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VK/REM/ec
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Card 3/3

SOV/92-58-1-18/22

AUTHOR: Rybakov, V. A.

TITLE: Prevention of Petroleum Product Losses in a Bulk Plant (Bor'ba s poteryami nefteproduktov na neftebaze)

PERIODICAL: Neftyanik, 1958, 3, Nr 1, pp. 28-29 (USSR)

ABSTRACT: The author states that pumps of the type 4NDV, 6NDV, and NP-2 are widely used in bulk plants and terminals of the Soviet Union. In pumps of the first two types the stuffing boxes of the driving shaft have a hydraulic sealing, though which drops of the product may leak when the product is pumped. In this way a part of the product pumped may be lost. Pumps of the 4NDV type and 6NDV type are centrifugal pumps with suction systems which must be filled with the liquid petroleum product before the pump starts to operate. Air, gas, and vapors must first be removed from this system. When tanks and pipelines are being cleaned, piston pumps are often allowed to remain idle and their suction systems draw in the air, gas, and vapors which must be removed in order to start pumping the

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Prevention of Petroleum Product Losses in a Bulk Plant

liquid product. In certain bulk plants, where necessary precautions are not taken, these noxious gases and vapors are allowed to penetrate into the premises of the pumping station and to contaminate the air. Therefore, the efficiency expert M. G. Gurevich suggested that special equipment be installed to gather products leaking through the stuffing box sealing and to direct them to a special collector from which they can be removed by the 6NDV, 4NDV, or NP-2 pumps. The same equipment removes air, gas, and vapors escaping from the suction system and brings them to the above-mentioned collector installed outside the pump house as shown in Fig. 1 and Fig. 2. In this way product losses are prevented and the air in the pump house is not contaminated with noxious vapors. Fig. 3 shows the design of the equipment which gathers products leaking through the pump stuffing box, and also diverts vapors and gases coming out of the pipeline system and pump housing. This special collector is a drum 430 mm. x 670 mm. large, which is shown by the author in Fig. 4. The equipment under discussion is simple in construction and in operation. Every bulk plant can build one from its own resources. There are 4 figures.

1. Petroleum industry 2. Industrial equipment--Operation 3. Industrial equipment --Maintenance

Card 2/2

KUDASOV, Grigoriy Filippovich; SHCHEGOLEV, A.V., inzh., retsenzent; RYBAKOV, V.A., kand. tekhn. nauk, red.; VARKOVETSKAYA, A.I., red. izd-va; KONTOROVICH, A.I., tekhn. red.

[Abrasive materials and tools] Abrazivnye materialy i instrumenty. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1960. 102 p. (MIRA 14:9)
(Bibliotechka shlifovshchika, no.1)
(Abrasives) (Grinding wheels)

MINDAROV, Mars Tagirovich; RYBAKOV, Vladimir Aleksandrovich; KRAVTSOV, B.F., nauchn. red.; SHENGER, I.A., ved. red.

[Construction and assembly of drilling rigs] Stroitel'stvo i montazh burovykh. Leningrad, Nedra, 1965. 111 p. (MIRA 18:12)

RYBAKOV, V.A.; KIZKOV, M.V.; POGORELOV, P.I.

Potentialities for improving excavator performance in strip mines of the "Magnezit" Plant. Ogneupory 31 no.1:10-13 '66. (MIRA 19:1)

1. Nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut po dobyche poleznykh iskopayemykh otkrytym sposobom.

POGONYALKIN, P.P., gornyy inzh.; RYBAKOV, V.A.

Reducing the labor input in dumping operations on excavation piles. Gor. zhur. no.5:75-76 My '64. (MIRA 17:6)

1. NIIOGR, Chelyabinsk.

RYBAKOV, V.G.; FAYNSHTEYN, B.Ya.

Training of students in the field of revolutionary and labor traditions. Sov. zdrav. 18 no.5:19-22 '59. (MIRA 12:7)

1. Iz kafedry marksizma-leninizma (zav. - dotsent V. G. Rybakov) Leningradskogo pediatricheskogo meditsinskogo instituta.
(EDUCATION, MEDICAL,
in Russia, hist. of communist revolution in med. curriculum (Rus))

RYBAKOV, V.G., dotsent; FAYNSHTEYN, B.Ya., kand.istor.nauk

Connection between the teaching of social sciences and the type of medical college. Sov. zdrav. 21 no.1:11-15 '62. (MIRA 15:2)

1. Iz kafedry marksizma-leninizma (zaveduyushchiy V.G.Rybakov) Leningradskogo pediatricheskogo meditsinskogo instituta.
(MEDICAL COLLEGES) (SOCIAL SCIENCES--STUDY AND TEACHING)
(COMMUNIST EDUCATION)

RYBAKOV, V.I.

Useful attachment. Avt. dor. 24 no.3:32 Mr '61. (MIRA 14:5)
(Pipe, Concrete)

S/077/60/005/004/001/002
E194/E284

AUTHORS: Nikolayenko, A. G. and Rybakov, V. I.

TITLE: Stereo-Photography of the Flow Path of a Flat Keeled Plate Gliding on a Free Water Surface

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii, 1960, Vol. 5, No. 4, pp. 289-292

TEXT: Existing methods of determining the spatial flow path of gliding bodies are laborious and not sufficiently accurate. In 1937 Epstein first used stereo-photography for this purpose. The results were accurate and complete but the cameras and stereoscopes were imperfect and it was difficult to record the smooth water surface and so stereo-photography did not become accepted as a regular method for making such tests. In 1958 a number of further tests were made with improved equipment including those described here. A pair of Zeiss stereo cameras were used each with a Tessar lens of f 4.5 with a focal length of 184 mm. The light source was a flashgun with 24 lamps which is briefly described. Accuracy of readings taken from stereo photographs depend considerably on the accuracy of orientation of the cameras.

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S/077/60/005/004/001/002
E194/E284

Stereo-Photography of the Flow Path of a Flat Keeled Plate Gliding on a Free Water Surface

The methods of checking this accuracy are briefly explained. Because of the importance of the exposure time tests were made with a chalkmark on a rotating disc which showed that the exposure time is 0.0015 secs. The object of the tests was to determine the shape of the trace obtained when a flat keeled plate moves in water. The plate was towed by the trolley of a ship testing tank at a constant speed of 8 m/sec. The model was made in transparent plastic with a keel angle of 30°, width 2 β = 300 mm and length 2 m. The distance between cameras was 253 mm and the optical axes of the cameras were parallel. As the model was symmetrical the cameras and other equipment were installed to one side of it. The smooth surface of the water was made visible by the use of white threads 1.5 - 2 m long which, when in motion caused sufficient disturbance of the surface to give adequate reflection but did not introduce appreciable error. Various devices were used to check the accuracy of the measurements including visual measurements of

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S/077/60/005/004/001/002
E194/E284

Stereo-Photography of the Flow Path of a Flat Keeled Plate Gliding on a Free Water Surface

of the wetted length of the model and the level of the undisturbed water surface. The light source was installed behind the model at an angle of 45° to the water surface. The source used gives a sufficiently powerful flash but some motion can be seen on the negatives because of the length of exposure. However, synchronism is perfect and so this motion has little effect on the accuracy of the measurements. The stereo photographs were compared on a Zeiss stereo comparator. Typical test results are given. Possible errors are assessed: for this method 3.8 mm maximum error. The difference between the height of the undisturbed water surface obtained from the stereograms and by visual measurements from the trolley (where some subjective error is possible) is 3.3 mm. It was generally found that the method of determining the position of the disturbed surface of the water by adjustable needles was very rough and gave an error of the order of 10 mm because of a certain instability due to the presence of standing waves in the tank. Moreover, the floating threads did not strictly indicate the water

S/077/60/005/004/001/002
E194/E284

Stereo-Photography of the Flow Path of a Flat Keeled Plate Gliding on a Free Water Surface

surface level being sometimes somewhat below the undisturbed surface. Because of these and other effects the possible error may be somewhat greater than the theoretical value mentioned above. With the use of flash sources of similar power but shorter effective exposure time the accuracy of measurement could be further increased by a factor of about 2. There are 7 figures.

Card 4/4

L 04070-67 EWT(1) GW/GD

ACC NR: AT6025116 (N) SOURCE CODE: UR/0000/65/000/000/0154/0164

41
B+1

AUTHOR: Rybakov, V. I.; Nikolayenko, A. G.; Staseyev, Yu. P.

ORG: none

TITLE: Use of motion-picture methods to investigate hydrodynamic processes

SOURCE: AN SSSR. Okeanograficheskaya komissiya. Sektsiya podvodnykh issledovaniy. Razvitiye morskikh podvodnykh issledovaniy (Development of underwater marine research) Moscow, Izd-vo Nauka, 1965, 154-164

TOPIC TAGS: cinematography, hydrodynamics, stereoscopic photography, underwater photography

ABSTRACT: This article examines certain principles of conducting underwater motion-picture filming of rapidly moving objects both in fluids and at the intersection of the air-fluid interface. A stereophotogrammetric cinematographic method is devised for visualizing water flows in transmitted and in combined light for studying cavitation flows. The method indicated in the article for determining the power of the light source with consideration of absorption, scattering, and travel rate of the object permits obtaining qualitative and quantitative data. Photography in media with different optical densities permits obtaining the characteristics of the

Card 1/2

motion of a body with an accuracy up to 5%. Application of stereophotogrammetric motion-picture filming in hydrodynamic investigations showed the advantages of the method, the need for its further development, and its introduction into scientific research. Orig. art. has: 10 figures.

SUB CODE: 14,20/ SUBM DATE: 06Dec65/ ORIG REF: 002

KH

RYBAKOV, V.I.

History of orthopedics in Russia; 65th anniversary of N.I.Studenskii's death. Ortop.travm. i protez. 18 no.4:49-52 Jl-Ag '57. (MIRA 11:1)

1. Iz Kazanskogo nauchno-issledovatel'skogo instituta vosstanovitel'noy khirurgii i ortopedii (dir. - zasluzhennyy deyatel' nauki Tatarskoy ASSR prof. L.I.Shulutko)
(ORTHOPEDICS,
contribution of N.I.Studenskii)
(STUDENSKII, NIKOLAI IVANOVICH, 1844-1891)

RYBAKOV, V.I.; NIKOLAYENKO, A.G.; SOKOLOV, O.A.

Filming movement of a body in two media. Zhur.nauch.i prikl.fot. i kin. 5 no.6:424-432 N-D '60. (MIRA 14:1)
(Motion-picture photography—Scientific applications)

L 24470-65 EWT(1)/FCC GW

ACCESSION NR: AT5000701 S/2599/64/000/043/0003/0016

AUTHOR: Romov, A. I.; Fishman, Yu. S.; Ry*bak, V. I.

TITLE: Numerical wind forecast and computation of divergence from the geostrophic wind at the mean level

SOURCE: Kiyev. Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut. Trduy, no. 43, 1964. Voprosy sinopticheskoy i dinamicheskoy meteorologii (Problems in synoptic and dynamic meteorology), 3-16

TOPIC TAGS: weather forecasting, wind, geostrophic wind, numerical weather forecasting, cyclone, atmospheric pressure, anticyclone

ABSTRACT: This paper presents an analysis of the results of wind forecasting and divergence from the geostrophic wind at the mean level. The paper begins with the geostrophic wind at the mean level. The paper begins with the principal equations and presentation of the computation model, followed by examples of computations and some results of testing of the prognostic model. The principal original contribution is an analysis of computed maps of wind divergence from the geostrophic. The maps clearly show a pattern in the direction of the vectors of wind divergence in pressure formations. Above both cyclonic and anticyclonic

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regions the ageostrophic wind blows clockwise; the vector field of divergences forms an anticyclonic vortex. This is noticeable not only over well-developed cyclones, but also over pressure formations with weak pressure gradients. Thus, in cyclones, the vectors of the geostrophic and ageostrophic velocities are generally directly in opposite directions and the resultant wind velocity is less than the geostrophic velocity. The resultant (real) vorticity in a cyclone is less than its geostrophic approximation. In anticyclones and high-pressure ridges, on the other hand, the geostrophic and ageostrophic wind components have approximately identical directions and therefore the real wind is greater than the geostrophic wind. Allowance for the ageostrophic wind in the free atmosphere should be made in synoptic practice, such as in preparing a forecast or obtaining wind information aloft using pressure field data. The authors also describe the automation of the output and analysis of forecasting results using the display on the screen of a cathode-ray tube; the apparatus involved has apparently been described earlier (Rybak, V. I., Shishonok, I. N., Avtomatizatsiya i priboro-stroyeniye, No. 1, 1963). The working surface of the screen is 170 mm^2; output of information is more than 15,000 points per second. This makes it possible to obtain the results in the form of a photographic map of the predicted wind. Orig. art. has: 32 formulas, 5 figures and 4 tables.

L 24470-65

ACCESSION NR: AT5000701

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, Kiev (Ukrainian hydrometeorological scientific research institute)

SUBMITTED: 00 ENCL: 00 SUB CODE: ES

NO REF SOV: 014 OTHER: 003

Card 3/3

NIKOLAYENKO, A.G.; RYBAKOV, V.I.

Stereoscopic photography of the flow around a flat bottom model gliding on a free water surface. Zhur.nauch.i prikl.fot.i kin. 5 no.4:289-292 Jl-Ag '60. (MIRA 13:8)
(Photography, Stereoscopic) (Fluid dynamics)

AUTHORS: Pikazin, Ya. S., Rybakov, Ye. T.

