VASHCHENKO, Yu.I., inzhener.

Needed standard assortment of tubes used for bearings. Standartizatsiia no.6:54-55 N-D '56. (MLRA 10:1)

1. Perveural'skiy Novotrubnyy zavod.
(Tubes--Standards)

VASHCHENKO, Yu.I., inzhener.

"Pipe rolling and pipe welding" P.T. Emel'ianenko, A.A. Shevchenko, S.I. Borisov. Reviewed by IU.I. Vashchenko. Stal' 16 no.7:669-670 Jl '56. (MLRA 9:9)

1. Pervoural'skiy Novotrubnyy zavod.
(Rolling (Metalwork))
(Emel'ianenko, P.T.) (Shevchenko, A.A.) (Borisov, S.I.)
(Pipe steel--Welding)

VASHCHENKO, Yu. I., inzhener.; BUDKIN, M.A., inzhener.

"Pipe rolling processes". N. F. Ermolaev. Reviewed by Yu. I. Vashchenko, M. A. Budkin. Stal' 16 no.9:861 S '56. (MLRA 9:11)

1. Pervoural'skiy Novotrubnyy zavod.
(Rolling (Metalwork))(Pipe, Steel) (Ermolaev, N.F.)

133-12-17/26

AUTHORS: Vashchenko, Yu.I., and Chemerinskaya, R.I., Engineers.

TITLE: On the Problem of Limitation of Control Tests of Rolled Products for Hair Cracks on Metallurgical Works (K voprosy o sokrashchenii kontrol'nykh ispytaniy na volosoviny na metallurgicheskikh zavodakh.)

PERIODICAL: Stal', 1957, No.12, p. 1119 (USSR)

ABSTRACT: The authors support the proposal of S.N. Filipov (Standarizatsiya, 1955, No.6) and Z.N. Kalinina (Stal', 1957, No.2) on limiting the number of control tests of rolled products for hair cracks, as the test consumes a considerable amount of metal without giving a real evaluation of its quality. There are 2 Slavic references.

ASSOCIATION: Pervoural'sk Novotrubnyy Works (Pervoural'skiy Novotrubnyy zavod)

AVAILABLE: Library of Congress

Card 1/1

VASHCHENKO, Yu. I.

Changes in technological processes of pipe drawing. Biul. TSNIICHM no. 10:46 '58. (MIRA 11:7)

1. Pervoural'skiy Novotrubnyy zavod.
(Pipe)
(Drawing(Metalwork))

VASHCHENKO, Yu.I.

S/130/60/000/008/009/009

AUTHORS: Vashchenko, Yu.I., Potorochin, Ye.K.

TITLE: The Use of Hardfaced Rollers on Transverse Pipe Rolling Mills

PERIODICAL: Metallurg, 1960, No. 8, pp. 24-26

TEXT: As the service life of cast-iron rollers of three-high rolling mills is relatively short, experimental investigations were carried out on the use of steel rollers hardfaced by the following technology: preparation of the rollers to hardfacing, induction heating, hardfacing, heat treatment, calibration and repeated heat treatment. A groove is cut on 1045 steel rollers intended for hardfacing. The groove surface must be free of mazut, graphite, oil, oxides, and rust and there must be no cracks, cavities, slag impurities or coarse network on the rollers. The rotating roller is heated up to 370-380°C using a water-cooled inductor. Heating time is 2 1/2- 3 hrs. Every 30-40 minutes heating is interrupted for 8-10 minutes to allow the heat to spread uniformly over the whole volume of the roller. The temperature is checked with a thermopencil. Superheat is avoided. For hardfacing of rollers the Institut elektrosvarki im. Patona Akademii nauk USSR (Institute of Electric Welding imeni Paton of the Academy of Sciences UkrSSR) recommends the use of 1113/2(8 (PF3Kh2V8) powder wire and AN-20 (AN-20) flux. The rollers are hardfaced with an automatic A-384 welding head in 3-4 layers, with 4-4.5mm

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The Use of Hardfaced Rollers on Transverse Pipe Rolling Mills

pitch, a current intensity of 270-300 amp and 30-32 v. voltage. The feed of wire is 56 m/hour. The hardfacing process must be continuous. Thermal treatment, consisting in heating to 370-400°C and slow cooling (16 hrs), is performed twice: immediately after completed hardfacing and after mechanical treatment. The hardfaced roller is bored according to a pattern and after finishing it is polished on a special machine. As a result of multiple tests of the hardfaced rollers it was possible to change over to using hardfaced steel rollers instead of cast-iron rollers on three-high rolling mills and burnishing mills. Presently, the hardfacing of piercing mill rollers is being developed and studies are continued on hardfacing the rollers of a three-high sizing machine, since the replacement of cast-iron rollers by hardfaced steel rollers on this machine did as yet not yield satisfactory pipe surfaces. There are 2 diagrams.

ASSOCIATION: Pervoural'skiy novotrubnyy zavod (Pervoural'sk Novotrubnyy Plant)

S/130/60/000/009/004/004
A006/A002

AUTHORS: Vashchenko, Yu.I., Krovsikov, R.P.

TITLE: Assimilation of Pipe Production on a 120-Ton Drawing Machine

PERIODICAL: Metallurg, 1960, No. 9, pp. 27 - 29

TEXT: The 120-ton pipe drawing machine (Figure 1) operating at the Pervoural'sk Novotrubnyy Plant was built by the Irkutskiy zavod tyazhelogo mashinostroyeniya (Irkutsk Plant of Heavy Machinebuilding) and has a series of characteristic features differing from conventional designs. The machine is equipped with two "revolving chamfers" (perekidnoy zhelob) for mandrel drawing which are mounted alternately on the drawing axis by two hydraulic cylinders. The cylinder force is transmitted to a shaft where equal-arm levers supporting the chamfers on brackets, are mounted. In each chamfer there is a stop with a fixed rod having on its front end a plug-mandrel. The pipe is supplied to the rollers from a table and is then transported to the rod with the mandrel. The mandrel with the pipe is then mounted along the drawing axis. The rod with the mandrel and the pipe is supplied to the drawing ring by a special hydraulic cylinder and drawing is started in the usual manner. The machine is equipped

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S/130/60/000/009/004/004
A006/A002

Assimilation of Pipe Production on a 120-Ton Drawing Machine

with two bogies for 120-ton force for drawing large-size pipes and 30-ton force for drawing pipes without mandrels, shaping and expanding. The bogie is equipped with a pneumatic cylinder for clamping the pipe head and moving the bogie with the pipe until the onset of the drawing force. The feed and delivery mechanisms have also been redesigned, ensuring now a more accurate and reliable operation. The main drive of the machine consists of two МТ 82 (MP82) motors of 100 kw each, operating on one shaft with 0-570 rpm. Presently, high-precision pipe drawing is carried out on the described machine. The internal diameter of the pipes is 108 x 8, 145 x 8 and 146 x 1.5 mm. These pipes can not be manufactured on other machines at the required accuracy. Data obtained show that in spite of accessory operations and a higher metal consumption, precision pipe drawing on the 120-ton machine is possible and expedient. There are 3 figures and 1 table.

ASSOCIATION: Pervoural'skiy novotrubnyy zavod (Pervoural'sk Novotrubnyy Plant)

Card 2/2

VASHCHENKO, Yu. I.

S/130/62/000/002/005/005
A006/A101

AUTHORS: Khasin, G. A., Chikina, V. G., Bogdashkin, A. I., Rannev, G. G., Bruns, G. L., Vashchenko, Yu. I.

TITLE: A unit for the hot drawing of hard-to-deform steels

PERIODICAL: Metallurg, no. 2, 1962, 33 - 35

TEXT: At the Zlatoust Metallurgical Plant a unit for the hot drawing of hard-to-deform steels was developed and put into operation. It consists of a drawing mill, type I/750M, a tubular furnace to preheat the wire and a device for measuring the wire temperature during drawing. The wire is preheated in the tubular furnace by passage through molten lead and a charcoal layer. The capacity of the furnace is 75 kw, feed voltage 380 v, and the amount of lead 2,000 kg. The lead level remained almost unchanged after the calibration of over 100 tons high-speed steel; the wear of the draw plates is about 0.01 mm per 1 ton of wire. The wire temperature when leaving the draw plate is controlled by an infrared photo-electric pyrometer developed by NIIM, being able to measure temperatures within a range of 200 - 500°C. The pyrometer is combined with an electronic potentiometer ЭПП -120 (EPP-12). The least wire diameter during the measurement

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S/130/62/000/002/005/005
A006/A101

A unit for the hot drawing of hard-to-deform steels

is 2 mm. The distance from the sensitive head to the wire surface is 5 - 10 mm. The device is power-supplied from a 220 v 50 cycle circuit through a ferro-resonance voltage stabilizer. The device operates on the principle of measuring the intensity of infrared radiation of the heated metal. Its block-circuit is given. The draw plate temperature is controlled and regulated by an induction power-frequency heater which is mounted on the draw-plate holder, in whose body a manometric thermometer is mounted. The introduction of the hot drawing method at the Zlatoust Plant yielded the following results:, reduction of heat treatment and preparatory operations by a factor of 3 -4; reduction of technological production time; increase of the drawing-drum efficiency; reduction of annealing time by about 35.5 hours per one ton of steel; reliable operation of the unit and the possibility of using it in other plants. There are 3 figures.

