MITYUSHKIN, Yu.I.; SEMENOV, Yu.I., student; SHITKOV, V.N., student

Compressible gas flow through an axial nozzle tip with cooled blading. Trudy LKI no.34:151-158 '61. (MIRA 15:8)

1. Kafedra sudovykh parovykh i gazovykh turbin Leningradskogo korablestroitel'nogo instituta (for Mityushkin). 2. Mashinostroitel'nyy fakul'tet Leningradskogo korablestroitel'nogo instituta (for Semenov, Shitkov).

(Marine gas turbines)

ACCESSION NR: AR4021745 S/0285/64/000/002/0012/0013

SOURCE: RZh. Turbostroyeniye, Abs. 2.49.75

AUTHOR: Mityushkin, Yu. I.; Semenov, Yu. I.; Shitkov, V. N.

TITLE: Gas flow through cooled guide-vane assemblies with a variable temperature field at the intake

CITED SOURCE: Tr. Leningr. korablestroit. in-ta, vy*p. 39, 1962, 91-97

TOPIC TAGS: gas turbine engine, guide vane assembly, turbine vane, turbine cooling, gas-flow calculation

TRANSLATION: To strengthen the operating vanes it is advisable in certain gas turbine engine designs to increase the gas temperature from the base towards the tip of the vanes. The calculations of the gas flow through a cooled guidevane assembly take into account the variation of the temperature field at its intake. Under study is the steady axially-symmetric flow of compressed gas passing with friction through a guide-vane assembly from the cooled vanes. The gas flow is assumed to be cylindrical; the distribution of the parameters at the intake of

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ACCESSION NR: AR4021745

the guide-vane assembly is known. The presented method makes it possible to calculate the field of velocities at the outlet of a cooled guide-vane assembly equipped with arbitrarily twisted vanes, when the temperature field varies at the inlet to the turbine's stage and the drop in total pressure varies along the radius. It is noted that due to the rather small relative length of turbine blades ($\ell/D_{average}$ = 1/8-1/12) in high-pressure gas-turbine engines used on ships and due to the insignificant change in the angle of torsion α_1 and in the flow losses η_1 taking place along the height of the vanes, it can be assumed that both α_1 and η_1 are constant along the radius. No cooling is required for nozzle vanes made of ceramic or metallo-ceramic materials. This fact simplifies considerably the derived equations. In this article are given the results of calculating the field of velocities at the outlet of a cooled and an uncooled guide-vane assembly for various laws governing the change in temperature along the height of the vanes. On the basis of these results it is shown that for acceptable quantities of air used to cool the nozzle vanes (2% of the air passing through the engine) and for high gas temperatures it is practically possible to disregard the lowering of the gas temperature resulting from the cooling at the

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ACCESSION NR: AR4021745

outlet of the guide-vane assembly. In this case the velocity planes and their distribution over the height of the vanes are practically the same with and without cooling. It is noted that the unsteadiness of the temperature field at the intake changes substantially the field of velocities at the outlet of the guide-vane assembly and requires an appropriate shaping of the operating vanes. There are 2 illustrations and a bibliography of 4 titles. V. Tenyakov.

DATE ACQ: 05Mar64 SUB CODE: AI, PR ENCL: 00

Card 3/3

SHITKOVSKAYA, M.V.

Motortrucks with high roadability. Avt. i trakt. prom. no.5:46-47 My '57. (MLRA 10:6)

(Motortrucks)

YELISEYEV, B.; SHITKOVSKAYA, M.V.

The SP-90 device for measuring the backing distance of automobiles. Avt. transp. 36 no.10:35-36 O '58. (MIRA 13:1)
(Automobiles--Apparatus and supplies)

KALININ, Fedor Leontiyevich; MEREZHINSKIY, Yuriy Georgiyevich; LYUDINSKIY, N.A., doktor biol. nauk, otv.red.; SHITKOVSKAYA, V.L., red.

[Plant growth regulators; the biochemistry of their action and their use] Reguliatory rosta rastenii; biokhimiia deistviia i primenenie. Kiev, Naukova dumka, 1965. 405 p. (MIRA 18:7)

SHITLIN, A.I.

SHITLIN, A.I., slesar'

Instrument for testing the sweep of group switches. Elek. i tepl. tiaga 2 no.1:25-26 Ja '58. (MIRA 11:3)

1. Depo Zlatoust Yuzhno-Ural'skoy dorogi.
(Electric switchgear)

SHCHITNIKOV, B. N.; TAVLINSKII, [illegible] A., and MIKHAYLOV, [illegible],

"Digital Electronic Computer TsEM-1," Problems of Cybernetics, No 1, Moscow, p 190. Fizmatgiz, 1958. 268 pp. with co-authors.

This collection of articles deals with general problems of cybernetics, information theory, theory of algorithms and automatic machines, theory of control systems, theory of games and tactics, methods of operations x analysis, problems in the theory of calculating machines, programming, and the application of cybernetics to other sciences, such as biology, economics and linguistics. "Problems of Cybernetics," as a recurrent publication, will continue to include original papers, survey articles and translations and, like the present work, will contain the results of seminars in cybernetics held at Moscow Univ.

MIKHAYLOV, G.A. (Moskva); SHITNIKOV, B.N. (Moskva); YAVLINSKIY, N.A. (Moskva)

The TsEM-1 electronic digital computer. Probl.kib. no.1:190-202 '58. (MIRA 12:4)

(Electronic digital computers)

SHITNIKOVA, I. S., SPIVAK, G. V., KANAVINA, N. G., PRILEYAYEVA, I. N.
DOMBOVSKAYA, T. N., AZOVTSEV, V. K. (Moscow)

"On the Direct Visualization of the Domains of an Ferromagnetic by Means of an Electron Microscope with Secondary Emission and an Electron Mirror," a paper submitted at the International Conference on Physics of Magnetic Phenomena, Sverdlovsk, 23-31 May 56.

SHITNIKOVA, Z.

Method of recording morbidity in children's polyclinics. Vop.okh. mat.i det. 4 no.6:77-78 N-D '59. (MIRA 13:4)
(MEDICAL RECORDS)

SHITOV, A.A., inzh.

In the section on the "Acceleration of the blast furnace process."
Met. i gornorud. prom. no.2:79-80 Mr-Ap '62. (MIRA 15:11)
(Blast furnaces--Congresses)

SHITOV, A.A., inzh.

Meeting of the Scientific Council to "Accelerate and perfect existing and develop new processes for the production of metals on the basis of Ukrainian deposits of ores and fuels." Met. i gornorud. prom. no.3:87 My-Je '62. (MIRA 15:9)
(Ukraine—Metallurgical research)

SHITOV, A.A., inzh.

Direct process of iron production from ores in the United States. Met. i gornorud. prom. no.1:81-84 Ja-F '62.
(MIRA 16:6)
(United States--Iron--Metallurgy)

USSR

SHITOV, A.A., inzh., referent

Industrial production of sponge iron in Sweden (from foreign journals). Met. i gornorud. prom. no.4:90-91 Jl-Ag '62. (MIRA 15:9)

(Sweden--Iron--Metallurgy)

SHITOV, A.A., inzh.

New methods for the production of iron and steel (from "Stahl und Eisen," no.22, 1961; "Iron and Steel Engineer," no.36, 1959). Met.i gornorud.prom. no.5:88-89 S-O '62. (MIRA 16:1)
(Steel--Metallurgy) (Iron--Metallurgy)

SHITOV, A.A., inzh.

Industrial production of ferronickel in the United States by direct reduction (from foreign periodicals). Met.i gornorud. prom. no.5:91-92 S-O '62. (MIRA 16:1)
(United States--Iron-nickel alloys)

SHITOV, A.A., inzh.

