"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

68487

S/126/60/009/01/022/031
E091/E191

Imperfections in the Crystalline Structure of Niobium resulting from High Degrees of Deformation

in the direction of the axis of compression and in the direction perpendicular to this axis is associated with a difference between the crystal lattice distortion and the block dimensions, and not with a change in texture. Hence the anisotropy in hardness may be due not to different physical properties in various crystallographic directions, but to a dependence of the properties of the fine crystalline structure on the direction relative to the axis of compression in plastic deformation. Further, hardening observed after strong deformation is accompanied not only by formation of a considerable number of imperfections in the crystal structure, but also by changes in the degree of perfection of the texture. These changes govern the mechanism and kinetics of plastic deformation which exerts a considerable influence on the formation and nature of imperfections of the crystal structure.

There are 5 figures and 4 Soviet references.

Card 5/6

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

68487

S/126/60/009/01/022/031
E091/E191

Imperfections in the Crystalline Structure of Niobium resulting from High Degrees of Deformation

ASSOCIATION: Institut metallofiziki AN USSR (Institute of Metal Physics, Acad. Sci. Ukr. SSR)

SUBMITTED: June 29, 1959

Card 6/6

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

S/601/60/000/011/002/014
D207/D304

AUTHORS: Lysak, L. I., and Drachinskaya, A. G.

TITLE: Mechanism of formation of the carbide phase on tempering of steel ЭИ-69 (EI-69)

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut metalofyzyky. Sbornik nauchnykh rabot. no. 11. 1960. Voprosy fiziki metallov i metallovedeniya, 22-27

TEXT: The authors investigated conversion of the γ solid solution (austenite) into the carbide $(Fe, Cr, W, Mo)_{23}C_6$ in steel EI-69. This conversion occurs on tempering at 650 - 950°C and hardens the steel. The composition of the steel was (in %): 0.48 C; 14 Cr; 14 Ni; 2.7 W; 0.4 Mo; 0.6 Si; 0.7 Mn; 67.12 Fe. Monocrystals were prepared by melting EI-rods in a Tamman furnace, gradual solidification and quenching from 1200°C in water.

Card 1/2

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Cylindrical samples were cut from monocrystals with their axes along the [100] direction of austenite. The surface layers damaged in cutting were etched away. The processes occurring in EI-69 were investigated by X-ray crystallography using K_{α} and K_{β} radiation from a Cr anode. Gnomostereographic projections of principal planes of the austenite and carbide lattices showed that the cube and dodecahedron faces of the carbide phase are parallel to the same faces of the austenite phase tempered at 650 - 950°C. This result was used to suggest a possible mechanism of conversion of austenite into carbide by loss of 22 carbon atoms from the former. Surfaces of separation between the matrix lattice and the precipitated phase were the (111) planes. There are 3 figures and 5 Soviet-bloc references.

SUBMITTED: September 22, 1959

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.

PHASE I BOOK EXPLOITATION SOV/5525

Bagaryatskiy, Yuriy Aleksandrovich, Doctor of Physics and Mathematics; Yakov Mendelevich Golovchiner; Vera Alekseyevna; Emmanuil Zel'manovich Kaminskiy, Candidate of Physics and Mathematics; Viktor Mikhaylovich Kardonskiy; Vladislava Kazimirovna Kritskaya, Candidate of Physics and Mathematics; Leonid Ivanovich Lysak, Doctor of Technical Sciences; Yuriy Andreyevich Osip'yan; Mark Davydovich Perkas, Candidate of Technical Sciences; Vladimir Moiseyevich Rozenberg, Candidate of Technical Sciences; Naum Isaakovich Sandler, Candidate of Technical Sciences; Nadezhda Trofimovna Travina, Candidate of Physics and Mathematics; and Lev Markovich Utevskiy, Candidate of Technical Sciences.

Rentgenografiya v fizicheskom metallovedenii (Radiography in Physical Metallography) Moscow, Metallurgizdat, 1961. 368 p. 5,200 copies printed.

Sponsor' , Agencies: Gosudarstvennyy nauchno-ekonomicheskiy Sovet SSSR. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii im. I.P. Bardina. Institut metallovedeniya i fiziki metallov.

Ed. (Title page): Yu. A. Bagaryatskiy; Ed. of Publishing House: Ye.N. Berlin; Tech. Ed.: Ye.B. Vaynshteyn.

Card 1/7

PURPOSE: This handbook is intended for x-ray technicians working in plant laboratories of the metallurgical and machine-manufacturing industry. It may also be useful to technical personnel in the field of applied x-ray diffraction analysis employed at scientific, technical, and educational institutions.

COVERAGE: The handbook contains basic information of the methods employed in metallography. It consists of four parts. Part I contains descriptions of methods for the study of polycrystals, including the special features of the work with sharp-focused tubes and ionization counters, preparation of specimens, and choice of radiation sources, filters, cameras, and geometry of the picture. Data on the photometering of x-ray pictures and on the application of electron diffraction techniques to metal science are also presented. Part II contains a detailed description of stresses and deformations in crystals of metal, as well as of new methods for measuring the size of grains and areas of coherent scattering. The material also contains data on methods for studying the recrystallization of metals for determining textures. Part III is devoted to x-ray phase analysis to be carried out with the aid of tables included in the appendix. Part IV deals with x-ray studies of steel that has been variously treated by thermal and thermochemical methods. No personalities are mentioned. There are 282 references: 199 Soviet, 55 English, 26 German, and 2 French.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.

Effect of hardening and tempering steel on the fine crystal structure of martensite. Sbor.nauch.rab.Inst.metallofiz.AN URSR no.12:21-36 '61. (MIRA 14:8)

(Steel--Metallography)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.

Effect of alloying elements on changes during the tempering of the mosaic structure and distortions of the crystal lattice of martensite. Sbor.nauch.rab.Inst.metallofiz.AN URSR no.12:124-134 '61. (MIRA 14:8)

(Steel alloys--Metallography)
(Phase rule and equilibrium)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

S/601/62/000/014/010/012
I003/I203

AUTHORS: Krulikovskaya, M. P., Lysak, L. I., Lyapunova, K. A. and Rakhman, P. B.

TITLE: Variation in the crystalline structure and in the properties of EI-69 steel upon heat-treatment

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut metalofyzyky. Sbornik nauchnykh rabot. no. 14. Kiev, 1962. Voprosy fiziki metallov i metallovedeniya, 111-115

TEXT: Data published in recent years on the changes taking place in the crystalline structure of steels and non-ferrous metals during phase transformations do not sufficiently clarify the nature of these changes and the role played by them in the process of the strengthening of metals. Therefore further investigation of this subject is of great importance. The mechanical properties of the above austenitic steel (0.45% C, 14.0% Ni, 14.0% Cr, 2.70% W, 0.60% Si, 0.70% Mn and 0.40% Mo) after quenching from 1180-1200°C are rather poor, however, after tempering at 600-750°C the hardness, yield strength and ultimate strength increase, while the plasticity and toughness decrease. This investigation shows that this is due to an increase in the amount of imperfections in the crystalline lattices and to a breaking up of the mosaic structure of the γ-phase. The softening of this steel as a result of tempering at temperatures higher than 750°C is accompanied by a decrease in the amount of imperfections in the crystalline lattice of the matrix, and a coarsening of the blocks of the mosaic structure of the γ-phase. There are 2 figures.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

S/601/62/000/016/014/029
E111/E451

AUTHORS: Krulikovskaya, M.P., Lysak, L.I.