S/050/60/000/04/014/018
B007/B017

TITLE: "Aluminum Silicol" Method for Producing Hydrogen"

PERIODICAL: Meteorologiya i gidrologiya, 1960, Nr 4, pp 47-48 (USSR)

TEXT: At present, rapid methods are employed by the Gidrometeosluzhba (Hydrometeorological Service), Sevmorput' (Northern Sea Route) etc to produce hydrogen: 1) interaction of ferrosilicon (silicol), caustic soda, and water according to $Si + 2NaOH + H_2O \longrightarrow Na_2SiO_3 + 2H_2$. 2) Interaction between aluminum and water in the presence of catalytic amounts of alkali. The main disadvantage of the first method is the necessity to heat the water itself at temperatures above zero (at 15°). Therefore, new methods for oxygen production were developed. These are based mainly on the interaction between aluminum and its alloys with water. Also these methods show the shortcomings mentioned here. In view of these shortcomings and of the fact that ferrosilicon is still the most inexpensive product for hydrogen production, and that it will always be less expensive than aluminum, the new "aluminum silicol" method was developed by the Glavnaya geofizicheskaya observatoriya (Main Geophysical Observatory). In this method hydrogen is produced by the interaction between ferrosilicon and aluminum mixtures, water, and alkali. The mixture consists of ferrosilicon and 5-15% of

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Aluminum Silicol Method for Producing Hydrogen

S/050/60/000/04/014/018
B007/B017

the most inexpensive secondary aluminum powder of the type APV. The aluminum enters into reaction with alkali and water and produces high temperatures which, in turn, initiate the reaction between ferrosilicon, alkali, and water (without preheating of the water). Some examples for the application of this method are given.

Card 2/2

RYBAKOV, V.M., kandidat tekhnicheskikh nauk.

Reworking staple fiber. Tekst.prom.14 no.1:19-22 Ja '54. (MLRA 7:2)
(Rayon)

RYBAKOV, V. M.

DEFORMATIONS OF CARBON AND ALLOY STEEL PLATES DURING AUTOMATIC SUBMERGED WELDING. V.M. Rybakov. (Avtogennoe Delo, 1948, No. 2, pp. 15-20). (In Russian). An account is given of measurements of deformation carried out with a simple apparatus after cooling steel plates to which bending welds had been made along an edge using an automactic submerged A.C. arc process. The plates were rectangular, 500 mm. long, 110-140 mm. wide and 8-12 mm. thick, and had been subjected to tempering at 650-700°. The effect on the deformation of the following factors was investigated: Composition of the steel; strength of current; speed of welding; arc voltage; type of flux; angle of inclination of the electrode; type of electrode wire; and number of layers welded. The results obtained are presented graphically, and it is concluded that deformations can be reduced by correct selection of conditions.

Immediate source clipping

RYBAKOV, V. M.

23361 Ispol'zovaniya Tsel'nometallicheskoy Kard'. Tekstil. Prom-st', 1949
No. 6, c. 15-17

SO: LETOPIS NO. 31, 1949

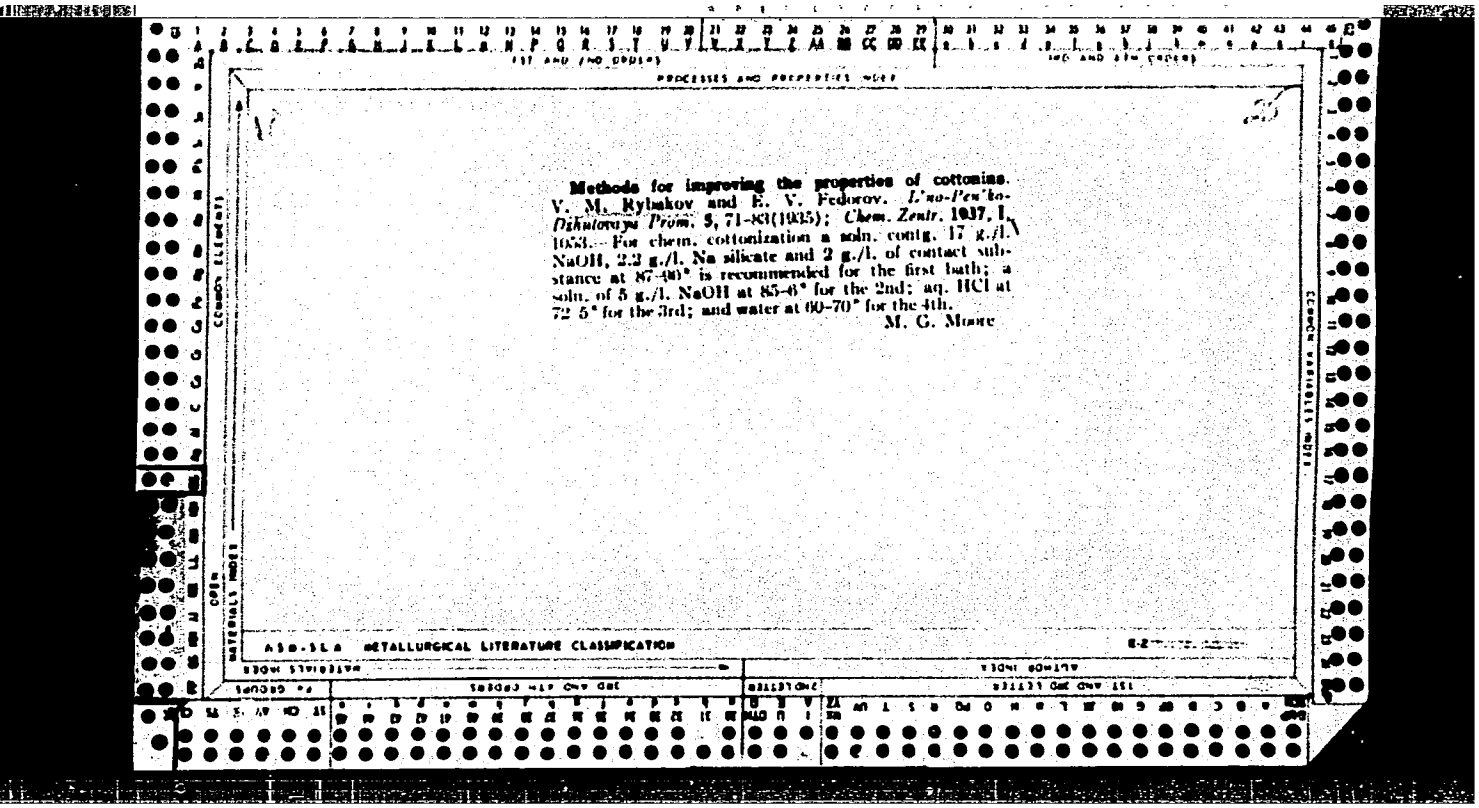
RYBAKOV, V.M.; SKOKIN, T.B.

Let us fulfill the yearly plan on time. Leg.prom. 14 no.9:42-46 S '54. (MLRA 7:9)

1. Nachal'nik Glavtrikotazha MPTSHP SSSR (for Rybakov). 2. Nachal'nik otdela truda i zarplaty (for Skokin).
(Hosiery industry)

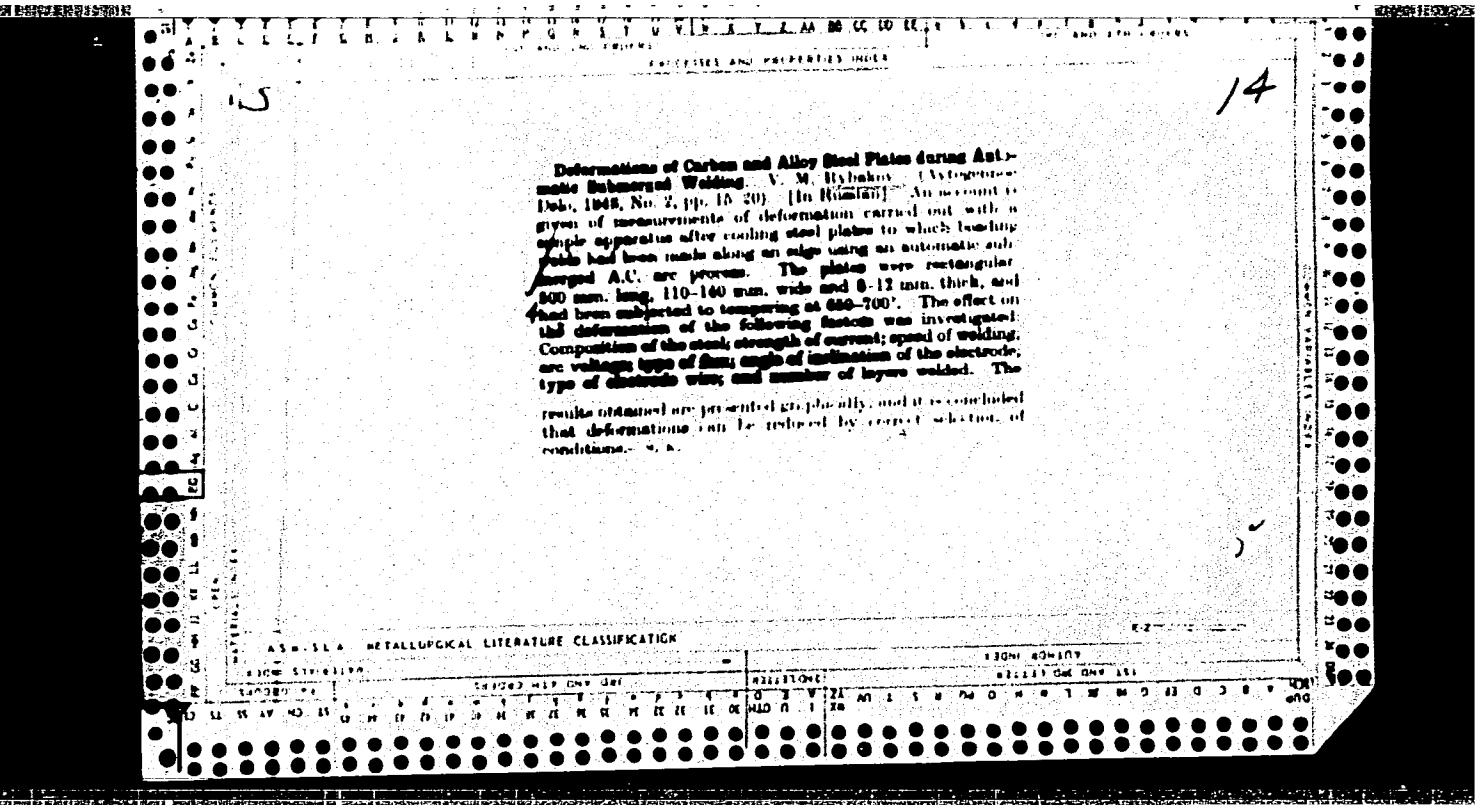
RYBAKOV, V.M., kandidat tekhnicheskikh nauk; RUSAKOV, N.G.

Spinning long staple rayon fiber on cotton machines. Tekst.prom. 14 no.10:22-23 O '54. (MLRA 7:10)
(Rayon)



Methods for improving the properties of cottonins. V. M. Rybakov and E. V. Fedorov. *Lyno-Pen'ko-Dikulovaya Prom.* 5, 71-83(1935); *Chem. Zentr.* 1937, I, 1053.—For chem. cottonization a soln. contg. 17 g./l. NaOH, 2.2 g./l. Na silicate and 2 g./l. of contact substance at 87-90° is recommended for the first bath; a soln. of 5 g./l. NaOH at 85-6° for the 2nd; aq. HCl at 72.5° for the 3rd; and water at 60-70° for the 4th.