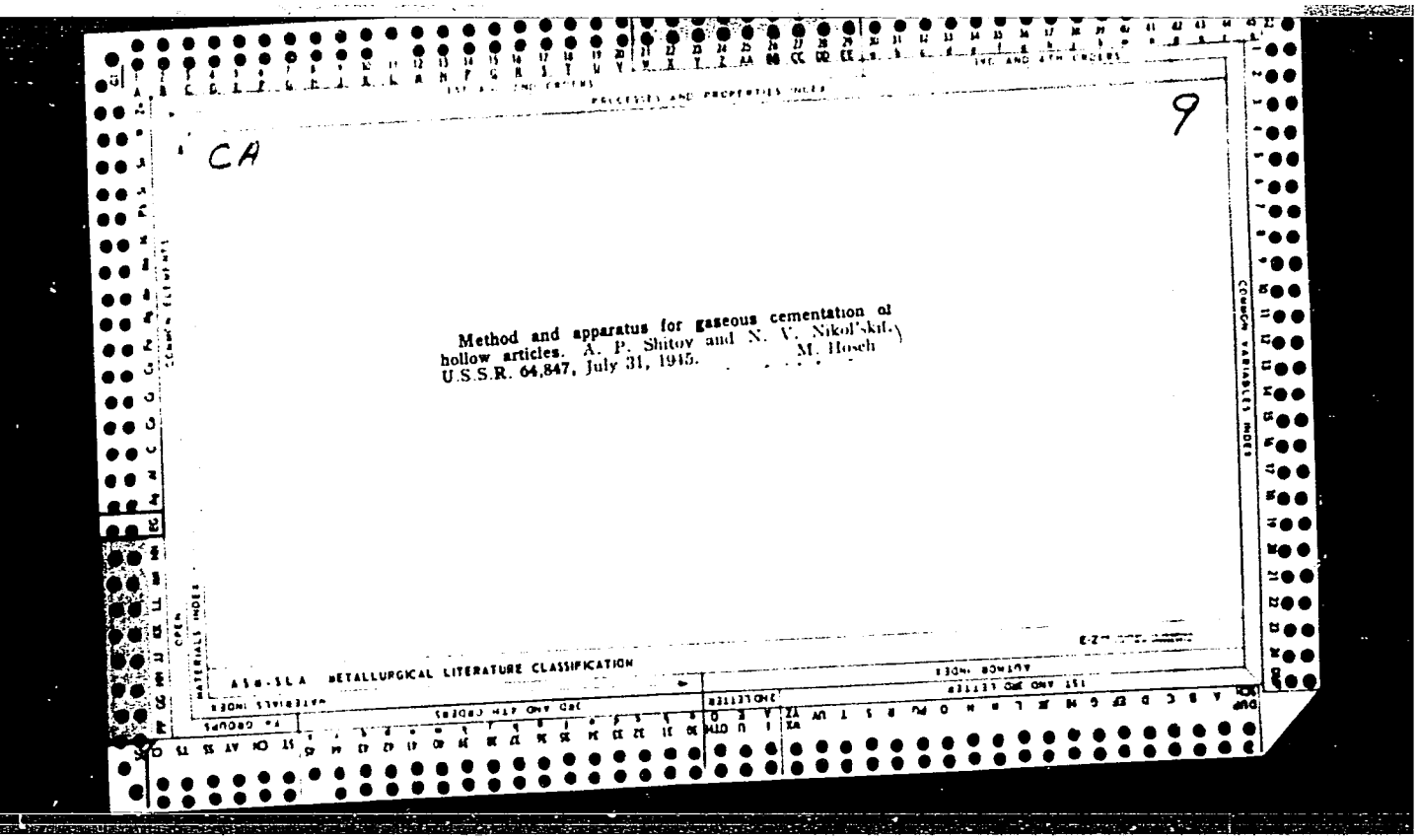
Cast refractories in metallurgy. Met. i gornorud. prom. no.6: 84-85 N-D '62. (MIRA 17:8)

SHITOV, A.A., inzh.

Expansion of steel vacuuming in foreign countries. Met. i gornorud. prom. no.5:88-90 S-O '63. (MIRA 16:11)

SHITOV, A.I., inzh.

Soldering without the use of a soldering iron. Avtom., telem. i sviaz' 4 no.10:32-33 O '60. (MIRA 13:10)
(Solder and soldering)



SHITOV, A. P. and V. B. RAITSES.

Protsess gazovoi tsementatsii; obrazovanie okaliny. (Vestn. Mash., 1950, no. 8, p. 43-44.)

(Process of gas cementation and formation of scale.)

DLC: TN4.V4

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

[illegible], A. F. [illegible]

Usovershenstvovaniye sposoba ochistki detaley ot okaliny. (Vestn. Mash., 1946, no. 12, p. 49)

Reference to Kirov tractor plant in Chelyabinsk.

Improved method of cleaning machine parts from scale.

DLC: TN.N74

Cf: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

SHITOV, A.P.; PYATAKOV, L.L.; GORBUL'SKIY, I.Ya.; KULIKOV, I.M.; KURBAT, S.I.

Induction surface hardening of tractor block bushings instead of through hardening. Prom.energ. 11 no.8:21-22 Ag '56.
(Cast iron--Hardening)

SHITOV, A.P.

ZVEREV, A.G.; POPOV, V.F.; FADEYEV, I.I.; BABUSHKIN, V.I.; BERLOVICH, I.L.; BOCHKO, A.M.; BURLACHENKO, S.Ye.; GARBUZOV, V.F.; DMITRICHEV, P.Ya.; DUNDUKOV, G.F.; ZLOBIN, I.D.; KOROVUSHKIN, A.K.; KORSHUNOV, A.I.; KUZIN, M.G.; KUTUZOV, G.A.; LYSKOVICH, A.A.; MASHTAKOV, A.M.; MIKHEYEV, V.Ye.; NIKEL'BERG, P.M.; POSKONOV, A.A.; ROMANOV, G.V.; SOSIN, I.F.; SOSNOVSKIY, V.V.; POVOLOTSKIY, M.M.; URYUPIN, F.A.; KHARIONOVSKIY, A.I.; CHULKOV, N.S.; SHESHERO, N.A.; SHITOV, A.P.; SHUVALOV, A.M.; YANBUKHTIN, K.Kh.

Arsenii Mikhailovich Safronov; obituary. Fin.SSSR 18 no.11:95 N '57. (MIRA 10:12)

(Safronov, Arsenii Mikhailovich, 1903-1957)

RAYTSES, V.B., kand. tekhn. nauk; SHITOV, A.P., inzh.

Industrial testing of electric heating furnaces. Sbor. st. CHPI no.14:101-104 '59. (MIRA 12:9)
(Electric furnaces--Testing) (Furnaces, Heat-treating)

S/137/63/000/001/014/019
A006/A101

AUTHORS: Pyatakova, L. L., Iskhakov, S. S., Shitov, A. P., Miroshnikova, K. Ye.

TITLE: On the mechanism of the effect of some elements upon the properties of carburized steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1963, 50, abstract 1I283 (In collection: "Novoye v metalloved. i tekhnol. term. obrabotki stali", Chelyabinsk, 1962, 7 - 23)

TEXT: The authors investigated the Si-Mn steel system containing in %: C 0.15 - 0.24, Si 0.80 - 1.30, Mn 1.5 - 2.00 with admixtures of V, Cu, W, B, Ti, Cr and Mo. The steel is intended for the production of gears. The effect of alloying elements upon martensite transformation was studied. M_s is most strongly reduced by Mn and Cr; less by Ni, V, Mo, and is almost not reduced by Si and Cu. Due to alloying with Si (1.0 - 1.3%) it is possible to prevent, during carburizing, oversaturation of the surface C layer and to obtain a necessary depth of the carburized layer at an optimum C content (0.85 - 0.9%). Si-Mn

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On the mechanism of the effect of...

steels have a martensite transformation temperature as high as 300 to 365°C. Admixtures of Mo, V, Cr (0.5 - 0.7%) or B (0.001 - 0.002%) to Si-Mn steel secure high roasting ability and satisfactory properties on large-size parts, up to 100 mm in diameter. Si-Mn steels have σ_b 132 - 167 kg/mm^2, σ_s 122 - 145 kg/mm^2, δ 10 - 15%, ψ 53.5 - 66.6%, a_k 10.3 - 13.8 kgm/cm^2; grain size is 2.9 - 3.2. Additional alloying of the steel with V, Cu and Mo prevents grain growth, strengthens the grain boundaries and increases roasting ability. Alloying affects the failure resistance of the steel due to its increased ductility (in martensite state). Grade 17СГ2М (17SG2M) steel, developed on the basis of the investigations, offers high fatigue contact and operational strength. The use of this steel instead of 12Х2НЧ (12Kh2NCh) steel yields savings of about 70 rubles per 1 ton. There are 12 references.

