NORIN, B.N.; PANKINA, A.T.

Interrelations between microclimate and the structure of vegetation in the forest tundra. Bot. zhur. 48 no.10:1409-1423 O '63. (MIRA 17:1)

1. Botanicheskiy institut imeni V.L.Komarova AN SSSR, Leningrad.

BEYDEMAN, Irina Nikolayevna; BESPALOVA, Zoya Georgiyevna; RAKHMANINA, Aleksandra Timofeyevna; YUNATOV, A.A., doktor biolog.nauk, otv.red.; VIKHREV, S.D., red.izd-va; KRUGLIKOVA, N.A., tekhn.red.

[Studies on ecology, geobotany, agriculture, and drainage in the Kura-Aras Lowland of Transcaucasia; natural and anthropogenic changes of plant communities, water conditions and root systems of plants] Ekologo-geobotanicheskie i agromeliorativnye issledovaniia v Kura-Araksinskoi nizmennosti Zakavkaz'ia; estestvennye i antropogennye smeny rastitel'nykh soobshchestv, vodnyi rezhim i kornevye sistemy rastenii. Moskva, Izd-vo Akad.nauk SSSR, 1962. 464 p.
(MIRA 15:2)

(Kura Lowland--Botany)

NASYROV, Yu.S.; RAKHMANINA, K.P.

Physiological characteristics of barley as related to its growing in various vertical belts of Tajikistan. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSR 3:68-81 '64. (MIRA 18:4)

RAKHMANINA, K.F.

Water balance of dominant species of some types of subalpine vegetation. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSR 2:163-193 '62.
(MIRA 16:4)

(Anzob Pass--Alpine flora)
(Plants--Water requirements)

L 33660-66 EWT(1) SCTB DD

ACC NR: AT6013448 SOURCE CODE: UR/3179/65/007/000/0133/0141

AUTHOR: Nasyrov, Yu. S.; Rakhmanina, K. P. 27 B+1

ORG: none

TITLE: Photosynthesis and transpiration of Gissar Range plants

SOURCE: Vsesoyuznoye botanicheskoye obshchestvo. Problemy botaniki, v. 7, 1965. Voprosy biologii i fiziologii rasteniy v usloviyakh vysokogoriy (Problems of biology and physiology of plants at high altitudes), 133-141

TOPIC TAGS: plant ecology, photosynthesis, plant morphology, climatic influence

ABSTRACT: Photosynthesis intensity and transpiration rate of plants growing at a 3500 m altitude in the Gissar Range were investigated in 1956-57 by the Botanical Institute of the AN TadzhSSR. The climate of the area characterized by considerable daily and seasonal temperature shifts, dryness of air, high insulation, and little precipitation is classified as a moderately humid high altitude subtropic zone. Findings show that photosynthesis intensity and transpiration activity of high altitude plants is relatively low. The photosynthesis apparatus of

Card 1/2

RAKHMANINA, K.P.

Water balance of the dominant species of some types of woody plants in the Kondara Gorge. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSR 1:41-75 '62. (MIRA 16:3)
(Kondara Gorge--Trees--Water requirements)

LAKHMANINA, K.P.

Water balance of dominant and associated species of shortgrass semi-savannas. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSR 2:135-162 '62. (MIRA 16:4)

(Tajikistan--Prairies) (Plants--Water requirements)

RAKHMANINA, K.P.; NASYROV, Yu.S.

Photosynthesis and water balance in plants as related to their ecology and origin. Trudy Otd. fiziol. i biofiz. rast. AN Tadzh. SSSR no.3:23-28 '63. (MIRA 16:9)

[redacted]

Characteristics of water balance in some dominant plant species of Tajikistan. Izv. Otd. biol. nauk AN Tadzh. SSR no.1 32-44 '62. (MIRA 17:10)

1. Otdel fiziologii i biofiziki rastenii AN Tadzhikskoy SSR.

RAKHMANINA, K. P.

Dissertation defended in the Botanical Institute imeni V. L. Komarov for the academic degree of Candidate of Biological Sciences:

"Water Conditions of Altitude-Replacing Type Plants of Tadzhikistan."

Vestnik Akad Nauk No. 4, 1963, pp. 119-145

L 17313-63 EWT(1)/EWP(q)/EWT(m)/FCS/BDS/ES(v) AFFTC/ASD/ESD-3
Pe-4 TF

ACCESSION NR: AP3005489 S/0030/63/000/008/0084/0088

AUTHOR: Rakhmaninov, O. I. (Cuba) 74 67

TITLE: Friendship between SSSR and Cuban scientists. Cuban scientists in the Soviet Union

SOURCE: AN SSSR. Vestnik, no. 8, 1963, 84-88

TOPIC TAGS: Soviet scientist, Cuban scientist, conference

ABSTRACT: At the invitation of M. V. Keldy*sh, president of the SSSR Academy of Sciences, a delegation of the Cuban Academy of Sciences visited the Soviet Academy during the period of May 9-30th. It was headed by Dr. Antonio Nuñes Jimenez, president of the Cuban Academy of Sciences, and had among its members Professor Julio le Riverend, Director of the Historical Institute, and Olejo Leñar Valdez, a member of the National Commission of the Academy. A brief biography of Dr. Jimenez is given. Today 1 220 000 children are enrolled in Cuban schools and 70 000 students in colleges. The Cuban Academy of Sciences operates the Institutes of Biology, of Complex Nerve Activity, of Geography, Cartography, Ethnography, Folklore, and History. Institutes of Meteorology and Scientific Information are being organized. The departments of Havana University are enumerated. During their visit, the Cuban

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L 17313-63

ACCESSION NR: AP3005489

7

delegates became acquainted with a number of scientific institutions in Moscow, Leningrad, and Kiev and met leading workers from the Soviet and Ukrainian Academies of Science and from the universities as well. Nuñes Jimenez showed much interest in studies dealing with solar energy and the energy of the wind and devoted much attention to the performance of the All-Union Institute of Scientific Technical Information. There followed visits to the Institute of Ethnology and to the Zoological Institute of the Academy, where the delegates became interested in marine biology. In Leningrad the delegates had consultations with the academician Kostenko and the rector of Leningrad University on the organization of education and the training of scientists. They also participated in a session of the Geographic Society. In Kiev the delegates were received by the president of the Ukrainian Academy, B. E. Paton, as well as by the rector of the University of Kiev. Upon their return to Moscow, the delegates participated in a session of the Academy's Presidium, where speeches were exchanged, praising the achievements and political organizations of their respective countries. The visit culminated in a presentation to Dr. Jimenez of a model space satellite that took the picture of the other side of the moon and the signing of an agreement for future cooperation between the two Academies. This agreement includes coordination of investigations and exchanges of equipment, literature, and scientific workers. A joint project of oceanographic investigations in general and of marine biology in particular was arranged. Help

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L 17313-63
ACCESSION NR: AP3005489

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was promised in the establishment in Cuba of an Institute of Scientific Information and in the training of scientific cadres.

ASSOCIATION: none

SUBMITTED: 00 DATE ACQ: 06Sep63 ENCL: 00

SUB CODE: AD NO REF SOV: 000 OTHER: 000

Card 3/3

NASYROV, Yu.S., otv. red., SAPOZHNIKOV, D.I., red.; PROKOF'YEV, A.A., red.; ZALENSKIY, O.V., red.; MAKSIMOV, A.N., red.; KARIMOV, Kh.Kh., red.; LOGINOV, M.A., red.; GILLER, Yu.Ye., red.; USMANOV, P.D., red.; KAS'YANENKO, A.G., red.; RAKHMANINA, K.P., red.

[Contribution of plant physiology to agriculture; problems of photosynthesis and metabolism] Fiziologiia rastenii - sel'skomu khoziaistvu; voprosy fotosinteza i obmena veshchestv. Dushanbe, Izd-vo AN Tadzhikskoi SSR, 1965. 131 p. (MIRA 18:4)

1. Akademiya nauk Tadzhikskoy SSR, Dushanbe. Institut fiziologii i biofiziki rastenii.

MAMEDZADE, S.A., RAKHMANOVA, M.V.