M. G. Moore

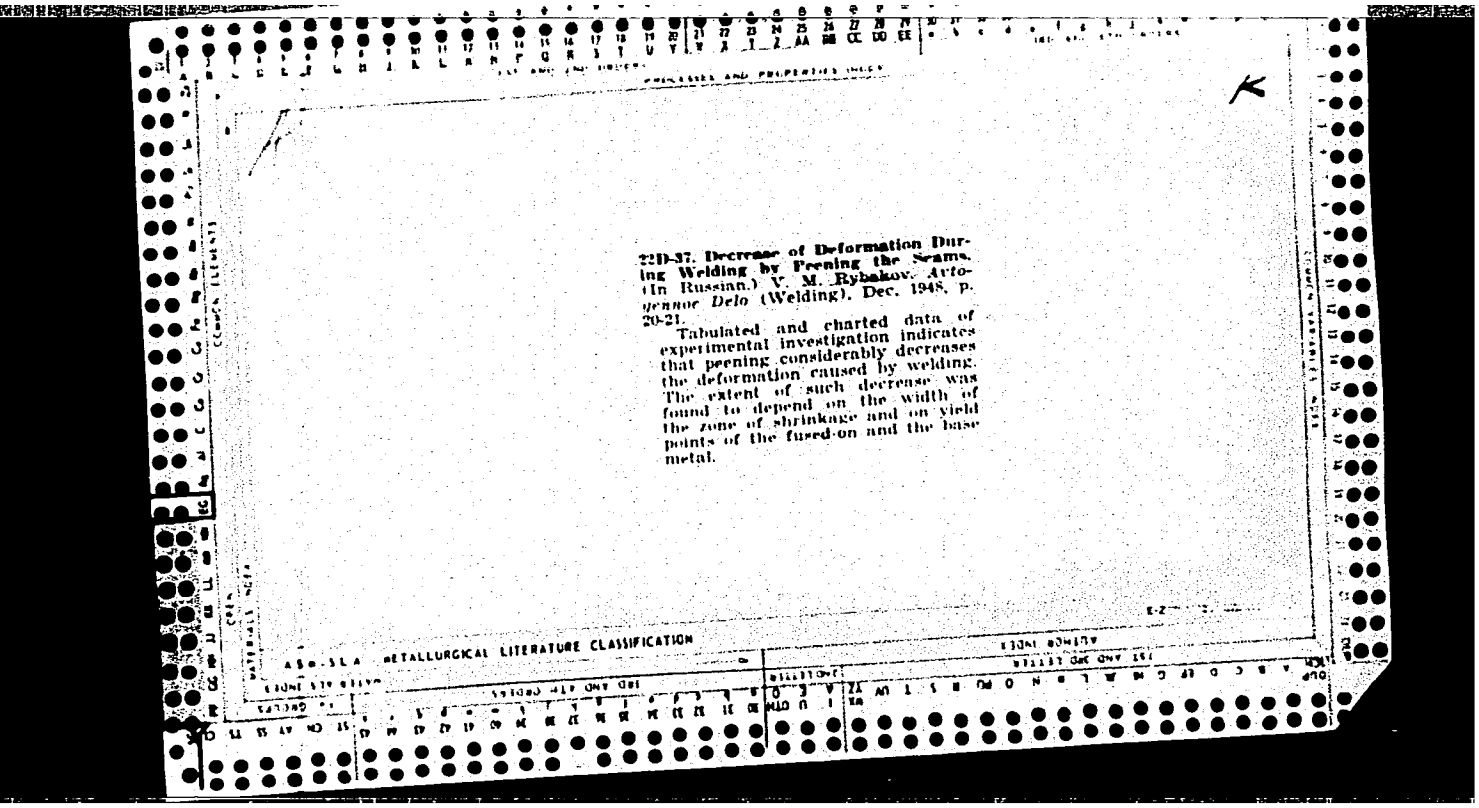


15

14

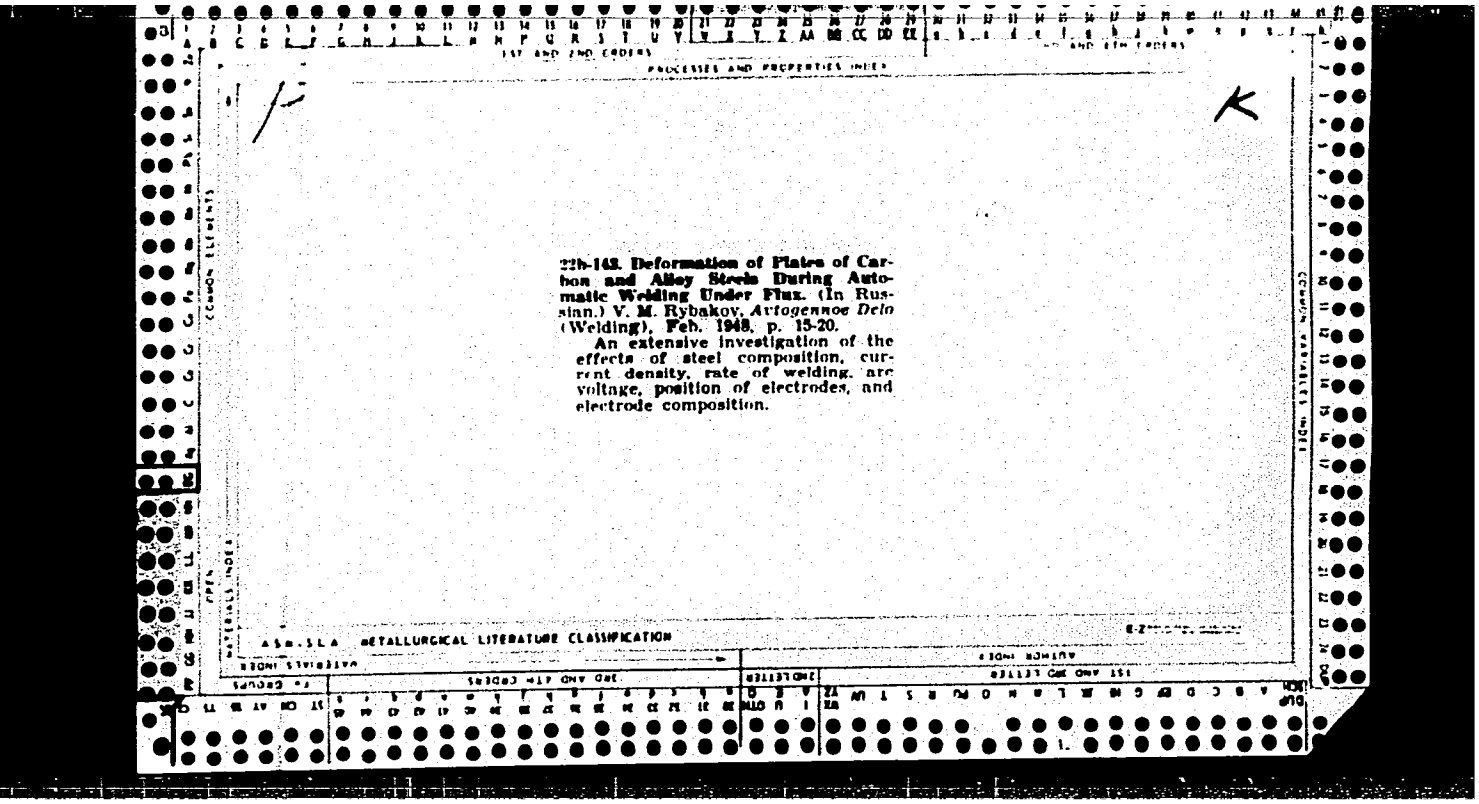
Determinations of Carbon and Alloy Steel Plates during Automatic Submerged Welding. V. M. Bykhalov. (Avtogennoe Delo, 1948, No. 7, pp. 15–20) [In Russian] An account is given of measurements of deformation carried out with a simple apparatus after cooling steel plates to which bending blocks had been made along an edge using an automatic submerged A.C. arc process. The plates were rectangular 800 mm. long, 110–140 mm. wide and 8–12 mm. thick, and had been subjected to tempering at 650–700°. The effect on the deformation of the following factors was investigated: Composition of the steel; strength of current; speed of welding; arc voltage; type of flux; angle of inclination of the electrode; type of electrode wire; and number of layers welded. The results obtained are presented graphically, and it is concluded that deformations can be reduced by correct selection of conditions.—S. A.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



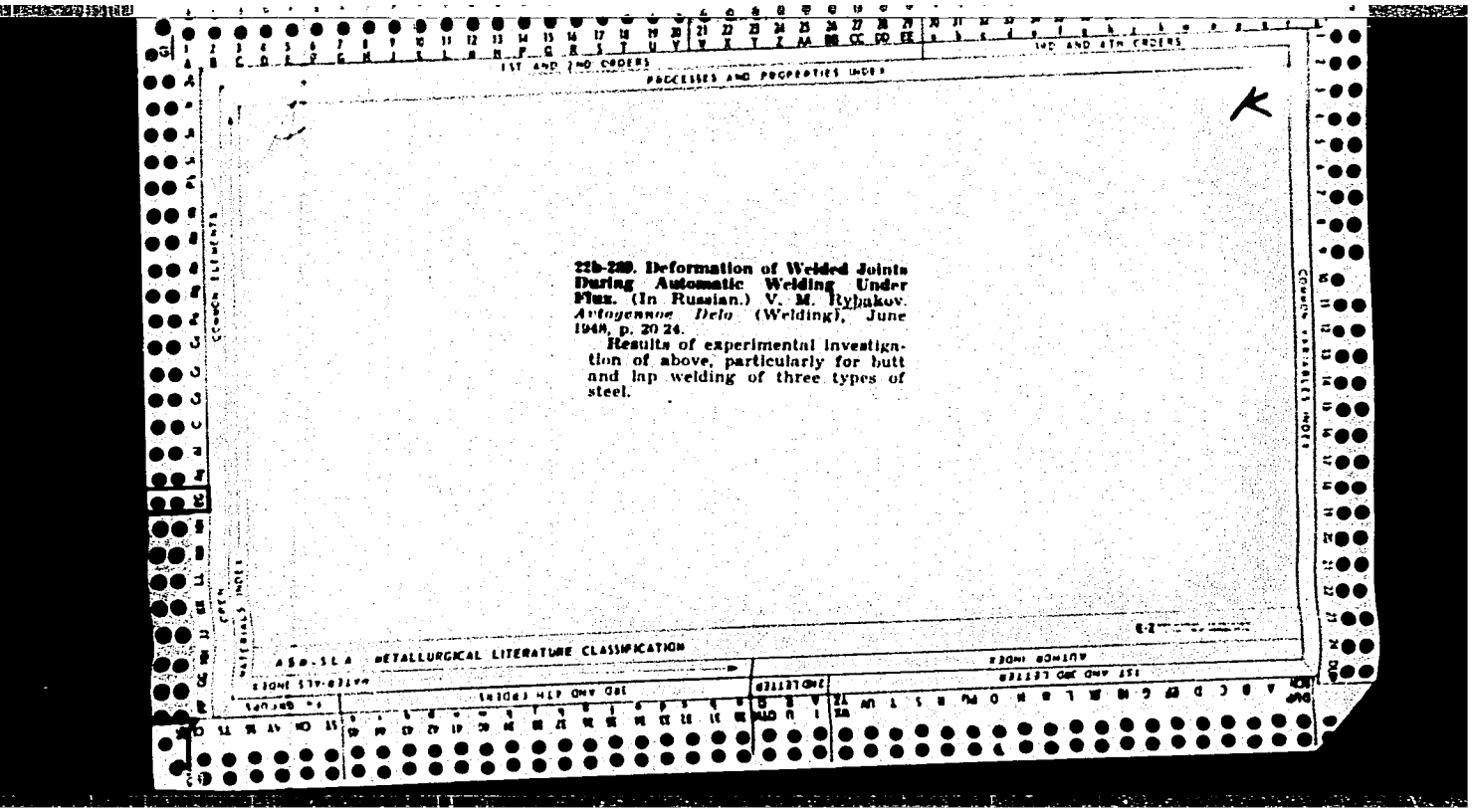
2210-37. **Decrease of Deformation During Welding by Peening the Seams.** (In Russian.) V. M. Rybakov. *Avtogennoe Delo* (Welding), Dec. 1948, p. 20-21.

Tabulated and charted data of experimental investigation indicates that peening considerably decreases the deformation caused by welding. The extent of such decrease was found to depend on the width of the zone of shrinkage and on yield points of the fused-on and the base metal.



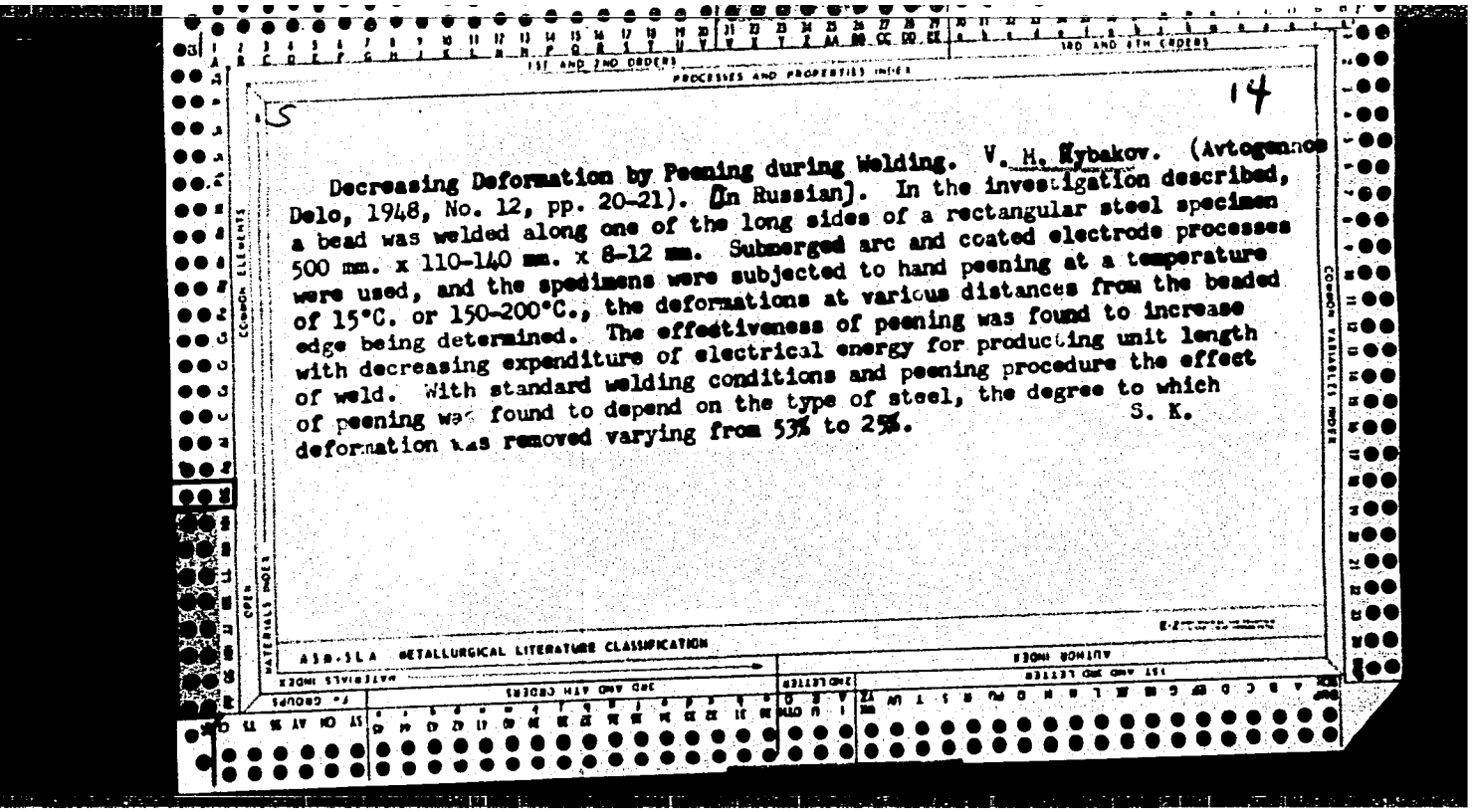
22h-143. **Deformation of Plates of Carbon and Alloy Steels During Automatic Welding Under Flux.** (In Russian.) V. M. Rybakov. *Avtogennoe Delo* (Welding), Feb. 1948, p. 15-20.

An extensive investigation of the effects of steel composition, current density, rate of welding, arc voltage, position of electrodes, and electrode composition.