L. Koblikova

[Abstracter's note: Complete translation]

S/276/63/000/001/005/028
A006/A101

AUTHORS: Pyatakova, L. L., Iskhakov, S. S., Shitov, A. P., Miroshnikova, K.Ye.

TITLE: On the mechanism of the effect of some elements upon the properties of carburizing steel

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 1, 1963, 35, abstract 1B176 (In collection: "Novoye v metalloved. i tekhnol. term. obrabotki stali", Chelyabinsk, 1962, 7 - 23)

TEXT: The authors analyzed in detail the mechanical, technical and, in some cases, the operational properties of silico-manganese-base steel containing in %: C 0.15 - 0.24; Si 0.8 - 1.30; Mn 1.50 - 2.00 with admixtures of V, Cu, W, B, Ti, Cr, and Mo. An analysis is made of the location of the martensite point, the ability of cementation, hardenability, mechanical properties, and some parameters determining the behavior of steel under operational conditions. As a result of the investigation performed, it was established that the use of silico-manganese-base steel with Mo or W admixtures for the manufacture of gears instead of chrome-nickel steel, yields not only a high economical effect but raises

USSR/Engineering - Excavator SU-60 31 May 53

"Excavator SU-60," Engr L.P. Khodchenko and Engr A.S. Shitov, State Planning Institute for Organizing the Dwelling-Construction Industry

Byul Stroi Tekh No 10, p 29

States industrial tests have been conducted on excavator Su-60, manufactured according to drawings developed by Kiev State Planning Institute for Organizing the Dwelling-Construction Industry. Can be used for excavating and loading sand from pit or river into trucks or railroad cars. Dimensions in mm: 11,700 x 6,600 x 3,500. Gives specifications.

268T68

ALEKSEYEV, V.N.; VINOGRADOV, A.N., kand.ekon.nauk; VLADIMIROV, V.A., inzh.; KOCHETOV, I.V., prof., doktor ekon.nauk; MINAKOV, P.F.; POTAPOV, I.A.; ROMANOV, M.P., dotsent, kand.ekon.nauk; SPENGLER, Ye.N., kand.ekon.nauk; SHITOV, A.V.; SHUKHATOVICH, I.M.; YAKUBOV, L.S.; IVLIYEV, I.V., red.; KRISHTAL', L.I., red.; KOCHETOV, I.V., prof., doktor ekon.nauk, nauchnyy red.; IVANOV, A.P., nauchnyy red.; BOBROVA, Ye.N., tekhn.red.

[Statistics and bookkeeping in railroad transportation; manual] Statistika i bukhgalterskii uchet na zheleznodorozhnom transporte; spravochnik. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshcheniia, 1960. 485 p. (MIRA 14:3)
(Railroads--Accounts, bookkeeping, etc.)
(Railroads--Statistics)

SHITOV, N. I.

Author of the chapter "A Three-ton Electrically Driven Lorry (Produced by the German Essling Works)." (See "A.T.Z.", Germany, Aug., 1950

from the publication "Avtombilnaya I Traktornaya Promyshlennost" (Automobile and Tractor Industry) No. 1, January 1954, p. 29) (See V. E. Malakhovskiy for authors of other chapters.)

SHITOV, B.I.

Non-blinding headlights. Avt.trakt.prom. no.7:31 Jl '53. (MLRA 6:8)
(Automobiles--Lighting)

SHITOV, B.I.

Alkali storage batteries for starting automobile motors. Avt.trakt.prom. no.9:30-31 S '53. (MLRA 6:9)
(Automobiles--Batteries)

SHITOV, B. I.

USSR/Engineering - Trucks

Card 1/1

Authors : Shitov, B. I.

Title : A three-ton electrically driven truck

Periodical : Avt. Trakt. Prom. Ed. 1, 29-30, January 1954

Abstract : Presentation of data, and a description of an electrically driven truck (EL-3001), produced by the German Essling Works. The truck is powered by an electrical 12.5 kvt motor, and carries two batteries, type 5AFA-Ku 285. The maximum speed for this truck, with a three-ton load, is 22 km/h. Illustration; graphs, and tables of characteristics.

Institution : ....

Submitted : ....

SHITOV, B.I.

Manufacturing process of cadmium-nickel batteries. Avt.trakt. prom. no.4:31 Ap '55. (MLRA 8:5)
(Automobiles--Batteries)

SHITOV, B.I.

New developments in battery design abroad. Avt.i trakt.prom. no.4: 42-43 Ap '56. (MLRA 9:8)
(Storage batteries)

BOYM, Anatoliy Borisovich,; MENDELEVICH, Yakov Ayzikovich,; SIMONOV, Lev Antonovich,; SHITOV, B.I., retsenzent,; GOL'DBERG, G.I., red.; NAKHIMSON, V.A., red. izd-va,; EL'KIND, V.D., tekhn. red.

[Controlling radio interference due to automobiles, motorcycles, and tractors] Podavlenie radiopomekh, sozdavaemykh avtomobiliami, mototsiklami i traktorami. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 94 p. (MIRA 11:8)
(Radio--Interference)

SH 170, G.A.

25(1) PHASE I BOOK EXPLOITATION SOV/2383

Akademiya nauk SSSR. Komissiya po tekhnologii mashinostroyeniya

Avtomatizatsiya mashinostroitel'nykh protsessov. t. II: Privod i upravleniye rabochimi mashinami (Automation of Machine-building Processes. Vol2: Drives and Control Systems for Process Machinery) Moscow, Izd-vo AN SSSR, 1959. 370 p. Errata slip inserted. 5,000 copies printed.

Ed.: V.I. Dikushin, Academician; Ed. of Publishing House: D.M. Ioffe; Tech. Ed.: I.P. Kuz'min.

PURPOSE: This book is intended for engineers dealing with automation of various machine-building processes.

COVERAGE: This is the second volume of transactions of the second Conference on Overall Mechanization and Automation of Manufacturing Processes held September 25-29, 1956. The present volume consists of three parts, the first dealing with automation of engineering measuring methods. The subjects discussed include automatic control of dimensions of machined parts, inspection methods for automatic production lines, in-process inspection devices, application of electronics in automating linear measuring processes, and machines for automatic inspection of bearing races. The second part deals with automatic drives and control systems for process machinery, including application of digital computers in the control of metal-cutting machine tools, reliability of relay systems, application of gas-tube frequency converters in the control of induction motor speeds, magnetic amplifiers and their use in automatic systems, hydraulic drives, and ultrasonic vibrators. Part three deals with mechanisms of automatic machines and automatic production lines. The subjects discussed include linkage, indexing, and Geneva-wheel-type mechanisms, friction drives, automatic loading devices, diaphragm-type pneumatic drives, various auxiliary devices for automatic production lines, and methods of design and accuracy of cams. No personalities are mentioned. There are no references.

Card 5/7

GLYASS, Vyacheslav Danilovich; SHITOV, G.A., inzh., retsenzent; KUDASOV, G.F., kand.tekhn.nauk, red.; VAKSER, D.B., dotsent, red.; LEYKINA, T.L., red.izd-va; KONTOROVICH, A.I., tekhn.red.

[Screw-thread grinding] Rez'boshlifovanie. Pod obshchei red. G.F. Kudasova. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 62 p. (Bibliotechka shlifovshchika, no.7).
(Screw cutting) (MIRA 13:7)

YESAFOV, V.I.; SHITOV, G.P.

Characteristics of primary-tertiary β-glycols. Part 3. Zhur.ob.-khim. 32 no.9:2819-2822 S '62. (MIRA 15:9)

1. Ural'skiy gosudarstvennyy universitet.
(Glycols)

SHITOV, I.A.

Epidemic situation in the Republic of Togo; data from a trip by a delegation of Soviet physicians to the Republic of Togo. Zhur. mikrobiol. epid. i immun. 33 no.10:132-135 0'62 (MIRA 17:4)

1. Iz Ryazanskogo meditsinskogo instituta imeni akademika Pavlova.

IVANOV, V.V.; SHITOV, I.K.; YUDOVIN, I.B.

Using pulsed loadings for pipe fastening. Mashinostroitel' no.11:26-27 '65. (MIRA 18:11)

SHITOV, I. N.