TITLE: Kinetics of crystal-structure changes of the component phases of ЭИ-69 (EI-69) steel during the decomposition of the γ-solid solution

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut metalfyzyky. Sbornik nauchnykh rabot. no.16. Kiev, 1962. Voprosy fiziki metallov i metallovedeniya. 111-114

TEXT: Supplementing their previous work, the authors have now obtained direct and more complete data on the kinetics of changes in crystal-structure imperfections of the component phases during the tempering of a steel containing 0.45% C, 14% Ni, 14% Cr, 2.7% W, 0.4% Mo, 0.7% Si, 0.7% Mn, balance iron. Specimens were quenched from 1200°C (holding time 5 hours) and tempered at 730 to 900°C for up to 88 hours. X-ray examination and hardness tests were carried out, with special reference to carbides, after different tempering times. The results confirm that the increase in strength of this steel is associated with considerable changes in the imperfections of the matrix crystal structure occurring in

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the initial stages of decomposition. It appears that these imperfections, consisting of boundaries of blocks, grain fragments and grains of the solid solution and dispersed particles of the precipitating phase, hinder the movement of dislocations. The crystal lattice distortions produced or altered during tempering are localized in volumes of the order of 10^{-6} cm and can have a similar effect. Weakening is correlated with a decrease in the crystal-lattice distortions, the growth of blocks and grains of the matrix and the coagulation of carbide-phase particles, i.e. with structural changes reducing the number of places where dislocations can be arrested. There is 1 figure.

SUBMITTED: January 15, 1962

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

ACCESSION NR: AT4010695 S/2601/63/000/017/0111/0119

AUTHOR: Glazov, A. P.; Ly*sak, L. I.; Tikhonov, L. V.; Khazanov, M. S.

TITLE: Investigation of changes in the fine crystalline structure of alloy ZhS-6K during thermal fatigue

SOURCE: AN UkrRSR. Insty*tut metalofizy*ky*. Sbornik nauchny*kh trudov, no. 17, 1963. Voprosy* fiziki metallov i metallovedeniya, 111-119

TYPIC TAGS: thermal fatigue, turbine, turbine blade, thermal stress, macro deformation, micro deformation, roentgenography, cracking, elasticity, alloy Zhs-6K, alloy crystal structure

ABSTRACT: Thermal fatigue is one of the basic factors leading to breakage of gas turbine blades. Continuous, cyclic, thermal loads when starting, stopping, or changing operating conditions sharply decrease the durability of the blades. During the process of cyclic thermal loading cracks usually appear in the surface layers of the blades and quickly lead to breakage. It is usually agreed that thermal stress is the most important factor occurring in processes without fixed thermal influences. Thermal stress surface is

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greatest on the layers; hence structural changes are more evident there. During the loading process an accumulation of elastic macrodeformations takes place leading to the formation of cracks. In this study the blades of a gasturbine were investigated by an X-ray (roentgenographic) method; the blades were tested for thermal stability in conditions maximally approaching working conditions with respect to temperature and speed of the gas stream. X-ray examinations of the blades were made before and after the appearance of cracks. Roentgenographic investigation of the hard solution on the surface layers was conducted in a ionization unit URS-50I which automatically registered the diffused radiation. The results showed that considerable structural changes occur during cyclic, thermal loading only on the surface layers of blades with thickness 0.05 - 0.10 mm. Noticeable changes occur with a relatively low number of thermocycles (about 100). With further increase in the number of thermocycles structural changes do not occur either before or after the formation of cracks. Further, with an increase in the number of thermocycles, the zone of coherent diffusion first increases from an initial 3.10^{6} cm to a magnitude of 10^{-3} mm and then decreases to 3.10^{-6} cm, after which cracks appear. In blades with cracks the dimensions of the area of coherent diffusion is 10^{-3} cm. During cyclic thermal loading of blades no noticeable accumulation of elastic macro and intergrodeformations occurs in surface layers as compared with their initial state. At the same

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time, before the formation of a crack, intensive accumulation of plastic deformations is noticeable in the zones of the formation of the crack, accompanied by an increase in the density (closeness) of dislocation. Orig. art. has: 5 figures.

ASSOCIATION: Insty*tut Metalofizy*ky* AN UkrRSR (Institute of Metallurgical Physics AN UkrRSR)

SUBMITTED: 00 DATE ACQ: 31Jan64 ENCL: 00

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

ACCESSION NR: AT4013951 S/2659/63/010/000/0201/0204

AUTHOR: Krulikovskaya, M. P.; Ly*sak, L. I.

TITLE: Kinetics of the changes in crystal structure of the component phases of grade EI-69 steel during disintegration of Gamma-hard solutions

SOURCE: AN SSSR. Institut Metallurgii. Issledovaniya po zharoprochny*m splavam, v. 10, 1963, 201-204

TOPIC TAGS: steel, EI-69, steel phases, steel crystalline structure, Gamma-hard solution, tempering.

ABSTRACT: Other investigators have studied the structural changes in EI-69 steel during disintegration of gamma-hard solutions at tempering temperatures of 300-1200C, as well as the kinetics of disintegration of a standard hard solution. The present investigation provided direct and more complete data on the kinetics of variation of the crystal structure of the component phases of EI-69 (containing 0.45% C, 14%Ni, 14% Cr, 2.7% W, 0.4% Mo, 0.7% Si, and 0.7% Mn) steel during tempering. As shown in the Enclosure, the results of this investigation confirm previously published data. An increase in strength is connected

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ACCESSION NR: AT4013951

with significant changes in the crystalline structure caused by the initial disintegration stages. Orig. art. has: 1 figure.

ASSOCIATION: Institut metallurgii AN SSSR (Metallurgical Institute AN SSSR)

SUBMITTED: 00 DATE ACQ: 27Feb64 ENCL: 01

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AM4017086 BOOK EXPLOITATION S/

Gertsriken, S. D.; Dekhtyar, I. Ya.; Krivoglaz, M. A.; Larikov, L. N.; Ly*sak, L. I.; Nesterenko, Ye. G.; Novikov, N. N.; Sosnina, Ye. I.; Slyusar, P. F.; Tikhonov, L. V.; Trefilov, V. I.; Chuistov, K. V.

Physical bases of the strength and ductility of metals (Fizicheskiye osnovy* prochnosti i plastichnosti metallov) Moscow, Metallurgizdat, 1963. 321 p. illus., biblio. Errata slip inserted. 4250 copies printed. Editor of the publishing house: Ye. N. Berlin; Technical editor: L. V. Dobuzhinskaya; Bindery artist: Yu. M. Vashchenko

TOPIC TAGS: strength of metals, ductility, crystal lattice, dislocations, metal failure, strain hardening, solid solution, microstress, lattice defect, plastic strain, relaxation, polygonization, recrystallization, grain growth

PURPOSE AND COVERAGE: This collection of articles is intended for scientific personnel and for engineers and metals physicists; it also may be useful to students at metallurgical and machine-building vuzes. The results of study of crystal-lattice imperfections and the dislocation theory of metal failure are

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presented. Contemporary concepts of the nature and mechanism of different weakening processes in metals are expounded, as well as present-day thinking concerning the effect of impurities on the kinetics of the weakening processes. The articles in this collection are principally the original results of research performed in recent years at the Institut Metallofiziki AN USSR.

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SUB CODE: ML, AP SUBMITTED: 23Aug63 NR REF SOV: 253

OTHER: 463 DATE ACQ: 17Jan64

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

ACCESSION NR: AP3006378 S/0126/63/016/002/0256/0259

AUTHORS: Ly*sak, L. I.; Nikolin, B. I.