ASSOCIATIONS: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant); Chelyabinskiy NIIM (Chelyabinsk NIIM)

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VASHCHENKO, Yu.I.

Pipe discards in rolling on three-high mills. Metallurg 7 no.10:37-39 O '62. (MIRA 15:9)

1. Ukrainskiy nauchno-issledovatel'skiy trubnyy institut.
(Pipe mills)

VYDRIN, V.N., kand.tekhn.nauk; BEREZIN, Ye.N., inzh.; KHIMICH, G.L.; TRET'YAKOV, A.V.; FEDOROV, M.I.; VASHCHENKO, Yu.I.

"Mechanical equipment of rolling mills" by A.A. Koroleva. Reviewed by V.N. Vydrin and others. Stal' 22 no.1:61-63 Ja '62. (MIRA 14:12)

1. Chelyabinskiy politekhnicheskiy institut (for Vydrin, Berezin).
2. Nauchno-issledovatel'skiy konstruktorsko-tekhnologicheskiy institut tyazhelogo mashinostroyeniya Uralmashzavoda i Ural'skiy politekhnicheskiy institut (for Khimich, Tret'yakov, Fedorov).
(Rolling mills--Equipment and supplies)
(Koroleva, A.A.)

ACCESSION NR AM4029020 BOOK EXPLOITATION S/

Vatkin, YAkov Leybovich; Plyatskovskiy, Oskar Aleksandrovich; Vashchenko, YUriy Ignat'yevich

Seamless tubes; a handbook (Besshovnyye truby*; spravochnoye rukovodstvo dlya rabochikh), Moscow, Metallurgizdat, 1963, 179 p. illus., biblio. Errata slip inserted. 2,700 copies printed.

TOPIC TAGS: seamless tube, pilgrim mill, continuous mill, extrusion, cold rolling, drawing, reduction mill

PURPOSE AND COVERAGE: The book considers the various methods of producing seamless tubes in a broad assortment. Handbook data are given on the technology of fabricating tubes on automatic, pilgrim, and continuous mills and also by extrusion, cold rolling, and drawing. Information is given on setting the grooves of various mills and the basic characteristics of the equipment. The various types of defects and methods of eliminating them are noted. There is a description of safety measure in tube rolling shops and examples of automation of certain equipment are given. The book is intended as a manual for workers and foremen of tube shops and can also be useful for students in metallurgical technicums when studying rolling.

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VASHCHENKO, Yu.I., inzh.; SPIRIN, A.A., inzh.

Ration of endwise slipping on diagonal pipe rolling mills with a three-high reeler. Proizv. trub no.10:20-23 '63. (MIRA 17:10)

DUKHAN, E.Sh.; VASHCHENKO, Yu.I.

Standardization of the dimensions of pipes for the bearing industry. Standartizatsiia 27 no.9:16-18 S '63. (MIRA 16:10)

L 13192-65
ACCESSION NR: AP4045875 S/0137/64/000/007/D040 /D040

SOURCE: Ref. zh. Metallurgiya, Abs. 7D221

AUTHOR: Bruns, G. L.; Vashchenko, Yu. I.

TITLE: Infrared photoelectric pyrometer

CITED SOURCE: Sb. Teoriya i praktika metallurgii. Vyp. 6. Chelyabinsk, 1963, 206-211

TOPIC TAGS: infrared pyrometer, heat measurement, hot drawing

TRANSLATION: This type of pyrometer has recently been widely used in hot drawing. A block diagram of the pyrometer is given and the principle of its operation is described. Also shown are the technical [illegible] measured (200-600°). A. Leont'yev

SUB CODE: MM, TD ENCL: 00

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VASHCHENKO, Yu.I.; MARKOVA, V.M.

Rapid roll changing on a three-high mill. Metallurg 9 no.12:28-30 D '64. (MIRA 18:2)

1. Ukrainskiy nauchno-issledovatel'skiy tekstil'nyy institut i Pervoural'skiy novotrubnyy zavod.

VASHCHENKO, Yu.I.; SHIFRIN, I.Z.

Improving the axial adjustment of three-high plug rolling mills. Metallurg 10 no.9:30-32 S '65. (MIRA 18:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy trubnyy institut i zavod im. K.Libknekhta.

Vashchenko, Z.A.

32-1-29/55

AUTHORS: Tsobkallo, S.O., Vashchenko, Z.A.

TITLE: A Comparison of the Method of Static Stress and the Infrasonic Method in the Determination of Young's Modulus of Foil Material (Sravneniye metodov statycheskogo nagruzheniya i infrazvukovogo dlya opredeleniya modulya uprugosti listovykh materialov).

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 1, pp. 68-70 (USSR)

ABSTRACT: In the introduction it is said that such determinations are of great importance for the industry, but that, as yet, this kind of work has found too little application in Soviet works laboratories. In the description of the method of static stress it is mentioned that in this case the device developed by Müller [Ref. 4] is used according to the drawing attached, and that computation of the modulus is carried out in accordance with the generally known formula. The infrasonic method is used also in the case of the application of a special device which is here shown in form of a graph. This device is described as follows: A strip of the material to be tested is clamped fast at one end. The other end is caused to oscillate. The device, together with the sample, is in

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a furnace. The very slow oscillations of the sample are recorded by the known photoelectric indicator developed by Tsobkallo [Ref. 6]. The principle of this indicator consists in the fact that the oscillating part of the sample is introduced into the field of a light source, so that the shadows caused by the oscillations fall upon a photoelement, where they are transformed into electric pulses, which are then measured electronically. On the strength of the examples given it is proved that the infrasonic method is more advantageous and more accurate than the method of static stress, and that it can be recommended as the only possible one for the determination of Young's modulus at high temperatures. There are 2 figures, 1 table, and 6 references, 5 of which are Slavic.

ASSOCIATION: Leningrad Polytechnic Institute (Leningradskiy politekhnicheskiy institut).

AVAILABLE: Library of Congress

TSOBKALLO, S.O.; VASHCHENKO, Z.A.

Better parameters for copper-smelting reverberating furnaces with arched crowns. Izv. vys. ucheb. zav.; tsvet. met. 2 no.3: 99-100 '59. (MIRA 12:9)

1. Leningradskiy politekhnicheskiy institut, Kafedra fizicheskogo metallovedeniya.
(Smelting furnaces)

TSOBKALLO, S.O.; VASHCHENKO, Z.A.

Comparative study of the elastic limit and the elastic aftereffect of phosphor bronze springs. Izv. vys. ucheb. zav.; tsvet. met. 2 no.3:101-107 '59. (MIRA 12:9)

1.Leningradskiy politekhnicheskiy institut, Kafedra fizicheskogo metallovedeniya.

(Bronze--Heat treatment) (Elasticity)

VASHCHENKO, Z.A.

24(6) PHASE I BOOK EXPLOITATION SOV/2385

Akademiya nauk SSSR

Nekotoryye problemy prochnosti tverdogo tela; sbornik statey (Some Problems in the Strength of Solids; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 386 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V. I. Aver'yanov; Tech. Ed.: R. S. Pevzner; Editorial Board: A.F. Ioffe, Academician; G. V. Kurdyumov, Academician; S. N. Zhurkov, Corresponding Member, USSR Academy of Sciences; B. P. Konstantinov, Corresponding Member, USSR Academy of Sciences; F. F. Vitman, Doctor of Physical and Mathematical Sciences, Professor (Resp. Ed.); L. A. Glikman, Doctor of Technical Sciences, Professor; N. A. Zlatin, Doctor of Physical and Mathematical Sciences; V. A. Stepanov, Doctor of Technical Sciences; Ya.B. Fridman, Doctor of Technical Sciences, Professor; B. S. Ioffe, Candidate of Technical Sciences (Deputy Resp. Ed.).

PURPOSE: This book is intended for construction engineers, technologists, physicists and other persons interested in the strength of materials.

COVERAGE: This collection of articles was compiled by the Otdeleniye fiziko-matematicheskikh nauk AN SSSR (Department of Physical and Mathematical Sciences) and the Fiziko-tekhnicheskiy institut AN SSSR (Institute of Applied Physics, Academy of Sciences, USSR) in commemoration of the 80th birthday of Nikolay Nikolayevich Davidenkov, Member of the Ukranian Academy of Sciences, founder and head of the Otdel prochnosti materialov (Department of the Strength of Materials) at the Institute of Applied Physics, Academy of Sciences, USSR, founder of the Fakul'tet fizicheskogo metallovedeniya (Department of Physical Metallurgy) at the Leningradskiy politekhnicheskiy institut (Leningrad Polytechnic Institute), recipient of the Stalin Prize (1943), the Order of the Red Banner of Labor (1945) and the Order of Lenin (1953). The articles deal with the strength of materials, phenomena of imperfect elasticity, temper brittleness, hydrogen embrittlement, cold brittleness, influence of deformation speed on the mechanical properties of materials, fatigue of metals, and general problems of the strength, plasticity, and mechanical properties of nonmetals. Numerous personalities are mentioned in the introductory profile of Professor Davidenkov. References are given at the end of each article.