Forestry Schools and Education

The institute helps production, Les i step' 5, No. 1, 1953.

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

C 4

9

Uniformalizing ores and concentrates in Magnitogorsk works M P Marinenko and I S Shitov *Gornyi Zhur* 1952, No 1, 29-30 Procedures adopted at the mines, open storage yards, and storage bins for uniformalization of ore with various Fe content so as to obtain an ore of uniform Fe content in successive batches are described M H

SHITOV, I. S.

Name	Title of Paper	Organization
Gurkov, I.E. Popov, S.I. Golovin, G.M. Karpov, A.F. Nikol'skiy, N.A. Shitov, I.S. Bulychev, V.V. Ogiyevskiy, V.M. Treyvus, M.M. Shtremt, A.A. Trofimov, G.V. Fushkarev, G.I. Markman, M.Ye. Tikhovidov, I.I.	"The Working of Iron Ores by the Open Pit Method"	Magnitogorsk Mining Metallurgical Institute imeni G.I. Nosov

SHITOV, I. S.

BULYCHEV, V.V.; GOLOVIN, G.M.; ZURKOV, P.E.; KARPOV, A.F.; NIKOL'SKIY, N.A.; OGIYEVSKIY, V.M.; POPOV, S.I.; TREYVUS, M.N.; SHITOV, I.S.; SHTREMT, A.A.; ZURKOV, P.E., kandidat tekhnicheskikh nauk, redaktor; KOMPANEYETS, V.P., kandidat tekhnicheskikh nauk, retsenzent; VAGANOV, P.V., kandidat tekhnicheskikh nauk, retsenzent; IKONNIKOV, A.N., kandidat tekhnicheskikh nauk, retsenzent; SAUKHAT, I.G., kandidat tekhnicheskikh nauk, retsenzent; NIKOLAYEV, S.I., retsenzent.

[Mining iron ore by the opencast method] Razrabotka zheleznykh rud otkrytym sposobom. Pod. obshchei red. P.E.Zurkova. Sverdlovsk, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1953. 632 p. (MLRA 7:8)
(Iron mines and mining)

MARTYNOV, G., inzhener; SHITOV, I., inzhener

All-Union Conference on Automatization of Industrial Processes in Iron Metallurgy. Gor. zhur. no.7:3 of cover Jl '56.
(MLRA 9:9)

(Metallurgy) (Automatic control)

SHITOV, I.S.; ANTONOV, N.G., gornyy inzhener; TIKHOVIDOV, A.F., gornyy inzhener.

Potentialities for increasing labor productivity in the Magnitogorsk mine. Gor.zhur.no.9:8-11 S '56. (MLRA 9:10)

1.Glavnyy inzhener Gornogo upravleniya Magnitogorskogo metallurgicheskogo kombinata (for Shitov).
(Magnitogorsk--Mining engineering)

SHITOV I. S.

18(5) PHASE I BOOK EXPLOITATION SOV/1247

Dostizheniya domenshchikov Magnitogorskogo metallurgicheskogo kombinata (Achievements of Blast Furnace Operators of the Magnitogorsk Metallurgical Combine) Moscow, Metallurgizdat, 1957. 279 p. 3,000 copies printed.

Ed.: Bannykh, A.I., Professor; Ed of Publishing House: Yablonskaya, L.V.; Tech. Ed.: Attopovich, M.K.

PURPOSE: This book is intended for engineers, foundry foremen, and personnel in research institutes. It may also be useful to students and others interested in foundry practice.

COVERAGE: This book deals with achievements of the foundries of the Magnitogorsk Metallurgical Combine. The processes of preparing the charge, melting and pouring are described. Improvements in foundry methods and the theory behind these improvements are presented with numerous graphs and illustrations. The book is the combined effort of the following authors: Foreword: Bannykh, A.M. (editor); Introduction, parts 1 and 2: Bannykh, A.M.; part 3 by

Card 1/6

Achievements of Blast Furnace Operators (Cont.) SOV/1247

Stefanovich, M.A.; Chapter I, part 1 by Dorogobid, G.M.; part 2 by Shitov, I.S.; part 3 by Yakobson, A.P.; Chapter II, part 1, 2, and 3 by Galatonov, A.L.; part 4 by Barnykh, A.M. and Nayasov, A.G.; Chapter III, Galatonov, A.L. and Golchin, V.I.; Chapter IV, parts 1,2,3,4,5 and 6 by Galatonov, A.L.; part 7 by Stefanovich, M.A.; Chapter V by Stefanovich, M.A.; Chapter VI by Babarykin, N.N.; Chapter VII by Shastin, V.A.; Chapter VIII by Gormostayev, V.K. There are 51 references, of which 43 are Soviet, and 8 are English.

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Achievements of Blast Furnace Operators (Cont.) SOV/1247

AVAILABLE: Library of Congress

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3-10-59

Card 6/6

SHITOV, I. S.

I. S. Shitov Mine Management of Magnitogorsk Metallurgical Combine

"The slowness of Mekhanobr in certain fields"

report presented at the 4th Scientific and Technical Session of the Mekhanobr Inst, Leningrad, 15-18 July 1958

SHITOV, I.S.

Expansion of iron ore dressing at the Magnitogorsk Metallurgical Combine. Stal' 22 no.8:694-695 Ag '62. (MIRA 15:7)

1. Gornoye upravleniye Magnitogorskogo metallurgicheskogo kombinata.

(Magnitogorsk--Ore dressing)

VINOGRADOV, V.S., inzh.; AL'TSHULER, M.A., kand. tekhn. nauk; POLYAKOV, V.G., inzh.; KUROCHKIN, A.N., inzh.; KARMAZIN, V.I., doktor tekhn. nauk; ZAIKIN, S.A., inzh.; OSTROVSKIY, G.P., inzh.[deceased]; NAUMENKO, P.I., inzh.; BOBRUSHKIN, L.G., inzh.; RUSTAMOV, I.I., inzh.; SHIFRIN, I.I., inzh.; GOLOVANOV, G.A., inzh.; KRASOVSKIY, L.A., inzh.; TSIMBALENKO, L.N., inzh.; RAVIKOVICH, I.M., inzh.; BAZILEVICH, S.V., kand. tekhn.nauk; ZORIN, I.P., inzh.; ZUBAREV, S.N., inzh.; TIKHOVIDOV, A.F., inzh.; SHITOV, I.S., inzh.; GAMAYUROV, A.I., inzh.; KUSEMBAYEV, Kh.N., inzh.; DEKHTYAREV, S.I., inzh.; VORONOV, I.S., inzh.; BURMIN, G.M., inzh.; BARYSHEV, V.M., inzh.; GOLOVIN, Yu.P., inzh.; MARCHENKO, K.F., inzh.; RYCHKOV, L.F., inzh.; NESTERENKO, A.M., inzh.; KABANOV, V.F., inzh.; PATRIKEYEV, N.N., inzh.[deceased]; ROSSMIT, A.F., inzh.; SOSEDOV, O.O., inzh.; POKROVSKIY, M.A., inzh., retsenzent: POLOTSK, S.M., red.; GOL'DIN, Ya.A., glav. red.; GOLUBYATNIKOVA,G.S., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Iron mining and ore dressing industry]Zhelezorudnaia promyshlennost'. Moskva, Gosgortekhizdat, 1962. 439 p. (MIRA 15:12)

1. Moscow. TSentral'nyy institut informatsii chernoy metallurgii. (Iron mines and mining) (Ore dressing)

VORONOV, F.D.; BIGEYEV, A.M.; KOTOV, V.N.; SHITOV, I.S.; LETIMIN, V.N.

Production of fluxed briquets for converter steel smelting.
Stal' 23 no. 3:214-216 Mr '64. (MIRA 17:5)

1. Magnitogorskiy metallurgicheskiy kombinat i Magnitogorskiy gornometallurgicheskiy institut.

SHITOV, K.A.

Serum-free medium for culturing Leptospira. Zhur.mikrobiol.epid.i immun. no.3:74-77 Mr '54. (MLRA 7:4)

1. Iz Voronezhskogo instituta epidemiologii i mikrobiologii (direktor V.M.Kruglikov, nauchnyy rukovoditel' - professor M.V.Zemskov).
(Leptospira) (Bacteriology--Cultures and culture media)

SHITOV, K.A.