Errors in the diagnosis of echinococcosis and their prevention.
Azerb. med. zhur. 41 no.2:11-18 F '64 (MIRA 18:1)

RAKHMANINA, N.A.

Toxicological characteristics of industrial polyacrylamide.
Nauch. trudy AKKH no.22:56-59 '63. (MIRA 18:5)

RAKH[illegible], [illegible], red.

[New methods for the reconditioning of parts and the purification of fuel] Novye metody vosstanov[illegible] detalei i ochistki topliva. Moskva, 1963. 36 p.

1. Moscow. Tsentral'nyy [illegible] institut informatsii i tekhniko-[illegible] po [illegible], traktornogo [illegible] [illegible] promyshlennosti [illegible].

GABRIYEL'YANTS, G.A., glav. red.; AZIZKHANOV, D.A., red.; VENGERSKIY, V.M., red.; YEREMENKO, V.Ye., red.; YERSHOVA, Ye.M., red.; ZININ, T.G., red.; KOVYNEV, N.P., red.; RAKHMANKULOV, K.M., red.; SLIVKIN, LZ., red.; TIKHOMIROV, A.I., red.; YUNUSOV, F.Yu., Geroy Sotsialisticheskogo Truda, red.; AKBAROV, A., red.; BAKHTIYAROV, A., tekhn. red.

[Materials of the Conference of Agricultural Workers of Central Asia, Azerbaijan, and Southern Areas of Kazakhstan] Materialy Soveshchaniya rabotnikov sel'skogo khozyaystva respublik Sredney Azii, Azerbaidzhana i iuzhnykh oblastei Kazakhstana, Tashkent, 1961. Tashkent, Gos. izd-vo Uzbekskoi SSR, 1962. 358 p.(Za rabotu, tovarishchi khlopkoroby!) (MIRA 15:3)

1. Soveshchaniye rabotnikov sel'skogo khozyaystva respublik Sredney Azii, Azerbaydzhana i yuzhnykh oblastey Kazakhstana, Tashkent, 1961. 2. Predsedatel' kolkhoza imeni Karla Marksa Oshskogo rayona Kirgizskoy SSR (for Yunusov).
(Soviet Central Asia--Agricultural workers)
(Azerbaijan--Agricultural workers)
(Kazakhstan--Agricultural workers)

RAKHMANKULOVA, R.G.; FALUNINA, Z.F.

Determining the hardness of wheat bread by the action of β-amylase on bread starch. Izv. vys. ucheb. zav.; pishch. tekh. no.2:129-133 '60. (MIRA 14:7)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti, kafedra obshchey tekhnologii pishchevykh proizvodstv i kafedra tekhnologii khlebopekarnogo proizvodstva.
(Bread)
(Amylase)

RAKHMANINA, A.T.

The developmental rhythm of plants in some phytocoenoses of the Terek-Kuma Plain and the ecological factors of their environment. Bot.zhur. 45 no.1:34-47 Ja '60.
(MIRA 13:5)

1. Botanicheskiy institut im. V.L.Komarova Akademii nauk SSSR, Leningrad.
(Terek Valley--Botany--Ecology)
(Kuma Valley--Botany--Ecology)

RAKHMALIYA, A.T.

Effect of the salinization degree of soils on the distribution of plants (based on the example of an Eastern Caucasian Solonchak). Trudy Bot. inst. Ser. 3 no.11:185-196 '57. (MIRA 10:8)
(Azerbaijan--Solonchak soils) (Botany--Ecology)

RAKHMANINA, A. T.

RAKHMANINA, A. T.: "The biological-ecological characteristics of crow communities.(Salsola dendroides Pall.) of the lowlands of eastern Transcaucasia." Acad Sci USSR. Botanical Inst imeni V. L. Komarov. Leningrad, 1956. (DISSERTATION FOR THE DEGREE OF CANDIDATE IN BIOLOGICAL SCIENCE)

So.: Knizhnaya letopis' No 15, 1956, Moscow

NOVOSELOVA, R.S.; RAKHMANINA, L.S.

Auricular flutter in a 5-year-old child [with summary in English]. Pediatriia 36 no.2:77-79 F '59. (MIRA 12:4)

1. Iz Detskoy klinicheskoy bol'nitsy No.2 imeni I.V. Rusakova (glavnyy vrach - zasluzhennyy vrach RSFSR V.A. Kruzhkov).
(AURICULAR FIBRILLATION, in inf. & child
in 5-year-old boy (Rus))

RAKHMANINOV, A. N.

Program for the observation points on the field-culture pests. Leningrad, 1930.
84 p. (Vsesoiuznaia Akademiia S.-Kh. nauk im. Lenina. Institut zashchity rastenii. Otdel prikladnoi entomologii i zoologii, no. 14)

1. Plants, Protection of - Russia.
2. Zoology; Economic.

RAKHMANINOV, S.S.

Vascular suture in infected gunshot wound; experimental study. (MLRA 8:7)
Vest.khir. 75 no.3:55-60 Ap '55.

1. Iz 1-y gospital'noy khirurgicheskoy kliniki (nach.-prof. E. V. Smirnov) Voyennomorskoy meditsinskoy akademii.
(WOUNDS AND INJURIES, experimental,
blood vessel, suture in gunshot wds.)
(BLOOD VESSELS, wounds and injuries,
exper. gunshot wds., suture)

RAKHMANINOVA, G.N., kandidat sel'skokhozyaystvennykh nauk.

Vitamin C content of the milk of the main cow breeds proposed for the Ukraine. Sbor.trud.Khar'.vet.inst. 20:89-100 '49. (MLRA 9:11)
(Ukraine--Milk--Analysis and examination)
(Ascorbic acid)

KORCHUNOV, L.G., prof., red.; LEONT'YEV, S.I., red.; ISAYENK , Ye.M., red.; RAKHMANKIN, S.G., red.; KASATKINA, N.I., red.

[Ways for the development of land transportation of lumber] Puti razvitiia sukhoputnogo transporta lesa; sbornik statei. Moskva, TSentr. nauchno-issl. in-t informatsii i tekhniko-ekon. issledovanii po lesnoi, tselliuiozno-bumazhnoi, derevoobrabatyvaiushchei promyshl. i lesnomu khoz., 1964. 168p. (MIRA 18:1)

1. Leningradskaya lesotekhnicheskaya akademiya im. S.M. Kirova (for Korchunov).

[redacted], [redacted].

Boilers

Cleaning more efficiently the boiler of power plant PVKS-[redacted]. S. I. Rikhmanin. L. s. prom. 12 No. 7, 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1952, Uncl.

SHARAKHMEDOV, A.; RAKHMANKULOV, A. [translator]; TIKHONOVA, I., red.
SALAKHUTDINOVA, A., tekhn. red

[Green light to cotton; from the experience of the Khrushchev Collective Farm Yangi-Yul' District, Tashkent Province] Khlopku zelenuiu ulitsu; iz opyta kolkhoza imeni Khrushcheva IAnguiul'skogo raiona Tashkentskoi oblasti. Tashkent, Gos.izd-vo UzSSR, 1961. 45 p. (MIRA 15:1)
(Yangi-Yul' District--Cotton growing)

KAGANOV, A. L., dotsent; RAKHMANKULOV, A. G.

Peripheral blood indices in normal Kuzbass inhabitants. Probl. gemat. i perel. krovi no.4:11-13 '62. (MIRA 15:4)

1. Iz kafedry propedevtiki vnutrennikh bolezney (zav. - dotsent A. L. Kaganov) Kemerovskogo meditsinskogo instituta (dir. - dotsent I. F. Popov)

(KUZNETSK BASIN--BLOOD--ANALYSIS AND CHEMISTRY)

Country : USSR
Category : Farm Animals. Q
The Honeybee.
Abs. Jour : Ref Zhur-Biol., No 21, 1958, 96945

Author : Rakhmankulov, F. Kh.
Institut. : Scientific Research Institute of Apiculture.
Title : A Measure of Increasing Red Clover Pollination by Bees.