Gindin, I.A., B.G. Lazarev, Ya.D. Starodubov, and V.I. Khotkevich (Fiziko-tekhnicheskiy institut AN USSR-Institute of Applied Physics, Academy of Sciences Ukr. SSR, Khar'kov). Low-temperature Polymorphism of Metals 61

Zhurkov, S.N., and E.Ye. Tomashevskiy (Institute of Applied Physics, Academy of Sciences, USSR, Leningrad). Time Dependency of Strength Under Different Load Conditions 68

Bokshteyn, S.Z., T.I. Gudkova, A.A. Zhukhovitskiy, and S.T. Kishkin. Influence of Stresses and Deformation on the Process of Diffusion 76

Pines, B.Ya., and A.F. Sirenko (Gosudarstvennyy universitet imeni Gor'kogo, g. Khar'kov State University imeni Gor'kiy, Khar'kov). Diffusion Creep of Cermet Specimens Pressed From Powdered Iron 87

Rybkina, V.I., and E.S. Yakovleva (Institut fiziki metallov UFAN SSSR, Sverdlovsk-Institute of Metal Physics, Ural Branch, Academy of Sciences, USSR, Sverdlovsk). Influence of Aluminum and Copper on the Deformation of Nickel 95

Kontorova, T.A. (Institut poluprovodnikov AN SSSR, Leningrad-Semiconductor Institute, Academy of Sciences, USSR, Leningrad). Relationship Between the Mechanical and Thermal Characteristics of Crystals

Garber, R.I., and I.I. Solosbenko (Gosudarstvennyy pedagogicheskiy institut imeni G.S. Skovorody, Khar'kov-State Pedagogical Institute imeni G.S. Skovorda, Khar'kov). Strengthening of Rock Salt Crystals by Repeated Reverse Bendin 105

Gaydukov, M.G., and V.A. Pavlov (Institute for Metal Physics, Ural Branch, Academy of Sciences, USSR, Sverdlovsk). Some Aspects of Stress Relaxation in Bronze BK_{40}Z-1 111

Tsobkallo, S.O., and Z.A. Vashchenko (Polytechnic Institute imeni M.I. Kalinin, Leningrad). Increasing the Elastic Limit and Decreasing the Elastic Aftereffect During Cold Hardening and Tempering of Spring Aluminum Bronze BrA7 118

Glikman, L.A., and N.M. Kolgatin (NII po pererabotke nefti i polucheniyu iskusstvennogo zhidkogo topliva, g. Leningrad-Scientific Research Institute for Petroleum Refining and Production of Synthetic Liquid Fuels, Leningrad). Nature of the Physical Yield Point of Steel 130

3

S/136/60/000/04/018/025
E091/E235

AUTHORS: Tsobkallo, S. O., Candidate of Physical and Mathematical Sciences and Vashchenko, Z. A., Engineer

TITLE: Influence of Dispersion Hardening on the Elastic Limit and the Elastic Afterworking of the Spring Alloy Kunial' B

PERIODICAL: Tsvetnyye metally, 1960, Nr 4, pp 71-76 (USSR)

ABSTRACT: In this work, a Kunial' B alloy containing 91.96% Cu, 5.88% Ni, 1.54% Al and 0.28% Fe, was studied. Strip of approximately 0.5 mm thickness was made from this alloy which was rolled with 2 different reductions (33 and 85%) in order to study the influence of cold working. Prior to rolling, the alloy was quenched in water from 750°C. Subsequently, the specimens made from the strip were subjected to annealing at temperatures in the range of 400 to 600°C. In this work, 2 main groups of properties of the alloy were studied which depend on: 1) the imperfect elasticity and the resistance of the material to small plastic deformations; 2) the resistance to large plastic deformations (ultimate strength σ_B, elongation on failure δ and microhardness H_p at a

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Influence of Dispersion Hardening on the Elastic Limit and the Elastic Afterworking of the Spring Alloy Kunial' B

load of 100 g). The investigations were carried out on 150 x 20 mm rectangular strip specimens from which specimens for tensile testing were also cut. The imperfect elasticity and the resistance to small plastic deformations formed the main group of properties investigated in this work; these were represented by the limit of elasticity, taking into consideration their dependence on the time of application of the force (Ref 1), and also by direct and reverse elastic after effect characterised by a few criteria. The measurement of these values was carried out in bending by a new method, based on measurements of flow deformation at a given constant total deformation of the specimen (Ref 2). The modulus of normal elasticity, the knowledge of which is required for stress calculations, was measured by a new ultrasonic method (Ref 3). The values of the modulus were found to be (1.37 to 1.34) 10^4 kg/mm^2 for the original work-hardened materials and were (1.38 to 1.42) 10^4 kg/mm^2 for annealed specimens. The Poisson coefficient for the materials was taken as 0.36. The

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Influence of Dispersion Hardening on the Elastic Limit and the Elastic Afterworking of the Spring Alloy Kunial' B

elastic limits of the materials investigated were determined from elastic limit curves (see Fig 1) which had been worked out earlier by one of the authors (Ref 1). To plot these curves, a series of identical specimens were subjected to various stresses for 10 minutes. After removal of the load, the residual deformation was measured for each specimen. The dependence of this deformation $\Delta\varepsilon_{10}$ on the stress σ gives the ten-minute elastic limit curve. Having selected the appropriate limit for the residual deformation (in this work these limits were taken as 0.001, 0.003, 0.005 and 0.01%), the required limit of elasticity, as well as the proportional elastic limit (limit of proportionality ?) σ_{pg}, the value of which corresponds to the end of the linear portion of the elastic limit curve (Table 1), can be determined from these curves. The greatest attention was paid in this work to the influence of the dispersion hardening on the above properties. To this end, elasticity limit

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curves were plotted after annealing the alloy at various temperatures, for materials having undergone reductions of 33 and 85%. On the basis of these experiments, the relationship between elastic limits with an average tolerance of 0.003% residual deformation and annealing time t_o (Fig 2) were plotted. Series of elastic limit curves were obtained from groups of specimens having been annealed at various temperatures (see Fig 1), which enabled the dependence of elastic limits with various deformation tolerances on annealing temperature to be constructed (Fig 3) and the optimum temperatures to be finally established. Curves of direct and reverse after effect (Figs 4 and 5 respectively), were plotted in order to study the elastic after effect in relation to the condition of the material. Table 2 shows the criteria of the elastic after effect for the Kunial' B alloy in the work-hardened condition after quenching and after subsequent annealing treatments. During the

Card 4/6 annealing treatment, the changes of the mechanical

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Influence of Dispersion Hardening on the Elastic Limit and the Elastic Afterworking of the Spring Alloy Kunial' B

properties and the microhardness were investigated (see Fig 6). The authors arrive at the following conclusions: 1) Dispersion hardening increases the elastic limit and reduces the elastic after effect of the Kunial' B alloy. 2) The optimum annealing temperature for ensuring the best imperfect elasticity properties (elastic limit and elastic afterworking) is 450 to 500°C with an annealing time of 4 to 2 hours for Kunial' B alloys which were work-hardened with reductions of 33 to 85% after quenching. 3) Within the range of 33 to 85% reduction, an increase in work-hardening prior to tempering increases somewhat the elasticity limit and the imperfect elasticity properties. 4) For estimating the resistance to large plastic deformation of thin sheet spring materials, it is expedient to use microhardness testing with relatively large loads (100 g). Such measurements are considerably simpler than currently used tests to failure

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Influence of Dispersion Hardening on the Elastic Limit and the Elastic Afterworking of the Spring Alloy Kunial' B

and determination of the ultimate strength and elongation. There are 6 figures, 2 tables and 5 references, 4 of which are Soviet and 1 English.

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VASHCHENKO, Z. A.

USSR/Physics - Distance Meter

FD-2845

Card 1/1 Pub. 153-28/30

Author : Vasil'yev, D. M. and Vashchenko, Z. A.

Title : Method of Determining Small Variations of Interplane Distances

Periodical : Zhur. Tekh. Fiz, 25, 765-767, 1955

Abstract : The equation of Wolf-Bragg is used to express the distance between interference lines of light to study small variations in interplane distances of the lattice of the specimen. One reference.

Institution :

Submitted : February 5, 1955

VASHCHENKO Z. A.

USSR/Physical Chemistry - Crystals B-5

Abs Jour : Referat Zhur - Khimiya, No 2, 1957, 3539

Author : Vasil'yev D.M., Vashchenko Z.A.
Title : Contribution to Procedures for Determination of Small Changes in Interplanar Distances

Orig Pub : Zh. tekhn. fiziki, 1955, 25, No 4, 765-767

Abstract : See RZhFiz, 1956, 3867.

