962. 46 p. (MIRA 16:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh stroitel'nykh materialov. 2. Deystvitel'nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Popov).
(Finishes and finishing)

[illegible](t)/[illegible] [illegible]EPF(c)/ [illegible](t)/[illegible](d)/[illegible] [illegible](t)/[illegible](b) Ps-4 IJP(c)

[illegible]/0031/007/0[illegible]/0818

AUTHOR: [illegible], A. P.; [illegible], V. [illegible].; [illegible], A. A.; [illegible]lina, G. V.; [illegible]

TITLE: [illegible] method of evaluating the protective properties of anodic oxide film on alum[illegible]

SOURCE: [illegible] Laboratoriya, v. 31, no. 7, 1965, 816-818

TOPIC TAGS: anodic oxide film, oxide film, galvanic circuit, electrolyte solution, electr[illegible] force, protective film/ [illegible] electrolyte (solution of potassium bi-[illegible] in sulfuric acid)

ABSTRACT: The authors describe a method they developed for the quick determination of the protective [illegible] of oxide film on aluminum, based on utilizing the [illegible] of the [illegible] electrolyte [illegible] galvanic circuit. The pro-[illegible] the rise of an e.m.f. On using an film [illegible] protective properties of this [illegible] which a specific e.m.f. [illegible]. A series of [illegible] electrolytes was tested out. A drop-

Card 1/3

L 57742-63

ACCESSION NR: AC3017091

1ct of electrolyte solution 1 (see figure) was deposited on the purified and de-[illegible] surface 2 of [illegible] so as to [illegible] part of the vertically [illegible] 3 in this [illegible]. Wire 3 is linked to the specimen by [illegible] circuit 4. [illegible] fastened on plexiglas bracket 5. Of the electrolyte solutions [illegible], the [illegible] electrolyte (25 cc HCl (sp. gr. 1.19), 3 [illegible], 75 cc [illegible]) [illegible] to be the most suitable. The method was verified [illegible] of [illegible] oxide films on aluminum in a sulfuric acid solution and [illegible] with the [illegible] of the ordinary visual determination based on the [illegible] of [illegible] color in the droplet. A special time indicator, triggered [illegible] a specific [illegible] in the circuit, was used. The tabulated findings [illegible] that the [illegible] is definitely acceptable for comparative [illegible] of the [illegible] of oxide films. This method not only reduces testing time [illegible] with the droplet color test, but also is more precise and objective. Orig. art. has: 1 figure, 3 tables.

ASSOCIATION: [illegible] institut ([illegible] Aviation Institute)

SUBMITTED: [illegible] ENCL: 01 SUB CODE: EE, EM

NR REF SOV: 002 OTHER: [illegible]

Card 2/3

L'VOV, G. S.

L'VOV, G.S. (Astrakhan')

Simultaneous perforation of two peptic ulcers of the jejunum following gastroenteroanastomosis. Klin.med. 32 no.4:80-81 Ap '54. (MLRA 7:7)

1. Iz kafedry obshchey khirurgii (zav. dotsent A.I.Bogatov) Astrakhanskogo meditsinskogo instituta.

(PEPTIC ULCER, perforation,
*simultaneous perf. of two jejunal ulcers after gastroenteroanastomosis)

BOL'SHEV, I.N.; L'VOV, G.S.

Rapid micromethod for the determination of thrombocytes and reticulocytes. Lab.delo no.6:24 N-D '55. (MIRA 12:6)

1. Iz kliniko-diagnosticheskoy laboratorii (zav. - I.N.Bol'shev) Fakul'tetskoy khirurgicheskoy kliniki Gor'kovskogo meditsinskogo instituta imeni S.M.Kirova (nauchnyy rukovoditel' - prof.Ye.L. Berezov).

(ERYTHROCYTES,
reticulocyte, rapid microdeterm.)
(BLOOD PLATELETS,
microdeterm., rapid technic)

L'VOV, G. S.

L'VOV, G. S. "Hematological shifts following spleenectomy." Gor'kiy State Medical Inst imeni S. M. Kirov. Gor'kiy, 1956. (Dissertation for the Degree of Candidate in Medical Sciences)

So: Knizhnaya Letopis', No. 18, 1956

L'VOV, G.S.; MASLOVSKAYA, R.V.

Quantitative displacements of erythrocytes and leucocytes under the influence of emotions linked to surgical operations. Lab. delo 7 no.9:25-26 S '61. (MIRA 14:10)

1. Kafedra fakul'tetskoy khirurgii Astrakhanskdgo meditsinskogo instituta (zav. - prof. A.A.Kozyrev).
(ERYTHROCYTES) (LEUCOCYTES)
(EMOTIONS—PHYSIOLOGICAL EFFECT)

L'VOV, G.S.