Detection of pathogenic Leptospira and their antibodies in the milk of cows which had had leptospirosis. Zhur.mikrobiol.epid.i immun. no.3:89 Mr '54. (MLRA 7:4)

1. Iz Voronezhskogo instituta epidemiologii i mikrobiologii.
(Leptospirosis) (Antigens and antibodies)

SHITOV, K. A.

USSR/Microbiology - Medical and Veterinary. F-4

Abs Jour : Ref Zhur - Biologiya, No 7, 1957, 26501

Author : Shitov, K.A.
Inst : Voronezh Institute of Veterinary Science.
Title : The Biological Method of Diagnosing Leptospirosis.

Orig Pub : Tr. Voronezhsk. zoovet. in-ta, 1956, 13, 121-126

Abst : The infection of spotted marmots (Citellus suslica) through the blood and urine of puppies suffering from leptospirosis, the urine of guinea pigs and the blood and urine of diseased humans, led, in all cases of the presence of leptospirae in the material tested, led to the death of the marmots within 6-7 days, more rarely 11-22 days, with the occurence of a typical patho-anatomical pattern and the isolation in them of pure leptospirae cultures. The infection of marmots by means of various materials from puppies who had died of leptospirosis was found to be the most effective

Card 1/2

SHITOV, K. A., SOLOVIYEV, S. I. and SALEY, P. I.

"Abortions of leptospirosious origin in pigs."

Veterinariya, Vol. 37, No. 8, 1960, p. 39

Shitov — Docent, Voronezh Sci-Res Vet Station

SALLY, P.I., kand.veterinarnykh nauk; SHITOV, K.A., dotsent; SOLOV'YEV, S.I.

Abortions in swine caused by leptospirosis. Veterinariia 37 no.8:39-40 Ag '60. (MIRA 15:7)

1. Voronezhskaya nauchno-issledovatel'skaya veterinarnaya stantsiya. (Voronezh Province--Leptospirosis) (Abortion in animals) (Swine--Diseases and pests)

SHITOV, K.A., dotsent; VITKALOV, V.V., veterinarnyy vrach; SHCHERBAN', N.F., aspirant; DORONIN, N.N., doktor veterin. nauk

Testing BCG vaccine in tuberculosis of poultry. Veterinariia 41 no.2:41-43 F '65. (MIRA 18:3)

1. Voronezhskiy sel'skokhozyaystvennyy institut (for Shitov).
2. Rossoshanskoye proizvodstvennoye upravleniye (for Vitkalov).
3. Donskoy sel'skokhozyaystvennyy institut (for Shcherban', Doronin).

SMIRNOVA, T.V.; DUKEL'SKAYA, N.M.; GORBUNOVA, V.P.; SHITOV, L.N.; NAUMOVA, I.I.

Analogs of warfarin and their rodenticide properties. Izv.vys. ucheb.zav.; khim.i khim.tekh. 5 no.1:107-111 '62. (MIRA 15:4)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva i Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.
(Warfarin)

SHAFRANSKIY, V.N.; CHERESHNEV, V.A., nauchn. red.; SHITOVA, L.N., red.; SHEVCHENKO, T.N., tekhn. red.

[Determining the need for construction equipment] Opredelenie potrebnosti v stroitel'nykh mashinakh. Moskva, Gosstroiizdat, 1963. 92 p. (MIRA 17:2)

[illegible], Aleksandr Grigor'yevich; [illegible], Vitaliy Isaif'yevich; [illegible], L.K., red.

[Increasing labor productivity in construction] Povyshenie proizvoditel'nosti truda v stroitel'stve. Moskva, Stroiizdat, 1964. 94 p. (MIRA 17:8)

ROVENSKIY, Semen Yakovlevich; CHKHEIDZE, Grigoriy Davidovich; PETROV, Viktor Konstantinovich; LIBKIND, Azariy Samuilovich; BALIKHIN, M.I., nauchn. red.; SHITOVA, L.N., red.

[Operational planning in construction by stages and complexes] Operativnoe planirovanie v stroitel'stve po etapam i kompleksam. [By] S.IA.Rovenskii i dr. Moskva, Stroiizdat, 1964. 115 p. (MIRA 17:6)

GLADSHTEYN, B.M.; SHITOV, L.N.; KOVALEV, B.G.; SOBOROVSKIY, L.Z.

Reaction mechanism of direct haloalkylation of elementary phosphorus. Zhur. ob. khim. 35 no.9:1570-1574 S '65.
(MIRA 18:10)

L 25679-66 EWT(m)/EWP(j) RM

ACC NR: AP6016688 SOURCE CODE: UR/0079/65/035/009/1570/1574

AUTHOR: Gladshteyn, B. M.; Shitov, L. N.; Kovalev, B. G.; Soborovskiy, L. Z. 38 B

ORG: none

TITLE: Mechanism of the direct holoalkylation of elementary phosphorus

SOURCE: Zhurnal obshchey khimii, v. 35, no. 9, 1965, 1570-1574

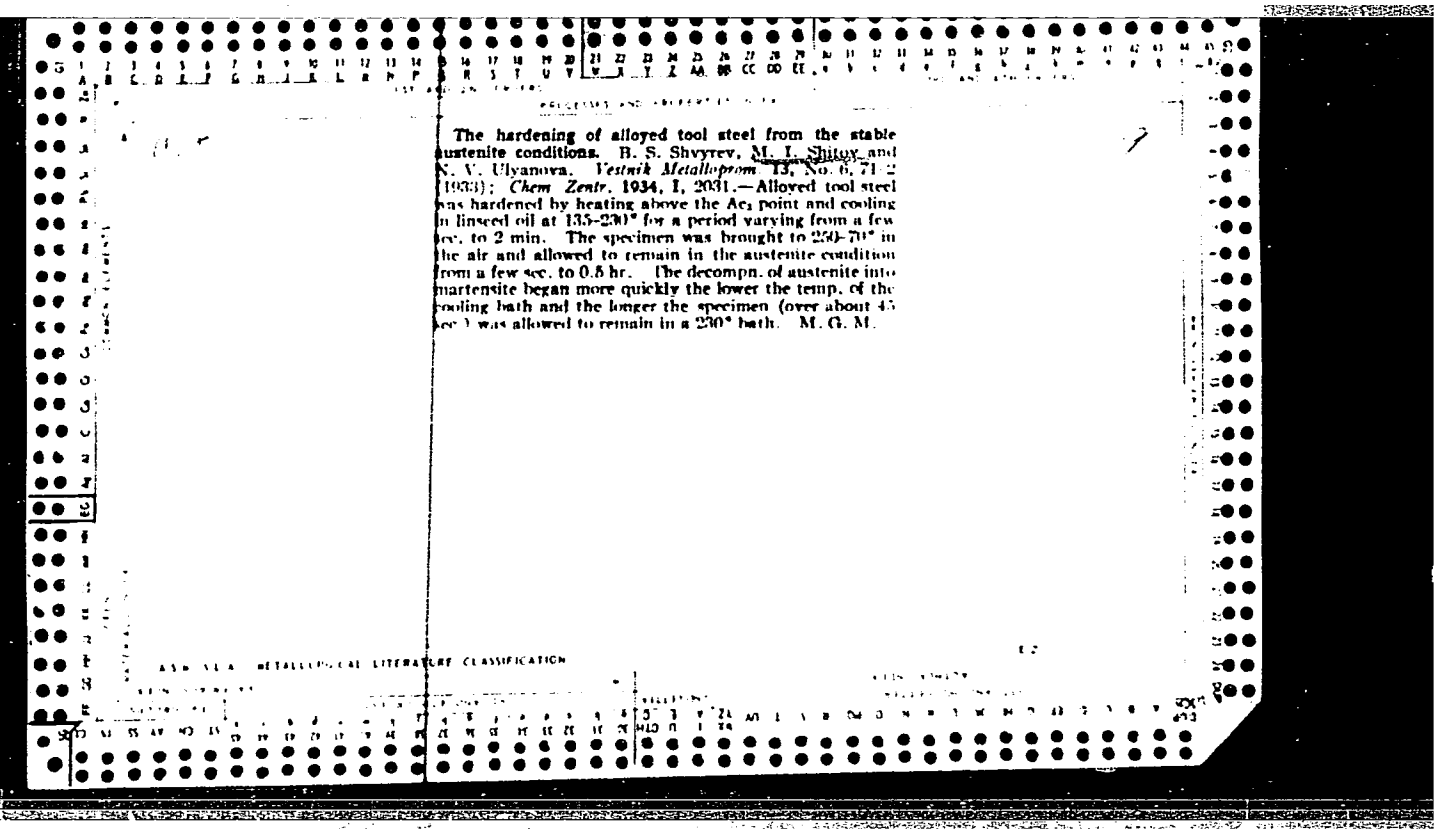
TOPIC TAGS: free radical, phosphorus, alkylation, halogenation