Orig Pub. : Byul. nauchno-tekhn. inform. N.-i. in-ta pchelovodstva, 1957, No 2, 20
Abstract : It was established by experiments which were carried out on 21 bee colonies that by creating a bee-breeding hunger in the nest (by increasing free breeding and reducing bee breeding reserves) combined with training bees with aromatized syrup, the frequency with which the bees visited red clover (being a good bee-breeding carrier) increased by 324 percent and the seed yield increased by 180 percent as compared to bees which received the aromatized syrup only without a bee-breeding hunger having been created for them.

Card: 1/1

RAKHMANKULOV, S.

Intensity of photosynthesis and respiration in hybrids and self-pollinated lines of corn. Uzb. biol. zhur. 7 no.5:19-24 '63. (MIRA 18:11)

1. Nauchno-issledovatel'skiy institut selektsii i semenovodstva khlopchatnika.

VALIDOV, I.G.; RAKHMANKULOVA, G.M.

Physiological heterogeneity of skeletal muscle fibers. Nauk zap. Kyiv. un. 16 no.17:39-42 '57. (MIRA 13:2)
(MUSCLE)

RAKHMANKULOVA, R.G.; FALUNINA, Z.F.

Effect of ferments on bread hardening. Khleb. i kond. prom. 1 no.3:9-12 Mr '57. (MLRA 10:4)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Enzymes) (Bread)

RAKHMANKULOV, I.

Piercing by ray of light in shaftline laying. Mor.flot 15 no.10: 28-29 O'55. (MIRA 8:12)

1. Starshiy inzhener TsPKB-8
(Shipbuilding)

AUERMAN, L.Ya.; RAKHMANKULOVA, R.G.

Protein substances in the crumb of bread during staling. Khleb. i kond. prom. 1 no.2:22-26 F '57. (MIRA 10:4)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Proteins) (Bread)

RAKHMANKULOVA, R.G.; AUERMAN, L.Ya.

Preserving the freshness of bread by storing it in the frozen state. Khleb.i kond.prom. 1 no.6:3-5 Je '57. (MLRA 10:8)

1.Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Bread--Storage)

RAKHMANKULOVA, R. G. Cand Tech Sci -- (diss) "Study of the Process of Spoilage of Bread." Mos, ■ 1957. 15 pp 21 cm. (Min of Higher Education USSR, Mos ~~Engineering~~ Technological Inst of Food Industry), 100 ~~copies~~ copies (KL, 26-57, 109)

AUERMAN, L.Ya.; RAKHMANKULOVA, R.G.

Organoleptic methods for evaluating the degree of freshness of bread. Trudy MTIPP 4:118-120 '56. (MLRA 9:10)

(Bread)

AUERMAN, L.Ya.; BAKHMANKHLOVA, R.G.; BAZULINA, E.F.; TYURINA, G.V.; KHOLINA, L.S.

Determining the degree of staleness of wheat bread by the compressibility and crumbling capacity of the soft part of the bread. Trudy MTIPP 4:121-126 '56. (MLRA 9:10)

(Bread)

RAKHMANOV, A.

Economic accountability and systematization of wages. Muk.-elev. prom. 23 no.6:3 of cover Je '57. (MLRA 10:9)

1. Direktor Atkarskogo khlebopriyemnogo punkta Saratovskoy oblasti.
(Grain trade--Accounting)

BAKHMANOV, A.

Workers of the Atkarsk Milling Combine are getting ready for the second year grain crop of the seven-year plan. Muk.-elev. prom. 26 no.6:7-8 Je '60. (MIRA 13:12)

1. Direktor Atkarskogo mel'kombinata.
(Atkarsk--Grain elevators)

RAKHMANOV, A.

Equipping grain storage with mechanical ventilation systems.
Muk.-elev.prom. 22 no.1:11 Ja '56. (MLRA 9:5)

1. Krasnodarskiy zagotovitel'nyy punkt.
(Krasnodar District--Grain--Storage)

RAKHMANOV, A.

Transport seed corn in shelled form. Muk.-elev.prom.21 no.12:27-28 D '55. (MLRA 9:4)

1.Krasnodarskiy zagotovitel'nyy punkt.
(Corn (Maize)--Transportation)

RAKHANOV, A.

RAKHANOV, A.

Control of grain pests in Krasnodar Territory. Muk.-elev.prom. 20 no.11:27 N '54. (MLRA 8:3)

1. Krasnodarskiy zagotovitel'nyy punkt.
(Krasnodar Territory--Grain--Diseases and pests)

TARKHOV, Nikolay Alekseyevich; RAKHMANOV, Aleksandr Dmitriyevich; PATON, B.Ye., otv.red.; ASNIS, A.Ye., kand.tekhn.nauk, red. vypuska; KAZIMIROV, A.A., red.; MEDOVAR, B.I., red.; PODGAYETSKIY, V.V., red.; MAYEVSKIY, V.V., red.

[Electrodes for arc welding and hard facing] Elektrody dlia dugovoi svarki i naplavki. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1959. 63 p. (MIRA 13:2)
(Electric welding--Equipment and supplies)

RAKHMANOV, A D

PHASE I BOOK EXPLOITATION SOV/4099

Tarkhov, Nikolay Alekseyevich, and Aleksandr Dmitriyevich Rakhmanov

Elektrody dlya dugovoy svarki i naplavki (Electrodes for Arc Welding and Surfacing) Moscow, Mashgiz, 1959. 63 p. (Series: Biblioteka svarshchika) 10,000 copies printed.

Editorial Board: A.Ye. Asnis, A.A. Kazimirov, B.I. Medovar, B.Ye. Paton (Resp. Ed.), and V.V. Podgayetskiy; Eds.: V.V. Mayevskiy and A.Ye. Asnis; Chief Ed.(Southern Division, Mashgiz): V.K. Serdyuk, Engineer.

PURPOSE: This booklet is intended for welders.

COVERAGE: The booklet deals with processes taking place in manual arc welding. The main causes for the formation of defects on deposited metal and the effect of electrode coating and coating components on the quality of deposited metal are discussed. General information on modern methods of making electrodes are presented. The problem of electrode classification and selection for various

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types of work is also discussed. No personalities are mentioned. There are 8 references, all Soviet.

TABLE OF CONTENTS:

Electrodes for Arc (Cont.) SOV/4099

AVAILABLE: Library of Congress (TK 4660 .T3)

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VK/pw/jb
8-12-60

BOYEVA, K.I., inzh.; RAKHMANOV, A.D.

Conference and exhibit on welding in Hungary. Svar. proizv. no.1:41 Ja '64. (MIRA 17:1)

TARKHOV,N.A., inzhener; MARKELOVA,L.V., inzhener; RAKHMANOV,A.D., inzhener; VIKENT'YEV,V.V., inzhener

Practices in the design and use of metal electrode manufacturing equipment. Svar. proizv. no.10:16-22 O'55. (MLRA 8:12)

1. Opytnyy svarochnyy zavod TSentral'no nauchno-issledovatel'skogo instituta Ministerstva putey soobshcheniya
(Electrodes)

S/135/63/000/003/009/011
A006/A101

AUTHORS: Iskol'dskiy, I. I., Professor, Rakhmanov, A. D., Engineer

TITLE: Grade XP-19 (KhR-19) hardfacing electrodes with chrome carbides and borides in the coating

PERIODICAL: Svarochnoye proizvodstvo, no. 3, 1963, 32 - 33

TEXT: The authors developed new wear resistant KhR-19 electrodes, 4 mm in diameter, whose coatings contain chrome carbide, chrome boride, and graphite instead of ferroalloys. The hardness of a single-layer built-up with the new electrodes is HRA 79.8, and HRA 80.3 in two-layer hardfacing. Hardfacing is conducted on d-c or a-c, 200 - 210 amps intensity, 25 - 30 v voltage and hardfacing coefficient λ = 10.2 g/amp. hours. The investigation included the discovery of a simple method for obtaining Cr_3C_2. The charges were obtained by mixing chromium oxide and carbon black in 10-liter steel drums on rolls during 2 hours. The charges corresponded to the following stoichiometrical proportions: $3Cr_2O_3 + 13C = 2C_3C_2 + 9CO$; $7\ Cr_2O_3 + 27C = 2Cr_7C_3 + 21CO$; $23Cr_2O_3 + 81C = 2Cr_{23}C_6 + 69CO$. The optimum temperature range of experiments, conducted in a

Card 1/2

RAKHMANOV, A. G.