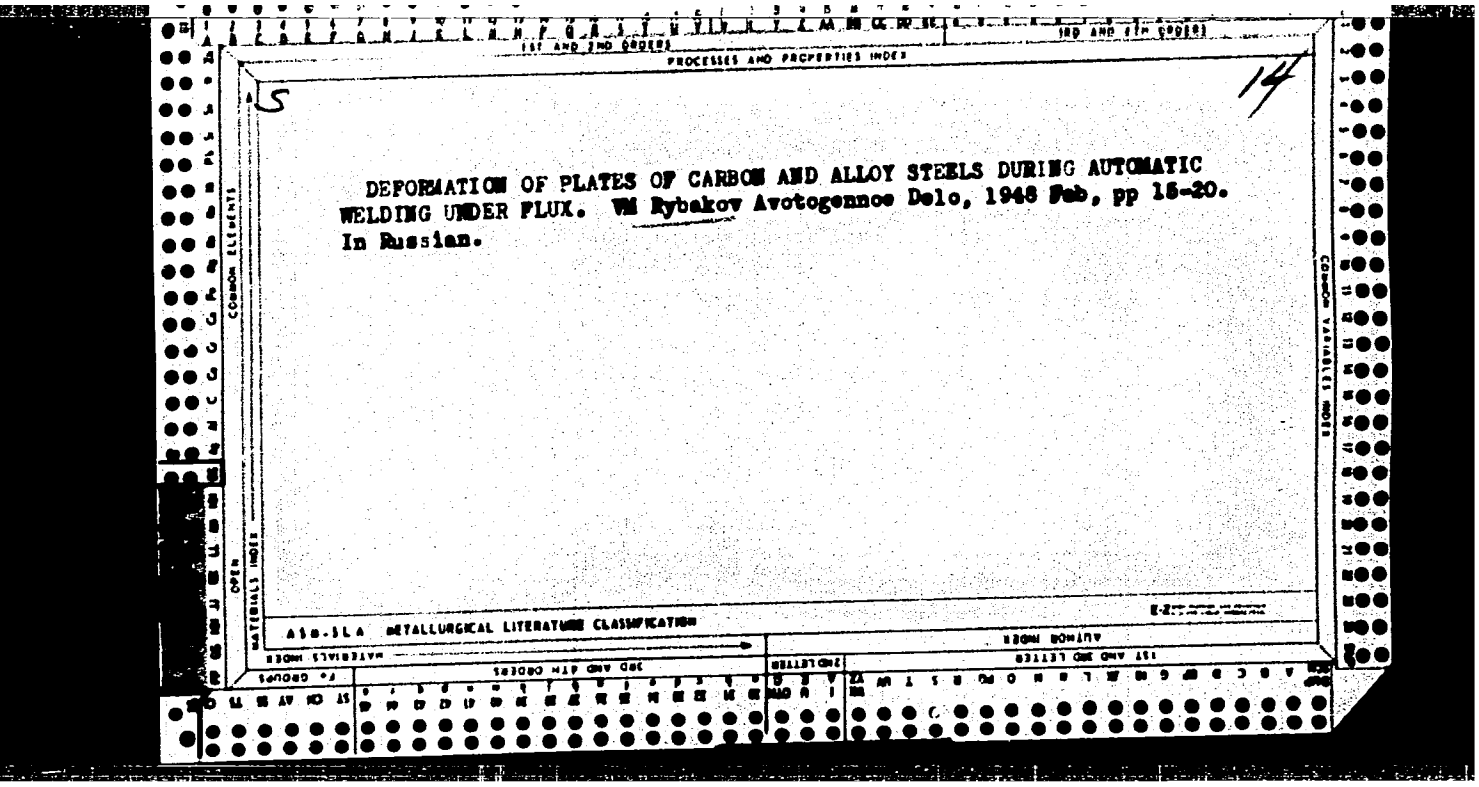
22b-289. **Deformation of Welded Joints During Automatic Welding Under Flux.** (In Russian.) V. M. Rybakov. *Avtogennoe Delo* (Welding), June 1948, p. 20-24.

Results of experimental investigation of above, particularly for butt and lap welding of three types of steel.

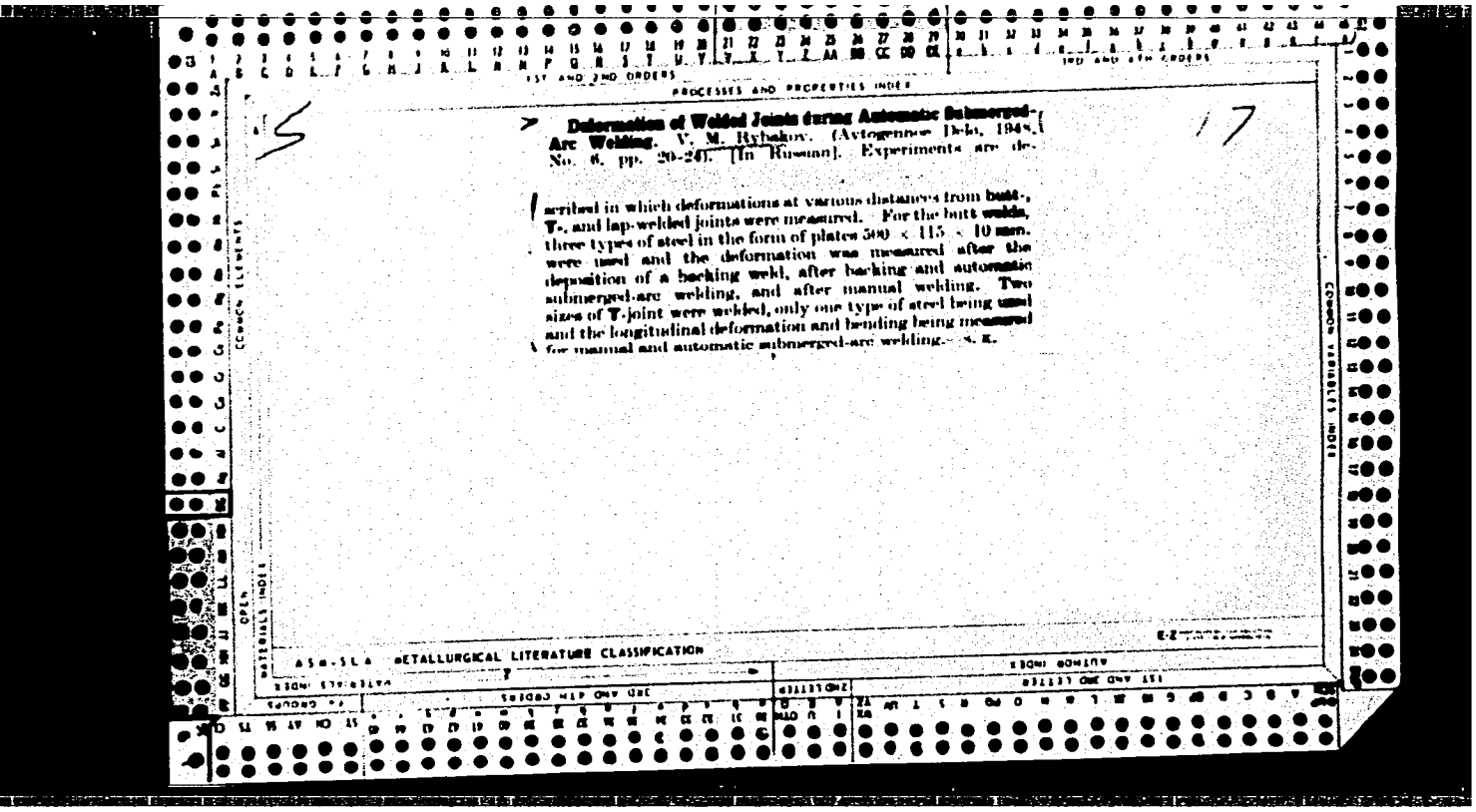


14

Decreasing Deformation by Peening during Welding. V. M. Kybakov. (Avtogennoe Delo, 1948, No. 12, pp. 20-21). [In Russian]. In the investigation described, a bead was welded along one of the long sides of a rectangular steel specimen 500 mm. x 110-140 mm. x 8-12 mm. Submerged arc and coated electrode processes were used, and the specimens were subjected to hand peening at a temperature of 15°C. or 150-200°C., the deformations at various distances from the beaded edge being determined. The effectiveness of peening was found to increase with decreasing expenditure of electrical energy for producting unit length of weld. With standard welding conditions and peening procedure the effect of peening was found to depend on the type of steel, the degree to which deformation was removed varying from 53% to 25%. S. K.



DEFORMATION OF PLATES OF CARBON AND ALLOY STEELS DURING AUTOMATIC WELDING UNDER FLUX. VM Rybakov Avtogennoe Delo, 1948 Feb, pp 18-20. In Russian.



Deformation of Welded Joints during Automatic Submerged-Arc Welding. V. M. Rybakov. (Avtogennoe Delo, 1948, No. 6, pp. 20-24). [In Russian]. Experiments are described in which deformations at various distances from butt-, T-, and lap-welded joints were measured. For the butt welds, three types of steel in the form of plates 500 × 115 × 10 mm. were used and the deformation was measured after the deposition of a backing weld, after backing and automatic submerged-arc welding, and after manual welding. Two sizes of T-joint were welded, only one type of steel being used and the longitudinal deformation and bending being measured for manual and automatic submerged-arc welding.—S. E.

RYBAKOV, V.M., kand.tekhn.nauk; KARPECHENKO, P.S., kand.tekhn.nauk.

Developing electrodes for the air-arc cutting of metals. Svar. proizv. no.2:33-34 F '63. (MIRA 16:2)

1. Moskovskiy inzhenerno-stroitel'nyy institut im. V.V.Kuybysheva.
(Electric metal cutting) (Electrodes)

KIKIN, A.I., prof.; BELENYA, Ye.I., prof.; STRELETSKIY, N.S., prof., doktor tekhn. nauk; LESSIG, Ye.N., dots.; MUKHANOV, K.K., dots.; DUBINSKIY, G.S., dots.; SHESTAK, G.A., dots.; IGNAT'YEVA, V.S., dots.; KUYBAKOV, V.M., dots.; GENIYEV, A.N., prof.; VEDENIKOV, G.S., dots.; TUBIN, S.M., kand. tekhn. nauk, nauchnyy red.; BEGAK, B.A., red. izd-va; OSENKO, L.M., tekhn. red.

[Metal construction; present state and outlook for future development] Metallicheskie konstruktsii; sostoianie i perspektivy razvitiia. Pod obshchei red. N.S.Streletskogo. Moskva, Gos. izd-vo lit-ry po stroit., arkhit. i stroit. materialam, 1961. 333 p. (MIRA 15:4)

1. Moscow. Moskovskiy inzhenerno-stroitel'nyy institut. 2. Kafedra metallicheskikh konstruktsiy Moskovskogo inzhenerno-stroitel'nogo instituta imeni V.V.Kuybysheva (for all except Tubin, Begak, Osenko).

(Building, Iron and steel)
(Aluminum, Structural)

KARPECHENKO, P.S., kand.tekhn.nauk; RYBAKOV, V.M., kand.tekhn.nauk

Some problems of using welding in reinforced concrete elements. Sbor. trud. MISI no.18:110-124 '62. (MIRA 16:2)
(Precast concrete--Welding)

RYBAKOV, V.M., kand.tekhn.nauk; KARPECHENKO, P.S., kand.tekhn.nauk

The effect of technical factors of welding on the deformation of welded joints. Sbor. trud. MISI no.18:125-142 '62. (MIRA 16:2)

(Welding)

RYBAKOV,V.M., kandidat tekhnicheskikh nauk

Producing high-number yarns from viscose staple fiber. Tekst. prom.15 no.7:12-13 Jl'55. (MLRA 8:10)
(Rayon spinning)

RYBAKOV, V. M.

25584. RYBAKOV, V. M.
Deformatsii svarnykh soedineiy pri avtomaticheskoy svarke pod flyusom. Avtogen. Delo, 1948, No. 6, s. 20-24.

SO: Letopis' Zhurnal Statey, No. 30, Moscow, 1948

RYBAKOV, V. M.

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

Deformation of Welded Joints during Automatic Submerged-Arc Welding. V. M. Rybakov. (Avtogennoe Delo, 1948, No. 6, pp. 20–24). [In Russian]. Experiments are described in which deformations at various distances from butt-, T-, and lap-welded joints were measured. For the butt welds, three types of steel in the form of plates 500 × 115 × 10 mm. were used and the deformation was measured after the deposition of a backing weld, after backing and automatic submerged-arc welding, and after manual welding. Two sizes of T-joint were welded, only one type of steel being used and the longitudinal deformation and bending being measured for manual and automatic submerged-arc welding.—S. K.

RYBAKOV, V.M., tekhnolog

Device for moving collectors. Elek.i tepl.tiaga. 4 no.6:17 Je '60. (MIRA 13:8)
(Electric railway motors)

PILIKOVSKIY, Mikhail Yakovlevich; RYBAKOV, Vladimir Mikhaylovich; UKRAINSKIY, E.M., retsenzent; BELITSINA, N.M., prof., doktor tekhn. nauk, red.; SOKOLOVA, V.Ye., red.; SHVETSOV, S.V., tekhn. red.

[Processing of synthetic fibers by cotton-spinning machinery] Pererabotka khimicheskikh volokon na khlopkopriadil'nom oborudovanii. Pod red. N.M.Belitsina. Moskva, Izd-vo nauchno-tekhn. lit-ry RSFSR, 1961. 166 p. (MIRA 15:1)
(Textile fibers, Synthetic)
(Spinning machinery)

RYBAKOV, V. M.

Deformation of carbon- and alloy-steel plates during autogenous welding under a flux. V. M. Rybakov. *Avtogennoe Delo* 1948, No. 2, 15–20.—Deformation caused by welding a bead on a plate 500 mm. long, 110–140 mm. wide, and 8–12 mm. thick was detd. on steels contg. (1) C 0.19, Si 0.01, Mn 0.47, P 0.028, and S 0.033; (2) C 0.28, Si 0.20, Mn 0.63, P 0.026, and S 0.041; (3) C 0.42, Si 0.25, Mn 0.68, P 0.028, and S 0.023; (4) C 0.33, Si 0.99, Mn 1.06, P 0.032, S 0.032, and Cr 1.04; and (5) C 0.35, Si 1.16, Mn 1.64, P 0.039, S 0.026, Ni 1.0, Cr 0.11, and Mo 0.037%. The 2 alloy steels showed 1/3 less deformation than the plain C steels. Variation in current applied indicated max. deformation at 1500 amp. when welding speed was 28.1 m. per hr. Deformation decreased as the welding speed was increased from 16 to 85 m. per hr. An increase in voltage from 30 to 45 v. decreased deformation. H. W. Rathmann

RYBAKOV, V. M.

