

MIKHAYLOV, A.N., doktor tekhn.nauk, prof.; SUCHKOV, V.G., kand.tekhn.nauk

Use of high temperature methods for speeding the tanning of stiff
leather. Kozh.-obuv.prom. 3 no.12:14-17 D '61. (MIRA 15:1)
(Tanning)

BRESLER, S.M.; MIKHAYLOV, A.N.

Effect of the methods of the basicity regulation of chromium
salt solutions on their tanning properties. Kozh.-obuv.prom.
4 no.6:19-23 Je '62. (MIRA 15:6)

(Tanning materials)

BRESLER, S.M.; MIKHAYLOV, A.N.

Improving the chrome emulsion method of leather tanning. Kozh.-
obuv.prom. 4 no.8:32-34 Ag '62. (MIRA 15:8)
(Tanning)

ARBUZOV, G.A., prof., doktor tekhn. nauk; AFANAS'YEV, A.A., dots.,
kand. tekhn. nauk; YEGOROVA, Ye.A.; KARZINKINA, K.D.;
KARPOVA, A.A.; PURVANIDZE, E.M.; MIKHAYLOV, A.N., prof.,
doktor tekhn. nauk, red.; KACHKO, I.L., inzh., red.;
KRASNOBRODSKAYA, L.L., red.; YURCHENKO, D.I., red.;
MIKHLIN, E.I., tekhn. red.

[English-Russian leather and footwear dictionary] Anglo-
russkii kozhevenno-obuvnoi slovar'. Pod obshchei red.
A.M.Mikhailova. Moskva, Fizmatgiz, 1963. 402 p.
(MIRA 16:7)

(Leather industry--Dictionaries)
(English language--Dictionaries--Russian)

STEFANOVICH, N.N., kand. tekhn. nauk; MIKHAYLOV, A.N., prof., doktor
tekhn. nauk

Effect of the deamination of hides and skins on their tanning
with aluminum salts. Izv. vys. ucheb. zav.; tekhn. leg. prom.
no.3:67-69 '63. (MIRA 16:7)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-
obuvnoy promyshlennosti. Rekomendovana kafedroy tekhnologii
kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy
promyshlennosti.

(Tanning) (Deamination)

BRESLER, S.M.; MIKHAYLOV, A.N.

Effect of the tanning temperature on the stability of the
chromium-collagen bond in leather washing with water. Kozh.-
obuv. prom. 5 no.11:29-32 N '63. (MIRA 17:1)

MIKHAYLOV, A. N., prof.

From the report of A. N. Mikhailov "Generalization of the practices
of the leather industry in the use of worm apparatus and ways for
their further improvement." Kozh. obuv. prom. 5 no. 12:3-6
D '63. (MIR 17:5)

MIHAJLOV, A.N. [Mikheylov, A.N.] (Moszkva,

Effect of reducing substances on the structure of collagen. Ber cipe
13 no.6:168-170 N '63.

BRESLER, S.M., MIKHAYLOV, A.N.

Changes in the composition of chromium complexes of ...
during tanning. Nauka. 1981. Study TSNIKI no. 33424-10. 163
(MIRA 188.)

BRESLER, S.M.; MIKHAYLOV, A.V.; RUDAKOV, N.I.

Increased resistance to the washing out of leather fixed
chromium compounds. "Aukh. tekh. izv. TSNIKP no. 30:34-36
'63 (MIRA 18:1)

GOLUBEVA, S.P.; MIKHAYLOV, A.N.

Effect of methylene and carbonyl cross links between polymer
nuclei on the tanning properties of synthetic tanning materials.
Nauch.-issl. trudy VNIIEP no.33:43-56 1973 (MIRA 1974)

ZAYDES, A.L.; MIKHAYLOV, A.N.; PUSHENKO, O.I.

Modified method of determining hydroxyproline. Biokhimiya 29
no. 1:5-7 Ja-F '64. (MIRA 18:12)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-
obuvnoy promyshlennosti, Moskva. Submitted Feb. 6, 1962.

L 38366-66

ACC NR: AP6019945

(A) SOURCE CODE: UR/0323/66/000/001/0042/0050

AUTHOR: Mikaelyan, I. I. (Candidate of Technical Sciences); Kut'in, V. A. (Candidate of Technical Sciences); Mikhaylov, A. N. (Prof.; Dr. of Technical Sciences)

ORG: Department of Chemistry and Technology of Leather and Fur, Central Scientific Research Institute of the Leather and Footwear Industry (Kafedra khimii i tekhnologii kozhi i mekha, tsentral'nogo nauchno-issledovatel'skogo instituta kozhevenno-obuvnoy promyshlennosti)

TITLE: Physicochemical properties of collagen fibers

SOURCE: IVUZ. Tekhnologiya legkoy promyshlennosti, no. 1, 1966, 42-50

TOPIC TAGS: collagen, fiber, tanning material, lime

ABSTRACT: The properties of collagen fibers from clean raw hide and subjected to prolonged liming (four months) were studied. The resilient, elastic, plastic, and total deformation, tensile strength, elongation at rupture, and change in the size of fibers tanned by different methods were determined. X-ray structural analysis established that prolonged liming decreases the intensity of the interference rings of the x-ray diffraction patterns of collagen fibers. Tanning of the fibers also decreased the intensity of crystal rings. After prolonged liming, neutralized and tanned collagen fibers whose x-ray patterns and electron photomicrographs differed

Card 1/2

L 38366-66

ACC NR: AP6019945

from those of untreated fibers displayed relatively high mechanical properties: tensile tests showed the breaking load to be 24-81 g, the corresponding tensile strength 10-35 kg/mm², and the elongation at rupture, 10-20%. The curves of load vs. elongation and the curves of change in deformation at constant load for fibers subjected to prolonged liming were analogous to those for fibers limed by the method used in the leather industry. The total deformation of fibers at the same constant load for untreated fibers and those tanned with basic chromium salts and plant tanning agents was approximately the same (10-12%); the deformation of formaldehyde-tanned fibers was slightly higher (14-15%). In all the fibers tested, the elastic deformation amounted to 50-60% of the total deformation. Orig. art. has: 3 figures, 5 tables, and 4 formulas.