RAKHMANOV, A. G. Gadfly of cattle and the measures of the fight.

So: Veterinariya; 22; (2-3); February/March 1945; Uncl.
TABCON

BAKHLANOV, A.N. (Leningrad)

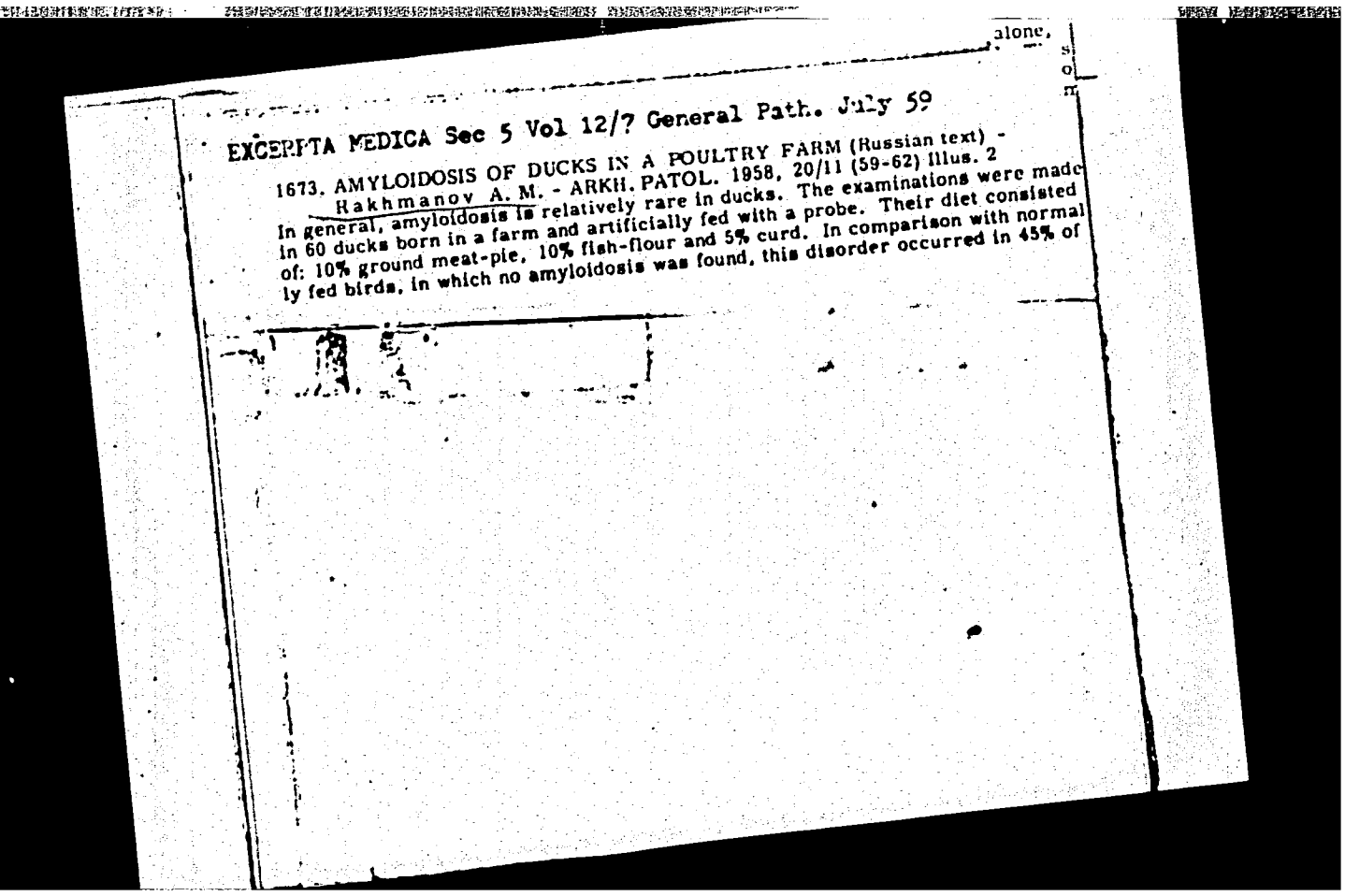
Amyloidosis in ducks bred and fattened on poultry farms.
Arkh.pat. 20 no.11:59-62 '58. (MIRA 12:8)

1. Iz kafedry patologicheskoy anatomii (zav. - prof.V.Z. Chernyak) Leningradskogo veterinarnogo instituta.
(AMYLOIDOSIS) (DUCKS--DISEASES AND PESTS)

RAKHMANOV, A. M.

RAKHMANOV, A. M.: "Pneumoaerocystitis and Amyloidosis of Ducks on Poultry Farms (Pathological-Anatomic Investigation)." Min Higher Education USSR. Leningrad Veterinary Inst. Chair of Pathological Anatomy. Leningrad, 1956. (Dissertation for the Degree of Candidate in Veterinary Science)

So: Knizhnaya Letopis', No. 19, 1956.