Distr: 4E4j

VASHCHENKO, Zakhar Markovich. OVCHARENKO, F.D., akademik, otv. red.; NIKITENKO, Ye.D., red.

[Chemical mineral raw materials of the Ukrainian S.S.R. (1817-1963); a bibliographic index to the literature] Khimichna mineral'na syrovyna Ukrains'koi RSR (1817-1963 rr.); bibliografichnyi pokazhchyk literatury. Kyiv, Naukova dumka, 1965. 158 p. (MIRA 18:9)

1. Akademiya nauk Ukr.SSR (for Ovcharenko).

VASIL'YEV, D.M.; VASHCHENKO, Z.M.

Determination of slight modifications in interplaner distances. Zhur. tekh.fiz. 25 no.4:765-767 Ap '55. (MLRA 8:5)
(Metallography)

PHASE I BOOK EXPLOITATION 1085

Dumanskiy, Anton Vladimirovich, and Vashchenko, Zakhar Markovich

Bibliograficheskiy ocherk razvitiya otechestvennoy kolloidnoy khimii, vyp. 3 /1942-1952 gg/ (Bibliographical Studies of the Development of Russian Colloidal Chemistry, v. 3 /1942-1952/) Kiyev, Izd-vo AN USSR, 1958. 216 p. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii.

Resp. Ed.: Ovcharenko, F.D., Corresponding Member, Ukrainian SSR Academy of Sciences, Doctor of Chemical Sciences, Ed. of Publishing House: Levberg, Z.A.; Tech. Ed.: Rakhlina, N.P.

PURPOSE: This book is intended for chemists, engineers, technical and scientific workers, teachers, and postgraduate and undergraduate students of higher educational institutions.

COVERAGE: This third volume of the series includes 2000 references to works on colloidal chemistry published in the Soviet Union during the period 1942-1952. It is a bibliography with a short survey of works from 1942 to 1952 on the develop-

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ment of colloidal chemistry and its theory and practical application in many branches of the national economy.

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1-13-59

VASHCHENKO, Zakhar Markovich; OVCHARENKO, F.D., akademik, otv. red.; DAKHNO, Yu.B., tekhn. red.

[Clays of the Ukrainian S.S.R., 1860-1960; a bibliographic index of literature]Hlyny Ukrains'koi RSR, 1860-1960 rr.; bibliografichnyi pokazhchyk literatury. Kyiv, Vyd-vo Akad. nauk URSR, 1963. 197 p. (MIRA 16:3)

1. Akademiya nauk Ukr. SSR (for Ovcharenko)
(Ukraine--Clay--Bibliography)

KALANTAYEVSKAYA, K.A., dotsent; VASHCHENKOVA,A.P.

Studying the nervous system from vascular reflex reactions to intracutaneous adrenaline and histamine injections. Zdrav.Kazakh. 16 no.10:7-10 '56. (MLRA 9:12)

1. Iz kafedry kozhnykh i venericheskikh bolezney Kazakhskogo gosudarstvennogo meditsinskogo instituta imeni V.M.Molotova.
(NERVOUS SYSTEM) (HISTAMINE) (ADRENALINE)

3249. INFLUENCE OF SPECIFIC THERAPY ON THE DISORDERS OF THE NERVOUS SYSTEM IN SYPHILIS (Russian text) - Vashchenkova A. P. ZDRAVOOKHR. KAZ. 1958, 18/3 (44-49)

The function of the nervous system in 68 untreated and in 17 treated patients suffering from various forms of syphilis was investigated using the following tests: pharmacodynamic skin tests with histamine and epinephrine, thermoregulation reflex, electroresistance of the skin, vegetative reflexes, blood pressure, and thorough study of the neuro-psychiatric case history. The majority of both treated and untreated patients showed disturbances of the functional status of their nervous systems. The use of penicillin failed to completely restore the functional equilibrium of the nervous system. The functional disturbances were most serious in cases of alcoholism, or with a history of physical or psychological traumas, of malaria and other severe infectious diseases, or unsatisfactory standards of living.

Tyndel - Toronto

VASHCHENKOVA, A. P.: Master Med Sci (diss) -- 'Material on the pathology and therapy of syphilis". Alma-Ata, 1958. 20 pp (Kazakh State Med Inst), 300 copies (KL, No 9, 1959, 117)

VASHCHENKOVA, A.P.; SERGEYEV, S.Ya.

Morbidity due to dermatoses in the Semipalatinsk Leather Combine; preliminary report. Zdrav.Kazakh. 22 no.6:28-30 '62. (MIRA 15:11)

1. Iz kafedry kozhno-venericheskikh bolezney (zav. - dotsent R.Kh.Abdusametov) Semipalatinskogo meditsinskogo instituta.
(SEMIPALATINSK--LEATHER WORKERS--DISEASES AND HYGIENE)
(SKIN--DISEASES)

KALANTAYEVSKAYA, K. A., prof.; VASHCHENKOVA, A. P., kand. med. nauk

Reflex-vascular reactions of the skin in children on the administration of adrenaline, histamine and nicotinic acid. Vest. derm. i ven. 36 no.7:19-23 Jl '62. (MIRA 15:7)

1. Iz kafedry kozhnykh i venericheskikh bolezney (zav. - prof. K. A. Kalantayevskaya) Kiyevskogo instituta usovershenstvovaniya vrachey (dir. - dotsent M. N. Umovist)

(ADRENALINE) (HISTAMINE) (NICOTINIC ACID)
(SKIN--BLOOD SUPPLY)

L. S.

TITLE: Salmonellosis in rodents in Leningrad

SOURCE: Zhurnal mikrobiologii, epidemiologii i immunobiologii, no. 6, 1965, 43-47

TOPIC TAGS: salmonella, rodent carrier, disease control

ABSTRACT: Approximately 46,000 rodents were examined in a study of salmonellosis [illegible] examined 36,000 gray rats, 850 black [illegible] were caught [illegible] 301 serological types of salmonella were isolated from [illegible] 28 serological types from the B, C, D, E, and F groups. [illegible] from the organs of the gray rats and house mice, a matter of epidemiological in-

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ACCESSION NR: AP5014266

4

terest because these rodents belong to synanthropic species. No salmonellas were isolated from rodents caught in open places such as gardens, parks, and cemeteries. Most of the types (...%) were isolated during the summer, 14% in the fall. The commonest of the salmonellas isolated were S. enteritidis (...%) and *B. typhimurium* (40%); *S. suipestifer*, *S. paratyphi* C, and others were rarer. The types of salmonellas (15) isolated from the rodents were also isolated from sick persons during the same period. The percentage of the various types isolated from man was about the same as in the ... type, but less ... types.

ASSOCIATION: [illegible]

SUBMITTED: 26Feb64 ENCL: 00 SUB CODE: IS

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GREPPENCHUK, A.F.; BAKULINA, L.I.; VASILENKOVA, G.I.; SOKOVA, [illegible]; [illegible], T.A.; ANDREYEVA, A.P.; [illegible], P.V.; BARTASHEVA, V.A.; BOLSHAKOVA, L.S.

Salmonellosis in rodents in Leningrad. Zhur. mikrobiol., epid. i immun. 42 no.6:43-47 '65. (MIRA 18:8)

1. Leningradskaya protivochumnaya portovaya i gorodskaya nablyudatel'naya stantsiya i Leningradskaya sanitarno-epidemiologicheskaya stantsiya.

S/058/62/000/010/062/093
A061/A101

24.7000

AUTHORS: Mikolaychuk, O. G., Vashchenyuk, M. M.

TITLE: Structure and some properties of thin HgS films

PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1962, 16, abstract 10E126 ("Dopovidi ta povidomi. L'vivs'k. un-t", 1961, no. 9, part 2, 35 - 38, Ukrainian)

TEXT: Thin HgS films were obtained by condensation in vacuum. The condensate displayed an amorphous structure up to a thickness of 10^{-7} cm, and a crystalline structure upwards of $5 \cdot 10^{-7}$. Texture was absent in thin layers. The temperature dependence of the electric resistance of films deposited on a backing at 20, 104, 144, and 194°C was investigated. The electric resistance of films deposited on a "hot" (144, 194°C) backing, grew with temperature, whereas that of films deposited on a "cold" (20, 104°C) backing passed through a maximum at 180°C, whereupon it began to drop.

L. Vigdorchik

[Abstracter's note: Complete translation]

Card 1/1

VASHCHEV, N. V.

"Effect of Air and Wood Moisture Content on the Strength of Glued Joints." Cand Tech Sci, Leningrad Order of Lenin Forestry Engineering Academy imeni S. M. Kirov, Min Higher Education USSR, Leningrad, 1955. (KL, No 17, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

VASHCHEV, N.V., kandidat tekhnicheskikh nauk.