TITLE: Orientation of gamma-phase and epsilon-phase lattices during gamma-epsilon transformation in Fe-Mn alloys and in Fe-Mn-C steel

SOURCE: Fizika metallov i metallovedeniye, v. 16, no. 2, 1963, 256-259

TOPIC TAGS: Fe-Mn alloy, Fe-Mn-C steel, transformation, phase lattice orientation

ABSTRACT: The orientation of gamma-phase and epsilon-phase lattices during the $\gamma \rightarrow \varepsilon$ transformation in Fe-Mn-C steel had not been experimentally determined. The goal of this work was to supply this information and to verify the theoretical data of Z. Nishiyama (Kinzoku no Kenkyu, 1936, 13, 300) and the approximate experimental results of J. C. Parr (Acta Cryst., 1952, 5, 842). The composition of steel samples was: Fe+12% Mn and 0.5% C; that of the alloy: Fe+20% Mn. The phase orientations were determined from x-ray pictures of stationary samples produced in a rotation chamber at 2° intervals. The results obtained were used to construct polar diagrams for determining the gamma-phase and epsilon-phase orientation in steel. This was impossible to achieve by x-ray analysis alone because of the blending of the $(311)_\gamma$ and $(11\bar{2}2)_\varepsilon$ diffraction spots. It was established that the

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ACCESSION NR: AP3006378

relation between the gamma-phase and epsilon-phase lattices was:

$$(111)_\gamma \parallel (0001)_\varepsilon ; (01\bar{1})_\gamma \parallel (11\bar{2}0)_\varepsilon .$$

This relation coincided entirely with that obtained by J. C. Parr. Only one of the possible four types of orientation (during the $\gamma \rightarrow \varepsilon$ transformation) was realized in steel monocrystals, while all four types appeared in the alloy. Orig. art. has: 4 figures.

ASSOCIATION: Institut metallofiziki AN USSR (Institute of Physical Metallurgy AN UkrSSR)

SUBMITTED: 20Dec62 DATE ACQ: 27Sep63 ENCL: 00

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Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; DRACHINSKAYA, A.G.

Effect of the crystal structure imperfections in hardened steel on the martensite decomposition process. Fiz. met. i metalloved. 16 no.3:370-377 S '63. (MIRA 16:11)

1. Institut metallofiziki AN UkrSSR.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; NIKOLIN, B.I.

Martensite phase with a laminated structure. Dokl. AN SSSR 153 no.4:812-815 D '63. (MIRA 17:1)

1. Institut metallofiziki AN UkrSSR. Predstavleno akademikom G.V. Kurdyumovym.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

ACCESSION NR: AP4013091 S/0126/64/017/001/0040/0044

AUTHORS: Ly*sak, L. I.; Nikolin, B. I.

TITLE: Studying packing defects and microhardness of ε-phase in single crystals of Fe-Mn-C steel

SOURCE: Fizika metallov i metalloved., v. 17, no. 1, 1964, 40-44

TOPIC TAGS: steel, Fe-Mn-C steel, steel single crystal, packing defect, microhardness, phase transformation, gamma-phase, epsilon-phase, gamma-to-epsilon transformation, x-ray diffraction pattern, U8 steel, St.3 steel

ABSTRACT: The γ- to ε- phase transformation in Fe-Mn-C steel single crystals has been studied microscopically and by x-ray diffraction patterns. Samples consisting of steels U8 and St.3 and of electrolytic manganese were produced in a high-frequency induction oven (their carbon content varied from 0.2 to 1.4% and their manganese content from 4 to 18%). The single crystals were grown by slow oven cooling of the melts. The rate of their growth strongly affected the amount of the ε-phase which increased with the decrease in cooling velocity. The largest ε-phase plates were formed in samples 0.5 to 1 mm thick. An analysis

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ACCESSION NR: AP4013091

showed that during the $\gamma \rightarrow \varepsilon$ phase transformation in Fe-Mn-C steel some chaotic packing defects were formed. These are reflected in the blurring of ε-phase points on the x-ray diffraction pattern and in the appearance of diffusive bands connecting some of the γ- and ε-phase points. These packing defects appeared and disappeared together with the ε-phase. The microhardness of the ε-phase in the steel containing Fe + 0.4% C + 14% Mn was 420 kg/mm^2 and the Meyer index was 1.73. Orig. art. has: 5 figures.

ASSOCIATION: Institut metallofiziki AN SSSR (Institute of Metal Physics AN SSSR)

SUBMITTED: 15Jun63 DATE ACQ: 26Feb64 ENCL: 00

SUB CODE: ML NO REF SOV: 007 OTHER: 013

Card 2/2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

ACCESSION NR: AT4042837 S/2601/64/000/018/0123/0128

AUTHOR: Krulikovskaya, M. P., Ly*sak, L. I.

TITLE: Effects of W, Mo and C on crystal structure changes in the constituent phases of austenitic steels during decomposition of the supersaturated Gamma solid solution

SOURCE: AN UkrSSR. Institut metallofiziki. Sbornik nauchny*kh rabot, no. 18, 1964. Voprosy* fiziki metallov i metallovedeniya (Problems in the physics of metals and physical metallurgy), 123-128

TOPIC TAGS: steel No. 1, steel No. 2, steel EI-257, steel EI-69, ferrochromium steel, carbide phase hardness, matrix structure diffraction analysis, carbide phase coagulation, matrix lattice microdeformation, molybdenum alloying effect, tungsten alloying effect, carbon content effect, austenitic steel, steel microstructure, Gamma solid solution

ABSTRACT: Hardness tests (Rockwell, scale B) and X-ray diffraction studies were carried out on samples of steels No. 1, No. 2 (14% Ni, 14% Cr, 0.10 and 0.45%C, respectively, Fe residual) and EI-257 (Ni-Cr as above, 0.10%C, 2.7% W, 0.4% Mo, Fe residual)

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ACCESSION NR: AT4042837

to determine the effects of W, Mo and C on coagulation of the carbide phase and on crystal structure changes in the matrix. Samples were annealed, peened into rods, homogenized (5 hrs., 1200C), then tempered across 600-1100C (1 hr. intervals, by 50-100C) or 750-850C (various periods). It was established that increasing the C content from 0.1 to 0.45% results in the development of substantial microdeformations of the matrix lattice and a significant hardening effect during decomposition. Phase composition, grain size and crystal lattice parameters of the carbide phase remain unchanged. Introduction of W and Mo intensifies the micro-heterogeneity of the matrix and displaces peak deformation and hardness toward higher temperatures for low-carbon (0.1%) steels. Both promote the separation of a more dispersed carbide phase, the retardation of its coagulation and an increase in carbide lattice parameters. Orig. art. has: 3 tables and 3 graphs.

ASSOCIATION: Institut metallofiziki AN UkrSSR (Metallophysics Institute, AN UkrSSR)

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SUB CODE: MM NO REF SOV: 010 OTHER: 000

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; DRACHINSKAYA, A.G.

Effect of defects in the crystal structure of hardened steel martensite on the mechanism and the kinetics of martensite decomposition. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.18:136-142 '64 (MIRA 17:8)

Changes in the defects of the crystal structure of martensite at the first stage of decomposition. Ibid.:143-151

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; TIMOFEYEVA, A.I.

Orientation and mechanism of the formation of cementite during its isolation from austenite. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.18:152-154 '64 (MIRA 17:8)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; VEKSLER, Ye.Ya.; DRACHINSKAYA, A.G.

Changes in the mechanical properties and imperfections in the crystal structure during the quenching of hardened steel of the pearlitic class. Sbor.nauch.trud. Inst. metallofiz. AN URSR no.19:69-73 '64. (MIRA 18:5)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; DRACHINSKAYA, A.G.

Effect of slow low-temperature tempering on changes in the structure and properties of steel during subsequent tempering. Sbor.nauch. trud. Inst. metallofiz. AN URSR no.19:161-164 '64.

(MIRA 18:5)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; NIKOLIN, B.I.

Etch spirals on Fe-Mn-C steel. Sbor.nauch.trud. Inst. metallofiz. AN URSR no.19:232-234 '64. (MIRA 18:5)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; NIKOLIN, B.I.

Crystallostructural changes with martensitic transformations $\gamma \rightarrow \varepsilon \rightarrow \alpha$. Sbor. nauch. trud. Inst. metallofiz. AN URSR no.20:154-164 '64. (MIRA 18:5)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; NIKOLIN, B.I.

Studying the relief in $\gamma \rightarrow \varepsilon$ transformations on single crystals of Fe-Mn-C steel. Fiz. met. i metalloved. 17 no.5:703-707 My '64.