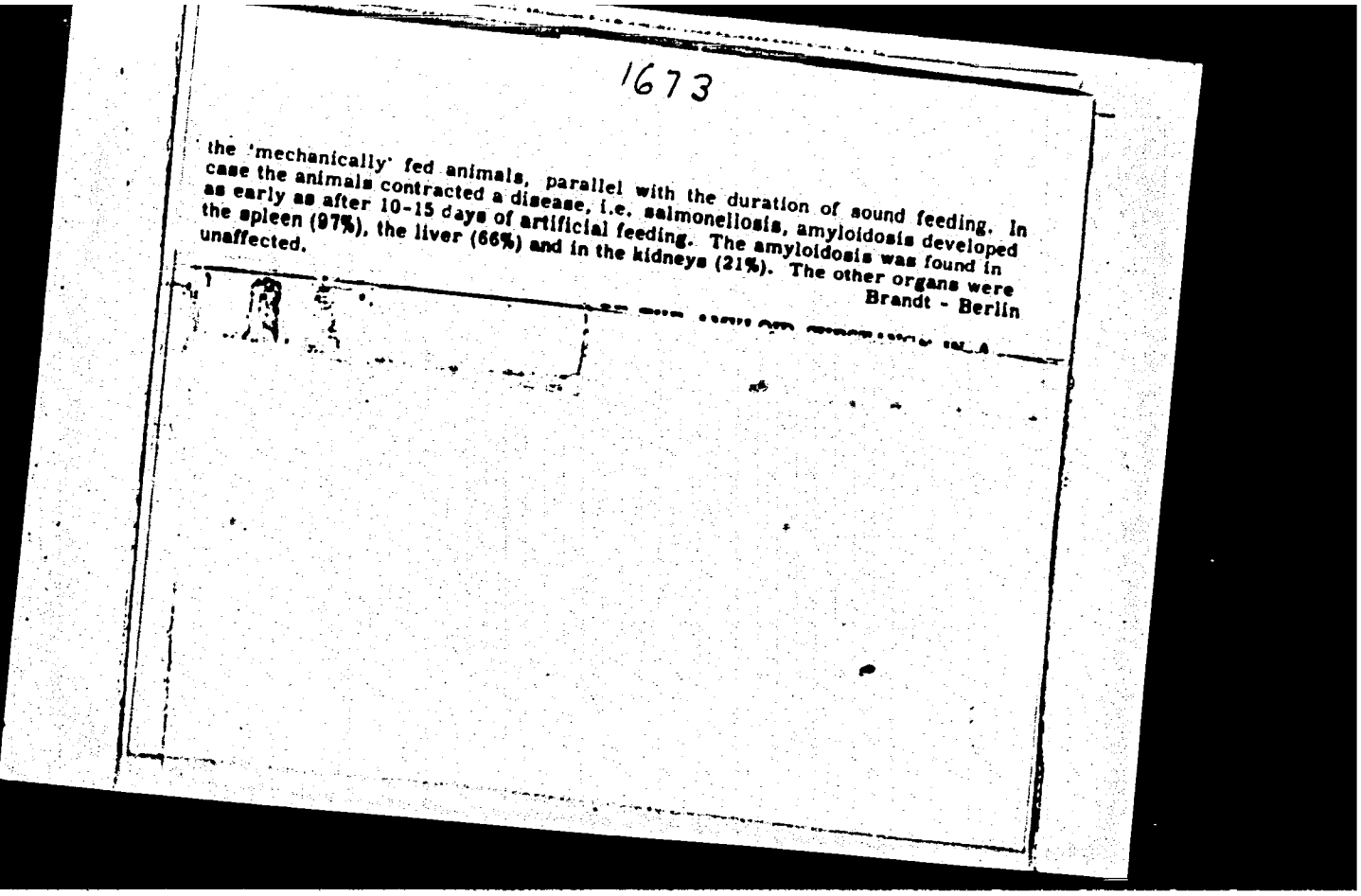


alone,

EXCERPTA MEDICA Sec 5 Vol 12/7 General Path. July 59

1673. AMYLOIDOSIS OF DUCKS IN A POULTRY FARM (Russian text) -
Rakhmanov A. M. - ARKH. PATOL. 1958, 20/11 (59-62) Illus. 2

In general, amyloidosis is relatively rare in ducks. The examinations were made in 60 ducks born in a farm and artificially fed with a probe. Their diet consisted of: 10% ground meat-pie, 10% fish-flour and 5% curd. In comparison with normally fed birds, in which no amyloidosis was found, this disorder occurred in 45% of



1673

the 'mechanically' fed animals, parallel with the duration of sound feeding. In case the animals contracted a disease, i.e. salmonellosis, amyloidosis developed as early as after 10-15 days of artificial feeding. The amyloidosis was found in the spleen (97%), the liver (66%) and in the kidneys (21%). The other organs were unaffected.

Brandt - Berlin

RAKHMANOV, A.N., prof. doktor tekhn. nauk

Horizontal pressure of flow on a baffle pier with a vertical upstream face. Izv. VNIIG 73:37-48 '63 (MIRA 18:1)

Hydraulic jump on an apron with a very rough surface. Ibid.: 49-73

RAKHMANOV, A.M., dotsent; ANNABIGIN, U., veterinarnyy vrach

Therapeutic effectiveness of antibiotics in diplococcal septicemia of lambs. Veterinariia 38 no.1:41 Ja '61. (MIRA 15:4)

1. Semipalatinskiy zooveterinarnyy institut.
(Lambs--Diseases and pests)
(Antibiotics) (Septicemia)

RAKHMANOV, A. M., ANNABIGIN, U. (Rakhmanov) Assistant Professor

"Medicinal Effectiveness of Antibiotics in Diplococcal Septicemia of Lambs," Veterinariya, Vol. 38, No. 1, p. 41, 1961.

LEDYAYEV, A.D., kand. veter. nauk; MAKHMANOV, A.M., kand. vet. n. [illegible]

Diagnosis of Aujeszky's disease in swine. Veterinariia [illegible] no.1: 41-43 Ja '64. (MIRA 17:3)

1. Semipalatinskiy zooveterinarnyy institut.

RAKHMANOV, A.N., prof.

Contour of a surface eddy and a transient stream and some velocity characteristics of a bottom hydraulic jump. Izv.VNIIG 59:30-61 '58. (MIRA 13:7)

(Hydraulic jump)

RAKHMANOV, A.N.

Principles of calculating the resistance of rock-filled aprons of lumber-floating dams. Nauch. trudy LTA no.96:3-11 '61.
(MIRA 17:3)

Translation from: Referativnyy zhurnal. Mekhanika, 1957 Nr 4, p 60 (USSR) SOV/124-57-4-4278

AUTHOR: Rakhmanov, A. N.

TITLE: On Two Regimes of an Unsubmerged and a Submerged Diving-jet Hydraulic Jump and on the Lengths of Its Eddy Area or Whirlpool (O dvukh rezhimakh nezatoplennogo i zatoplennogo donnogo gidravlicheskogo pryzhka i o dlinakh vodovorotnogo uchastka etogo pryzhka)

PERIODICAL: Izv. Vses. n.-i. in-ta gidrotekhn., 1956, Vol 55, pp 37-74

ABSTRACT: The paper adduces the results of experimental hydraulic investigations conducted by the author during the period of 1948-1952. The author notes the presence in both the unsubmerged and the submerged diving jet hydraulic jumps of two basic regimes — the diving jet regime and the diving-jet/surface-jet regime — as well as of intermediate regimes between them which the author designates as imperfect diving-jet and diving-jet/surface-jet regimes. The experimental investigations made possible (within the conditions under which the investigations were conducted) the establishment of the following: Empirical relationships for determining the length of the surface eddy area with a submerged jump and an unsubmerged diving-jet hydraulic jump and

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On Two Regimes of an Unsubmerged and a Submerged Diving-jet Hydraulic (cont.)

of the boundary of the formation of an imperfect and a fully-developed (perfect) diving-jet/surface-jet regimes of a diving-jet jump; the extent of a bottom eddy area with a diving-jet/surface-jet regime of the jump and experimental data on the vertical dimensions of the bottom eddy area of the jump. Experimental data on the pulsation of the length of the surface eddy area of a diving-jet jump and the length of the zone of bottom turbulence of a diving-jet/surface-jet jump are obtained.

A. N. Akhutin

Card 2/2

RAKHMANOV, A.N., prof.

Erosion capacity of the current in bottom hydraulic jump. Izv. VNIIG 63:3-25 '60. (MIRA 14:5)
(Hydraulic jump) (Erosion)

RAKHMANOV, A.N., prof.

Erosion capacity of a current below a jet deflector or baffle.
Izv. VNIIG 65:23-39 '60. (MIRA 14:5)
(Erosion)

RAKHMANOV, A.N., prof.

Hydraulic jump patterns in the presence of a jet deflector.
Izv. VNIIG 65:41-62 '60. (MIRA 14:5)
(Hydraulic jump)

RAKHMANOV, A.N.

Using three-dimensional models for determining the erosive action of a stream on the basis of the size of granular materials in a state of equilibrium. Trudy LTA no.86:75-89 '58 (MIRA 13:3)

1. Kafedra vodnogo transporta lesa Leningradskoy ordena Lenina lesotekhnicheskoy akademii imeni S. M. Kirova.
(Erosion)

RAKHMA[illegible], prof., doktor tekhn.nauk

[illegible]draulic jump regime in a stilling basin. Izv. VNIIG 76:5-34 '64.
(MIRA 18:10)

14(10) SOV/33-59-2-11/22

AUTHOR: Rakhmanov, A.N., Doctor of Technical Sciences, Professor

TITLE: Action Characteristics of a Sudden Hydraulic Bottom Water Pressure on the Bottom of a Stream (Kharakteristika vozdeystviya donnogo gidravlicheskogo pryznka na dno potoka)

PERIODICAL: Gidrotekhnicheskoye strotel'stvo, 1959, Nr 2, p 43-46 (USSR)

ABSTRACT: As a result of experiments made in the Laboratoriya rechnoy gidravliki VNIIG im.B.Ye. Vedeneyeva (the Laboratory of Fluvial Hydraulics of the VNIIG imeni B.Ye. Vedeneyev), the author proposes a graphic solution of the problem for determining the character of the action of a stream on the bottom of the tailrace and its washing-out strength. There are 2 graphs and 1 set of diagrams.