SUB CODE: 11/ SUEN DATE: 29Mar65/ ORIG REF: 017/ OTH REF: 002

Card 2/2 vmb

... ..

... ..

... ..

MIKHAYLOV, A.N., kandidat tekhnicheskikh nauk.

Heating packs of veneer in hot presses. Der. prem. 4 no.11:
10-11 N '55. (MLRA 9:2)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fanery i
mebeli.

(Veneers and veneering)

TEMKINA, R.Z.; MIKHAILOV, A.N.; IZRAILEVA, I.R.; YACHINA, T.V.

Adhesive carbamide resins with fillers. Der.prom. 5 no.11:9-12
N '56. (MLRA 10:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Urea) (Fillers (In paper, paint, etc.)
(Glue)

FILIPPOVA, N.B., inzh.; MIKHAYLOV, A.N., doktor tekhn.nauk, prof.

Chromatographic determination on paper of resorcinol contained in
novolak resins synthesized from resorcinol. Izv.vys.ucheb.zav.;
tekh.leg.prom. no.5:3-5 '60. (MIRA 13:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut kozhevenno-obuvnoy
promyshlennosti. Rekomendovana kafedroy tekhnologii voloknistykh materialov.
(Paper chromatography) (Resorcinol)
(Resins, Synthetic)

MIKHAYLOV, Aleksey Nikolayevich, dots., kand. tekhn. nauk;
SHVARTSMAN, G.M., st. nauchn. sotr., kand. tekhn. nauk,
retsenzent; NEKHAMKID, N.O., kand. tekhn. nauk, dots.,
retsenzent; VASECHKIN, Yu.V., dots., kand. tekhn. nauk,
otv. red.; FILONENKO, K.D., red.

[Role of pressure in the technological process of the production of gluing materials; lecture in the course "Technology of the production of gluing materials and boards" for students of the Faculty of the Mechanical Technology of Wood] Rol' davleniya v tekhnologicheskoy protsesse izgotovleniya kleemykh materialov; lektsiya po kursu "Tekhnologiya proizvodstva kleemykh materialov i plit" dlia studentov fakul'teta mekhanicheskoi tekhnologii drevesiny. Leningrad, Vses. zaochnyi lesotekhn. in-t, 1964. 34 p. (MIRA 18:3)

PROKOF'YEV, Nikolay Mikhaylovich; MIKHAYLOV, A.N., dots., kand.
tekhn. nauk retsenzent; BROK, S.I., dots., kand. tekhn.
nauk, retsenzent; NEKHAMKIN, N.C., dots., kand. tekhn.
nauk, otv.red.; ANPILGOV, A.V., red.

[Fundamentals of the standardization of the technological processes of mechanical wood processing; technology of the production of articles from wood (for students of the Faculty of the Mechanical Technology of Wood)] Osnovy tipizatsii tekhnologicheskikh protsessov mekhanicheskoi obrabotki drevesiny; tekhnologiya proizvodstva izdelii iz drevesiny (dlia studentov fakul'teta mekhanicheskoi tekhnologii drevesiny). Lektsiia. Leningrad, Vses. zaochnyi lesotekhn. in-t, 1964. 56 p. (MIKA 1F:3)

RITOV, M.N.; MIKHAYLOV, A.N.; DOROVIN, I.Ye.; MANAKIN, N.V., redaktor;
MAL'KOVA, N.V., ~~tekhnicheskii~~ redaktor

[Progressive methods of bulldozer work] Peredovye metody bul'-
dozernykh rabot. Moskva, Nauchno-tekhn. izd-vo avtotransportnoi
lit-ry, 1954. 34 p. (MIRA 8:6)
(Bulldozers)

BOYTSOV, V.I., inzh.; MIKHAYLOV, A.N., inzh.; SAFRANOV, V.N., tekhnik;
LESNYAKOV, P.I., red.; DONSKAYA, G.D., tekhn.red.

[Technical specifications for overhauling of the D-265 motor
grader] Tekhnicheskie usloviia na kapital'nyi remont avtogrei-
dera D-265. Moskva, Nauchno-tekhn.izd-vo M-va avtomobil'nogo
transp. i shosseinykh dorog RSFSR, 1959. 93 p. (MIRA 12:12)

1. Moscow. Vsesoyuznyy dorozhnyy nauchno-issledovatel'skiy
institut. 2. Sotrudniki laboratorii ekspluatatsii i remonta dorozhnykh
mashin Gosudarstvennogo vsesoyuznogo dorozhnogo nauchno-issledovatel'-
skogo instituta Glavdorstroya Ministerstva transportnogo stroitel'stva
SSSR (for Boytsov, Mikhaylov, Safranov).