Morphology and orientation of ε-martensite in single crystals of Fe-Mn-C steel. Part 3. Ibid.:708-713 (MIRA 17:9)

1. Institut metallofiziki AN SSSR.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

L 8093-66 EWT(m)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) JD

ACC NR: AP5027139 SOURCE CODE: UR/0126/65/020/004/0547/0554

55
B

AUTHOR: Lysak, L. I.; Nikolin, B. I.
44,55 44,55

ORG: Institute for the Physics of Metals AN UkrSSR (Institut metallofiziki AN UkrSSR)
44,55

TITLE: Packing defects in the martensite transition in steel

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 4, 1965, 547-554

TOPIC TAGS: martensite steel, phase transition, crystal lattice defect

ABSTRACT: The article considers the question of the role of packing defects in the formation of the martensite epsilon' and epsilon phases in iron-manganese-carbon steels. X-ray investigations of manganese steels (0-0.6% carbon, 8-18% manganese) showed the existence of a new martensite phase, the epsilon'-martensite phase. This phase has an 18-layer rhombohedric lattice with the parameters a = 12.56 Å, alpha = 11°40' (spatial group D_{3d}^{5}), with hexagonal axes a = 2.53 Å, c = 37.44Å. X ray investigations show that the epsilon' phase has a closely packed structure of the I type (ABCABCBCABCACABCAB). A figure shows the changes in the crystal lattice in manganese steels with phase transitions, during heating and cooling. During cooling, the transitions are, successively, from the gamma, through the epsilon' and epsilon

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L 8093-66

ACC NR: AP5027139

phases to the kappa' phase and, during heating, from the kappa' phase to the alpha, and kappa phases. It is proposed that in steels where the intermediate epsilon' and epsilon martensite phases are not formed, the paths for the displacement of the atoms during the transition from the gamma to the kappa' phase are the same as in steels where the epsilon' and epsilon phases are formed. The reason for this can be explained as follows. In the formation of a new phase, energy is required for the creation of a new interphase boundary. If the decrease in the free energy does not cover its increase in the bond with the formation of a new interphase boundary, then such a phase will not be formed. Alloying elements evidently decrease the free energy of the epsilon' and epsilon phases, but do not change the mechanism of the transition from the gamma to the kappa' phase. Orig. art. has: 5 figures.

SUB CODE: MM/ SUBM DATE: 28Oct64/ ORIG REF: 006/ OTH REF: 011

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

L 63530-65 EWP(z)/EWT(m)/EWP(b)/EWA(d)/T/EWP(w)/EWP(t) UR/0126/65/019/006/0863/0869
ACCESSION NR: AP5016529 669.14.018.45 : 539.56

AUTHOR: Lysak, L. I.; Veksler, Ye. Ya.

TITLE: Investigation of the nature of temper embrittlement in heat-resistant steels of the pearlitic class

SOURCE: Fizika metallov i metallovedeniye, v. 19, no. 6, 1965, 863-869

TOPIC TAGS: temper embrittlement, heat-resistant steel, pearlitic steel

ABSTRACT: The susceptibility to temper embrittlement of four grades of low-carbon pearlitic steels--12Kh1M1F, 15Kh1M1F, 25Kh2MFA and 15KhM--was investigated as a function of two ranges of tempering temperatures. Changes in impact strength and fine-grain structure varied with temperature ranges but embrittling temperatures were found to vary with chemical composition of the steel. A drop in impact strength in the samples tested corresponds to an increase in microdefects in the crystal lattice during decomposition of the supersaturated α solid solution. From this it is concluded that temper embrittlement is not due solely to processes at the prior grain boundaries, but to changes in the condition of the whole grain volume. This

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2

is supported in x-ray diffraction studies showing line width to be inversely proportional to impact strength. A relation expressing the dependence of impact strength on lattice microdefects is discussed. In two samples, temper embrittling susceptibility was found to be a function of grain size after annealing. In these chromium-molybdenum-vanadium steels, vanadium is found to increase susceptibility to temper embrittlement while molybdenum in amounts up to about 1% tends to suppress temper embrittlement. Orig. art. has: 3 figures, 2 tables.

ASSOCIATION: Institut metallofiziki AN UkrSSR (Institute of Physics of Metals, AN UkrSSR); Laboratoriya metallov Kiyevenergo (Metals Laboratory, Kiyevenergo)

SUBMITTED: 04Jul64 ENCL: 00 SUB CODE: MM, AS

NO REF SOV: 013 OTHER: 004

KC

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; VOVK, Ya.N.; KHANDROS, E.L.

Crystal structure of martensite in hardened steel. Fiz. met. i metalloved. 19 no.6:933-935 Je '65. (MIRA 18:7)

1. Institut metallofiziki AN UkrSSR.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

L 8081-66 EWT(m)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) JD

ACC NR: AP5027138 SOURCE CODE: UR/0126/65/020/004/0540/0546

AUTHOR: Lysak, L. I.; Vovk, Ya. N.

ORG: Institute for the Physics of Metals AN UkrSSR (Institut metallofiziki AN UkrSSR)

TITLE: The nature of phase transitions in the hardening of manganese steel

SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 4, 1965, 0540-0546

TOPIC TAGS: work hardening, phase transition, manganese steel, austenite steel, martensite steel

ABSTRACT: It has been determined previously that at negative temperatures, in addition to the kappa and the alpha phases, there is formed still another new phase, called the kappa' or kappa'-martensite phase. Experiments have shown that the kappa'- martensite lattice is oriented with respect to the austenite lattice in the same manner as the kappa and alpha lattices. In the work described in this article, samples were cooled suddenly from room temperature to -160° (at a rate of 55 degrees/min) and were photographed at this temperature. The photographs showed comparatively narrow patches of kappa'-martensite. The

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

L 8081-66

ACC NR: AP5027138

same samples were then heated to temperatures of -70°, -35°, 0°, and 20°, held for 2.5 hours, and photographed at each temperature. The x-ray photos show that with heating to a temperature of -70°, the patch of (002) kappa'-martensite extends toward the side of lower angles of reflection. At -35°, it extends even further to the same side, and in addition, there is formed a second washed out patch close to the iron line. In general, the observations indicate that, on heating kappa'-martensite at negative temperatures, there takes place the transition of this phase to the kappa and $alpha_t$ phases. The data obtained in the present work make it possible to explain the failure of efforts to find a reverse martensite transition in steel. The fact is that attempts were made to find, not the reverse martensite transition of the kappa phase to the gamma phase, but the transition of the products of the decomposition of the kappa'-martensite phase to the austenite phase. To establish a reverse martensite transition, it would be necessary to prevent the decomposition of the kappa' phase into the kappa and $alpha_t$ phases. Orig. art. has: 2 figures and 1 table.

SUB CODE: MM/ SUBM DATE: 01Jul64/ ORIG REF: 012/ OTH REF: 004

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Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; VOVK, Ya.N.

Nature of phase transformations during the hardening of manganese steel. Fiz. met. i metalloved. 20 no.4:540-546 O '65. (MIRA 18:11)

1. Institut metallofiziki AN UkrSSR.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, L.I.; NIKOLIN, B.I.

Defects of packing during martensite transformations in steel. Fiz. met. i metalloved. 20 no.4:547-554 O '65. (MIRA 18:11)

1. Institut metallofiziki AN UkrSSR.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

ACC NR: AT6036276 SOURCE CODE: UR/0000/66/000/000/0048/0052

AUTHOR: Lysak, L. I.; Vovk, Ya. N.