Effect of the atmospheric humidity and wood moisture on the strength of glued joints. Der. prom. 6 no.4:6-8 Ap '57. (MLRA 10:6)

1. Leningradskaya lesotekhnicheskaya akademiya im. S.M. Kirova.
(Gluing--Quality control) (Humidity)

VASHCHEV, N.V., kand.tekhn.nauk

Putting the decisions of the June Plenum of the Central Committee of the CPSU into practice. Der.prom. 9 no.6:3-6 Je '60. (MIRA 13:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Furniture) (Veneer and veneering)

VASHCHEV, N.V.

Use of the results of research work in production. Der.prom. 10 no.9:9-10 S '61. (MIRA 14:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Woodworking machinery)

VASHCHEV, N.V.

Adjusting woodworking machinery. Der. prom. 13 no.7:18-19 Jl '64.
(MIRA 17:11)

1. Lesotekhnicheskaya akademiya im. S.M. Kirova.

[illegible], Nikolay Vasil'yevich; [illegible], V.V., red.

[Apparatus for adjusting woodworking machinery for size] Pribor dlia nastroiki derevoobrabatyvaiushchikh stankov na razmer. Leningrad, 1964. 13 p. (MIRA 17:7)

VASHCHEV, N.V.; MODIN, N.A.; BERGSON, N.V.

Compressed wood for the manufacture of parts for cross. Bar. prom. 14 no.6:15 Je '65. (MIRA 18:7)

L 23412-66 EWT(d)/EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/EWP(l) JD/HM

ACC NR: AP6004140 SOURCE CODE: UR/0125/66/000/001/0066/0068

AUTHOR: Vashchevskiy, V. F.; Gologovskiy, G. M.; Dykhno, S. L.

62
B

ORG: none

TITLE: Device for automatic monitoring of the parameters of resistance-welding regime

SOURCE: Avtomaticheskaya svarka, no. 1, 1966, 66-68

TOPIC TAGS: resistance welding, welding equipment component, power monitor, pulse signal, metallurgic testing machine, circuit design, automatic control equipment

ABSTRACT: The authors present a description of the P-192 device for automatic monitoring and signaling of deviations from the set welding regime according to the amplitude of welding current and the parameter

$$A = \int_0^{t_d} i_w dt$$ (where t_d is the duration of the welding-current pulse).

Range of current intensities measured: 1-100 kilo-amperes (ka). Welding-current measurement error: ±5%. The device (Fig. 1) is connected to the welding machine by two circuits. The first circuit (Fig. 2), represented by toroidal measuring transform-

Card 1/5 UDC: 621.791.76:681.1/.2

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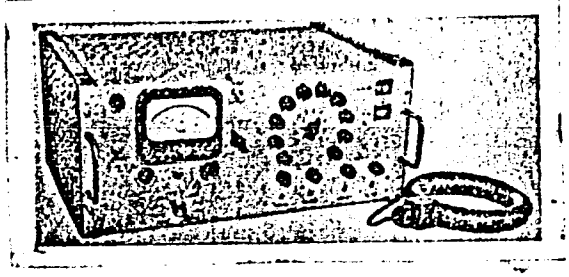

Fig. 1. External view of the P-192 device

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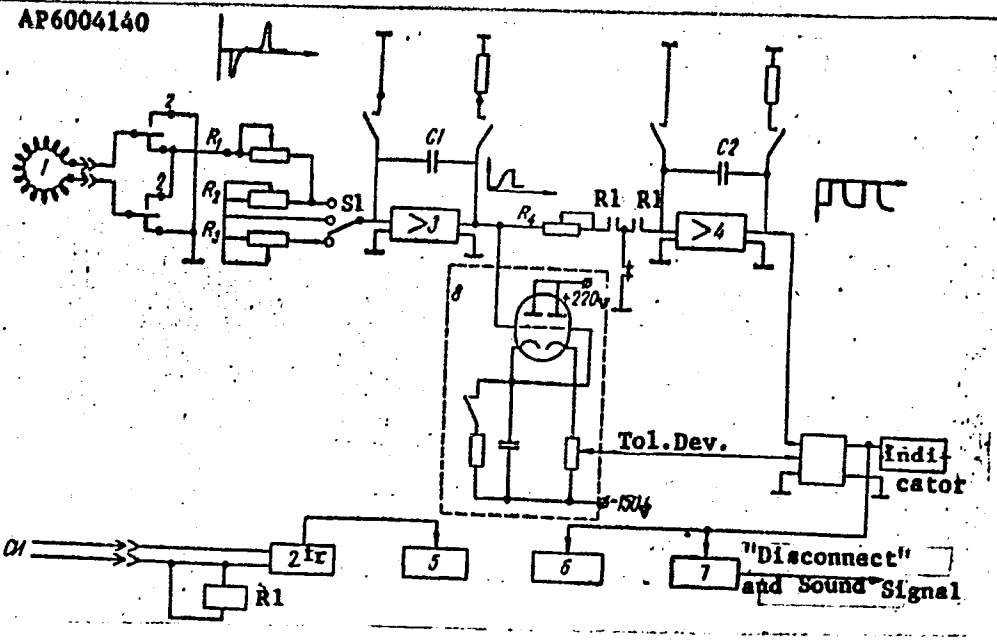

Fig. 2. Block diagram of the device

er 1, is connected to the bottom holder of the welding machine. The second circuit pertains to synchronizing voltage pulses which must overlap in time the welding-current pulses and which are used to trigger flip-flop relay 2: the contacts of this relay switch the output of the toroidal transformer, since each time the polarity of current pulses in the welding machine is reversed. The voltage from the toroidal transformer flows to electronic integrator 3 of the DC tube-amplifier type. The input resistors R_1, R_2, R_3 of the amplifier are designed to regulate the time constant of the RC of the integrator. Switch S1 is used to adjust the measurement range to 10, 50 or 100 ka. The integrator output is connected to memory element 8 which records the amplitude value of the restored voltage pulse at the output of integrator 3, whence the pulse is conveyed to a second integrator (DC amplifier 4 and integrating elements -- resistor R_4 and capacitor C2). The contacts of relay R1 cause the resistor R_4 to be connected to the amplifier input and, during the passage of the welding-current pulse, the voltage

$$U_2 \approx \int_0^{t_d} U_1 dt = \int_0^{t_d} \left(\int \frac{di_w}{dt} dt \right) dt = \int_0^{t_d} i_w dt.$$

forms at the output of integrator 4. The voltage proportional to the amplitude of the welding-current pulse, from the output of the memory element, and the voltage pro-

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portional to the amount of electricity passed during a welding pulse, from the output of the second integrator (amplifier 4), proceed to the device for measuring the tolerances of the parameters, where the variations in the pulse amplitude and the amount of electricity therein, when they exceed the upper and lower limits of the tolerance range, are recorded correct to ~0.5% and indicated by the pointer on the dial. The device also includes built-in electromechanical counters of points at which the current or electricity exceed the specified tolerances and relay counters for generating the "disconnect" signal (opening of contacts) or sound signal (closing of contacts). It is also equipped with sockets for connecting an oscillograph by means of which the current-pulse shape can be visually monitored. The device can be used to monitor the performance of DC, AC and capacitor welding machines. It can be adjusted to three different scales of measurement of current-pulse amplitude and of the corresponding heating (amount of electricity in a pulse): 10 ka, 5 ka-sec; 50 ka, 25 ka-sec; and 100 ka, 50 ka-sec. Currently, a new version of the device, with digital readout which should greatly simplify the measurements, is being developed. Orig. art. has: 3 figures.

SUB CODE: 09, 11, 13/ SUBM DATE: 03Jun65/ ORIG REF: 005/ OTH REF: 000

Card 5/5

VASHCHILIN, V.

Some problems in Marxist-Leninist theories of the essence of property. Biul.SNO LGU no.1:114-122 '58. (MIRA 13:6)
(Property)

VASHCHILINA, L.M. CAND PHYSIO-MATH SCI.

Dissertation: "Investigation of V. Ya. Struve's Observations Conducted with a Passage Instrument in the First Vertical, at Pulkovo (1840-42)."