(Graders (Earth-moving machinery)--Maintenance and repair)

MIKHAYLOV, Aleksey Nikolayevich; SOLOMATIN, V.I., red.; GANYUSHIN, A.I.,
red. izd-va; DONSKAYA, G.D., tekhn. red.

[Operating the D-370 mixer and the D-371 loader] Ekspluatatsiya
smesitel'nykh D-370 i pogruzhnykh D-371. Moskva, Nauchno-tekhn. izd-vo
M-va avtomobil'nogo transp. i shosseinykh dorog RSFSR, 1960. 65 p.
(MIRA 13:12)

(Road machinery)

mil' Haylen, A.A.

PLASO : BOOK INFORMATION 8CV/441

Справочник по малообъемным материалам. Том 4. Неорганические материалы (Handbook on Machine-Building Materials, Vol. 4. Nonmetallic Materials). Moscow, Mashin, 1960. 723 p. Entries 21 p inserted. 26,000 copies printed.

Ba.: O.I. Popello-Alesayer, Doctor of Technical Sciences, Professor; 24, st. 7
vial. A.I. Levina, Doctor of Technical Science, Professor; St. of Pribludnaya
Lane: V.I. Borkova, Engineer; Tech. St.: I.P. Soboleva; Managing Ed. for
Information Literature (Kashgirs); L.M. Krasovskiy, Engineer.

REMARKS: This book is intended for machine-building and construction engineers, architects, and other persons interested in the properties of building materials.

COMMENTS: This is the fourth of a long series of books on Machine-Building Materials. The book contains a large number of tables suitable for use in machine building and other non-structural applications. Textile, wood, plastic, ceramic, alloy, and glass materials and lattices of these materials are reviewed and lists of their physical and mechanical properties are listed. To personalities are recommended. References follow individual chapters.

●

Handbook on Machine-Building Materials (Cont.)

SOV/4419

Electric insulating materials and articles	319
Ebonite articles	319
Electric insulating materials made from soft rubber	321
Ch. VI. Paint Materials (Belovitskiy, A.A., and V.I. Ivonin, Engineers)	323
Cellulose ester enamels, primers, and lacquers	323
Enamels, primers, and lacquers based on various synthetic resins	323
Enamels and primers, oil-resin type	323
Oil-resin lacquers	464
Auxiliary materials	476
Solvents, diluents, and thinners	494
Solvents for paint materials	498
Ch. VII. Leather (Mikhaylov, A.N., Professor, Doctor of Technical Sciences, and L.V. Matveyeva, Engineer)	503
Ch. VIII. Textile Materials (Sheydeman, I.Yu., Candidate of Technical Sciences)	508
Card 9/15	

MIKHAYLOV, Aleksey Nikolayevich; ZUBKOVA, M.S., red.; NIKOLAYEVA, L N.,
tekhn. red.

[Manual for bulldozer operators] Pamiatka mashinistu bul'dozera.
Moskva, Nauchno-tekhn. izd-vo M-va avtomobil'nogo i transp. i shos-
seinykh dorog RSFSR, 1961. 31 p. (MIRA 14:11)
(Bulldozers)

MIKHAYLOV, Aleksey Nikolayevich; ZUBKOVA, M.S., red.; NIKOLAYEVA, L.F.,
tekhn. red.

[Instructions for the bulldozer operator] Pamiatka mashinistu bul'-
dozera. Moskva, Nauchno-tekhn. izd-vo M-va avtomobil'nogo transp. i
shosseinykh dorog RSFSR, 1961. 31 p. (MIRA 14:11)
(Bulldozers) (Industrial safety)

MIKHAYLOVA, Raisa Dmitriyevna; MIKHAYLOV, Aleksey Nikolayevich;
IVANOVSKAYA, K.M., red.; DONSKAYA, G.D., tekhn. red.

[Curing concrete with the use of film-forming materials]
Ukhod za betonom s primeneniem plekkoobrazuiushchikh ma-
terialov; posobie masteru. Moskva, Avtotransizdat, 1961.
42 p. (MIRA 15:7)
(Concrete--curing) (Protective coatings)

KRIVSHIN, Aleksandr Pavlovich, kand. tekhn. nauk; MIKHAYLOV, Aleksey Nikolayevich, inzh.; KARNIAUKHOV, V.M., retsenzent; GANYUSHIN, A.I., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Repairing motor graders] Remont avtogreiderov. Moskva, Nauchno-tekhn. izd-vo M-va avtomobil'nogo transp. i shosseinykh dorog.
MSFSR, 1961. 132 p. (MIRA 15:2)
(Graders (Earth-moving machinery))—Maintenance and repair

MIKHAYLOV, A. A. - inzh.

Loading materials in continuous action mobile units. Avt. dor.
24 no.10:11-13 0 '61. (MIRA 14:11)
(Loading and unloading) (Concrete mixers)

MIKHAYLOV, A.N., inzh.

Mechanizing the sorting and washing of gravel materials. avt.dor.
25 no.3:9 Mr '62. (MIRA 13:3)
(Gravel) (Road machinery)

MIKHAYLOV, A.N., inzh.

Increasing the output of the S-543 concrete mixing plant. Avt.
dor. 26 no.5:3-5 My '63. (MIRA 16:7)

(Concrete mixers)

NOVIKOV, Ivan Vasil'yevich; AKIL'YEV, Stepan Alekseyevich;
MIKHAYLOV, A.N., red.