ORG: Institute of metal physics AN UkrSSR (Institut metallofiziki UkrSSR)

TITLE: New martensitic phase in manganese steel

SOURCE: AN UkrSSR. Struktura metallicheskikh splavov (Structure of metal alloys). Kiev, Izd-vo Naukova dumka, 1966, 48-52

TOPIC TAGS: phase transition, martensitic steel, martensitic transformation, manganese steel, tempering, quenching

ABSTRACT: The authors investigated by x ray diffraction single crystals of manganese steels (0.6 to 0.8 % C, 7.5 to 8.5 % Mn) with austenitic structure at room temperature. On cooling the specimens from room temperature to the temperature of liquid nitrogen, at a rate of 55 degrees/min, they discovered at -160°C the formation of a new phase (in addition to the κ - and α_t phases) which they called κ' -martensite. From measurements of the reflection angles, the authors conclude that the new patterns correspond to the reflection from a body-centered tetragonal lattice with the parameters $a_{Fe} < c_{\kappa'} < c_{\alpha t}$, $c_{\kappa'} > a_{\kappa'} > a_{Fe}$. $c_{\kappa'}$ increases with increase of carbon content, whereas $a_{\kappa'}$ does not change. The formation of the κ and α_t phases at temperatures below 0°C is attributed to the decomposition of κ' -martensite. The volume

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changes as these transformations are brought into connection with the change of free energy. The increase of electrical resistance and of hardness on heating of tempered steel is also explained by the aforementioned decomposition of K' -martensite. The authors feel that, in the light of the discovery of the new phase, the conclusions made concerning the phase transformations in steel on the basis of magnetic properties alone should be reconsidered. Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: 28Jun65/ ORIG REF: 005/ OTH REF: 001

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

TAMURIDI, R. I., LYSAK, P. I.

Influence of the industrial work of students on their attitude toward learning. Nauk. zap. Nauk.-dosl. inst. psykhol. 11:180-183 '59. (MIRA 13:11)

(Industry and education)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, S.A.

Original form of a wheat-rye hybrid. Priroda 44 no.4:120 Ap '55. (MIRA 8:4)

1. Veselo-Podolyanskaya selektsionnaya stantsiya (USSR).
(Wheat) (Rye)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, S.A.

Crossbreeding of wheat with rye and quack grass. Priroda 46 no.4:92-94 Ap '57. (MLRA 10:5)

1. Veselo-Podolyanskaya opytno-selektsionnaya stantsiya, Poltavskaya oblast', USSR.
(Hybridization, Vegetable) (Wheat breeding)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, S.I.

Category : USSR/Solid State Physics - Structural crystallography E-3

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1073

Author : Kurdyumov, G.V., Il'ina, V.A., Kritskaya, V.K., Lysak, S.I.

Title : X-ray Diffraction Investigation of the Strains and Binding Forces in the Crystal Lattice of Metals and Alloys

Orig Pub : Probl. metalloved. i fiz. metallov, sb. 4, 1955, 339-359

Abstract : Extensive experimental material is reported on the study of x-ray diffraction of strains and interatomic-interaction forces in the crystal lattice of metals and alloys. The characteristic features of the live crystalline structure of metals and alloys in strengthened state are examined. An analysis is made of metals for determining the various changes in the fine crystalline structure and of the properties of the crystals in the micro regions. Bibliography, 28 titles.

Card : 1/1

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

TKACHUK, V.G., doktor geologo-mineralog. nauk; TOLSTIKHIN, N.I., prof.; PINNEKER, Ye.V., kand. geologo-mineralog. nauk, mladshiy nauchnyy sotr.; YASNITSKAYA, N.V., mladshiy nauchnyy sotr., khimik; KRUTIKOVA, A.I., mladshiy nauchnyy sotr., khimik; SHOTSKIY, V.P., kand. geogr. nauk; ORLOVA, L.M., starshiy gidrogeolog; STEPANOV, V.M., kand. geologo-mineralog. nauk; VLASOV, N.A., kand. khim. nauk; PROKOP'YEV, B.V., kand. khim. nauk; CHERNYSHEV, L.A., starshiy prepodavatel'; PAVLOVA, L.I., starshiy prepodavatel'; Prinimali uchastiye: IVANOV, V.V., kand. geologo-mineralog. nauk; YAROTSKIY, L.A., kand. geologo-mineralog. nauk; KARASEVA, A.P., nauchnyy sotr.; ARUTYUNYANTS, R.R., nauchnyy sotr.; ROMANOVA, E.M., nauchnyy sotr.; TROFIMUK, P.I., starshiy gidrogeolog; LADEYSHCHIKOV, P.I., starshiy nauchnyy sotr., kand. geogr. nauk; LYSAK, S.V., starshiy laborant; KRUCHININA, L.Yu., laborant; SEMENOVA, Ye.A., red. izd-va; BOCHEVER, V.T., tekhn. red.

[Mineral waters of the southern part of Eastern Siberia] Mineral'nye vody iuzhnoi chasti Vostochnoi Sibiri. Moskva. Vol.1. [Hydrogeology of mineral waters and their significance for the national economy] Gidrogeologiia mineral'nykh vod i ikh narodnokhoziaistvennoe znachenie. Pod obshchei red. V.G.Tkachuk i N.I.Tolstikhina. 1961. 346 p. (MIRA 14:8)

1. Akademiya nauk SSSR. Sibirskoye otdeleniye. Vostochno-sibirskiy geologicheskiy institut.

(Continued on next card)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

TKACHUK, V.G.--- (continued) Card 2.

2. Vostochno-Sibirskiy geologicheskiy institut (for Tkachuk, Pinneker, Yasnitskaya, Krutikova, Lysak). 3. Institut geografii Sibirskogo otdeleniya Akademii nauk SSSR (for Shotskiy). 4. Chitinskoye geologicheskoye upravleniye (for Orlova). 5. Sosnovskaya ekspeditsiya Ministerstva geologii i okhrany nedr SSSR (for Stepanov). 6. Irkutskiy gosudarstvennyy universitet (for Vlasov, Prokop'yev, Chernyshev, Pavlova). 7. Leningradskiy gornyy institut (Tolstikhin). 8. Gosudarstvennyy nauchno-issledovatel'skiy institut kurortologii i fizioterapii (for Ivanov, Yarotskiy, Karaseva, Arutyunyants, Romanova). 9. Irkutskoye geologicheskoye upravleniye (for Trofimuk). 10. Baykal'skaya limnologicheskaya stantsiya Vostochno-Sibirskogo filiala AN SSSR (for Ladeyshchikov). 11. Otdel ekonomiki i geografii Vostochno-Sibirskogo filiala AN SSSR (for Kruchinina).

(Siberia, Eastern--Mineral waters)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

SUKHAREVSKIY, B.Ya.; LYSAK, S.V.

Effect of dislocations on the temperature characteristics of the polymorphic transformation of cristobalite. Dokl. AN SSSR 155 no. 3:615-618 Mr '64. (MIRA 17:5)

1. Ukrainskiy nauchno-issledovatel'skiy institut ogneuporov. Predstavleno akademikom N.V.Belovym.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAK, V., inzh.

Pneumatic transportation of bran at flour mills of Cherkassy Province. Muk.-elev. prom. 27 no.4:25 Ap '61. (MIRA 14:7)

(Cherkassy Province--Flour mills)
(Pneumatic-tube transportation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

1. LYSAK, V.M.

2. USSR (600)

4. Honey Plants

7. Improving the feed supply for bee culture, and others, Pchelovodstvo 30 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOV, D.A., mayor, voyennyy letchik vtorogo klassa.

Evasive action of a heavy bomber. Vest. Vozd. Fl. 41 no.12:41-45 D '58. (MIRA 11:12)

(Bombers)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

AGAFONOV, A.V.; ABAYEVA, B.T.; OKINSHEVICH, N.A.; [illegible]KOYAN, P.N.; FI[illegible]OV, V.P.; LYSAKOV, G.A.; ZHADA[illegible]VSKIY, N.B.; FEYGIN, S.A.; [illegible]SKIY, I.S.

Obtaining raw stock for the production of active carbon black by extraction with the selective solvents of the gas oils of catalytic cracking. Khim. i tekh. topl. i masel 9 no.7:36-39 Jl '64. (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

SOURCE CODE: UR/0000/66/000/000/0166/0167

ACC NR: AT6036560

AUTHOR: Yeremin, A. V.; Kopanev, V. I.; Azhayev, A. N.; Lysakov, N. A.; Zhadovskaya, S. V.