16 June 49
Moscow State V imeni M.V. Lomonosov.

SO Vecheryaya Moskva
Sum 71

VASHCHILKO, S.L., aspirant

Labor involving a giant fetus. Zdrav. Belor. 6 no.9:40-41 S '60.
(MIRA 13:9)

1. Iz Baranovicheskogo gorodskogo rodil'nogo doma (glavnyy vrach - zasluzhennyy vrach BSSR V.P. Shchegoleva).
(FETUS)

VASHCHILKO, S.L., aspirant

Methods for determining the size of the fetus in parturients. Zdrav. Bel. 6 no.11:14-17 N '60. (MIRA 13:12)

1. Iz kafedry akusherstva i ginekologii (zaveduyushchiy - professor I.M. Starovoytov) Minskogo meditsinskogo instituta i iz Baranovichskogo gorodskogo rodil'nogo doma (glavnyy vrach V. Shchegoleva).
(FETUS)

VASHCHILKO, S.L., aspirant

Labor complications for large fetuses in the placental and post-partum periods. Zdrav. Bel. 7 no.9:37-41 S '61. (MIRA 14:10)

1. Iz akushersko-ginekologicheskoy kliniki (zaveduyushchiy - prof. I.M.Starovoytov) Minskogo meditsinskogo instituta i iz Baranovichskogo gorodskogo rodil'nogo doma (glavnyy vrach - zasluzhennyy vrach BSSR V.P. Shchegoleva). Nauchnyy rukovoditel'-chlen-korrespondent AMN SSSR L.S.Persianinov.
(LABOR, COMPLICATED)

VASHCHILKO, S.L., aspirant

Characteristics of the course of pregnancy and management of labor in women with large fetuses. Akush.i gin. no.5:72-78 '61.
(MIRA 15:1)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. I.M. Starovoytov) Minskogo meditsinskogo instituta i Baranovicheskogo gorodskogo rodil'nogo doma (glavnyy vrach - zasluzhennyy vrach BSSR V.B. Shchegoleva; nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. L.S. Persianinov).
(PREGNANCY) (LABOR (OBSTETRICS))

VASHCHILKO, S.L.

Frequency and characteristics of asphyxia of large fetuses. Sov. med. 25 no.5:131-133 My '61. (MIRA 14:6)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. I.M.Starovoytev) Minskogo gosudarstvennogo meditsinskogo instituta i Baranovichskogo gorodskogo rodil'nogo doma (glavnyy vrach - zasluzhennyy vrach BSSR V.P.Shchegoleva; nauchnyy rukovoditel' - chlen-korrespondent Akademii meditsinskikh nauk SSSR zasluzhennyy deyatel' nauki BSSR prof. L.S.Persianinov).

(ASPHYXIA NEONATORUM)

VASHCHILKO, S.L., aspirant

Perinatal mortality of large fetuses. Zdrav. Bel. 8 no.4:39-42 Ap '62. (MIRA 15:6)

1. Iz Baranovichskogo gorodskogo rodil'nogo doma (glavnyy vrach - zasluzhennyy vrach BSSR V.P. Shchegoleva). Nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR professor L.S. Persianinov.

(INFANTS (STILLBIRTH) (NEWBORN)—MORTALITY)

VASHCHILKO, S.SL. (Baranovichi)

Problem of assistance during delivery of the shoulders of the fetus. Fel'd. i akush. 27 no.12:14-15 D'62. (MIRA 16:7)
(LABOR, COMPLICATED)

VASHCHILKO, S.L., aspirant

Causes of the development of large and gigantic fetuses. Vop.okh. mat.i det. 8 no.3:61-64 Mr '63. (MIRA 16:5)

1. Iz kafedry akusherstva i genikologii (zav. - prof. I.M. Starovoytov) Minskogo meditsinskogo instituta i Baranovichskogo gorodskogo rodil'nogo doma (glavnyy vrach - zasluzhennyy vrach BSSR V.P. Shchegoleva); nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR L.S. Persianinov.
(FETUS)

VASHCHILKO, S.L.

Surgical delivery and injuries to the mother in labor with a large fetus. Sov. med. 26 no.4:117-121 Ap '63.
(MIRA 17:2)

1. Iz kafedry akusherstva i ginekologii (zav. - prof. I.M. Starovoytov) Minskogo meditsinskogo instituta i Baranovichskogo gorodskogo rodil'nogo doma (glavnyy vrach - zasluzhennyy vrach BSSR V.P. Shchegoleva), nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. L.S. Persianinov.

VASHCHIIKO, V. Ya.

"Clinical and Experimental Reasons for the Use of Fish Oil During the First Year of Life of Premature Children." Cand Med Sci, Khar'kov, Medical Inst, Khar'kov, 1955. (KL,No 10, Mar 55)

SO: Sum. No. 670, 29 Sep 55--Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (15)

USSR/Human and Animal Physiology. Metabolism. Nutrition. T-2

Abs Jour: Ref Zhur-Biol., No 12, 1958, 55314.

Author : Vashchilko, V. Ya.
Inst :
Title : The Clinical and Experimental Basis for Feeding Cod-Liver Oil to Premature Babies in Their First Year of Life.

Orig Pub: Pediatriya, 1957, No 7, 34-35.

Abstract: No abstract.

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GIL', S.A.; VASHCHILKO, V.Ya.; YUMASHEVA, R.P.; IRZHANSKAYA, K.N.; GOFMAN, R.N.; YAKOVLEVA, A.N.

Clinical and physiological basis of diets of young children (with a single daytime sleep period). Vop.pit. 19 no.4:19-23 Jl-Ag '60. (MIRA 13:11)

1. Iz otdela fiziologii i vospitaniya rebenka (zav. - doktor med. nauk S.A. Gil') i fiziologicheskoy laboratorii (zav. kand.med.nauk R.N. Gofman) Khar'kovskogo instituta okhrany materintstva i detstva imeni N.K. Krupskoy.
(INFANTS—NUTRITION)

RATEVSKIY, F., general-mayor tankovykh voysk; VASHCHILO, I., podpolkovnik; STEPANYAN, V., gvardii kapitan

Basic military training for the young recruits; comments on articles published in no.11, 1958. Voen. vest. 39 no.2:59-61 '59.
(MIRA 12:7)

(Military training)

CHEKMAREV, A.P., professor; PAVLOV, V.L., inzhener; KLIMENKO, V.M., kandidat tekhnicheskikh nauk; YSUKANOV, G.B, inzhener; BORTUNOV, Ye.M., inzhener; VASHCHILO, P.A., inzhener.

Intensifying the reduction operation in the 1150 blooming mill. Stal' 15 no.10:916-921 O '55. (MLRA 9:1)

1.Deystvitel'nyy chlen AN USSR (for Chekmarev. 2.Institut chernoy metallurgii AN USSR, zavod imeni Dzerzhinskogo, Tekhnicheskoye upravleniye Ministerstva chernoy metallurgii USSR.
(Rolling mills)

VASHCHILO, P.A.

137-58-2-2848

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 2, p 93 (USSR)

AUTHOR: Vashchilo, P.A.

TITLE: Experience in the Use of Rolls at the im. Dzerzhinskiy Plant (Opyt ekspluatatsii prokatnykh valkov na zavode im. Dzerzhinskogo)

PERIODICAL: Tr. Nauchno-tekhn o-va chernoy metallurgii, 1956, Vol 10, pp 143-151

ABSTRACT: Comparative data are given on the durability of cast-iron rolls in the period between regrindings. Included are curves showing the relationship of roll durability to roll hardness in the rolling of a 45x45 mm angle bracket and a flanged ring. Installed on a 330 mill since 1949 were rolls with cast grooves; these were 2-5 times more durable than smooth-cast rolls. In the rolling of angle irons, the finishing stands of mills 280, 330, and 500 currently operate with chilled rolls having cast grooves. Possessing very hard grooves (55-65 H_{sh}) and very strong cores, these rolls are highly breakage-resistant. Data are given on roll durability in the rolling of sections of various types. Increasing roll hardness on a rail-structural rolling mill from 33-38 H_{sh} to 40-45 H_{sh} increased

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137-58-2-2848

Experience in the Use of Rolls at the im. Dzerzhinskiy Plant

maximum permissible contact loads from 400-450 tons to 500-650 tons. Alloying the cast iron with Mg increased the permissible groove-surface load of rail-forming rolls to 700-1100 tons.

D.M.

1. Rolling mills--Applications 2. Rolls--Durability 3. Rolls--Grinding
4. Angles--Rolling

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VASHCHILLO, P.A.

Pile extension for driving reinforced concrete piles. Rats.i izobr.predl.v stroi. no.58:12-13 '53. (MLRA 7:2)
(Concrete piling)

S/096/62/000/006/003/011
E193/E383

AUTHORS: Dolinskaya, L.A., Candidate of Technical Sciences, Vashchilo, T.P. and Kadinova, A.S., Engineers

TITLE: The effect of heat-treatment conditions on the structure and properties of steels 12Kh1MF (12Kh1MF) and 15Kh1M1F (15Kh1M1F)

PERIODICAL: Teploenergetika, no. 6, 1962, 20 - 24

TEXT: Cr-Co-V steels, 12Kh1MF and 15Kh1M1F, are widely used in the manufacture of boilers as materials for steam conduits and manifold tubes. It has been found, however, that when heat-treatment recommended for these steels (normalizing and tempering at 750 - 760 °C) is applied to such tubes, a final product is obtained which lacks homogeneity of its mechanical properties, the impact strength in particular. Thus, in the case of thick-walled tubes the impact-strength values greater than 20 kgm/cm^2 and lower than 2 kgm/cm^2 have been observed. Preliminary study of the manufacturing process revealed that the cooling rates during the normalisation treatment varied

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within very wide limits. Since this factor could be responsible for the wide variation in the mechanical properties, the investigation described in the present paper was undertaken. The effect of the rate of cooling from the austenitic range on the mechanical properties of the steels studied before and after tempering was investigated in the following manner. Test pieces, 14 x 14 x 60 mm, cut from hot-rolled tubes, were heated to 980 °C, held at this temperature for 30 min and then cooled in the furnace and in air, or quenched in water or oil. The cooling rates obtaining in industrial practice were simulated by cooling in air and reducing the cooling rate by the application of metal jackets. In this way, the following cooling rates were ensured: 2 400 °C/min (water quenching); 800 °C/min (oil quenching); 48 °C/min (air cooling); 8.3 °C/min (air cooling in a thin jacket); 3.7 °C/min (air cooling in a thick jacket); 1 °C/min (furnace cooling). The impact strength of specimens cooled from the austenitic range was determined and their microstructure examined, similar experiments being conducted on specimens normalized and tempered

at various temperatures. The effect of various heat-treatment conditions on the ductile-brittle transition temperature was also studied. Several conclusions were reached.