[Reconditioning parts of road machinery] Vosstanovlenie
detalei dorozhnykh mashin. Moskva, Transport, 1965. 104 s.
(MIRA 18:4)

ADADUROV, G.A.; KARRALOV, I.M.; SOLIMANOV, V.I.; TROBIN, A.A.;
IGNAT'YEV, T.S.; MIRZALOV, A.S.; TAIROV, V.I.; YIMOV, V.I.

Polymerization of condensed polymers in a back wave. Def.
AN SSSR 165 no.4:251-854 D 1-5. (MIRA, 1971)

1. Institut khimicheskoy fiziki AN SSSR. Moscow.
korrespondent AN SSSR (for Golt'manov).

"APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001033930010-1

APPROVED FOR RELEASE: 07/12/2001

CIA-RDP86-00513R001033930010-1"

L 21020-66 EWT(d)/EWT(m)/ENP(w)/ETC(m)-6 IJP(c) WW/EM
 ACCESSION NR: AP5021718 UR/0373/65/000/004/0129/0130

AUTHOR: Mikhaylov, A. P. (Novosibirsk)

TITLE: ¹⁶Flutter of a thin elastic simply supported rectangular panel under the
 action of shearing and compressive edge load ¹⁷₁₃

SOURCE: AN SSSR. Izvestiya. Mekhanika, no. 4, 1965, 129-130

TOPIC TAGS: panel flutter, supersonic flow, Galerkin method, pressure distribution

ABSTRACT: A numerical analysis is made of panel flutter under supersonic flow with shear and tension-compression loads. The panel is simply supported, and the governing equation for small oscillations is expressed by

$$D \nabla^4 w - N_{xx} \frac{\partial^2 w}{\partial x^2} - N_{yy} \frac{\partial^2 w}{\partial y^2} + 2N_{xy} \frac{\partial^2 w}{\partial x \partial y} + \frac{\gamma}{g} h \frac{\partial^2 w}{\partial t^2} = \Delta p$$

where p is the aerodynamic pressure on the panel calculated by the linear piston theory. The proposed solution of the above differential equation is given as a double summation of sine series. For definitiveness, a numerical example is given and the sine series estimated up to m = 5 and n = 2. The results show that the specific shear load reduces the critical flutter rate significantly. Orig. art. has: 4 equations and 2 figures.

Card 1/2

L 21020-66

ACCESSION NR: AP5021718

ASSOCIATION: none

SUBMITTED: 01Feb62

NO REF SOV: 001

ENCL: 00

SUB CODE: ME, AC

OTHER: 001

Card 2/2 BK

ALEKSEYEV, Dmitriy Mikhaylovich; MIKHAYLOV, Anatoliy Petrovich; LYUBIMOV, N.N., prof., doktor ekonom.nauk, red.; SHECHETIN, V.D., red.; PAVLOV, A.G., red.; ROMANOVA, N.I., tekhn.red.

[European Coal and Steel Community] Evropeiskoe ob"edinenie
uglia i stali. Pod red. N.N.Liubimova. Moskva, Izd-vo In-ta
mezhdunar.etnoshenii, 1960. 282 p. (MIRA 13:6)
(European coal and steel community)

MIKHAYLOV, A...

Graphical analysis of the data of the...
of the circumferential...
data of the...
y axis...
p.1)

SHNEYNES, A.I., 1947, "The Role of the Soil in the Consolidation of Road Soils by the Addition of Gravel and Sand", *Trudy Vsesoyuznogo Nauchno-Issledovatskogo Instituta Mestnykh Stroitel'stva*, No. 1, p. 1-10.

L 23326-65 EWT(1)/EWP(m)/EWA(d)/FCS(k)/EWP(1)/EWA(1) Pg. 1
ACCESSION NR: AP4046367

S/0020/64/158/003/0554/0557

AUTHOR: Grigolyuk, E. I. (Corresponding member AN SSSR); Mikhaylov, A. P.

TITLE: Three-layer rectangular plate in an ultrasound gas flow

SOURCE: AN SSSR. Doklady*, v. 158, no. 3, 1964, 554-557

TOPIC TAGS: ultrasound gas flow, three layer plate stability, hydrodynamics

ABSTRACT: The equations derived by the author previously (Izv. AN SSSR, Mek i mashinost. #1(1964)) are used for the investigation of the stability of a thin elastic, supported rectangular three-layer plate with a rigid filler, loaded in the plane by normal and shearing stresses and which is circumfluent by an ultrasound gas flow. It is assumed that the tangential displacement of the plate depend linearly on the thickness and are gradients of a potential function. By using Bubnov's method, the problem is reduced to a homogeneous system of algebraic equations. The characteristic values of the matrix are analyzed by the Danilevsky-Raus method. The value of the critical velocity is determined. Orig. art. has: 4 figures

Card 1/2

L 23326-65

ACCESSION NR: AP4046367

and 12 equations.

ASSOCIATION: Institut gidrodinamiki Sibirskogo Otdeleniya Akademii nauk SSSR
(Institute of Hydrodynamics Siberian Department Academy of Sciences, SSSR)

SUBMITTED: 10Feb64

ENCL: 00

SUB CODE: GP, ME

NO REF SOV: 004

OTHER: 001

Card 2/2

MOSHKOV, B.S.; MIKHAYLOV, A.P.