Card 1/1

LIVSHITS, L.S.; RAKHMANOV, A.S.

Determination of the resilience of steel at low temperatures.
Zav. lab. 24 no.5:622-625 '58. (MIRA 11:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu predpriyatiy gazovoy i neftyanoy promyshlennosti.
(Steel--Testing)

LIVSHITS, L.S.; RAKHMANOV, A.S.

Criteria and methodoloby of determining the tendency of steel for brittle fracture. Zav. lab. 31 no.11:1368-1371 '65.
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov.

LIVSHITS, L.S., kand. tekhn. nauk; RAKHMANOV, A.S., inzh.

Using aluminum alloys pipes for building pipelines. Svar. proizv. no.2:16-17 F '59. (MIRA 12:1)

1.Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov.
(Pipelines) (Aluminum alloys--Welding)

14(11) SOV/32-25-2-32/78

AUTHORS: Livshits, L. S., Rakhmanov, A. [illegible]

TITLE: Mechanical Testing Methods (Mekhanicheskiye metody ispytaniy). On the Low Temperature Resilience Determination and the Tendency of Metals to Form and Develop Cracks (Ob opredelenii udarnoy vyazkosti pri nizkikh temperaturakh i sklonnosti metalla k zarozhdeniyu i razvitiyu treshchin)

PERIODICAL: Zavodskaya Laboratoriya, 1959, Vol 25, No 2, pp 190 - 192 (USSR)

ABSTRACT: The causes which led to the destruction of a 5000 cu. m cylindrical steel container were investigated, and a number of peculiarities were observed which may be used for determining the brittleness after resilience (R) changes at low temperatures. The article explains the advantages of the described method for the determination of the deformation and tearing process in impact-bending tests as criteria for the brittleness. The container mentioned above consisted of dead melt steel MSr.3 (0.20% C, 0.19-0.20% Si, 0.35-0.30% Mn, 0.042% S and 0.019% P). The air temperature at the

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moment of destruction was -27°, soil temperature -31°. The metal properties were as follows: σ_B = 45.9 kg/mm^2, σ_S = 27 kg/mm^2, δ = 27% and ψ = 61.4%. Serial (R) tests at different temperatures of the two container rings furnished varying results (Fig 1); of the first container ring, however, only longitudinal, while of the second ring only transversal samples could be produced. Investigations of the samples of the first container ring (Fig 2) showed that the main component of the deformation process is the plastic deformation process, while the share of elastic deformation is small. Investigations regarding the dependence of the tearing process of the temperature prevailing during the test (Fig 3) point to the fact that the container was destroyed by decomposition due to brittleness. A high (R) value of a metal is in such cases nothing but proof of great tensile strength, if the values of the deformation and tearing process are also high. Otherwise, there may be little resistance to cracking (high tearing process but little

Mechanical Testing Methods. On the Low Temperature SOV/32-25-2-32/73
Resilience Determination and the Tendency of Metals to Form and Develop Cracks

deformation process), or a tendency towards a fast development of cracks (high deformation process, little tearing process). There are 4 figures and 2 Soviet references.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov (All-Union Scientific Research Institute for the Construction of Trunk Pipe Lines)

Card 3/3

83685

S/135/60/000/010/007/015
A006/A001

12300 only 2208, also 2408

AUTHORS: Brodskiy, A. Ya., Candidate of Technical Sciences, Rakhmanov, A. S., Engineer

TITLE: Two-Electrode Semi-Automatic Argon-Arc Welding of Aluminum Alloys

PERIODICAL: Svarochnoye proizvodstvo, 1960, No. 10, pp. 22-24

TEXT: A method of two-electrode semi-automatic argon arc welding of aluminum alloys from one feed source was developed with the participation of L. S. Livshits, Candidate of Technical Sciences, from VNIIST. It was intended to attain thereby an increase in the crystallization time of the seam metal and a higher welding efficiency. For this purpose the ПШП-9 (PShP-9) semi-automatic machine for one-phase two-electrode welding was redesigned at the welding laboratory of the department of metal structures at TsNIISK. The electric circuit of the machine remained the same, bu the electrode feed was modified as follows: the wires are fed through a flexible hose from two containers to the pistol. From the hose thy are supplied to a pulling device consisting of a roll with two semi-circular grooves and a pinion gear. Through a hollow pipe the wires enter a copper current-conducting tip with two eccentric apertures and are

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A006/A001

Two-Electrode Semi-Automatic Argon-Arc Welding of Aluminum Alloys

then supplied through the tip to the welding area. The gap between the electrode wires and their arrangement in respect to the symmetrical axis of the pistol may be varied by turning the tip. The optimum gap between the wires was found to be 2 mm. It was established by further experiments that the possibility of regulation was of great importance in developing the welding technology, since it affected the crystallization time of the welding pool, the width of the seam and the penetration depth. Tests performed with AMg alloy pipes of 377 mm external diameter proved the good quality of one-pass two-electrode argon-arc welding under the following conditions: V-shaped unblunted chamfer of the pipe edges with angles of taper of 30 - 50°; assembly of the pipes without a gap on a backing ring with a shaping groove; welding with 380 - 400 amps current; 12 - 13 m/hour speed; 12 - 15 l/min argon consumption; 300 m/hr electrode feed and 1.5 mm AMg wire diameter. The wire is degreased and undergoes a special etching treatment prior to welding. The ultimate strength of welds produced by the described method is 19 - 22 kg/mm^2. The developed technology provides for an extended welding current limit and increased coefficient of build-up, raising the efficiency of the process. Investigations showed that mechanical

Card 2/3

L 7078-00 EWT(m)/EWP(w)/T/EWP(t)/EWP(b) JD

ACC NR: AP5027462 SUB CODE: UR/0032/65/031/011/1368/1371

AUTHOR: Livshits, L. S.; Rakhmanov, A. S.

ORG: All-Union Scientific Research Institute for Trunk Pipeline Construction (Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov)

TITLE: Criteria and methods for evaluating the proneness of steel to brittle fracture

SOURCE: Zavodskaya laboratoriya, v. 31, no. 11, 1368-1371

TOPIC TAGS: brittle fracture, rupture strength, steel, metal test, cyclic test, test method

ABSTRACT: The existence of a large number of methods of testing and evaluating the proneness of metals to brittle fracture, differing in the manner of application of load and the type of specimens tested, complicates the selection of the optimal type of test. A general consideration of the problem, however, indicates that fundamentally the process of the deformation and fracture of a loaded specimen consists of four basic stages: 1) elastic deformation; 2) plastic (elasto-plastic) deformation, accompanied by the genesis or development of the existing fracture nuclei to a stage at which the "main line" of the fracture is determined, i.e. transition to the transcritical stage of crack development; 3) deformation of metal at the base of the de-

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UDC: 620.178.2

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ACC NR: AP5027462

3

veloping crack; 4) separation of the metal of the specimen into two parts. The loading rate of the specimen is a decisive factor in brittle fracture. Hence, dynamic (cyclic) loading should be employed in lieu of static loading in brittle fracture tests. Whatever the method of testing steel for proneness to brittle fracture, the following two indicators are basic: A_g (work of generation of fracture -- total work of the elasticity of plastic deformation) and A_f (work of fracture, characterizing the resistance to the development of the "main" crack). Since the proneness of steel to brittle fracture increases with decreasing temperature, it is important to determine the temperature of the transition of steel to brittle state in the presence of minimal A_g and A_f. These considerations argue in favor of the superiority of the method of determining A_g and A_f by means of a determination of the individual components of the impact strength of steel (cf. Zavodskaya laboratoriya, XXVII, 7, 1961 and XXV, 2, 1959). This method makes it possible to combine cyclic loading with various test temperatures, to determine A_g and A_f, to compare types of fracture with the magnitude of A_f and $T_{cr.f}$ (critical temperature of fracture), and to determine susceptibility to the action of stress concentrators. Such an approach has led to the solution of various practical problems: the elucidation of the causes of fracture of certain structural elements in cases where other methods and criteria for evaluating proneness to fracture were fruitless; the determination of certain common principles of the effect of heat treatment on the brittleness of steel (in the case of s.g. low-alloy steels it was established that the role of heat treatment lies in

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Card 2/3

L 9686-66

ACC NR: AP5027462

influencing, through the size of ferrite grains, the brittleness characteristics A_g and A_f). Orig. art. has: 4 figures.