Decreasing Deformation by Peening during Welding. V. M. Rybakov. (Avtogennoe Delo, 1948, No. 12, pp. 20-21). [In Russian]. In the investigation described, a bead was welded along one of the long sides of a rectangular steel specimen 500 mm. x 110-140 mm. x 8-12 mm. Submerged arc and coated electrode processes were used, and the specimens were subjected to hand peening at a temperature of 15°C. or 150-200°C., the deformations at various distances from the beaded edge being determined. The effectiveness of peening was found to increase with decreasing expenditure of electrical energy for producing unit length of weld. With standard welding conditions and peening procedure the effect of peening was found to depend on the type of steel, the degree to which deformation was removed varying from 53% to 25%. S. K.

COMMON VARIABLES INDEX

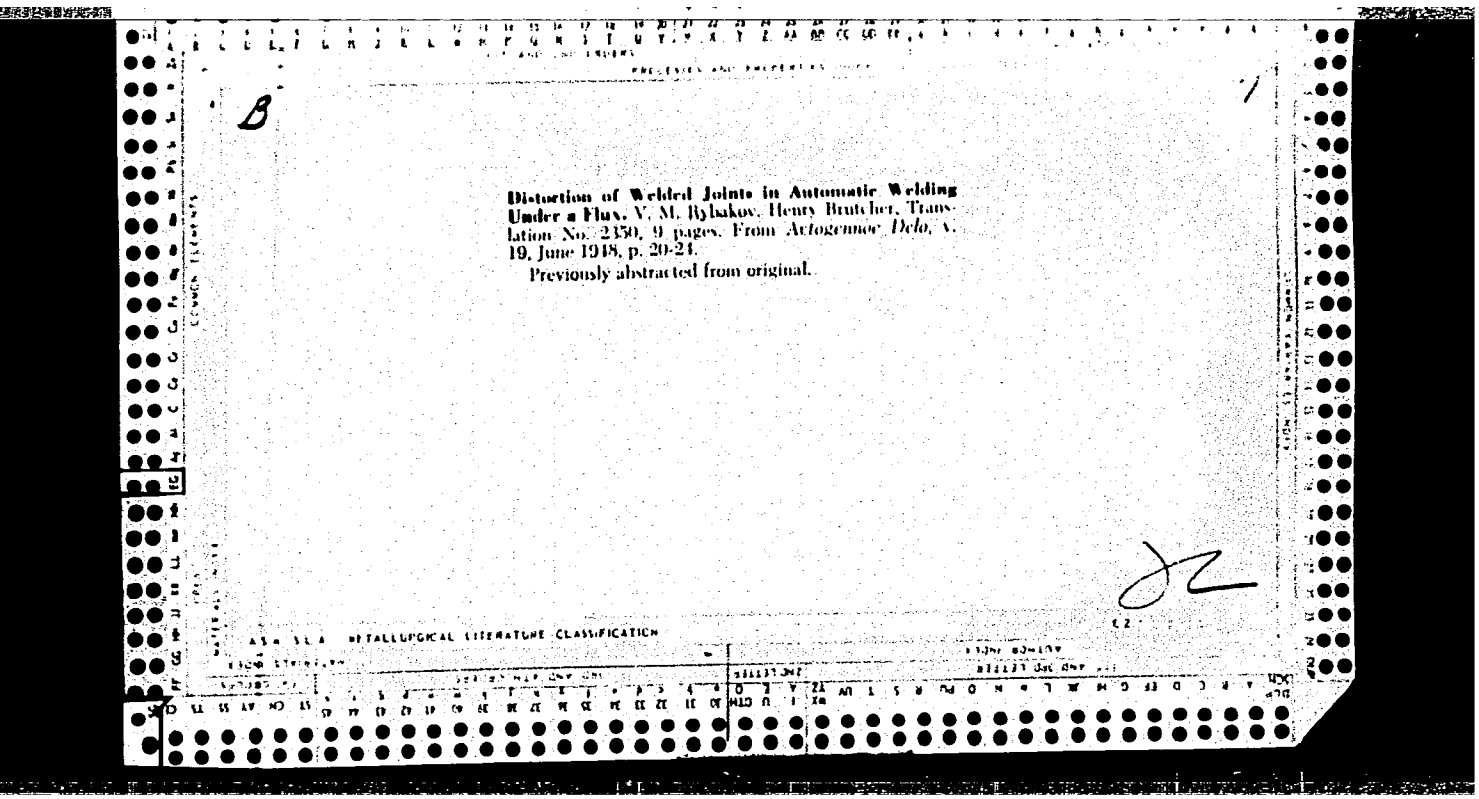
RYBAKOV, V. M.
25584

Deformatsii svarnykh soedineiy pri avtomaticheskoy svarke pod flyusom.
Avtogen. Delo, 1948, No. 6, s. 20-24

SO: LETOPIS NO. 30, 1948

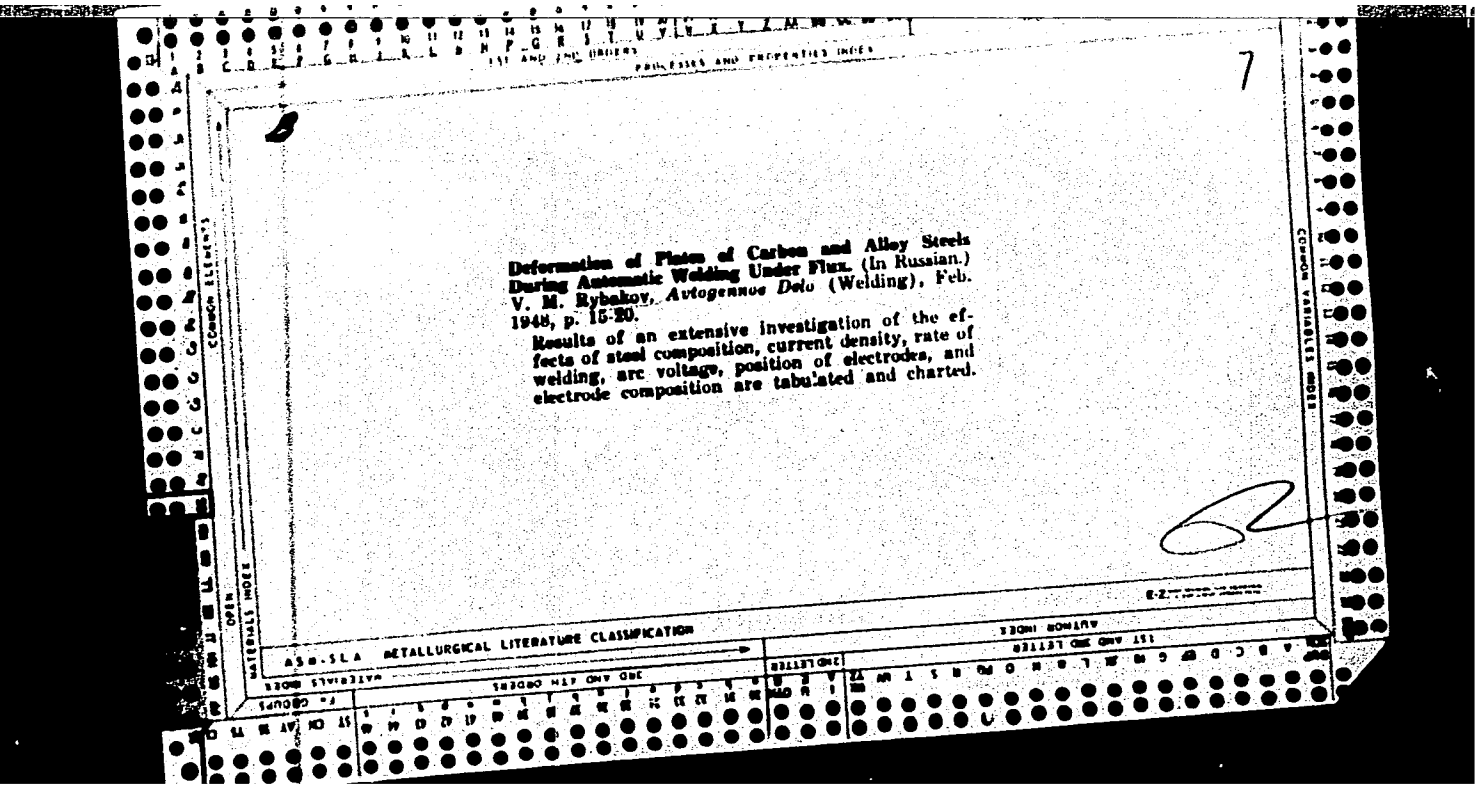
DEFORMATIONS OF CARBON AND ALLOY STEEL PLATES DURING AUTOMATIC SUBMERGED WELDING. V.M. Lyubkov. (Avtogennoe Delo, 1948, No. 2, pp. 15-20). (In Russian). An account is given of measurements of deformation carried out with a simple apparatus after cooling steel plates to which bending welds had been made along an edge using an automatic submerged A.C. arc process. The plates were rectangular, 500 mm. long, 110-140 mm. wide and 8-12 mm. thick, and had been subjected to tempering at 650-700°. The effect on the deformation of the following factors was investigated: Composition of the steel; strength of current; speed of welding; arc voltage; type of flux; angle of inclination of the electrode; type of electrode wire; and number of layers welded. The results obtained are presented graphically, and it is concluded that deformations can be reduced by correct selection of conditions.

Immediate source clipping



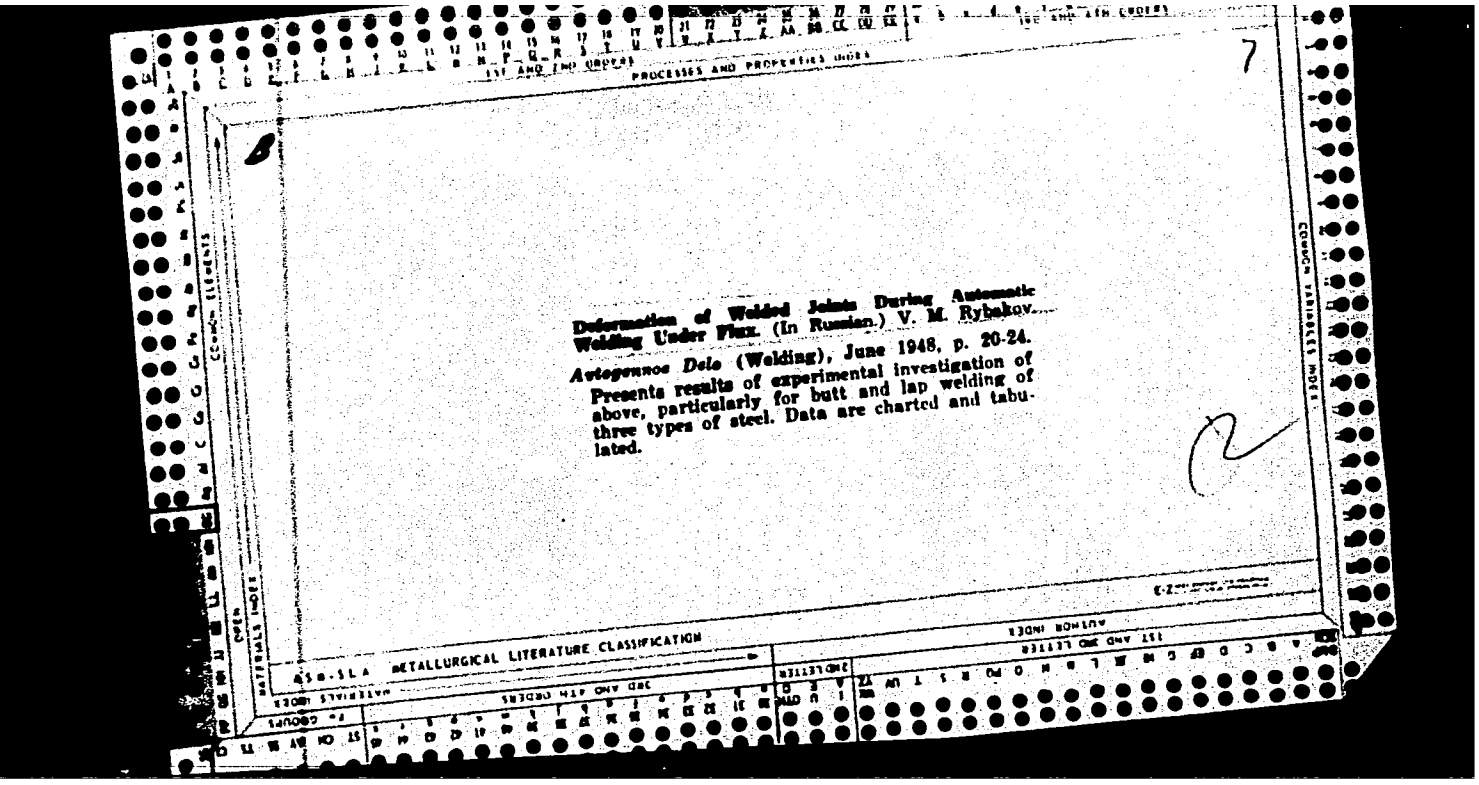
Distortion of Welded Joints in Automatic Welding Under a Flux. V. M. Rykakov. Henry Brutcher, Translation No. 2350, 9 pages. From *Avtogennoe Delo*, v. 19, June 1948, p. 20-24.

Previously abstracted from original.



Deformation of Plates of Carbon and Alloy Steels During Automatic Welding Under Flux. (In Russian.) V. M. Rybakov, *Avtogennoe Delo* (Welding), Feb. 1948, p. 15-20.