Effect of ultraviolet radiation on the dark phase of the actino-
rhythmic reaction in plants. Dokl. AN SSSR 158 no.4:990-992 C '84.
(MIRA 17:11)

1. Agrofizicheskiy nauchno-issledovatel'skiy institut, Leningrad.
Predstavleno akademikom A.L. Kursanovym.

PODOLSKY, I.I.; LEVRYGIN, N.A.; BISHPALOV, V.F.; AB. RAKHMANOV, M.A.; M.B.; MIKHAYLOV, A.P.; BAKSHANOV, G.G.; YATICHYEV, I.F.

Resolutions of the Kazakhstan Petrographic Conference, 1974.
Kazakh.S.S.R.Ser.geol. 22 no.5:98-103 Dec 1975.

(MIRA 13 12 7)

GRIGOLYUK, E.I.; MIKHAYLOV, A.P.

Flutter of a three-layered circular conical shell. Dokl. AN SSSR
163 no.5:1100-1103 Ag '65. (MIRA 18:8)

1. Vychislitel'nyy tsentr Sibirskogo otdeleniya AN SSSR. 2. Chlen-
korrespondent AN SSSR (for Grigolyuk).

ZISMAN, L.M., inzh.; MIKHAYLOV, A.P., inzh.; ROSMAN, L.V., inzh.;
STAVITSKIY, A.Ye., inzh.

Group control of the excitation in hydraulic generators by means
of a central regulator. Elek.sta. 29 no.11:34-37 N '58.

(MIRA 11:12)

(Electric generators) (Automatic control)

BOBROV, I.I., inzh.; DOLGOPOLOV, V.M., inzh.; ZISMAN, L.M., inzh.;
RAISEVICH, B.I., inzh.; MIKHAYLOV, A.P., inzh.

Recording frequency meter and power register device. Elek.sta.
32 no.9:89-91 3 '61. (MIRA 14:10)

(Frequency measurement)

(Electric power plant - Equipment and supplies)

SHUPIKOV, V.A., gornyy inzh.; MIKHAYLOV, A.P., gornyy inzh.; BUROV, B.S.,
gornyy inzh.

Steep slopes in the Buurdu pit. Gor. zhur. no. 913-1) S '61.
(MIRA 16:7)

1. Buurdinskiy rudnik, g. Frunze Kirgizskoy SSR.
(Kirghizistan--Strip mining) (Blasting)

MIKHAYLOV, A. P., dotsent

Transforamtion of complex expressions using a grid nomogram
technique. Izv vys uchet zav; eng; 7 no. 1:35-40 Ja '64.
(MIRA 17:6)

1. Leningradskiy tekstil'nyy institut imeni S. M. Kirova.
Predstavlena kafedroy elektrotehniki.

MICHAEL J. A... (New York)

Platter of a 10 1/2 inch diameter...
subjected to the action of a...
horse... (Div. A...)
... (MI A 10...)

L 11197-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k)/EWA(h)/ETC(m)-6 LJP(c) WW/EM
 ACC NR: AP6002623 SOURCE CODE: UR/0258/65/005/006/1087/1091

AUTHOR: Grigolyuk, E. I. (Novosibirsk); Mikhaylov, A. P. (Novosibirsk)

ORG: none

TITLE: Flutter of cylindrical sandwich shells

SOURCE: Inzhenernyy zhurnal, v. 5, no. 6, 1965, 1087-1091

TOPIC TAGS: sandwich shell flutter, cylindrical sandwich shell, cylindrical shell flutter, cylindrical shell

ABSTRACT: The dynamic stability of an elastic thin sandwich shell in a gas flow is discussed. It is assumed that the aerodynamic pressure variation is in accordance with the linear piston theory. An equation for small-amplitude vibrations of circular cylindrical shells previously derived by the author (Izv. AN SSSR, Mekhanika i mashinostroyeniye, no. 6, 1964), an equation which interrelates the displacement components and the boundary conditions are used in analyzing the flutter behavior of the shell. The shell faces are simply supported, and there are neither circumferential displacements nor meridional stresses in the shell. The Bubnov method is used in determining the vibration modes and in evaluating the effect of the transverse-shear rigidity of the core and of the geometric and mechanical shell parameters on the flutter speed of the gas flow past the shell. A formula for the critical (flutter) Mach number M_f is derived, and the dependence of M_f on the rigidity parameters of the core and faces is

Card 1/2

UDC: 533.601.342

L 14197-66

ACC NR: AP6002623

discussed and illustrated by diagrams. Orig. art. has: 5 figures, 15 formulas, and
1 table. [VK]

SUB CODE: 20/ SUBM DATE: 01Aug65/ ORIG REF: 008/ ATD PRESS: 4/44

Card

2/2

ANNAYEV, R.O.; MAMAYEV, S.; MIKHAYLOV, A.R.

Studying Wernst (Ettingshausen) and Hall effects in two-component copper-nickel alloys. Izv.AN Turk.SSR no.5:3-8 '56. (MLBA 9:12)

1. Institut fiziki i geofiziki Akademii nauk Turkmenskoy SSR.
(Copper-nickel alloys)

S/728/61/007/000/001/C52

AUTHORS: Annayev, R. G., Allanazarov, A., Mamayev, S., Mikhaylov, A. R.,
Dashavskiy, M. Ya., Kafiyeu, E. I., Myndyyev, V.

TITLE: Investigation of magnetoelectric properties of n- and p-type germanium single crystals along the principal crystallographic axes.