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 000

Card 3/3

12300A
1.2300

23281
S/135/61/000/007/004/012
A006/A106

AUTHORS: Brodskiy, A. Ya., Candidate of Technical Sciences, Baryshev, V. M., Rakhmanov, A. S., Engineers

TITLE: On the weldability of B92T (V92T) grade aluminum alloy

PERIODICAL: Svarochnoye proizvodstvo, no. 7, 1961, 13-17

TEXT: Results are presented from the first stage of investigations on the weldability of thermally strengthened V92T aluminum alloy. The work was carried out with the participation of L. S. Livshits, Candidate of Technical Sciences, from VNIIST, for the purpose of evaluating the applicability of this alloy in welded structures. The tests were made with 10 mm thick V92T-alloy sheets welded by argon-arc process with non-consumable electrode and by automatic and semi-automatic process with consumable electrode. Plates of 130 x 130 mm dimensions with V-shaped beveling of edges were welded on dismountable steel backing plates. The filler and electrode wires were of the same composition as the base metal. The content of the basic alloying components in the alloy was 3.9% Mg, 2.7% Zn, 0.8% Mn. From two chemical methods of cleaning the wire, etching in 30% ortho-phosphoric acid solution with small additions of potassium bichromate, for 20 min,

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On the weldability ...

at 45°C, assured reliable surface treatment of the wire. Manual argon-arc welding was performed on a УДАР-300 (UDAR-300) machine. The seams were applied in 2 and 3 layers at 280-300 amps current, 15 l/min argon consumption, 6 mm tungsten electrode diameter, 4 mm diameter of the filler wire and 70° chamfering angle. Semi-automatic and automatic welding was made on the ПШП-10 (PShP-10) semi-automatic and the АРК-1 (ARK-1) automatic machines. The semi-automatic welding conditions were: 270-280 amp current, 22-24 v arc voltage, 20 l/min argon consumption, 70° chamfering angle. Conditions for automatic welding were: 300-320 amps current intensity in single-layer welding and 280-300 amps in double-layer welding; 22-24 v arc voltage 20 l/min argon consumption; speed of welding single-layer joints 17-19 m/h; for welding the first layer of double-layer joints 28-30 min/h, and for welding the second layer 22-24 m/h; total chamfering angle 60°. The electrode was located vertically. Mechanical properties of the welded joints were determined on standard specimens with reinforced welds. Toughness of the weld metal, of the fusion zone metal and of the heat-affected zone were determined. The experiments showed that the mechanical properties of welded butt joints on 10 mm thick V92T specimens, performed by argon-arc method with consumable electrode were below those of joints argon-arc welded with non-consumable electrodes. The strength of welded butt joints of medium thickness is 90-95% of the base metal

On the weldability ...

strength after three-month natural aging. Therefore manual argon-arc welding with tungsten electrode can be recommended for important medium-thick V92T alloy parts. This alloy is somewhat more prone to pore formation than AMg6 alloy in particular when welded with consumable electrode. The relative strength of joints produced by argon arc welding with consumable electrode is 80%. Consequently, this method for welding V92T alloy must presently be limited. Natural aging of the weld metal and the heat-affected zone of welded butt joints lasts for 3 months and proceeds particularly intensively during the first month after welding. As a result of three-month natural aging the properties of the weld produced by argon-arc welding with non-consumable electrode and of the heat affected zone, approach the properties of the base metal in its initial state. The process of natural aging of weld joints is practically completed within three months. The V92T alloy is sensitive to stress concentration. For this reason the surface of the weld joint should pass smoothly into the base metal. There are 9 figures.

ASSOCIATIONS: TsNII stroitel'nykh konstruktsiy AS i A SSSR - TsNII of Building Constructions of AS and A SSSR - (Brodskiy and Baryshev); VNIIST (Rakhmanov)

25529

S/032/61/027/007/009/012
B110/B203

18.8200 2808, 1327

AUTHORS: Livshits, L. A., and Rakhmanov, A. S.

TITLE: Appearance of the fracture as a criterion for estimating the brittleness

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 7, 1961, 899-901

TEXT: According to N. N. Davidenkov (Ref. 1: Zavodskaya laboratoriya, XXI, 10 (1957)), Ye. M. Shevandin (Ref. 5: Sklonnost' khrupkosti nizkolegirovannykh staley, Metallurgizdat (1955)) established a close relationship between the fibrous structure of a fracture and the critical temperature of brittleness determined by means of impact bends. G. A. Vadimirskiy (Ref. 3: Khrupkost' stali, Mashgiz (1959)), however, showed that the critical temperature of brittleness and the temperature of transition of the fracture are different criteria of brittleness. B. A. Dedeyevskiy and Ya. B. Fridman (Ref. 6: Vliyaniye treshchin na mekhanicheskiye svoystva konstruktsionnykh staley, Metallurgizdat (1960)) studied the dependence of the fibrous structure of a fracture on the final work of the fracture under static bending. The present paper deals with the regularities governing and

Card 1/8

Appearance of the fracture as a

the appearance of the fracture (percentage of fibrous structure) of standard samples with Mesnager notch in steels of the grades 20 (0.19% C; 0.24% Si; 0.48% Mn; 0.04% S; and 0.04% P; σ_B = 46.7 kg/mm^2; σ_S = 28.7 kg/mm^2; δ_5 = 32.6%; ψ = 65%; a_H = 16 KG m/cm^2) and 12MKh (12SKh) (0.11% C; 0.24% Si; 0.52% Mn; 0.48% Cr; 0.41% Mo; 0.03% S and 0.02% P; σ_B = 46.2 kg/mm^2; σ_S = 35.2 kg/mm^2; δ_5 = 21%; ψ = 67%; a_H = 21.3 kG m/cm^2). The samples were (I) fully tempered (heated in the furnace to 900°C for 1 hr, cooled down to 650°C, then to 400°C at 50°C/hr, and then completely), and (II) from 860°C in water at 600°C hardened (Table 1). The differentiation of structural components was highest in (I): coarse ferrite grain; in (II): small uniform mixture of structural components; small size ferrite grain. Besides the bending angle, it was also attempted to estimate the cross-sectional reduction in the central, and the cross-sectional increase in the lower part to find the most sensitive and dependable criterion of plasticity. The attempts of estimating the plasticity in impact bending were only made on 12 MKh samples not subjected to thermal treatment. The relative necking (Fig. 1) was measurable at l_1, the widening at l_2.

Card 2/8

[illegible]

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B110/B203

Appearance of the fracture as a ...

According to the authors' method (Ref. 7: Zavodskaya laboratoriya, XXIV, 5 (1958); Nos. 2 and 12 (1959)), an impact pendulum was used, the work of which was increased up to sample destruction. The results obtained for MKh not subjected to thermal treatment (Fig. 3) showed that the character of the change in relative elongation and necking in the final stages of deformation differed slightly from that of the change in the bending angle. Here, the dependence is less straight-lined. In the graph showing the plasticity characteristics as dependent on the work absorbed, the complex resilience may be subdivided into: (1) deformation work a_1 and (2) rupture work a_r (Fig. 5). The error made in calculating the plasticity characteristics from the change in sectional dimensions along the [illegible] fracture may considerably affect [illegible] the test result and, consequently, the resilience [illegible] knowledge [illegible] as a plasticity criterion [illegible]

dependence [illegible] A comparison of the [illegible] with the resilience and its components [illegible] changes in analogy to the fracture appearance. [illegible] of the metal

Card 3/4

[illegible]/012

[illegible]

Appearance of the fracture as [illegible]

to resist the fracture [illegible] destruction work a_p but not the deformation work a_d [illegible] metal [illegible]. Since it does not give any indication [illegible], it cannot characterize the resilience. It can only be used for judging the tendency of the metal for (A) propagation of brittle destruction, but not its origin. The larger the fibrous structure of the fracture, the more is (A) slowed down. The a_r dependence of the [illegible] independent of thermal steel treatment. This should be checked on steels forming distinctly different structures by thermal treatment. The different gradients of steel curves may be explained as follows: The same properties are expressed in different steels by different fracture appearances. This requires different scales. If, for instance, a_r = [illegible] kgm/cm², steel 20 has about 30% fibrous structure of the fracture, steel [illegible] about 50%. There are 4 figures, 2 tables, and 7 Soviet-bloc references.