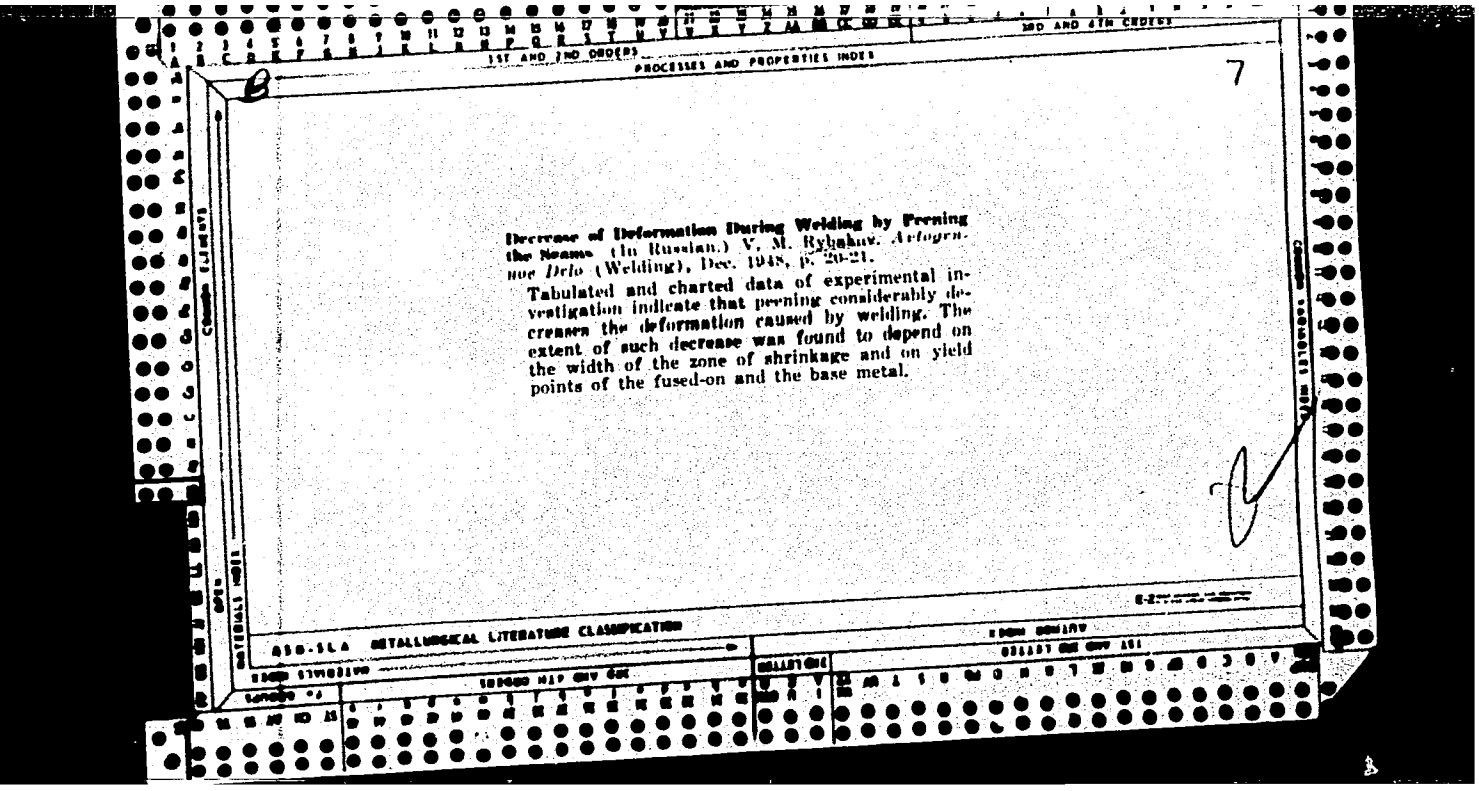
Results of an extensive investigation of the effects of steel composition, current density, rate of welding, arc voltage, position of electrodes, and electrode composition are tabulated and charted.



Deformation of Welded Joints During Automatic Welding Under Flux. (In Russian.) V. M. Rybakov.

Avtogennoe Delo (Welding), June 1948, p. 20-24.

Presents results of experimental investigation of above, particularly for butt and lap welding of three types of steel. Data are charted and tabulated.



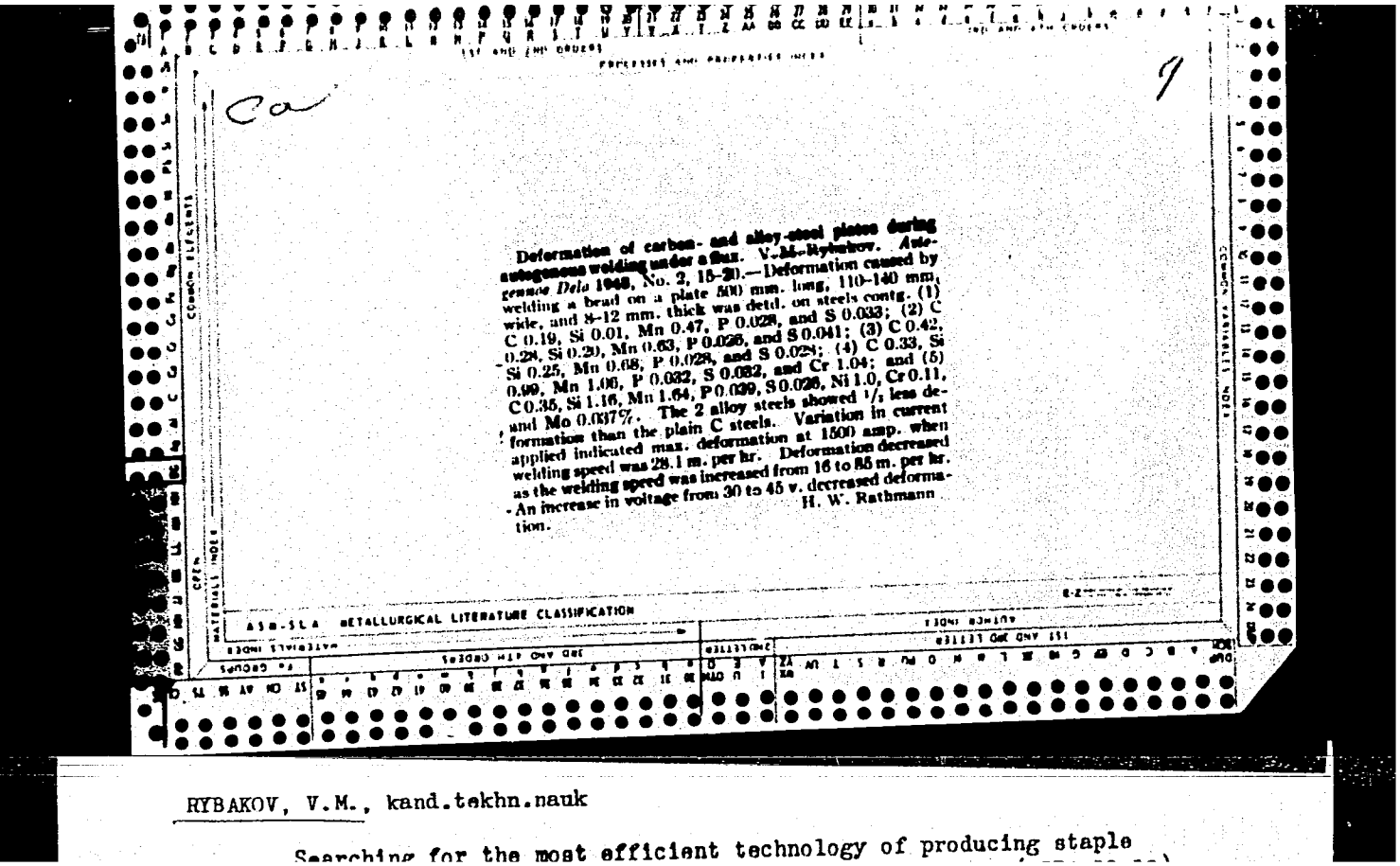
PROCESSES AND PROPERTIES INDEX

7

Decrease of Deformation During Welding by Peening the Seams (In Russian.) V. M. Rybakov. *Avtogennoe Delo* (Welding), Dec. 1948, p. 20-21.

Tabulated and charted data of experimental investigation indicate that peening considerably decreases the deformation caused by welding. The extent of such decrease was found to depend on the width of the zone of shrinkage and on yield points of the fused-on and the base metal.

ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION



Deformation of carbon- and alloy-steel plates during autogenous welding under a flux. V. M. Rybakov. *Avtogennoe Delo* 1948, No. 2, 15-20).—Deformation caused by welding a bead on a plate 500 mm. long, 110-140 mm. wide, and 8-12 mm. thick was detd. on steels contg. (1) C 0.19, Si 0.01, Mn 0.47, P 0.028, and S 0.033; (2) C 0.28, Si 0.20, Mn 0.63, P 0.026, and S 0.041; (3) C 0.42, Si 0.25, Mn 0.68, P 0.028, and S 0.028; (4) C 0.33, Si 0.99, Mn 1.06, P 0.032, S 0.032, and Cr 1.04; and (5) C 0.35, Si 1.16, Mn 1.64, P 0.039, S 0.026, Ni 1.0, Cr 0.11, and Mo 0.037%. The 2 alloy steels showed 1/3 less deformation than the plain C steels. Variation in current applied indicated max. deformation at 1500 amp. when welding speed was 28.1 m. per hr. Deformation decreased as the welding speed was increased from 16 to 55 m. per hr. An increase in voltage from 30 to 45 v. decreased deformation.

H. W. Rathmann

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

RYBAKOV, V.M., kand.tekhn.nauk

Searching for the most efficient technology of producing staple

RYBAKOV, V.M., kandidat tekhnicheskikh nauk; RUSAKOV, N.G.

Yarn from mixtures with capron staple fibers. Tekst.prom.16 no.10:29-30 O '56. (MIRA 10:1)
(Yarn) (Nylon)

VLADIMIROV, Boris Mikhaylovich; RYBAKOV, Vladimir Mikhaylovich; SAMOYLOV, Ivan Alekseyevich; BELITSIN, N.M., doktor tekhn.nauk, red.; FAMINSKIY, A.P., inzh., retsenzent; TERYUSHNOV, A.V., kand.tekhn. nauk, retsenzent; VERBITSKAYA, Ye.M., red.; MEDVEDEV, L.Ya., tekhn.red.

[Manual on cotton spinning] Spravochnik po khlopkopriadeniiu. Pod red. N.M.Belitsina. Izd.3., perer.i sokr. Moskva, Gos. nauchno-tekhn.izd-vo lit-ry po legkoi promyshl. 1958. 508 p. (MIRA 12:3)

1. Moscow. TSentral'nyy nauchno-issledovatel'skiy institut khlopchatobumazhnoy promyshlennosti.
(Cotton spinning)

RYBAKOV, Vasiliy Mikhaylovich, kand. tekhn. nauk; DMITRIYEV, Nikolay Petrovich, inzh.; TSEGEL'SKIY, V.L., nauchn. red.

[Welding of steel structures] Svarka stal'nykh konstruktsii. Moskva, Stroiizdat, 1965. 133 p. (MIRA 18:3)

RYBAKOV, V.

KARPECHENKO, P., kandidat tekhnicheskikh nauk, dotsent; RYBAKOV, V., kandidat tekhnicheskikh nauk, dotsent.

Welded joints of precast reinforced concrete columns. Gor.i sel'.stroi. no.7:7-9 Jl '57. (MLRA 10:10)
(Precast construction construction)

AUTHORS: Kuzovtsova, M.Ya., Mekhedov, V.N., Rybakov, V.N., Khalkin, V.A. SOV/89-4-6-12/30

TITLE: Light Tellurium Isotopes (Legkiye izotopy tellura)

PERIODICAL: Atomnaya energiya, 1958, Vol 4, Nr 6, pp 583-583 (USSR)

ABSTRACT: The mass numbers of light tellurium isotopes were experimentally determined ($A < 118$) together with their decay characteristics on the basis of subsidiary substances.
An antimony target is bombarded with protons of the synchro-cyclotron, and the activities of various chemical fractions are measured (the process of analysis is described).
The following determinations were carried out:

Te^{121}: $T_{1/2} \sim 17$ d
$Te^{118} + Te^{119}$: $T_{1/2} \sim 6$ d
Te^{117}: $T_{1/2} \sim 1.7$ h; β^+: 2.7 MeV; x-rays = 75%
Te^{116}: $T_{1/2} = 2.5$ h
Sb^{116}: K-capture 10%.

There are 7 references, 2 of which are Soviet.

Card 1/2

Light Tellurium Isotopes SOV/ 89-4-6-12/30

SUBMITTED: December 11, 1957

1. Tellurium isotopes (Radioactive)--Decay 2. Tellurium isotopes (Radioactive)--Masses 3. Tellurium isotopes (Radioactive)--Atomic weight 4. Proton bombardment--Applications

Card 2/2

RYBAKOV, V.N.; STRONSKIY, I.I.

Production of Sb^{125} and In^{113m} without carriers. Atom. energ. 6 no.2: 208-210 F '59. (MIRA 12:3)
(Antimony--Isotopes) (Indium--Isotopes)

05854

SOV/78-4-11-7/50

5(2)

AUTHORS: Rybakov, V. N., Stronskiy, I. I. (Stroński)

TITLE: The Separation of Tin, Antimony and Tellurium on Anion Exchangers

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 11, pp 2449-2451 (USSR)

ABSTRACT: When investigating the isotopes of Te and Sb which are produced from iodine under the action of high-energy protons, the problem of separating these elements by means of ion exchangers appeared. The authors checked the applicability of EDE-10P and ASD-2 exchanger resins of Soviet origin. The ASD-2 resin produced from trimethyl diamine and polystyrene was supplied by A. S. Tevlina (Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva- Moscow Institute of Chemical Technology imeni D. I. Mendeleyev). Concentration and activity (measured with the help of an MST-17 end-window counter) of the elements Te^{127} (half-life: 90 d), Sb^{124} (half-life: 60 d), Sn^{113} (half-life: 118 d), and Sn^{123} (half-life: 125 d) dissolved in HCl are shown in

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The Separation of Tin, Antimony and Tellurium on Anion Exchangers

table 1. Figure 1 demonstrates the separation of Sb and Te on an EDE-10P anion exchanger, figure 2 the same process on an ASD-2 exchanger. These elements were separated within 1 - 1.5 hours. Sb, Te and Sn could not be separated by means of an EDE-10P exchanger since Sn was washed out together with Sb. The strongly basic anion exchanger ASD-2, however, was found to be effective (Fig 3) and suited to be substituted for the most frequently used foreign anion exchanger, Daueks-1X8. The authors thank V. A. Khalkin and A. N. Murin for their interest and valuable remarks. There are 4 figures, 1 table, and 7 references, 2 of which are Soviet.