1) As the rate of cooling from the austenitic range is reduced, the impact strength of steel 12Kh1MF after tempering (3 hrs at 750 °C) increases from about 16 kgm/cm^2 for water-quenched material to about 22 kgm/cm^2 for furnace-cooled specimens.

2) The impact strength of steel 15Kh1M1F (tempered for 3 hours at 750 °C) decreases with decreasing rate of cooling from the austenitic range, reaching a minimum of about 6 kgm/cm^2 at the cooling rates of 3.7 - 8.3 °C per min, i.e. at rates which obtain in industry during normalizing of tubes of various sizes.

3) The impact strength of steel 15Kh1M1F after normalizing (cooling from the austenitic range at a rate of 4 - 8 °C per min) and tempering is lower than that of steel 12Kh1MF after the same treatment.

4) The impact strength of steel 12Kh1MF after tempering does

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The effect of heat-treatment ....

not change if normalizing is replaced by quenching. On the other hand, the impact strength of steel 15Kh1M1F after quenching and tempering is considerably higher than after normalizing and tempering (14 kgm/cm^2 in the former and 6 kgm/cm^2 in the latter case).

5) Some melts of steel 15Kh1M1F show a tendency to temper brittleness, the impact strength of some test pieces tempered at 700 °C being as low as 1 kgm/cm^2. The critical tempering-temperature range is 500 - 750 °C, the upper limit of this range varying between 650 and 750 °C, depending on the nature of the melt.

6) The wider the critical tempering-temperature range and the steeper the temperature gradient in the tube during heat-treatment, the greater is the risk of embrittlement.

7) The effect of the rate of cooling from the austenitic range on the ductile-to-brittle transition temperature is demonstrated in Fig. 4, where the impact strength of steel 12Kh1MF (graph a)

Card 4/05

The effect of heat-treatment....

and 15KhlM1F (graph 5), tempered for 3 hours at 750 °C, is plotted against the test temperature (°C), various curves relating to specimens which had been cooled from the austenitic range at the following rates: 1) 1 °C/min; 2) 3.7 °C/min; 3) 8.3 °C/min; 4) 48 °C/min; 5) 800 °C/min; 6) 2 400 °C/min. There are 3 figures.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy trubnyy institut (Ukrainian Scientific Research Tube Institute)

Card 5/[illegible]5

L 46252-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6010094 (N) SOURCE CODE: UR/0129/66/000/003/0039/0044

AUTHORS: Dolinskaya, L. A.; Mal'tsev, V. F.; Beylinova, T. A.; Krivosheyeva, A. A.; Kosaya, A. I.; Vashchilo, T. P.

ORG: Ukrainian Scientific Research Institute for Pipes (Ukrainskiy nauchno-issledovatel'skiy trubnyy institut) 38

TITLE: Embrittlement during tempering of chromium-molybdenum-vanadium steels 16

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 3, 1966, 39-44, and insert facing p. 49

TOPIC TAGS: TEMPERING, MOLYBDENUM STEEL, alloy steel, chromium steel, vanadium steel, pearlitic steel, austenite steel / 12Kh1MF steel, 15Kh1M1F steel

ABSTRACT: The influence of the temperature of austenization, of the cooling rate after austenization, and of tempering temperature on the structure of several specimens of 12Kh1MF and 15Kh1M1F steels was studied. The work supplements the results of L. A. Dolinskaya (Stal', 1963, No. 3). The chemical composition (percent carbides), microstructure, and coercive strength of the tempered specimens were determined. The experimental results are presented in graphs and tables (see Fig. 1). It was found that both steels, 12Kh1MF and 15Kh1M1F, tend to embrittlement as a result of tempering at 500—700C. It is concluded that the chief cause for the embrittlement in pearlitic steels during tempering is the formation of carbides resulting from the dissociation of intermediate structures.

UDC: 620.178.154.2:669.14.018.46

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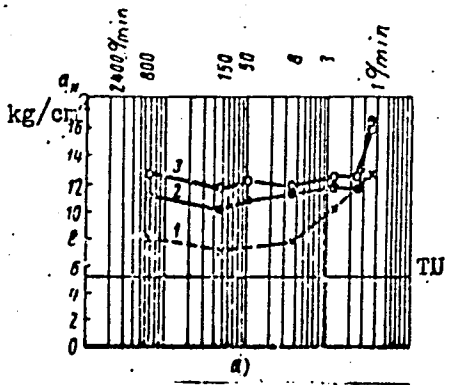
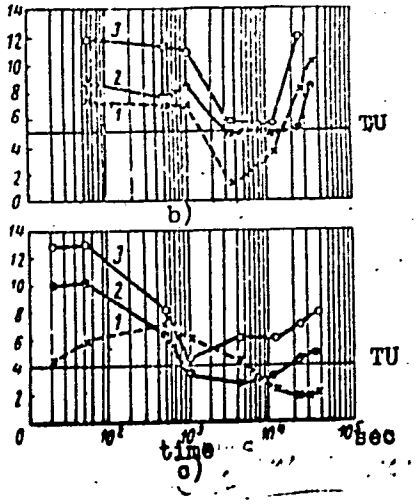
ACC NR: AP6010094

Fig. 1. Change in the impact viscosity as a function of the cooling rate: a - steel 12Kh1MF, 950C; b - 12Kh1MF, 1050C; c - 15Kh1MF, 1000—1070C; 1 - without tempering; 2 - after tempering at 700C; 3 - after tempering at 750C.





Orig. art. has: 2 tables and 6 graphs.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 003

Card 2/2 hs

ACC NR: AT7000192 SOURCE CODE: UR/000/64/000/000/0205/0222

AUTHOR: Vashchilov, Yu. Ya.

ORG: none

TITLE: Methods and results of investigations of the density profile of the earth's crust in the southern part of the Verkhoyan-Chuktoskaya folded region

SOURCE: Moscow. Universitet. Kafedra geofizicheskikh metodov issledovaniya zemnoy kory. Geofizicheskiye issledovaniya (Geophysical research), no. 1. Moscow, Izd-vo Mosk. univ., 1964, 205-222

TOPIC TAGS: earth crust, rock density, gravity survey, ~~geophysical~~ geologic survey, petrology

ABSTRACT: Investigations of the rock densities of the southern part of the Verkhoyansk-Chukotskaya folded region were carried out in three ways: 1) direct determination of rock densities from samples with subsequent statistical processing of the results, 2) measurement of the rock densities in situ by gravity observations in mines, and 3) determination of the densities through the interpretation of geophysical data. Density was determined from gravity anomalies with the use of the author's bilogarithmic chart and other methods. In addition, the determination of rock densities was made by a comprehensive interpretation of various geophysical data: gravity, seismic, and magnetic. The first two methods yield absolute density values. The third method yields gradient values. The results of all density determinations are given in tabular form. Orig. art. has: 2 formulas.

Card 1/1 SUB CODE: 08/ SUBM DATE: 05Nov64/ ORIG REF: 009/

L 08533-67 EWT(1) GW

ACC NR: AP6035597 SOURCE CODE: UR/0387/66/000/010/0040/0047

33

AUTHOR: Vashchilov, Yu. Ya.; Markunskiy, V. S. B

ORG: Geology Department, Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet. Geologicheskiy fakul'tet)

TITLE: Method of gravimetric investigation of a layered block structure of the Earth's crust

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 10, 1966, 40-47

TOPIC TAGS: earth crust, gravity anomaly, ~~Conrad discontinuity~~, Mohorovicic discontinuity, geologic structure/ ~~Ciscaucasia~~

ABSTRACT: Using Ciscaucasia as a test area, a method of interpreting gravity observations, based on an assumed layered block structure of the Earth's crust, is proposed for investigating the deep-seated structure. The method makes no use of seismic data but is based on the use of log-log function charts for the determination of the lower edges of bodies in the form of parallelepipeds from Δg anomalies and the statistical processing of the results obtained. After the depths of the lower edges have been determined, polygons or histograms of their distribution are constructed for three cases: 1) where the upper edge of the disturbing bodies coincides with the roof of the folded basement, 2) where the upper edge is on the observation surface and local salt-dome tectonics have been taken into account, and 3) where the upper

Card 1/2 UDC: 550.831

L 08533-67

ACC NR: AP6035597

edge is on the observation surface, but local salt-dome data are disregarded. Data obtained on the deep-seated structure of Ciscaucasia indicate that the depths of vertical faults bounding deep-lying blocks of rocks with various densities coincide with the horizontal interfaces of the Earth's crust, the granitic roof, the Conrad discontinuity, the Mohorovicic discontinuity, and others not having worldwide extent. This pattern holds true for other regions of the USSR as well. This method of interpretation of gravity anomalies also makes it possible to determine the distribution and depths of deep-seated fault systems. Faults coincide with zones of maximum horizontal gravity gradients of Δg anomalies. In addition, since interpretation with the log-log charts yields not only the z_2 values (depths of the lower edges), but also $\Delta\sigma$ values (horizontal density variations) as well, it is also possible to determine the pattern of deep-lying density inhomogeneities and petrographic characteristics. Orig. art. has: 2 figures and 4 formulas.