SOURCE: Akademiya nauk Turkmenskoy SSR. Fiziko-tehnicheskii institut.
Trudy, v. 7. Ashkhabad, 1961. 3 - 34.

TEXT: Experiments were performed to detect the presence of simple anisotropy in single-crystal germanium with respect to the Hall and Nernst effects, the presence of bianisotropy with respect to the Thomson-Bakhmet'yev thermomagnetic effect, the Thomson-Goldhammer galvanomagnetic effect, and magnetostriction. Along with the foregoing, a check was made on the presence of anisotropy with respect to the thermo-emf and electric conductivity in a semiconducting germanium crystal as a cubic system, along the principal crystallographic axes, although such anisotropy has not been hitherto observed in metallic cubic-crystal systems. No previous research on this subject is known. At weak fields the galvanomagnetic effect is proportional to the square of the magnetic field intensity, and its magnitude depends on the orientations of the current and of

Card 1/3

Investigation of magnetoelectric...

S/728/61/007/000/001/002

the magnetic field vectors relative to the crystallographic axes of the specimen. Longitudinal (current parallel to field) and transverse (current perpendicular to field) galvanomagnetic effects were investigated for a spherical specimen, relative to the [001], [110], and [111] axes in one diagonal plane (110) of the crystal. It is theoretically predicted that the longitudinal effect should be respectively 2.5 and 3 times larger along [110] and [111] than along [001]. The transverse effects are equal for [001] and [110] but not of the same value as for [111], according to theory. The experimental test procedure and the method of crystal production are described. The results confirm the theory in first approximation only; the presence of bi-anisotropy in n-type germanium, and the fact that the absolute values of the galvanomagnetic effect are different along the principal crystallographic axes of n- and p-type germanium crystals. A brief historical summary is presented of studies of the Nernst and Hall effects in semiconductors. Although theory predicts that these effects should be the same along all axes not only for metals but also for semiconductors, no experiments were made heretofore on the latter. This was now confirmed with the same spherical n-type single crystal of germanium as used for the Thomson-Goldhammer effect. A special DC potentiometer developed for this purpose is described. Single crystals of germanium with different types of conductivity were also grown to check on the

Card 2/3

Investigation of magnetoelectric ...

S/728/61/007/000/001/002

course of the "odd" effects in different types of semiconductors. It was found that different impurities give rise to different types of anisotropy. Magnetostriction of single crystals of germanium in fields up to 17,340 Oersted was found to be independent of the directions of the crystal axes and of the measurements, to have a negative sign and to be of the volume type, and to be independent of the type of conductivity. The thermomagnetic Thomson-Bakmet'ev effect (sometimes called the longitudinal Nernst-Ettinghausen effect) was likewise investigated, using the same specimen and a 17,000 Oersted field, at room temperature, and the germanium crystal was found to be bianisotropic with respect to the longitudinal and transverse thermomagnetic effects, with anisotropic thermal emf and electric resistivity along the principal crystal axes. English papers cited are by Pearson and Suhl (Phys. Rev. vol. 83, 768, 1951), Seitz (Phys. Rev. vol. 79, 372, 1950), Morin and Maita (Phys. Rev. vol. 94, 1525, 1954), and Hung and Glissman (Phys. Rev. vol. 96, 1226, 1954). There are 19 figures and 4 tables.

Card 3/3

The Nernst-Ettinghausen thermomagnetic effects in the system InAs-InP.
Ya. Agayev, O. Ismailov.

Thermal conductivity, thermoemf and electrical conductivity of AlSb,
alloyed with sulfur. Ya. Agayev, A. R. Mikhaylov.

Investigation of the galvanomagnetic properties of solid solutions
in the system InP-InAs. A. Allanazarov, Ya. Agayev.

Electrical and galvanomagnetic properties of InSb in the region of
intrinsic conductivity. O. Mosanov, Ya. Agayev.
(Presented by Ya. Agayev--15 minutes).

Report presented at the 3rd National Conference on Semiconductor
Compounds, Kishinev, 16-21 Sept 1963

ALLIUM, Yd., PYZHAYLO, A.F.

[illegible]

SECRET

ACCESSION NR: AP4044252

8/0202/64/000/004/0103/0105

AUTHOR: Agayev, Ya., Mikhaylov, A. R.

TITLE: Heat conductivity of AlSb monocrystals

SOURCE: AN TurkmSSR. Izv. Ser. fiziko-tekhnicheskikh, khim. i geol. nauk, no. 4, 1964, 103-105

TOPIC TAGS: aluminum antimonide, semiconductor, monocrystal, heat conductivity

ABSTRACT: Aluminum antimonide is a typical representative of semiconductors of the type III_2BV . Although a number of papers have been written on its heat conductivity in a narrow range of temperatures, no study has been made of the heat conductivity and other kinetic effects of AlSb alloyed with sulfur. It has been shown that the presence of impurities generally decreases the heat conductivity of AlSb, and that the heat conductivity of AlSb decreases with increasing temperature. The authors investigated the temperature dependence of the heat conductivity of pure monocrystals and AlSb and monocrystals of AlSb alloyed with sulfur in the temperature range 120-620K. The heat conductivity was measured by the absolute method in a stationary heat field, as first described by Kh. I. Amirkhanov (Izv. AN UzSSR, 4, 39-59, 1949) and improved by Ya. Agayev and A. R. Mikhaylov (Izv. AN TSSR, No. 3, 1964). Measurement errors did not exceed 5-6%.