ORG: none

TITLE: The effect of high temperatures on human functional capacities [Paper presented at the Conference on Problems of Space Medicine held in Moscow from 24 to 27 May 1966]

SOURCE: Konferentsiya po problemam kosmicheskoy meditsiny, 1966. Problemy kosmicheskoy meditsiny. (Problems of space medicine); materialy konferentsii, Moscow, 1966, 166-167

TOPIC TAGS: hyperthermia, human physiology, work capacity

ABSTRACT: Flight crews in southern parts of the country, like specialists working in so called hot shops, e.g., steel welders, open hearth plant workers, and so forth, are often subjected to the effects of high ambient air pressures. In view of the practical implications of the problem and the inadequacy of its treatment in literature, attempts were made to study the functional capacity of humans exposed for fairly long periods to high temperature conditions.

Three series of investigations were conducted. Unclothed subjects were exposed for an hour to air temperatures of 440C

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ACC NR: AT6036560

(series 1), 460C (series 2), and for 30 min to air temperature of 480C (series 3). Relative humidity in the thermochamber was kept between 15% and 25%, and velocity of air movement between 0.1 and 0.2 m/sec.

Work capacity was evaluated by means of correction tablet tests [A. A. Genkin et al. (1963)], grip strength dynamometry, and a graphic test [Frukuda (1959)]. Visual analyzer function was studied by determining the electrical excitation threshold of the eye, flicker fusion frequency, and the information transmission capacity of the visual analyzer [F. P. Kosmolinskiy, Ye. A. Derevyanko (1962), A. A. Genkin et al. (1963)]; vestibular analyzer function was studied by determining the duration of postrotational nystagmus and the counterrotation illusion, and also the area of displacement while walking in place with eyes closed [Frukuda (1959)]. In addition, pulse and respiration frequencies, electrocardiograms, blood pressure, and body and skin temperature at twelve points were recorded during all experiments, and some of the components of heat exchange were calculated. Not counting the control group (6 men), experiments were conducted on 39 subjects, 14 in series 1, 13 in series 2, and 11 in series 3. It was established that even a

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ACC NR: AT6036560

60 min exposure to an air temperature of 440C decreased work capacity (error increase of 2.4% on the correction test, 14.9% on the graphic test, and so forth); the information transmission capacity of the visual analyzer decreased by 13.5%; decreases were also seen in the electrical excitation threshold of the eye and in the weight of the subjects (by 200 g); increases were seen in body temperature (by 0.3C), the frequency of cardiac contractions (by 14/min), and so forth. In series 2 and 3, human functional capacity showed a sharp drop, which was characterized by more pronounced shifts in a number of investigated functions. Thus, at +60C the number of errors increased by 15.6%; at +80C, by 58%; and so forth.

The above data show that even a single hour's exposure of an unclad human to a temperature of +40C affects work capacity; this must be taken into account in organizing industrial medical support and in devising measures to improve work conditions and work schedules in hot climates. [W.A. No. 22; ATD Report 66-116]

SUB CODE: 06 / SUBM DATE: 00May66

Card 3/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

BAKUMENKO, I.T.; LYSAKOV, V.S.

Relation of the conditions governing the growth and further history of quartz from the different pegmatite zones to the characteristics of its thermoluminescence. Dokl. AN SSSR 165 no.3:660-663 N '65. (MIRA 18:11)

1. Submitted May 28, 1965.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOV, V.S.

130-7-17/24

AUTHORS: Arkhipova, M.S., Mishin, V.D., Smirnov, N.S., also Koftan, R., and Kanonykhin, G.I. and Lysakov, V.S.

TITLE: Symposium on Tin Economy in Tin-Plate Manufacture. (Ekonomiya olova pri proizvodstve beloy zhesti)

PERIODICAL: Metallurg, 1957, Nr 7, pp.30-34 (USSR)

ABSTRACT: The tin consumed in hot-dip tinning accounts for about half the cost of the tin-plate; only 75-80% of the tin is used for coating the sheet, the rest goes into various waste products: mainly flux and oil scum and crystals of the alloy $FeSn_2$ embedded in lumps of pure metallic tin. Recently ways of extracting tin from these waste products have been developed at various Soviet works and these are described in this symposium. The first contribution (pp.30-32) is by M. S. Arkhipova and V.D. Mishin of the Ural Polytechnic Institute and N.S. Smirnov of the Seversk Metallurgical Works. This describes pilot-plant work on the development of a hydrometallurgical method of extracting tin from flux scum at the Seversk works; a full-scale plant has been working there since 1954. Flow diagrams for the process are given, together with a graph showing degree of extraction of tin against time of cementation, and optimal conditions are summarised. In the

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130-7-17/24

Symposium on Tin Economy in Tin-Plate Manufacture.

second contribution (pp.32-33), by R. Koftan, Director of the Central Works Laboratory at the Novomoskovskiy tin-plate works, describes the hydrochemical method developed and tested at these works for the extraction of tin from flux dross which has been pre-treated with soda. Flow diagrams for the new and the old, furnace, method are given and yields contrasted. The advantages of the new method are shown and it is suggested that tin losses at the works could be reduced by 3-4% by its adoption. At the "Amurstal'" works, as explained by G. I. Kanonykhin (Head of the chemical laboratory) and V. S. Lysakov (Deputy Head of the technical control department) in the third contribution (pp. 33-34) a simplified form of the Seversk works method is used. The authors describe this with a flow diagram and mention that the installation must be in a separate space provided with extraction and feed ventilation. There are 4 figures and 1 table.

AVAILABLE: Library of Congress.

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOWSKI, Edward (London, England)

Charters for round-trip voyages. Tech gosp morska 15 no.2: 64 F '65.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOWSKI, T., mgr inz.

Testing calorimeters produced by Hallwachs and Moerkel. Pomiary 7 no.8:345-346 Ag '61.

1. Laboratorium Analizy Gazow, Glowny Urzad Miar, Warszawa.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.

Scientific secretaries exchange experience. NTO no.7:54 Jy '59. (MIRA 12:11)

1. Zamestitel' predsedatelya Stalinskogo oblastnogo pravleniya nauchno-tekhnicheskogo obshchestva energeticheskoy promyshlennosti.
(Stalino Province--Research, Industrial)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

BERTSEV, V.V., inzh.; DASHUK, P.N., inzh.; LYSAKOVSKIY, G.G.

Voltampere characteristics of a gliding discharge. Izv. vys. ucheb. zav.; energ. 6 no.6:24-31 Je '63. (MIRA 16:11)

1. Leningradskiy politekhnicheskiy institut imeni M.I. Kalinina. Predstavlena kafedroy tekhniki vysokikh napryazheniy.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

KUCHINSKIY, G.S., kand.tekhn.nauk, dotsent; LYSAKOVSKIY, G.G., inzh.

Study of the initial stages of ionization processes in oil-saturated paper insulation. Izv. vys. ucheb. zav.; energ. 7 no.8:32-39 Ag '64. (MIRA 17:12)

1. Leningradskiy politekhnicheskiy institut imeni M.I.Kalinina. Predstavlena kafedroy tekhniki vysokikh napryazheniy.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, Georgiy Iosifovich

Engr., Donbass Regional Electric Power Administration, -1948-. "Donbassenergo," -1948-.

Electrical Engineering.

"Operation of Power Lines with Phase Control and Single-Pole Automatic Repeater-Type Break-In Systems,"

SO: Elek. Stank., No. 12, 1947;

"Increasing Efficiency in Testing the Main Insulation of the Stators of High-Voltage Rotary Machines,"

SO: Elek. Stank., No. 19, No. 10, 1948;

"Discussion of the Article by A. M. Zaleskiy, 'Preventative Testing of the Insulation of Electrical Machines,'"

SO: Elektrichestvo, No. 5, 1948.