ABSTRACT: A free radical mechanism of the direct haloalkylation of elemental red phosphorus was experimentally confirmed. The proposed mechanism includes an attack on the phosphorus molecule by radicals formed as a result of homolytic decomposition of the alkyl halide, leading to the formation of phosphorus-containing radicals, the further transformations of which depend on the probability of recombination with other radicals. The hydrocarbon radicals can subsequently either recombine or, splitting out a hydrogen atom, be converted to carbenes, leading to the formation of the reaction products. The reaction products of methyl chloride and of benzyl chloride with red phosphorus were found to contain not only phosphorus-containing substances, but also hydrogen, methane, ethane, ethylene, and propylene, and toluene and trans-stilbene, respectively. R. I. Borodulina and Z. A. Krayneva assisted with the experiment. Orig. art. has: 1 figure, and 3 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 08Jun64 / ORIG REF: 004 / OTH REF: 009

Card 1/1 dda UDC: 547.241

2



The hardening of alloyed tool steel from the stable austenite conditions. B. S. Shvyrev, M. I. Shitov and N. V. Ulyanova. *Vestnik Metallopromy* 13, No. 6, 71–2 (1933); *Chem. Zentr.*, 1934, I, 2031.—Alloyed tool steel was hardened by heating above the Ac_1 point and cooling in linseed oil at 135–230° for a period varying from a few sec. to 2 min. The specimen was brought to 250–70° in the air and allowed to remain in the austenite condition from a few sec. to 0.5 hr. The decompn. of austenite into martensite began more quickly the lower the temp. of the cooling bath and the longer the specimen (over about 45 sec.) was allowed to remain in a 230° bath. M. G. M.

possibly also upon the thermal treatment itself. Comparison of the mech. properties of the cold-rolled duralumin indicated that the effect of thorough working is not essentially significant but that the anisotropy of the material after quenching is the chief factor increasing the depth of tempering. By a combination of mech. and thermal treatment a duralumin was obtained having a tensile strength of 48 kg./sq. mm. and an extensibility of 20%.

M. G. Moore

SHITOV/4:8184ENG8

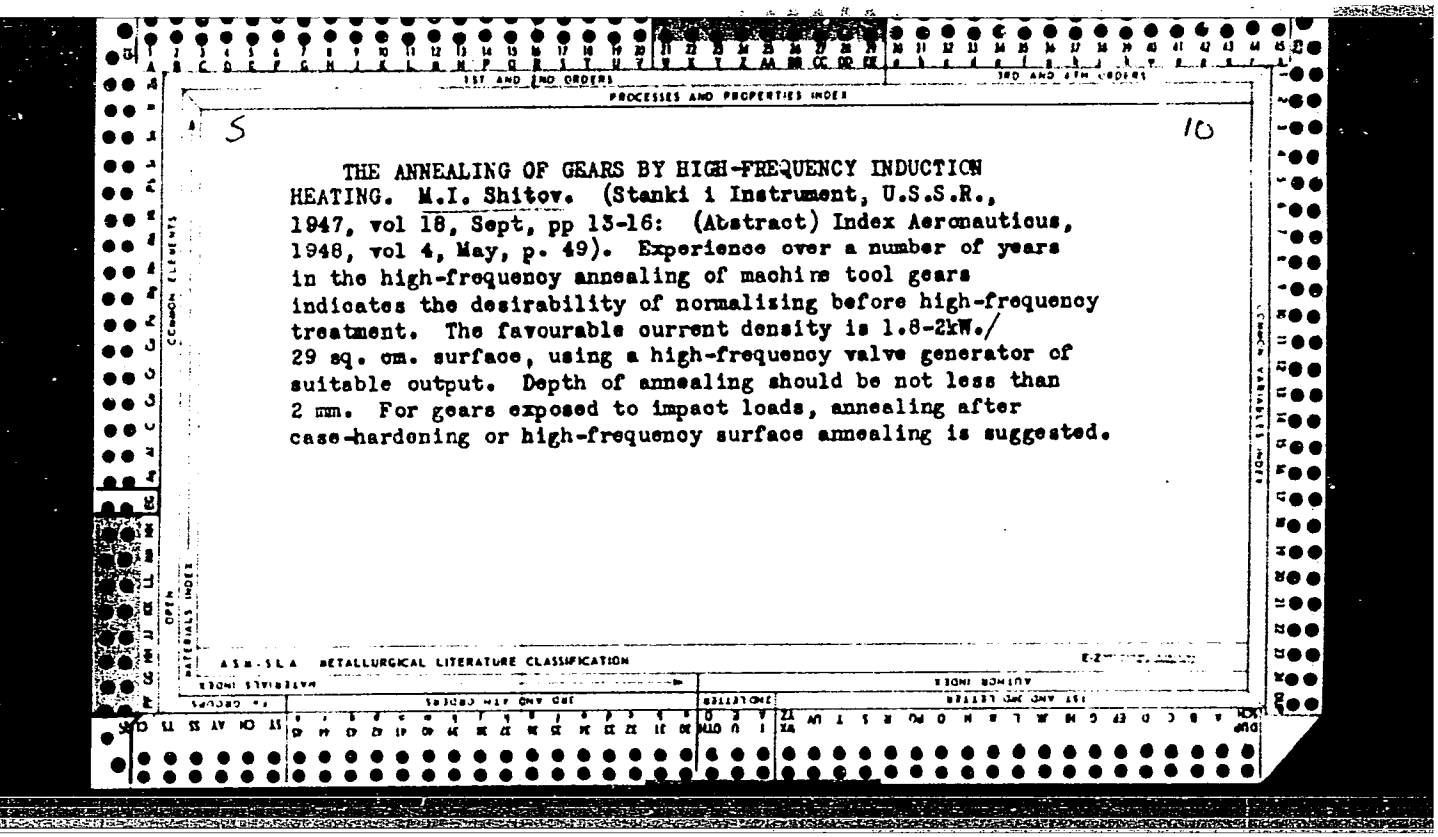
600

1. SHITOV, V. I. Engineer

2. USSR (600)

Machine Tool Plant imeni S. Ordzhonikidze "EI-290 (ZIS-332) Steel as a Substitute for High-Speed Steel" Stanki I Instrument, 12, No. 4, 1941.

9. [redacted] Report U-1503, 4 Oct. 1951.



PROCESSES AND PROPERTIES INDEX

5

10

THE ANNEALING OF GEARS BY HIGH-FREQUENCY INDUCTION HEATING. M.I. Shitov. (Stanki i Instrument, U.S.S.R., 1947, vol 18, Sept, pp 13-16: (Abstract) Index Aeronauticus, 1948, vol 4, May, p. 49). Experience over a number of years in the high-frequency annealing of machine tool gears indicates the desirability of normalizing before high-frequency treatment. The favourable current density is 1.8-2kW./ 29 sq. cm. surface, using a high-frequency valve generator of suitable output. Depth of annealing should be not less than 2 mm. For gears exposed to impact loads, annealing after case-hardening or high-frequency surface annealing is suggested.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SHITOV, M. I.

PA 37/49T34

USSR/Engineering Jun 48
Machinery
Steel, Chromium - Nickel

"Machining of Austenite Chromium-Nickel Steel 18-8," M. I. Shitov, Mach-Tool Plant imeni Ordzhonikidze, ½ p

"Stanki i Instrument" No 6

Difficulty in machining subject steel is well known. Describes special heat treatment for cutters. Novel feature is quenching in solution of potassium ferrocyanide. Quotes figures for tool angles and cutting speeds.