ASSOCIATION: [illegible] institut po stroitel'stvu magistral'nykh truboprovodov (All-Union Scientific Research Institute for the Construction of Main Pipelines)

Card 4/0

18.8200

21397
S/032/61/027/012/010/015
B104/B102

AUTHORS: Rakhmanov, A. S., and Livshits, L. S.

TITLE: Simplification of the determination of the resilience components

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 12, 1961, 1510 - 1513

TEXT: The number of samples required for determining the resilience of a material could be reduced substantially by repeated impact tests of one and the same sample with equal or increasing impact energy. The bending angle of the sample as a function of the impact energy of the pendulum was determined for 1 - 2 samples in tests in which the samples were not completely destroyed. Two or three samples are required for determining the resilience and the bending angle of breaking samples. The following steels were tested: 19Г (19G) (with low viscosity after deformation and aging); 10Г2 (10G2) (hot-rolled, medium viscosity); 12МХ (12 MKh) (heat-treated, high viscosity); 1Х18Н9Т (1Kh18N9T) and the Al alloy АМг (AMg) medium viscosity and high plasticity). For samples tested without

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Simplification of the determination ...

destruction it is possible to find stresses at which the bending angles are equal at equal loads, no matter whether the sample is loaded once or several times. This equality was found for a pendulum energy of 1 kgm for low-alloy pearlitic steels, (19G, 10G2, 12MKh) or even if the energy is increased successively. This value is 2 kgm in austenitic CrNi steels, and 3 kgm in the above-mentioned Al alloy. The resilience of samples subjected to several impact tests diverges from the value obtained by one test. Destruction and deformation energies can be determined from a plot of bending angle versus consumed impact energy. There are 3 figures, 1 table, and 5 references: 4 Soviet and 1 non-Soviet. The reference to the English-language publication reads as follows W. I. Harris, Ir., I. A. Rinebolt and R. Raring. The Welding. J., No. 9 (1951).

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'-stvu magistral'nykh truboprovodov (All-Union Scientific Research Institute for the Construction of Main Pipelines)

Card 2/2

FAL'KEVICH, A.S.; LIFSHITS, V.S.; RAKHMANOV, A.S.; PAPKOV, O.S.

Advantages of using electric contact welding in the construction of oil-field pipelines. Stroi. truboprov. 10 no.1:5-9 Ja '65. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut po stroitel'stvu magistral'nykh truboprovodov.

RAKHMANOV, A. V.

"Memoirs of A. V. Rakhmanov (1879-1948)," Voyen.-med. zhurn,. 1948, No. 12, p. 47-48

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

RAKHMANOV, B.A.,
S. M. BRODSKII, Hig. Truda 14, No. 5, 41-3 (1936)

LIVSHITS, L.S., kand.tekhn.nauk (Moskva); RAKHMANOV, A.S., inzh. (Moskva)

Welding of industrial pipe for use at temperature minus 70°.
Stroi.pred.neft.prom. 2 no.7:9-11 Jl '57. (MIRA 10:10)
(Pipe, Steel)
(Electric welding)

RAKHMANOV, B.I.; SMIRNOV, V.I., akademik.

Theory of one-sheeted functions. Dokl.AN SSSR 91 no.4:729-732 Ag '53.
(MLRA 6:8)

1. Akademiya nauk SSSR (for Smirnov).
(Functions) (Surfaces)

RAKHMANOV, B. N.

Rahmanov, B. N. On the theory of univalent functions. Doklady Akad. Nauk SSSR (N.S.) 78, 209–211 (1951). (Russian)

Let K be the class of functions $f(z)=z+\cdots$ which are regular, univalent, and convex in $|z|<1$. Starting from a lemma which the author states is obvious it is proved that, if $f(z)\in K$, $-\frac{1}{2}\pi\leqq\alpha\leqq\frac{1}{2}\pi$, then

$$\Phi_\alpha(z)=(f(z)+e^{i\alpha}zf'(z))/(1+e^{i\alpha})=z+\beta_2z^2+\beta_3z^3+\cdots$$

is univalent in $|z|<1$. The author notes that if $\alpha=\frac{1}{2}\pi$ and $f(z)=z/(1-z)$, then $|2\beta_2-\beta_3^2|>2$, so that $z/(1-z)^2$ does not furnish the maximum for an expression of this sort in the family of univalent functions. Bounds are stated for the radius of convexity and the radius of starlikeness of $\Phi_0(z)$, if $f(z)\in K$. Let $F(z)=z+\cdots$ be regular and univalent, and suppose $|\arg(zF'(z)/F(z))|\leqq\frac{1}{2}\pi$ in $|z|<1$. A number of inequalities involving $F(z)$ are given without proof. In each case equality occurs for $F(z)=2ze^{\arcsin z}/[1+(1-z^2)^{\frac{1}{2}}]$. It is proved that if $f(z)\in K$, and $0<\alpha\leqq\frac{1}{2}\pi$, then $f(e^{i\alpha}z)-f(e^{-i\alpha}z)$ is starlike in $|z|<1$. *A. W. Goodman* (Lexington, Ky.).

Source: Mathematical Reviews, Vol 12 No. 10

USSR/Mathematics - Schlicht (Simple) 21 Jan 52
Functions

"Theory of Schlicht Functions," B. N. Rakhmanov, Saratov State U imeni Chernyshevskiy

"Dok Ak Nauk SSSR" Vol LXXXII, No 3, pp 341-344

Discusses the following classes of functions:
(1) Class K_p of functions
$f_p(z) = z + a_{p+1} z^{p+1} + a_{2p+1} z^{2p+1} + \ldots$ simple and regular in unit circle around the origin;

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(2) Class S_p of functions $f_p(z)$, etc. Submitted by Acad V. I. Smirnov 27 Nov 51.

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(1)

Rahmanov, B. N. On the theory of univalent functions. Doklady Akad. Nauk SSSR (N.S.) 91, 729-732 (1953). (Russian)

From the set of functions univalent in the unit circle the author selects certain subsets defined by geometrical properties of the image regions. Nine theorems are stated without proof, a typical one being that if $\varphi_k(z) \in P_\alpha$, then $n^{-1}\sum_{k=1}^{n}\varphi_k(z) \in P_\alpha$. *A. W. Goodman* (Lexington, Ky.).

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Rakhmanov, B. N. On the theory of univalent functions. Doklady Akad. Nauk SSSR (N.S.) 97, 973–976 (1954). (Russian)

The author generalizes the concept of a starlike domain in six different ways and indicates the possibility of still further different generalizations. In three of the generalizations it is required that for each boundary point, M of D, a prescribed arc of a certain parabola (in place of the customary line to the origin) must lie in D. In the other generalizations, it is required that a segment of a line from M tangent to a certain parabola lies in D (or in the complement of D). The author announces six theorems (one per type of domain) giving necessary and sufficient conditions that a function $f(z)$, $f(0)=0$, $f'(0)=1$, regular in $|z|\leqq 1$ except for a finite number of boundary points, be univalent in $|z|\leqq 1$ and map this circle onto a domain of prescribed type. Each theorem is a generalization of the condition $\Re(zf'(z)/f(z))=0$, for a starlike domain. Extensions are given for mapping onto the complement of a domain of prescribed type. Only an outline of the method of proof is given.

A. W. Goodman (Lexington, Ky.).