Card 1/2

ACCESSION NR: AP4044252

The samples had a cylindrical form, 12-13 mm in diameter and 9-10 mm in height. It was found that the heat conductivity depends mainly on the heat conductivity of the crystal lattice, and that sulfur admixture has little effect. In the temperature range 170-620K the change in heat conductivity conforms to the law $\propto T^{-1}$; below 170K, this relationship is less regular. "In conclusion, the authors thank M.S. Mirgalovskaya and I.A. Strel'nikova for kindly furnishing the samples, as well as Doctor of Physical and Mathematical Sciences L.S. Stil'bans, A.V. Petrov and Kh. M. Kuliyeu for making it possible to carry out control measurements at the Institut poluprovodnikov AN SSSR (Institute of Semiconductors, AN SSSR)". Orig. art. has: 2 formulas and 2 figures.

ASSOCIATION: Fiziko-tekhnicheskiy Institut AN Turkmenskoy SSR (Physicotechnical Institute, AN Turkmen SSR).

SUBMITTED: 26Dec63

ENCL: 00

SUB CODE: TD, IC

NO REF SOV: 007

OTHER: 001

Card 2/2

MIKHAYLOV, A.S., kapitan

Work practices of experienced specialists. Vest.proti vovozd.obor.
no.2:64-67 P '61. (MIRA 14:2)

(Radiotelegraph)

ZHUKOV, A. V.; MIKHAYLOV, A. S.[deceased]; NIKULIN, V. M.; REDIN, N. S.

Using the method of conventional accounting units for measuring
labor productivity in refractory enterprises. Trudy Vost. inst.
ogneup. no.2:170-179 '60. (MIRA 16:1)

(Refractories industry—Labor productivity)

MIKHAYLOV, A.S.; TAZ'BA, M.M.

Experimental determination of the reduced moment of inertia of
the moving parts of an engine. TRUDY TSNIDI no.39:3-7 '60.
(MIRA 15:8)
(Diesel engines) (Moments of inertia)

MIKHAYLOV, A.S.

Investigating the effect of thermal insulation of a piston crown
on its thermal state and performance at heavy pressure charging.
Trudy TSNIDI no.37:22-51 '61. (MIRA 15:8)
(Diesel engines) (Pistons)

KARYAGIN, I.P.; MIKHAYLOV, A.S.

Fourth Plenum of the Main Administration of the Scientific and
Technical Society of the Power Industry. Prom. energ. 18 no.8:
55-56 Ag '63. (MIRA 16:9)
(Power engineering)

U.006

S/856/61/000/000/001/000

AO06/A101

1-2882
AUTHOR: Mikhaylov, A. S.

TITLE: A method of argon-arc welding titanium with aluminum

SOURCE: Sbornik izobreteniy: svarochnaya tekhnika. Kom. po delam izobr. i otkrytiy. Moscow, Tsentr. byuro tekhn. inform. 1961, 42. (Authors's Certificate no. 120881, cl. 21h, 30₁₂; no. 595464 of March 24, 1958)

TEXT: In the proposed method titanium is welded to aluminum without a filler metal. The welding arc is displaced from the weld toward the titanium side and only the aluminum is allowed to melt. An argon-arc welding torch with tungsten electrode is used: it is equipped with a tip for the argon supply to the cooling welded joint in order to protect the heated metal against interaction with air. A copper or steel backing plate with a groove should be used to assure the formation of the lower seam surface. The weld should be placed in a shielding gas medium. Melting of titanium can not be admitted, as it leads to the formation of an intermetallic compound and to brittleness. Welding is

Card 1/2

S/860/61/000/000/001/000
A method of argon-arc welding titanium with aluminum A006/A101

performed on d-c of reverse polarity (plus on the electrode). The gaps between the edges to be welded should not exceed 0.2 - 0.3 mm. The method is recommended to be introduced in the Leningrad sovnarkhoz.

Card 2/2

VERKHOVTSEV, E.V.; PROKHOROV, K.K.; MIKHAYLOV, A.S.

Effect of the speed of pouring on the quality of steel ingots.
Vop.proizv.stali no.7:74-81 '60. (MIRA 13:8)
(Steel ingots) (Metallurgical plants--quality control)

PROKHORENKO, K.K.; VERKHOVTSEV, E.V.; KONYUKH, V.Ya.; MIKHAYLOV, A.S.

Slag conditions in the scrap process of steel smelting. Vop.proizv.
stali no.8:78-87 '61. (MII 14:6)
(Steel—Metallurgy) (Slag)

18 12 85
S/129/62/000/004/008/010
E027/E135

AUTHORS: Mikhaylov, A.S., Engineer, and Krylov, B.S., Engineer

TITLE: Susceptibility of welded joints in titanium alloys
to delayed cracking

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,
no.4, 1962, 46-53

TEXT: The reasons for delayed cracking in welded joints of titanium alloys were studied. A constant-load bend test was used. Preliminary experiments showed that loading to 80% or 110% of the yield stress in the outer fibres had no effect on the time to fracture and further experiments were carried out using 80% of the yield stress for the initial loading. If the specimens did not break after a certain time the load was increased every day. Pre-heating to 65 °C for 8 hours had no effect on cracking and the tests were carried out at room temperature. The materials examined were single alpha phase alloys: 8T1 (VT1), 8T5 (VT5) and TiAl3Sn11, and an alpha-beta phase alloy OT4 (OT4). After vacuum annealing the alloys contained 0.0002% H₂. Batches

Card 1/3

Susceptibility of welded joints ...