ASSOCIATION: Ob"yedinennyy institut yadernykh issledovaniy, Laboratoriya yadernykh problem, g. Dubna (Joint Institute of Nuclear Research, Laboratory for Nuclear Problems, City of Dubna) Institut yadernykh issledovaniy Pol'skoy Akademii nauk, Laboratoriya fiziki atomnogo yadra Kraków (Institute of Nuclear Research of the Polish Academy of Sciences, Laboratory for the Physics of the Atomic Nucleus, City of Kraków)

05854

SOV/78-4-11-7/50

The Separation of Tin, Antimony and Tellurium on Anion Exchangers

SUBMITTED: August 15, 1958

Card 3/3

21(8)

AUTHORS: Rybakov, V. N., Stronskiy, I. I. SOV/89-6-2-17/28

TITLE: Carrier-Free Production of Sb^{125} and In^{113m} (Polucheniye Sb^{125} i In^{113m} bez nositeley)

PERIODICAL: Atomnaya energiya, 1959, Vol 6, Nr 2, pp 208 - 210 (USSR)

ABSTRACT: For a carrier-free production of antimony and indium isotopes a 2 mm gauge and 100 mm high column was used, which contained the synthetic resin ASD-2 (particle size ~30μ) dissolved in chloroform. The synthetic resin is first treated with concentrated hydrochloric acid containing 10-20 mg Br_2/ml. It is then washed with 3 n HCl, and the column is filled with 0.1 ml radioactive tin solution. The tin solution (3 n with respect to HCl) contains 3.2 ml Sn^{IV}/ml and possesses an activity of $5.5.10^5$ impulses/min.ml. Tin and indium are washed out at a velocity of 1 drop per minute, i. e. for antimony with 3 n HCl and for indium with 2 n $HClO_4$. The chromatographically separated constituents are measured by means of an end-window counter of the MST-17 type. The γ-rays

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are measured by means of a scintillation γ-spectrometer with a NaJ(Tl) crystal. In In^{113m} γ-energy amounted to (0.42±0.04)Mev., the half-time period to (105±2) min. V. A. Chalkin was concerned in this work and provided the γ-spectrometer. The measurement by means of the γ-spectrometer was carried out by V. V. Kuznetsov. There are 3 figures and 10 references, 6 of which are Soviet.

SUBMITTED: August 20, 1958

RYBAKOV, V.N.

S/048/60/024/012/009/011
B019/B056

AUTHORS: Sorokin, A. A., Badenku, A., Klimentovskaya, M. V., Kryukova, L. N., Mitrofanov, K. P., Muravyeva, V. V., Rybakov, V. N., Chandra, G., and Shpinel', V. S.

TITLE: Study of the Decay of Te^{118} and Te^{119} and the Level Scheme of Sb^{119}

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1960, Vol. 24, No. 12, pp. 1484-1491

TEXT: The present paper was read at the 10th All-Union Conference on Nuclear Spectroscopy, which was held in Moscow from January 19 to January 27, 1960. The neutron-deficient tellurium isotopes were obtained by a one and a half hours' irradiation with 660-Mev protons at OIYaI (Joint Institute of Nuclear Research). The tellurium was chemically separated 1-2 days after irradiation. The measurements of the γ-spectrum and the γ-γ coincidences were carried out by means of a scintillation spectrometer. The β-γ coincidences were measured by means of a β-spectro-

Card 1/3

meter, which was connected with a coincidence circuit with a γ-spectrometer. The β^+ spectrum of Te^{118} consists essentially of a component with its upper edge at 2700 ± 50 kev. As shown by an exact investigation, this β^+-spectrum is furnished by the isotope Sb^{118}, which is in equilibrium with Te^{118}. On the basis of these results, the authors assume that the Te^{118} and Sb^{118} decay mainly into the ground state of the daughter nuclei. For the ground state of Sn^{118}, 0^+, and for the initial state of Sb^{118}, 0^+ or 1^+ is given. 6.1 ± 0.1 days are given as the half-life of Te^{118}. From investigations carried out with the scintillation-γ-spectrometer, in which Sb^{118}, Te^{121}, and Te^{123} were detected, the authors are able to state that all γ-transitions having a half-life of 4.75 days are related to the decay of Te^{119}. They are transitions between the Sb^{119} levels. From a thorough study of these lines and the angular correlation of the γ-radiation, the authors were able to set up the decay scheme of Te^{119} shown in Fig. 4. Finally,

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the authors deal with the Te^{119} isomers. They arrive at the conclusion that the isomer of Te^{119} with a half-life of 4.75 days is an excited isomeric state with the spin 11/2$^-$ and that the state of Te^{119} with a half-life of 12 hours is the ground state. The authors thank V.N. Mekhodov for producing the source, and L. Vasina, B. A. Komissarova, and Chzhan Tszun-shuan, students of physics at MGU, for carrying out measurements and evaluating experimental results. There are 10 figures and 14 references, 10 Soviet, 3 US, and 1 Dutch.

S/048/60/024/012/009/011
B019/B056

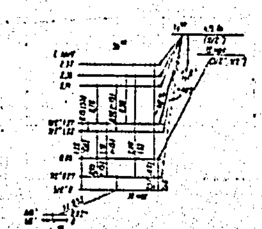

Рис. 4. Схема распада Te¹¹⁹. В скобках приведены относительные интенсивности γ-переходов

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33188

S/186/61/003/006/009/010
E040/E185

24.6600

AUTHORS: Kuznetsova, M.Ya., Min Nam Buk, Rybakov, V.N., and Khalkin, V.A.

TITLE: Formation of Te^{127} from I^{127} under bombardment by high-energy protons

PERIODICAL: Radiokhimiya, v.3, no.6, 1961, 755-759

TEXT: Ni^{65} appears to be formed by the $Cu^{65}(p,p\pi^+)Ni^{65}$ reaction when copper is bombarded by high-energy protons. Because no success was achieved in the further study of the above reaction using La^{139} and Au^{197} targets, an investigation was made of Te^{127} formation from I^{127} under the action of protons with the energy of 120-660 meV. The investigation was made in the internal beam of the synchrocyclotron at the Ob"yedinennyy institut yadernykh issledovaniy (Joint Nuclear Research Institute). Full details are given of the test methods employed, as well as the data for the dependence of Te^{127} formation from I^{127} as a function of the energy of the bombarding protons (table). In order to obviate the difficulties usually associated with the determination of the

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S/186/61/003/006/009/010
E040/E185

Formation of Te^{127} from I^{127} ....

radioactivity of Te^{127}, the electronic component of the target radiation was determined by means of a magnetic analyzer (Ref.9: M.Ya. Kuznetsova, V.M. Mekhedov, Izv. AN SSSR, seriya fiz., v.21, 7, 1020, 1957). An analysis is made of the reactions leading to the formation of Te^{119} and Te^{127} isotopes under the conditions used in the experiments. It is concluded that Te^{127} is formed mainly by the reaction I^{127}_{53} (n,p) Te^{127}_{52} under bombardment with protons in the energy range of 120-660 meV. The experimentally observed elevated yield of Te^{127} in the proton energy range of 160-260 meV is interpreted as being due to the reaction $I^{127}_{53}(p,pn^{+})Te^{127}_{52}$.

There are 1 table and 20 references: 10 Soviet-bloc, 1 Russian translation from non-Soviet-bloc publication, and 9 non-Soviet-bloc. The four most recent English language references read as follows:

Ref.13: E.B. Paul, R.L. Clarke,
Canad. J. Phys., v.31, 2, 267 (1953).

Card 2/3

33188

Formation of Te^{127} from I^{127} ... S/186/61/003/006/009/010
E040/E185

Ref.15: N. Metropolis, R. Bivins, M. Storm, A. Turkevich, J.M. Miller, G. Friedlander.
Phys. Rev., v.110, 185 (1958).
Ref.16: N. Metropolis, R. Bivins, M. Storm, J. Miller, G. Friedlander, A. Turkevich.
Phys. Rev., v.110, 204 (1958).
Ref.20: W. Winsberg,
Phys. Rev., v.95, 198 (1954).

SUBMITTED: October 31, 1960

Card 3/

KUZNETSOVA, M.Ya.; POKROVSKIY, V.N.; RYBAKOV, V.N.

[Study of the reaction $Al^{27}(p,p\pi^{+})Mg^{27}$] Izluchenie reaktsii $Al^{27}(p,p^{\pi+})Mg^{27}$. Dubna, Ob"edinennyi in-t iadernykh issledovanii, 1962. 10 p. (MIRA 15:2)
(Nuclear reactions)

S/186/62/004/003/014/022
E071/E433

AUTHORS: Rybakov, V.N., Wang Ch'uan-p'eng, Ming Nam Buk

TITLE: On the separation of tellurium without a carrier from CsCl target irradiated with protons with an energy of 660 Mev

PERIODICAL: Radiokhimiya, v.4, no.3, 1962, 340-345

TEXT: The separation of selenium and tellurium on anionites A[illegible]-2 (ASD-2) (a high-molecular quaternary ammonium base obtained by chloromethylation of copolymer of styrene and divinyl-benzene with subsequent amination with trimethylamine) and Dowex 1X8 was studied in order to find a convenient method of separating tellurium from the products of splitting iodine with high energy protons and similar reactions. The separation process was studied using radioactive selenium and tellurium. A glass column 2 mm in diameter and 100 mm high was filled with an anionite in the Cl^- form of a size below 40 μ. The separation was followed by measuring the radioactivity of each drop of the elutriant. The best conditions of separation were found to be: elutriation of selenium with 3 M HCl and tellurium with 1 M HCl.

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On the separation of tellurium ...

Subsequently, the method was tested on the separation of radioactive tellurium from products formed on irradiation of CsCl target with protons of 660 Mev. Tellurium was precipitated with selenium and then separated by the above methods. The radiochemical purity of the separated fraction was checked. Tellurium could not be elutriated from ASD-2 resin; apparently under the influence of resin containing amine groups, it was transferred into the metallic state. The authors consider that the method is applicable for the separation of tellurium from targets made from other materials. A method of preparation of targets for β-spectroscopy consisting of a deposition of tellurium from a 2.5 N hydrochloric acid solution at about 80°C on to a freshly polished silver plate was developed. Under these conditions about 90% of tellurium is transferred on to the silver surface without a carrier. There are 7 figures and 1 table.

SUBMITTED: May 6, 1961

Card 2/2

38853

S/056/62/042/006/004/047
B104/B102

24.6600 (2806)

AUTHORS: Kuznetsova, M. Ya., Pokrovskiy, V. N., Rybakov, V. N.

TITLE: Study of the $Al^{27}(p,p\pi^+)Mg^{27}$ reaction

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 42, no. 6, 1962, 1451 - 1455

TEXT: The excitation function of the $Al^{27}(p,p\pi^+)Mg^{27}$ reaction at proton energies between 130 and 660 Mev is investigated. The purity of the Al specimen justifies neglecting the production of Mg^{27} by disintegration of isotopes of heavy impurities. Three specimens ($7 \cdot 12$ mm^2; 0.4 mm thick) were so mounted in the synchrocyclotron of the OIYaI that the internal proton beam penetrated the successive specimens parallel to their 7 mm side. The reaction threshold is ~200 Mev. Therefore, the pions are produced by collisions of the incident protons with single nucleons of the nuclei. The shift of this threshold with respect to the threshold of free nucleon-nucleon collisions is explained by the innernuclear motion of the nucleons. At $E_p \sim 500$ Mev the excitation function becomes constant. The

Card 1/2

RYBAKOV, V.N.

Natural geometry or ruled surfaces. Uch. zap. MGPI no. 243: 121-125 '65 (MIRA 19:1)

ACC NR: AR7000955 SOURCE CODE: UR/0275/66/000/011/V021/V021

AUTHOR: Kononov, V. P.; Levin, V. N.; Rybakov, V. S.

TITLE: Increased reliability of performance of a controlled transistorized rectifier

SOURCE: Ref. zh. Elektronika i yeye primeneniye, Abs. 11V135

REF SOURCE: Tr. Leningr. in-t aviats. priborostr., vyp. 47, 1966, 82-85

TOPIC TAGS: electronic rectifier, transistor, RELIABILITY ENGINEERING

ABSTRACT: Controlled transistorized rectifiers are used for regulated d-c leads with a capacity of up to several hundred volts. The transistors are actuated by a brood pulse lasting $2\pi/m$, where m is the number of phases of the feed voltage. Because of the network's inductance, the transistor's performance time exceeds this value by the time necessary for switching. If the control pulse ends before the switching passes, the transistor will be prematurely closed. This will lead to increased losses in the collector, heating of the transistor, and lowering of the rectifier's efficiency. To widen the control pulse, it is proposed that a magnetiza-

Card 1/2 UDC: 621.314.61

ACC NR: AR7000955

tion choke be connected into the chain of the transistor base to shunt the transistor. To achieve better deactivation of the transistor during the negative half-period, it is proposed that a resistor be included at the general point of the emitters. A basic diagram of a full wave rectifier together with the above indicated additional elements is presented in the article. [Translation of abstract] [GC]

SUB CODE: 09/

Card 2/2

ACC NR: AP6013693 SOURCE CODE: UR/0143/66/000/009/0093/0093

INVENTOR: Telegin, A. A.; Rybakov, V. S.; Us, B. V.

ORG: None

TITLE: A device for measuring and monitoring the temperature of heated bodies from a distance. Class 42, No. 181344

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 9, 1966, 93

TOPIC TAGS: temperature measurement, remote control, thermal radiation detector, photoresistor

ABSTRACT: This Author's Certificate introduces: 1. A device for measuring and monitoring the temperature of heated bodies such as cutter surfaces from a distance. The operating principle of the unit is based on thermal radiation from the surface of the given body. The instrument contains a lens for focusing the radiation, a sensing element which converts variation in thermal radiation to variation in an electric signal, and a diaphragm which limits the exposed area of the sensing element. The sensitivity of the instrument is increased by using a lead sulfide photoresistor as the sensing element. 2. A modification of this device in which accuracy in focusing on a given object is improved by mounting the sensing element in a sleeve which may be easily removed and replaced during focusing by a sleeve with a light source and a lens for projecting a spot of light on the area to be measured.