Course of pregnancy and labor in patients with portal hypertension. Akush.i gin. no.4:115-116 '61. (MIRA 15:5)

1. Iz kafedry fakul'tetskoy khirurgii (zav. - prof. A.A. Kozyrev) Astrakhanskogo meditsinskogo instituta.
(PORTAL HYPERTENSION) (PREGNANCY, COMPLICATIONS OF)
(LABOR, COMPLICATED)

L'VOV, G.S., kand.med.nauk

Clinical aspects of traumatic injuries to the spleen and the immediate results of surgical treatment. Kaz.med.zhur. no.4:27-29 Jl-Ag '62. (MIRA 15:8)

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. A.A.Kozyrev) Astrakhanskogo meditsinskogo instituta.
(SPLEEN--WOUNDS AND INJURIES)

L'VOV, G.S.; CHUYEV, L.V.

New standards for ultrasonic testing. Part 1. Defektoskopiia no.1:55-56 '65. (MIRA 18:6)

ACC NR: AP7001724 SOURCE CODE: UR/0048/66/030/012/1942/1949

AUTHOR: Gorbatyy, N.A.; L'vov, G.V.; Perederiy, V.A.; Reshetnikova, L.V.; Fekhretdinov, F.A.

ORG: Department of Physical Electronics of Tashtent State University im. V.I. Lenin (Kafedra fizicheskay elektroniki Tashkentskogo gosudarstvennogo universiteta)

TITLE: Thermoelectron emission from hafnium and zirconium carbides

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 12, 1966, 1942-1949

TOPIC TAGS: hafnium compound, zirconium carbide, carbide, thermionic emission, work function, electron emission, thermoelectron emission

ABSTRACT: In view of discrepancies in the published data on the thermoelectron emission from HfC and ZrC, the work functions, Richardson constants, and current densities were recalculated for those materials under rigorously controlled conditions. The HfC samples contained 94% metal, 5.3% bound C, and 0.40% free C, and their lattice constant was 4.632 KX. The ZrC samples contained 88.95% metal, 10.05% bound C, and 0.40% free C, and their lattice constant was 4.679 KX. The Richardson method was

Card 1/2 UDC: none

ACC NR: AP7001724

used for the measurements of the basic characteristics, and the thermoelectron constant was assumed to be 120.4 amp·cm^{-2}·deg^{-2}. In half of the samples the carbides were deposited directly on tantalum substrates, and in the other half on tantalum coated with $MoSi_2$. The work function of HfC on tantalum was found to be 3.0 eV, its Richardson constant 0.3 amp·cm^{-2}·deg^{-2}, current density at 1920K was 17.6 and at 2140K 137 mA·cm^{-1}, and its effective work function 3.75 eV. The corresponding values for HfC on $MoSi_2$ were 3.0 eV, 1.8 amp·cm^{-2}·deg^{-2}, 91 and 790 mA·cm^{-1}, and 3.75 eV. The work function of ZrC on tantalum was 2.7 eV, the Richardson constant 0.15 amp·cm^{-2}·deg^{-2}, current density at 1920K was 46 and at 2140K 306 mA·cm^{-1}, and the effective work function 3.85 eV. The corresponding values for ZrC on $MoSi_2$ were 3.0 eV, 0.7 amp·cm^{-2}·deg^{-2}, 36 and 286 mA·cm^{-1} and 3.87 eV. [ZL]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 007/
ATD PRESS: 5114

Card 2/2

S/081/62/000/017/071/102
B156/B186

AUTHORS: L'vov, I. A., Sidorenkov, G. G.

TITLE: The catalytic cracking of the heavy wide fraction from thermal cracking

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 17, 1962, 470, abstract 17M135 (Novosti neft. i gaz. tekhn. Neftepererabotka i neftekhimiya, no. 2, 1961, 3 -.6)

TEXT: The heavy wide thermal cracking fraction can be refined in an industrial catalytic cracking unit with the fraction either in pure form or mixed with directly distilled crude, in order to produce high octane gasoline and an increased amount of light gas oil, the latter to be used as a component of diesel fuel. To refine this crude, the processing scheme of standard catalytic cracking plant is maintained intact. The total yield of light products is ~15% higher than when using straight-run fuel. To ensure a long working period between repairs, and to raise the output above the planned figure, the boiling limit for the wide thermal cracking fraction must be $\leqslant 480 - 490^{\circ}C$ and the amount of asphalt-tar

Card 1/2