Stalin 2nd Prize, 1947, phase repair electric transmission lines.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

1. LYSAKOVSKIY, G. I., Engs.; POBEGAYLO, K. M.

2. USSR (600)

4. Electric Machinery

7. Running high voltage, rotary machinery without drying, Elek. sta., 23, No. 10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G. I. AID P - 451

Subject : USSR/Electricity

Card 1/1 Pub. 27 - 14/34

Authors : Lysakovskiy, G. I., Kand. of Tech. Sci., and Pobegaylo, K. M., Eng.

Title : Switching High Voltage Rotating Machinery without Preliminary Drying

Periodical : Elektrichestvo, 7, 68-69, Jl 1954

Abstract : Successful experiments and data of results obtained are given. The further introduction of the method described is recommended. 1 diagram, 1 table and 3 Russian references (1952-1953).

Institution : None

Submitted : F 12, 1954

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

GRITSENKO, A.V., inzhener; LYSAKOVSKIY, G.I., kandidat tekhnicheskikh nauk.

Results of measures against the soiling of insulation. Elek. sta. 25 no.6:40-43 Je '54. (MLRA 7:7)
(Electric insulators and insulation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

IZRAYELIT, G.B., inzhener; LOYTSYANSKAYA, M.G.; KHOMYAKOV, M.V., inzhener; BARKAN, M.A., inzhener; KARAMZIN, A.P., inzhener; LYSAKOVSKIY, G.I., inzhener; VOLODIN, M.N., inzhener.

Testing the insulation of concrete reactors. Elek.sta. 25 no.10:41-47 O '54. (MLRA 7:11)

1. Mosenergo (for Khomyakov). 2. Gorenergo (for Barkan). 3. Sverdlovenergo (for Karamzin). 4. Donbassenergo (for Lysakovskiy). 5. Chelyabenergo (for Volodin).
(Electric insulators and insulation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I.

621.317.313 : 621.313.1

3376. ANALYSIS OF RESULTS OF PREVENTIVE TESTS OF THE MAIN STATOR INSULATION OF ROTATING H.V. MACHINES.

G.I.Lysakovskii.

Elekt. Stantsii, 1956, No. 12, 28-33. In Russian.

Tests with high alternating voltages lead to timely detection of defective elements. The voltages to be applied to machines not directly connected to overhead lines are 1.3-1.7 V_n; for machines connected to overhead lines, they should be 1.5-2.0 V_n; choice also depends on the surge voltages occurring in system concerned. Desirable improvements to the stator insulation, technique of bar insertion, and varnish quality, are pointed out.

Electrical Research Association

2

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I.

SKORIK, N.S., inzhener; TSUKERNIK, S.V., inzhener; LYSAKOVSKIY, G.I., kandidat tekhnicheskikh nauk; ZVEZDKIN, V.N., inzhener; IZRAYELIT, G.B., inzhener; KOZYREV, N.A., kandidat tekhnicheskikh nauk; KULAKOVSKIY, V.B., kandidat tekhnicheskikh nauk; KARAMZIN, A.P., inzhener; ALEKSEYEV, S.V., inzhener.

Electrical strength of stator winding insulation in 6-6. 6 kv electric machines. Elek.sta. 27 no.4:38-51 Ap '56. (MLRA 9:8)

1. Khar'kovskiy elektromekhanicheskiy zavod (for TSukernik); 2. Donbassenergo (for Lysakovskiy); 3. Lenenergo (for Izrayelit); 4. LPI (for Kozyrev); 5. TSentral'naya nauchno-issledovatel'skaya elektrotekhnicheskaya laboratoriya (for Kulakovskiy); 6. Sverdlovenergo (for Karamzin); 7. Mosenergo. (for Alekseyev).
(Electric insulators and insulation--Testing)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

KOTELEVTSEV, V.G., inzhener.; LYSAKOVSKIY, G.I., kandidat tekhnicheskikh nauk.

Operational reliability of SP-110 stick insulators. Elek. sta. 27 no.10:57-58 O '56. (MIRA 9:12)
(Electric insulators and insulation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I.

AUTHOR: Levshunov, R.T. and Lysakovskiy, G.I., Candidate of Technical Sciences. 104-2-30/38

TITLE: Results of operating experience of suspension insulators type П-4.5 with semi-conducting glaze. (Rezultaty opytnoy ekspluatatsii podvesnykh izolyatorov P-4.5 s poluprovodyashchey glazur'yu)

PERIODICAL: "Elektricheskie Stantsii" (Power Stations), 1957, Vol.28, No.2, pp.90-91 (U.S.S.R.)

ABSTRACT: Attention has recently been paid to the use of insulators covered with semi-conducting glaze which are of improved discharge characteristics in conditions of contamination and wetness. The article describes the results of the first Soviet experimental operation of suspension insulators type П-4.5 with semi-conducting glaze. The insulators were installed in places of severe contamination from power stations, chemical and metallurgical works. 56 strings were installed with resistances from 23 to 130 megohms. On 110 kV lines six strings of seven or eight insulators were installed and on 35 kV lines three strings of three or four insulators. The total operating time is from six months to three years during which the behaviour of the insulators was observed under different atmospheric conditions. These insulators were not cleaned during

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Results of operating experience of suspension insulators type П-4.5 with semi-conducting glaze. (Cont.) 104-2-30/38

the operating period whilst normal insulators were frequently cleaned. The performance of particular insulators is described. Certain changes took place in the glazing of some insulators which increased the resistance but this did not seem to do any harm. It is concluded that the insulators work satisfactorily in conditions of severe contamination and do not require periodic cleaning or special observation. The insulators are not subject to corona discharge and do not become covered with dirt. The ceramic research institute, the factories and power systems should study and generalise operating experience with these insulators and work should continue to ensure long term stability of the semi-conducting glaze.

There are 3 references, one of which is British.

An editorial note states that there have recently been cases of damage to insulators with semi-conducting glaze, which will be reported in a separate article.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G. I.

LYSAKOVSKIY, G. I., kandidat tekhnicheskikh nauk.

Evaluating phased automatic reclosing. Elek.sta.28 no.7:93 Jl '57. (MLRA 10:9)

(Electric relays)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., kand. tekhn. nauk; SHTERN, V.Kh., inzh.

New pin-type bracket insulators. Elek. sta. 30 no.3:62-63 Mr '59. (MIRA 12:5)

(Electric insulators and insulation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

GRITSENKO, A.V., inzh.; LYSAKOVSKIY, G.I., kand.tekhn.nauk

Analysis of data on the aging of stator insulation of a large turbogenerator. Elek.sta. 31 no.4:82-85 Ap '60. (MIRA 13:7)

(Turbogenerators--Windings)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., kand.tekhn.nauk; SERGIYENKO, N.M., inzh.

Use of glass suspension insulators on overhead power transmission lines. Elek. sta. 31 no.12:77-78 D '60. (MIRA 14:5)
(Electric insulators and insulation)
(Electric lines--Overhead)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., kand.tekhn.nauk; MUSATOV, T.P., inzh.

Methods for preventing the burning of wooden poles. Elek. sta, 32 no. 5:87-88 My '61. (MIRA 14:5)
(Electric lines—Poles) (Lightning protection)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., kand.tekhn.nauk

Concerning V.V. Voskresenskii's article "Laboratory servicing of the electrical equipment of electric power systems." Elek. sta. 32 no.7:85-86 Jl '61. (MIRA 14:10)
(Electric insulators and insulation)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., inzh.

Concerning N.N.Likontsev and B.M.Pokrovskii's article "Possibility of eliminating the overvoltage protection of hydrogenerators." Elek. sta. 32 no.12:87 D '61. (MIRA 15:1)
(Turbogenerators) (Likontsev, N.N.) (Pokrovskii, B.M.)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., POPOVOY, I.F., SHUR, S.S., ARTEMYEV, D.YE., BELYAKOV, N.N., BURGSDORF, V.V

"Internal overvoltage levels in the 110-220,000 V systems."

Report to be submitted for the 19th Biennial Session, Intl. Conference on Large Electric System (CIGRE), Paris, France, 16-26 May '62.