37/49T34

SHITOV, M. I.

PA 37/49T100

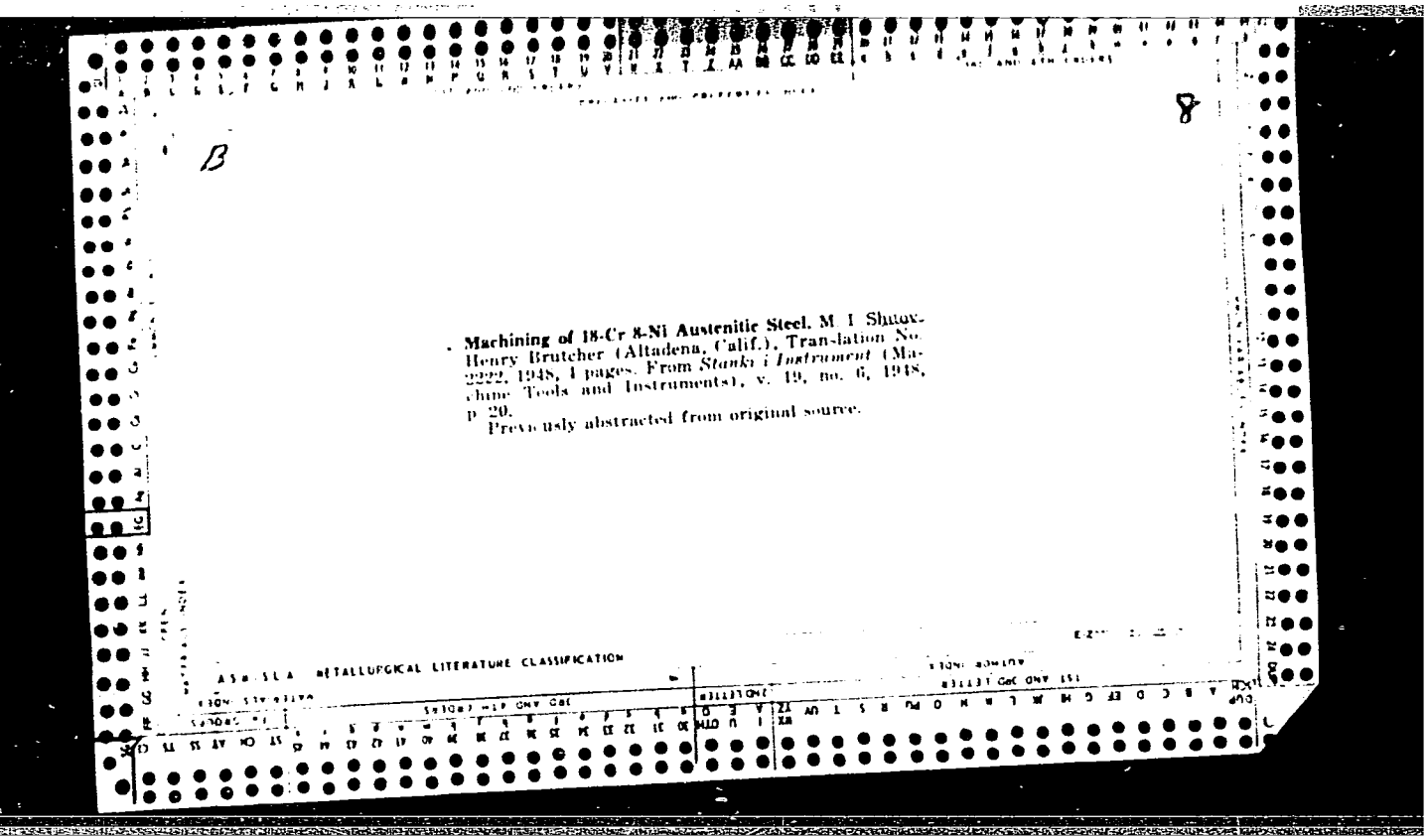
USSR/Metals Aug 48
Cast Iron
Hardening

"Hardening Cast Iron by Heating With a High-Frequency Current," M. I. Shitov, Engr, 2½ pp

"Stanki i Instrument" No 8

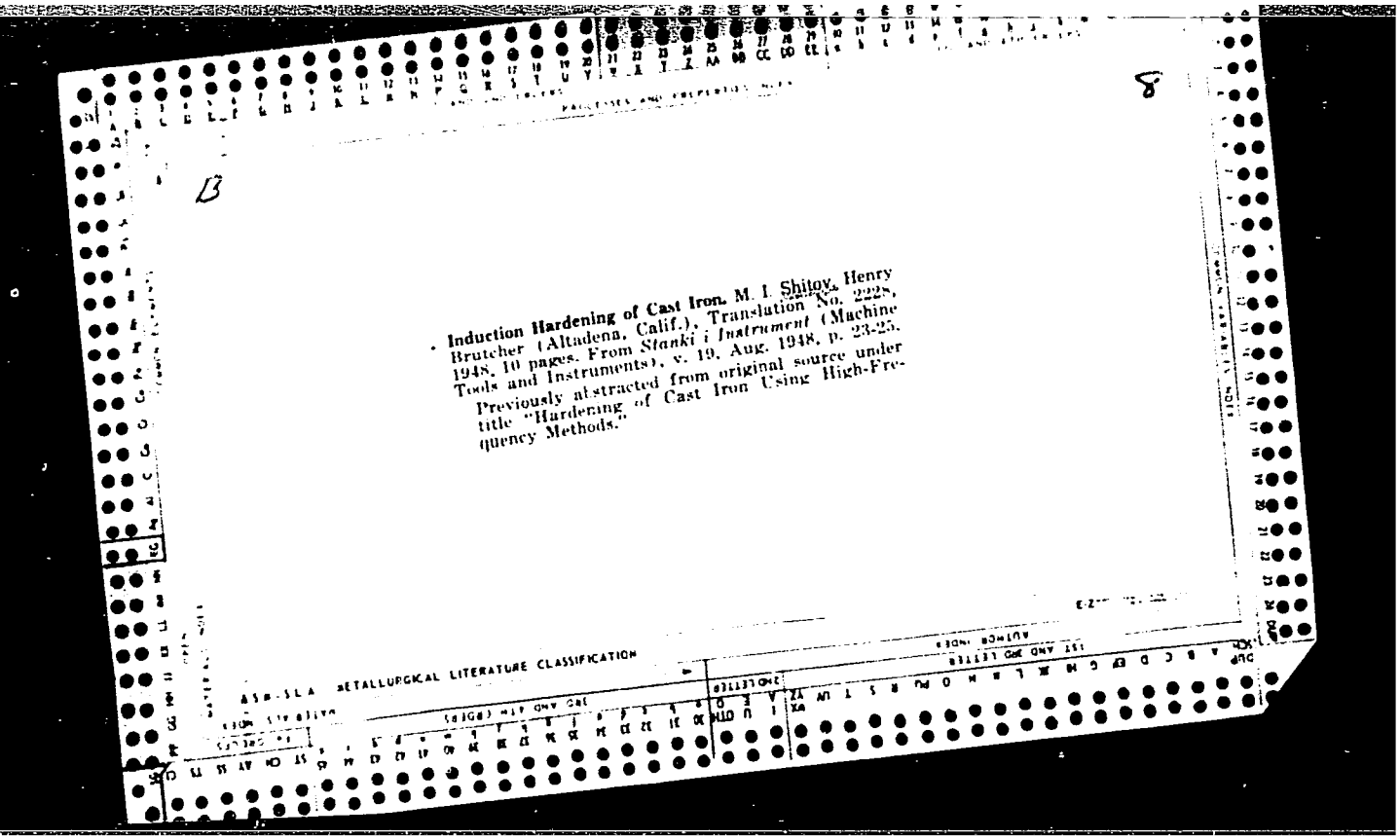
Presents results of experiments on using high-frequency current heating when hardening important cast-iron parts for machine tools. Shows that this method of hardening considerably increases wear resistance of cast iron. Includes five sketches.

37/49T100



. **Machining of 18-Cr 8-Ni Austenitic Steel.** M. I. Shutov. Henry Brutcher (Altadena, Calif.), Translation No. 2222, 1948, 4 pages. From *Stanki i Instrument* (Machine Tools and Instruments), v. 19, no. 6, 1948, p. 20.