SUB CODE: 08/ SUBM DATE: 30Nov65/ ORIG REF: 003/ ATD PRESS: 5103

Card 2/2

VASHCHILOV, Yu.N.

Taking into consideration terrain corrections in gravimetric observations in mines and wells. Razved. i prom. geofiz. no.51: 71-75 '64. (MIRA 17:11)

VASHCHILOV, Yu.Ya.

Using geophysical data for studying deep faults in the southern part of the Yana-Kolyma fold area and Okhotsk-Chaun volcanic belt and their role in the formation of granite intrusions and structures. Sov.geol. 6 no.4:54-72 Ap '63. (MIRA 16:4)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.
(Soviet Far East—Faults (Geology)) (Soviet Far East—Rocks, Igneous)

VASHCHINSKAYA, N.V.

Mineral oil and DDT as a combined insecticide for control of apple and fruit moth. Izvest. Akad. Nauk Armyan. S.S.R. 3, No.8, Biol. i Sel'skokhoz. Nauki 727-32 (in Russian; in Armenian) '50. (MLRA 4:10)
(CA 47 no.17:8958 '53)

VASHCHINSKAYA, N.V.

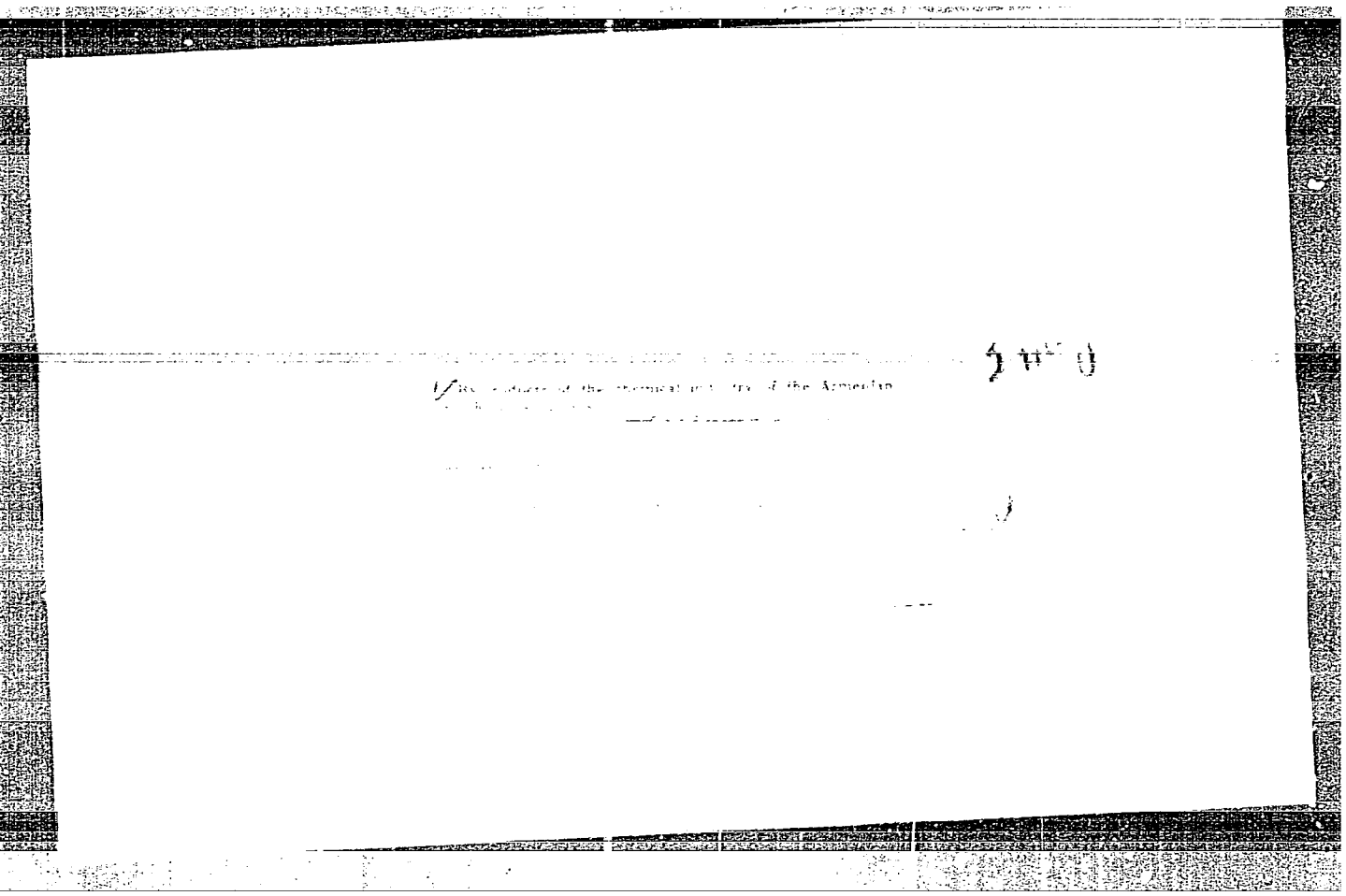
Possibilities of treating stone fruit trees with mineral oils in summer. Izv.AN Arm.SSR.Biol.i sel'khoz.nauki. 4 no.5:481-485 '51. (MLRA 9:8)

1. Institut plodovodstva Akademii nauk Armyanskoy SSR.
(Mineral oils)
(Fruit--Diseases and pests)
(Spraying and dusting)

VASHCHINSKAYA, N. V.

"Synanthropic Flies and Development of Methods to Control Them Under the Ecological Conditions in the Armenian SSR." Cand Biol Sci, Department of Biological Sciences, Acad Sci Armenian SSR, Yerevan, 1953. (RZhBiol, No 3, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55



VASHCHINSKAYA, N.V.

Migration distance and speed of the housefly. Izv.AN Arm.SSR.Biol.1 sel'khoz.nauki. 9 no.4:73-77 Ap '56. (MLRA 9:8)
(Flies) (Insects--Migration)

VASHCHINSKAYA, N.V.

Phenology of two subspecies of domestic flies in the Armenian SSR. (MLRA 9:6)
Med. paraz. 25 no.1:40-42 Ja-M '56

1. Iz Ministerstva zdravookhraneniya Armyanskoy SSR.
(FLIES
Musca domestica & Musca domestica vicina, phenol. in Armenian SSR)
(CLIMATE, eff.
on Musca domestica domestica & Musca domestica vicina in Armenian SSR)

VASHCHINSKAYA N.V.

USSR/Zooparasitology - Mites and Insects as Disease Vectors. G.
Insects.

Abs Jour : Ref Zhur - Biol., No 21, 1958, 95357

Author : Vashchinskaya, N.V.
Inst : -
Title : On Synanthropic Flies in the Armenian SSR.

Orig Pub : Med. parazitol. i parazitarn. bolezni, 1957, 26, No 4, 463-470

Abstract : Fauna of synanthropic flies in the cities, rayon centers and villages of the semi-desert (Ararat Plain) and steppe zone (Leninnakan Plateau, Sevan Hollow) of the Armenian SSR are described. Data is given on seasonal occurrence of a number of the different fly species, which are systematically met in the locations. An analysis of the connection which exists between the disease rate of acute intestinal infections and the number of house flies in the different climatic zones of Armenia is given.

Card 1/1

VASHCHINSKAYA, N.K.

Using chlorinated xylene to destroy larvae and pupae of synanthropous flies. Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 11 no. 5:107-112 My '58. (MIRA 11:7)

1. Ministerstvo zdravookhraneniya ArmSSR.
(Xylene)
(Flies--Extermination)

VASHCHINSKAYA, N.V.

Changes in the sex ratio of the soft scale Paleolecanium bituberculatum (Torg.) due to the effect of ecological factors. Izv. AN Arm. SSR. Biol. nauki 14 no.5:81-84 My '61. (MIRA 14:7)

1. Institut vinodeliya, vinogradarstva i plodovstva Ministerstva sel'skogo khozyaystva Armyanskoy SSR.
(ARMENIA--SCALE INSECTS) (SEX (BIOLOGY))