ARTEMYEV, Scientific Research Inst. of Direct Current, Leningrad
BELYAKOV, All-Union Scientific Research Inst. Electric Power
BURGSDORF, Central Scientific Research Elect. Engineering Lab., Min. Elect. Power Stations, USSR
POPOVOY, none given
Shur, Scientific Research Inst. of Direct Current, Leningrad

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., kand. tekhn. nauk; MUSATOV, T.P., inzh.

Simplified lightning protection systems of electric substations. Elek. sta. 32 no.1:76-78 Ja '61. (MIRA 16:7)

(Electric substations) (Lightning protection)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., kand. tekhn. nauk; MUSATOV, T.P.

Experience in the operation of a two-circuit power transmission line with "bochka" type towers. Energ. i elektrotekh. prom. no.3:61-64 Jl-S '62. (MIRA 18:11)

1. Glavnoye upravleniye energeticheskogo khozyaystva Donetskogo basseyna.

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[illegible], G.I., [illegible] tekhn. nauk; [illegible], I.I., [illegible]

[illegible] on extra-high voltages. [illegible] [illegible]
[illegible]:75-75 [illegible] '63.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOVSKIY, G.I., kand. tekhn. nauk

Experience in the preventive maintenance of the stator insulation of electrical machines. Elek. sta. 35 no.8:81-82 Ag '64. (MIRA 17:12)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

PA 70-61

LYSAKOVSKIY, I. V.

USSR/Medicine - Cysticercosis Mar/Apr 1948
Medicine - Diagnosis

"The Problem of the Clinically and Pathomorphologically Different Forms of Encephalic Cysticercosis," Prof I. V. Lysakovskiy, Deputy, Psychiatric Clinic, Omsk Med Inst; Oblast Psychiatric Hosp, 5½ pp

"Nevropatol i Psikhiat" Vol XVII, No 2

Diagnosis of cysticercosis is complicated as its symptoms are very similar to symptoms of brain tumors, and other serious diseases. Errors are made by even the most experienced practitioners and specialists. Briefly attempts to differentiate between clinical and pathomorphological forms of encephalic cysticercosis.

Submitted 26 Feb 1946.

70T61

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

UDOVENKO, I.P., inzh.; SKOBKIN, A.F., inzh.; LYSAKOVSKIY, V.A., inzh.

Testing supports of double-groove sections and pliable frames. (MIRA 18:5)
Gor. zhur. no.4:30-32 Ap '65.

1. Nauchno-issledovatel'skiy gornorudnyy institut, Krivoy Rog.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOWSKA, J.

Report of the activities of the scientific section of the Institute of Pathological Anatomy of the Warsaw Academy of Medicine in the academic year of 1951/52. Polski tygod. lek. 7 no.51-52:325-326*29 Dec 1952. (CIML 24:2)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOWSKA, J.

Prac. anat. patol. Szpit. miejsk. Kierownik. *Przypadek pekniecia tetniaka tetnicy plucnej przy przetrwalym przewodzie tetniczym. A case of rupture of an aneurysm of the pulmonary artery in a patient with persistent ductus arteriosus POSLK. TYG. LEK. 1953, 8/14 (535-537)

SO: EXCERPTA MEDICA, Vol. 8, No. 5, Section VI, May 1954

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

HRYNIEWIECKI, Tadeusz; LYSAKOWSKA, Janina

Circulatory failure caused by myxoma of the left auricle of the heart. Polski tygod. lek. 11 no.19:840-842 7 May 56.

1. Z Oddzialu Kardiologiczneggo Szpitala Miejskiego Nr 6 i Zakladu Kardiologii Instytutu Doskonalenia i Specjalizacji Kadr Lekarskich w Warszawie; kier.: prof. dr. med. E. Zera oraz z Pracowni Anatomo-Patologicznej przy Szpitalu Miejskim Nr 6.

(HEART, neoplasms,
myxoma of left auric. (Pol))
(MYXOMA,
heart, left auric. (Pol))

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

LYSAKOWSKA, JANINA

BURACZEWSKI, Janusz; LYSAKOWSKA, Janina; RUDOWSKI, Witold

Case of Godman's tumor (chondroblastoma) of unusual site.
Polski tygod. lek. 11 no.49:2069-2072 3 Dec 56.

1. (Z Instytutu Onkologii im. Marii Sklodowskiej-Curie w Warszawie; dyrektor) Warszawa, Instytut Onkologii ul. Wawelska 15.
(CHONDROMA, case reports,
perivertebral, laminectomy (Pol))
(SPINE, neoplasms,
chondroma, perivertebral, laminectomy (Pol))

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031120001-2

4362. ŁYSAKOWSKA J. Zakł. Patol. Inst. Onkol. Marii Skłodowskiej-Curie, Warszawa. O konieczności badań doraźnych w nowotworach sutka na podstawie materiału instytutu onkologii w okresie od 1952 do 1955 r. *Frozen section as a routine procedure in diagnosis of breast tumours* Nowotwory 1957, 7/1–2 (117–123) Tables 2

The analysis of 700 cases of breast tumours treated at the Warsaw Institute of Oncology and verified microscopically 'durante operationem' showed that the clinical preoperative diagnosis should not be considered as definite. There were cases of breast cancer with symptoms characteristic for benign lesions (7.2%) as well as benign tumours with clinical signs of malignancy (4.8%). The percentage of erroneous preoperative diagnosis was 5.9% and in 12.6% of cases the diagnosis could not be definitely established clinically. The frozen section was absolutely necessary in the average number of 18.5% of cases. In general hospital work it seems to be impossible to avoid erroneous or doubtful clinical diagnoses. The patients with breast lesions should be operated upon only in those hospitals in which intraoperative microscopical examination is possible.

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LYSAKOWSKA, Janina

Secondary latent cancer of the cervix uteri. Nowotwory 11 no.3/4: 323-328 '61.

1. Z Zakladu Patologii Instytutu Onkologii im. Marii Sklodowskiej-Curie w Warszawie. Dyrektor: prof. dr med. J. Laskowski, Kierownik Zakladu Patologii: prof. dr med. J. Laskowski.
(CERVIX NEOPLASMS diag)

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LYSAKOWSKA, Janina

The effectiveness of preoperative roentgen-irradiation of breast cancer according to histological criteria. (Analysis of 200 cases). Nowotwory 13 no.3:197-208 Jl-S'63.

1. Z Zakladu Patologii Instytutu Onkologii im. Marii Sklodowskiej-Curie w Warszawie. Kierownik: prof., dr. med. J.Laskowski; dyrektor: prof.dr.med. W.Jasinski.

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LYSAKOWSKI, Edward, doc. mgr inz.

A few remarks on motorization and electrification of the state railroads. Przegl kolej mechan 13 no.6:189-190 Je '61.

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LYSAKOWSKI, T.

General characteristics of automatic regulation of heating installations. p. 379.
(Polskie Zrzeszenie Gazownikow, Wodociagrocow i Technikow Sanitarnych) Warszawa, Poland.
Vol. 29, no. 11, Nov. 1955

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S/062/60/000/010/021/031/XX
B002/B060

AUTHORS: Kucherov, V. F., Andreyev, V. M., and Lysanchuk, L. K.

TITLE: Study in the Field of Stereochemistry of Cyclic Compounds. Report 33. Stereochemistry and Some Conversions of the Adduct of 1-Vinyl-6-methoxy-3,4-dihydronaphthalene With Maleic Anhydride

PERIODICAL: Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1960, No. 10, pp. 1796-1803

TEXT: The adduct (II) of 1-vinyl-6-methoxy-3,4-dihydronaphthalene (I) with maleic anhydride, the corresponding acid (III), and the diester (IV) have a cis-syn-configuration. The compounds of this series are readily converted by the action of hydrogen chloride into the corresponding isomers (V), (VI), (VII) which contain the double bond between the rings. Catalytic hydrogenation of the two series of isomers was investigated, and the resulting products (VIII) and (IX) were found to have cis-syn-cis-configuration. The diesters (IV) and (VI) were isomerized with sodium methylate, and the

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