Previously abstracted from original source.



Induction Hardening of Cast Iron. M. I. Shilov, Henry Brutcher (Altadena, Calif.). Translation No. 2228, 1948. 10 pages. From *Stanki i Instrument* (Machine Tools and Instruments), v. 19, Aug. 1948, p. 23-25.

Previously abstracted from original source under title "Hardening of Cast Iron Using High-Frequency Methods."

SHITOV, M.I.; REBRIKOVA, Ye.I.; MODLIN, B.D.

Factory laboratory assistance to plant workshops. Zav.lab.21 no.1: 122-124 '55. (MLRA 8:5)

1. Nachal'nik Tsentral'noy laboratorii Standozavoda im. Sergo Ordzhonikidze (for Shitov). 2. Nachal'nik tekhnologicheskoy laboratorii (for Rebrikova). 3.Nachal'nik stanochnoy laboratorii (for Modlin).
(Machine-tool industry)

SHITOV, N.

My advice to glass cutters. Sel'. stroi. 12 no.2:28 F '58.
(Glass cutting) (MIRA 11:2)

SHITOV, N. F.

No. 37368--Aleksandrovskiy zavod v nachale XX veka. V sb: Priro Dnye Recursy, Istoriya I Kul'tura kar-lo-fin. SSR. VYP. 1, Petrozavodsk, 1949, s. 44-54.

So: Letop s' Zhurnle'nykk Statey, Vol. 7, 1949.

SHITOV, N. G.

Ships - Disinfection

New method of vermin extermination of ships.
Rech. transp. 12, No. 1, 1952.

9. Monthly List of Russian Accessions, Library of Congress, June 1952. UNCLASSIFIED.

SHITOV, N.G.

Using compressed air for unloading cars. Rech. transp. 17 no.3:37-38 Mr '58. (MIRA 11:4)

1. Starshiy mekhanizatsii pristani Krasnoarmeysk.
(Loading and unloading)
(Air pump)

SHITOV, P.

Liquidate small districts. Fin. SSSR 20 no.7:62-63 Jl '59.
(MIRA 12:11)

1. Zaveduyushchiy Koptelovskim rayfinotdelom Sverdlovskoy oblasti.
(Koptelovo District--Budget)

SMITOV, S. T.

"The Characteristics of the Course of Suppurative Inflamatory Processes in Animal Joints, Depending on the Disruption of Certain Portions of the Nervous System." Cand Vet Sci, Leningrad Veterinary Inst, Leningrad, 1953. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

GOLIKOV, A.N., doktor veterin. nauk; SHITOV, S.T., kand. veterin. nauk

Novocaine block of craniocervical sympathetic ganglion in treating eye diseases. Veterinariia 40 no.10:42-44 O'63. (MIRA 17:5)

1. Moskovskaya veterinarnaya akademiya.

SHITOV, V.

Problems of fire prevention discussed in the local press. Pozh. delo 6:14 Mr '60. (MIRA 13:6)
(Moscow Province--Fire prevention--Study and teaching)

SHITOV, V.

AID P - 3149

Subject : USSR/Miscellaneous

Card 1/1 Pub. 135 - 11/20

Authors : Shitov, V., Gards Lt. Col. Eng., Bezdol'nov, V., Col. Eng.; Kalugin, V., Maj.

Title : Operation of a mobile radar station for aircraft landing

Periodical : Vest. vozd. flota, 10, 59-60, O 1955

Abstract : The authors describe the joint-operation of a mobile radar station with a radio and light system for aircraft landing. They suggest training methods and discuss deficiencies. A table of the standard commands transmitted to the pilot is given.

Institution : None

Submitted : No date

SHITOV, V.

Where can we get screens? Zhil.-kom. khoz. 13 no.5:29 My '63.
(MIRA 16:8)
1. Zaveduyushchiy banno-prachechnym kombinatom, Belaya Kalitva, Rostovskoy oblasti.
(No subject headings)

TREUSHNIKOV, Ya.; KIRILLOV, G.; SHITOV, V., kapitan-nastavnik

Study of winter navigation conditions on the Kuybyshev Reservoir. Rech. transp. 23 no.11:6 N '64. (MIRA 18:3)

1. Zamestitel' nachal'nika Volzhskogo gosudarstvennogo parokhodstva po tankernomu tonnazhu (for Treushnikov). 2. Kapitan ledokola "Dnepr" (for Kirillov).

ZVYAGIN, B.B.; SHAKHOVA, R.A.; SHITOV, V.A.

Some characteristics of the distribution of clay formations based on structural and mineralogical indicators as revealed by electronographic data. Trudy VSEGEI 72:57-73 '62.
(MIRA 15:9)

(Clay--Analysis)

ZVYAGIN, B.B.; MISHCHENKO, K.S.; SHITOV, V.A.

Electron diffraction data on the structures of sepiolite and palygorskite. Kristallografiia 8 no.2:201-206 Mr-Ap '63. (MIRA 17:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy geologicheskiy institut.

[redacted], A.; [redacted]KOVA, G.[redacted]; SHITOV, V.A.

"[redacted]" a new mineral. Dop. Vses. min. ob-va 94
no. 4, 437-443 '65. (MIRA 18:9)

VOSTOKOVA, Ye.A.; TAGUNOVA, L.N.; VEREYSKIY, N.G.; PREOBRAZHENSKAYA, N.N.; MOSKALENKO, N.G.; RACHINSKAYA, N.N.; TURMANINA, V.I.; SHITOV, V.D.; ORLOVA, V.P., red.; PEVZNER, V.I., tekhn.red.; OKOLELOVA, Z.P., tekhn.red.

[Handbook and guide to the lithological composition of surfical sediments and the depth of occurrence of underground waters] Spravochnik-opredelitel' litologicheskogo sostava poverkhnostnykh otlozhenii i glubiny zaleganiia podzemnykh vod. Pod red. N.G.Vereiskogo i E.A.Vostokovoi. Moskva, Sel'khozizdat, 1963. 259 p. (MIRA 17:3)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut gidrogeologii i inzhenernoy geologii (for all except Orlova, Pevzner, Okolelova).

SHITOV, V.I.

Use of lumber transportation in the Carpathian Mountains.
Bum. i der. prom. no.2:44-46 Ap-Je '64.
(MIRA 17:9)

SHITOV, V. V.

USSR / Cultivated Plants. Potatoes. Vegetables. Melons. H

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34692

Author : Shitov, V.
Inst : Not given
Title : Abundant Seedball Formation in Potato Crops.

Orig Pub : S. Kh. Sibiri, 1957, No 5, 89-90.

Abstract : Based on observations of 17 years, it is reported that in the Kurganskaya Oblast the following varieties are highly seedball-forming: Epron, Sverdlovskiy, and Narymchanin; among inter-species hybrids, the varieties 15567 (Mikhnevskiy), 15555 and others are highly fruit-forming. In the Sverdlovskaya Oblast under conditions of arid summers - seedball formation is scarcer and less abundant. Yield of seedballs on the Experimental Station of

Card 1/2

60

USSR / Cultivated Plants. Potatoes. Vegetables. Melons. H

Abs Jour : Ref Zhur - Biol., No 8, 1958, No 34692

Agriculture of Kurgansk amounted in 1956, from the variety Epron to 0.59, and from variety 14-312, to 68.4 hwt/h. Variety 14-312 is an inter-species hybrid of the varieties Tsentfoliya x Demissum x Narymchanin. It is distinguished by its resistance against phytophthora and canker and is outstanding by its qualities of good yield. It is to be recommended as a paternal component in hybridization. -- G. N. Chernov.

Card 2/2

SHITOV, V.V.

Technique involved in crossing potatoes. Agrobiologiia no.4: 129-130 Jl-Ag '58. (MIRA 11:9)

1. Kurganskaya gosudarstvennaya sel'skokhozyaystvennaya opytnaya stantsiya.

(Potato breeding)

SHITOV, V.V.

"Kurganskiy-1" a new potato variety. Agrobiologiia no.3:391-394 My-Je '63. (MIRA 16:7)

1. Opytnaya stantsiya Kurganskogo sel'skokhozyaystvennogo instituta, g. Kurgan.

(Kurgan Province--Potatoes--Varieties)