UDC: 536.521.2

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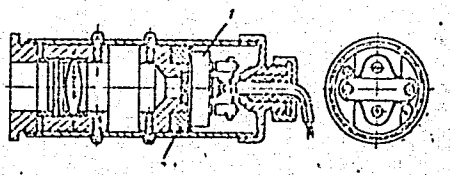
ACC NR: AP6015695



1—sensing element; 2—sleeve

SUB CODE: 14, 13/ SUBM DATE: 20May64

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L 30031-66 EWT(m)

ACC NR: AP6020114 SOURCE CODE: UR/0367/66/003/002/0313/0315

AUTHOR: Mokhodov, V. N.; Rybakov, V. N.; Sorokin, A. A.; Shtal', M. Z. 37 B

ORG: Joint Institute for Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy); Institute of Nuclear Physics, Moscow State University (Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta)

TITLE: Ratio of Te isomer yields in the disintegration of I and Cs by 660 MeV protons

SOURCE: Yadernaya fizika, v. 3, no. 2, 1966, 313-315

TOPIC TAGS: isomer, tellurium, proton, nuclear spin, probability

ABSTRACT: The ratios of the probabilities for the creation of high and low-spin states have been measured for Te^{119} and Te^{121} isomers, obtained in the disintegration of Cs and I by 660 MeV protons. For Te^{119} these ratios are 0.4 ± 0.03 and 0.77 ± 0.07; and for Te^{121}, 0.65 ± 0.07 and 1.1 ± 0.13. Orig. art. has: 1 figure and 1 table. [Based on authors' Eng. abst.] [JPRS]

SUB CODE: 20 / SUBM DATE: 20Jul65 / ORIG REF: 006 / OTH REF: 011

Card 1/1 90

RYBAKOV, V.N.; MAL'TSEVA, N.S.

Study of the reaction (p, pn) on ^{115}In by the radiochemical method. Radiokhimiia 7 no.1.90-95 '65. (MIRA 18:6)

SOROKIN, A.A.; SHTAL', M.Z.; RYBAKOV, V.N.

The Te^{119s} decay scheme. Izv. AN SSSR.Ser.fiz. 29 no.5:819-822 My '65. (MIRA 18:5)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova i Ob"yedinennyy institut yadernykh issledovaniy.

L 45223-65 EWT(m) Peb DIAAP
ACCESSION NR: AP5009823 UR/0367/65/001/002/0189/0190

AUTHORS: Zin Khe-sun, Mal'tseva, N. S.; Mekhedov, V. N.; Rybakov, V. N.

TITLE: The K-capture fraction of Ge-66, Ge-69, and As-72

SOURCE: Yadernaya fizika, v. 1, no. 2, 1965, 189-190

TOPIC TAGS: germanium, arsenic, K capture fraction, spallation reaction, positron decay, neutron deficient isotope

ABSTRACT: Since there are no published data on the K-capture probabilities of Ge^{66} and As^{72}, the authors determined these quantities experimentally for several neutron-deficient isotopes of gallium, germanium, and arsenic fractions obtained in spallation reactions. The probability ratios of K capture and β^+ decay were obtained with a magnetic analyzer by measuring the relative intensities and the decay curves of the corpuscular and x-radiation. The analyzer was

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L 45223-65
ACCESSION NR: AP5009823

described by one of the authors earlier (Mekhedov, with M. Ya. Kuznetsova, Izv. AN SSSR ser. fiz. v. 21, 1020, 1957). Measurements with the isotopes Cu^{64}, Ga^{66}, Ga^{68}, Ge^{68}, As^{71}, and As^{74}, the K-capture fraction of which is well known, were used as the control. The K-capture fraction of Ge^{66}, Ge^{69}, and As^{72} were found to be 48 ± 20, 55 ± 10, and 20 ± 10%, respectively, and agreed with the published data within the limits of experimental error. Orig. art. has: 1 table.

ASSOCIATION: Ob'yedinennyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 28Jul64 ENCL: 00 SUB CODE: NP

NR REF SOV: 002 OTHER: 002

Card 2/2

RYBAKOV, V.N.; MAL'TSEVA, N.S.

Study of the $(p, p\eta')$ reaction in In^{115}. Zhur. eksp. i teor. fiz. 46 no.5:1911-1912 My '64. (MIRA 17:6)

1. Ob"yedinennyy institut yadernykh issledovaniy.

ACCESSION NR: AP4037612 S/0056/64/046/005/1911/1912

AUTHORS: Ry*bakov, V. N.; Mal'tseva, N. S.

TITLE: Study of the reaction (p, p Pi+) on indium

SOURCE: Zh. eksper. i teor. fiz., v. 46, no. 5, 1964, 1911-1912

TOPIC TAGS: indium, cadmium, cross section, proton interaction, positive pi meson

ABSTRACT: The experiments were performed with spectroscopically pure indium contained in a quartz ampoule 3 mm inside diameter and 30 mm high, with wall thickness ~6.0 mm, wrapped in aluminum foil to monitor the proton beam. The target was irradiated in the internal proton beam of the LYaP OIYaI proton synchrotron. The activity measurements extended over a period of 10--12 months. Components with half lives 6--8 hours, 56 ± 2 hours, 44.6 ± 1.8 days and more than 1 year were observed. The production cross sections were determined for

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ACCESSION NR: AP4037612

only two isotopes, Cd^{115m} and Cd^{115}. The systematic decrease in the rise of the cross section with increasing atomic number may be due to the difference in absorption in the target nucleus of positive pions from the observed reaction. The experimental data are in satisfactory agreement with the calculations of Ericson, Selleri, and Van de Valle (Nuc. Phys. v. 36, 353, 1962). The present work provides more accurate data on the behavior of the reaction near threshold. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 02Dec63 DATE ACQ: 09Jun64 ENCL: 02

SUB CODE: NP NR REF SOV: 002 OTHER: 004

Card 2/4

ACCESSION NR: AP4037612

ENCLOSURE: 01

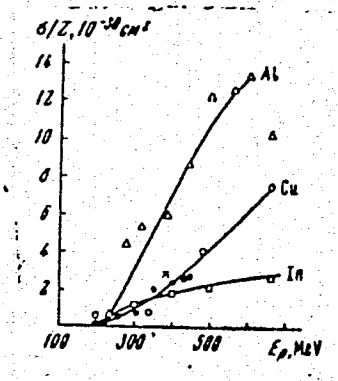
E_p, MeV	1 Сечения, 10^{-27} см²					$\frac{\sigma(Cd^{115m})}{\sigma(Cd^{115})}$
	Cd^{115m}	Cd^{115}	2 Сечение реакции (p, pn+)			
			Cd^{115m}	Cd^{115}	3 суммарное	
130	0,065±0,012	0,031				2,1±0,4
200	0,068±0,004	0,029±0,002				2,3±0,3
300	0,113±0,018	0,046±0,009	0,045±0,022	0,017±0,011	0,062±0,033	2,7±2,7
400	0,139±0,037	0,055±0,009	0,071±0,041	0,026±0,011	0,097±0,052	2,7±2,7
500	0,142±0,027	0,065±0,013	0,074±0,031	0,036±0,015	0,110±0,046	2,1±1,7
660	0,161±0,016	0,078±0,012	0,093±0,020	0,040±0,014	0,142±0,034	2,0±1,0

1 - cross sections, 2 - cross section of the reaction (p, p^+),
3 - total

Card 3/4

ACCESSION NR: AP4037612

ENCLOSURE: 02



Experimental data on the cross section for the (p, $p\pi^+$) reaction in different nuclei as obtained from various sources. (□ - present work).

Card 4/4

SOROKIN, A. A.; SHTAL', M. Z.; RYBAKOV, V. N.

"Concerning the Decay Scheme of Te^{119} ($t_{1/2}$ = 16 hr.)."

report submitted for All-Union Conf on Nuclear Spectroscopy, Tbilisi, 14-22 Feb 64.

MGU (Moscow State Univ)

RYBAKOV, V.N.

Rybakov, V. N. Binormal families of congruences. Dokl. Akad. Nauk SSSR (N.S.) 93, 13–14 (1953). (Russian)

A ruled surface is called binormal if its generators are the binormals of its line of striction. A congruence of lines can be decomposed into a family of such binormal surfaces. This paper enumerates a number of properties of such families. *D. J. Struik* (Cambridge, Mass.).

RYBAKOV, V.N.

Rybakov, V.N. -- "Families of Lines With Assigned Location of Binormals." Cand Phys-Math Sci, Moscow City Pedagogical Inst, Moscow 1953. (Referativnyy Zhurnal--Matemtika, Jan 54)

SO: SUM 168, 22 July 1954

RYBAKOV, V. N.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress, Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN M SSSR, Moscow, 1956, 237 pp.

Rybakov, V. N. (Moscow). Congruence Ruled Surfaces G, and G Bundles on Surfaces. 165-166

RYBAKOV, V. N.

Call Nr: AF 1108825

Transactions of the Third All-union Mathematical Congress (Cont.)Moscow, Jun-Jul '56, Trudy '56, V. 1, Sect. Rpts., Izdatel'stvo AN SSSR, Moscow, 1956, 237 pp.

Rybakov, V. N. (Moscow). Tangential Deformation of Surfaces and Connected Problems. 166-167

Sen'kin, Ye. P. (Leningrad). Indeformability of Convex Surfaces. 167

Mention is made of Pogorelov, A. B.

There are 3 references, all of them USSR

Sinyukov, N. S. (Odessa) Geodesic Representation of Riemann Spaces. 167-168

Mention is made of Shapiro, Ya. L.

Skopets, Z. A. (Yaroslavl'). Application of Non-Euclidean Geometrics for Generalizing of the Principle of Two Traces in Descriptive Geometry Euclidean Space. 169

Card 54/80

GERASIMOV, A.G., kand.tekhn.nauk; TATSIYENKO, P.A., kand.tekhn.nauk;
LUK'YANOV, S.M., inzh.; RYBAKOV, V.N., inzh.

Industrial testing of iron-titanium-vanadium ores of the "Lysanskiy" deposit. Gor.zhur. no.10:59-60 O '60.
(MIRA 13:9)

1. Krasnoyarskiy zavod "Sibelektrostal'".
(Ilmenite--Analysis) (Mineralogy, Determinative)

BUSHUYEV, V.P.; GUBIN, G.V.; GONCHARENKO, Yu.I.; KARMAZIN, V.I.; MARGULIS, V.S.; MITROV, V.A.; NIKOLAYENKO, N.O.; BOBRUSHKIN, L.G.; BUROV, A.I.; RYBAKOV, V.N.; SOSHIN, A.F.; TATSIYENKO, P.A.; TOVSTANOVSKIY, O.D.; YUROV, P.P.; Prinimali uchastiye: NIFAGINA, A.A.; CHERNYY, I.I.; GERSHOYG, Yu.G.; KOSTIKOV, A.G.; DOLGIKH, M.A.; MOVSKOVICH, S.A.; STUPIN, D.D.; NEVOYSA, G.G.

Magnetization roasting of Kerch ores in the experimental factory of Kamysh-Burun Combine. Gor. zhur. no.12:30-37 D '62. (MIRA 15:11)

1. Institut Mekhanobrchermet, Krivoy Rog (for Bushuyev, Gubin, Goncharenko, Karmazin, Margulis, Mitrov, Nikolayenko, Nifagina, Chernyy, Gershoyg, Kostikov). 2. Kamyshburunskiy zhelezorudnyy kombinat, Kerch' (for Bobrushkin, Burov, Rybakov, Soshin, Tatsiyenko, Tovstanovskiy, Yurov, Dolgikh, M.A.; Movskovich, S.A.; Stupin, D.D.; Nevoysa).
(Kerch Peninsula--Ore dressing)
(Iron ores)

MAL'TSEVA, N.S.; MEKHEDOV, V.N.; RYBAKOV, V.N.

Secondary reactions of astatine production in Bi and Pb bombardment by 3-10 Bev. protons. Zhur. eksp. i teor. fiz. 45 no.4:852-856 O '63. (MIRA 16:11)

1. Ob"yedinennyy institut yadernykh issledovaniy.

L 13622-63 EWT(m)/FCS(f)/BDS AFFTC/ASD

ACCESSION NR: AP3003100 S/0056/63/044/006/1800/1805

AUTHOR: Wang, Ch'uan-p'eng; Mekhedov, V. N.; Ry*bakov, V. N.; Shimchak, R. A.

TITLE: Search for secondary deuterium and tritium capture reactions

SOURCE: Zhurnal eksper. i teor. fiziki, v. 44, no. 6, 1963, 1800-1805

TOPIC TAGS: heavy arsenic isotope yield, deuterium capture, tritium capture

ABSTRACT: The yields of heavy arsenic isotopes produced by bombarding germanium with 120, 300, 480, and 660 MeV protons are measured by a radiochemical method. With increase of proton energy, all yields decrease monotonically, with values ranging from 3.4--1.0, 1.0--0.38, and 0.13--0.035 mb for As sup 74, 76, and 77, respectively. The main interest was in the study of reactions involving superbarrier deuterium and tritium capture reactions. The primary (p,xn) reactions are apparently the mechanism for the production of As sup 74 and As sup 76. The isotope As sup 77 is probably formed as a result of capture of superbarrier tritium nuclei. The origin of As sup 77 is more complicated. At low proton energies (120 and 300 Mev) it is essentially obtained via secondary deuterium and tritium nuclear capture reactions. At higher proton energies the overwhelming part of the isotope is apparently obtained via secondary Alpha-particle capture

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L 13622-63

ACCESSION NR: AP3003100 3

reactions. "The authors thank B. V. Kurchatov and V. M. Mal'tsev for valuable remarks." Orig. art. has: 4 formulas and 1 table.

ASSOCIATION: Ob"yedinenny*y institut yaderny*kh issledovaniy (Joint Institute for Nuclear Research)

SUBMITTED: 07Jan63 DATE ACQ: 23Jul63 ENCL: 00

SUB CODE: 00 NO REF SOV: 008 OTHER: 020

Card 2/2