S/129/62/000/004/008/010
EO27/E135

with the following hydrogen contents were prepared by thermal soaking: 0.005, 0.010, 0.015, 0.030 and 0.050%. Strips, 1.2 to 1.9 mm thick were butt welded using argon - arc procedure with no filler metal. The specimens were 15 mm wide and 60 mm long. The susceptibility to cracking increased with increasing hydrogen content. The time for cracking varied with hydrogen content from 6 to 40 days. All the alloys showed a coarse acicular structure in the welded joints. At 0.050% H_2 dark inclusions of titanium hydride could be observed in the VT1, VT5 and OT4 alloys. No titanium hydride could be found in TiAl3Sn11. The titanium hydride was finely distributed in the welded joint and coarsely distributed away from the heat affected zone. Hydrogen appears to be responsible for cracking under constant bending. In titanium alloys the following processes associated with diffusion of hydrogen can occur at room temperature: 1) the precipitation of hydride can occur; 2) hydrogen can be redistributed between the phases. Precipitation of hydride at grain boundaries and along certain crystallographic directions causes loss of ductility. Cracking is due to: 1) the above mentioned loss of

Card 2/3

Susceptibility of welded joints ... S/129/62/000/004/008/010
E027/E135

ductility; ii) stress concentrations at hydride precipitates;
iii) welding thermal stresses. Slow cooling after welding
promoted cracking since larger hydride precipitates were
formed at grain boundaries. In $TiAl_3Sn_{11}$ hydrogen probably
segregated to lattice defects. Nitrogen and oxygen increased
the susceptibility to cracking by rendering the metals less
ductile. The heat affected zone was the most susceptible part
of the welded joint.

There are 3 figures and 2 tables.

X

Card 3/3

ACCESSION NR: AT4007034

S/2598/63/000/010/0144/0150

AUTHOR: Mikhaylov, A. S.; Krylov, B. S.

TITLE: Effect of hydrogen on the tendency of titanium alloys to delayed fracture

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy*, no. 10, 1963.
Issledovaniya titanovykh splavov, 144-150

TOPIC TAGS: titanium alloy, VT-5-1 titanium alloy, TiAl sub 4 Sn sub 6 Cu sub 2 alloy, OT-4 titanium alloy, VT-4 titanium alloy, OT-4-2 titanium alloy, AT-4 titanium alloy, VT-6 titanium alloy, VT-14 titanium alloy, titanium alloy strength, titanium alloy ductility, titanium alloy delayed cracking, titanium alloy hydrogen content, titanium alloy weld strength, titanium alloy weld ductility, weld delayed fracture

ABSTRACT: The present work was carried out because no data are available on the tendency to delayed cracking in Ti alloys. Delayed cracking was studied on unwelded and welded specimens by the method of prolonged bending. Three modifications of this method were tested. In the first, the bending produced stresses in the external fibers of the specimen equal to 0.8 times the modulus of elasticity during bending. In the 2 other modifications, the initial bending produced stresses in the external fibers equal to 0.5 times the modulus of elasticity, the

Card 1/2

ACCESSION NR: AT4007034

stress being increased every 24 hours by 0.1 mm in the second modification and by 0.2 mm in the third. The second and third modifications proved more sensitive. The relationship between delayed cracking and the H content was investigated after vacuum annealing, when the H content dropped below 0.002%, and after saturation with H up to 0.005-0.03%. Saturation with H was carried out by the thermodiffusion method at 700C. It was proved that an increase in the H content may cause delayed cracking. The resistance to cracking of the welded specimens was generally lower than that of the basic alloy. Only in the VT-14 and T-4 alloys was this resistance higher for the welded specimens than for the basic metal. All alloys tested of the α and $\alpha + \beta$ structures showed delayed cracking above a critical H content, depending on the presence of the hydride phase of Ti. It was found that delayed cracking of the alloys VT-5-1, $\text{TiAl}_{14}\text{Sn}_6\text{Cu}_2$, OT-4 and VT-14, used for welded construction, can be predicted by reducing the H content of these alloys below 0.015%. Orig. art. has: 2 figures and 3 tables.

ASSOCIATION: INSTITUT METALLURGI AN SSSR (Institute of Metallurgy AN SSSR)

SUBMITTED: 00

DATE ACQ: 27Dec63

ENCL: 00

SUB CODE: ML

NO REF SOV: 002

OTHER: 003

Card 2/2

ARVLOV, B.S. (Leningrad); MURRAYLOV, A.S. (Leningrad)

effect of hydrogen on the tendency of titanium alloys to delayed
cracking. Izv. Akad. Nauk. SSSR. Tekhn. Nauk. Met. i Spets. Tekhn. 1963.
Ja-F '63.

(titanium alloys--Hydrogen content)

MIKHAYLOV, A.S.; KRYLOV, B.S.

Effect of hydrogen on the tendency of titanium alloys toward delayed
cracking. Titanologiya no.10412-142 '63. (MIRA 17:1)

L 23390-65 EWT(m)/EWP(v)/EPR/T/EWP(t)/EWP(k)/EWP(b) PP-1/PS-1 IJP(c) JD/HM
 ACCESSION NR: AP5003661 S/0285/65/000/001/0027/0027

AUTHORS: Mikhaylov, A. S.; Slonimskiy, Ye. V.

TITLE: A method for arc welding under argon of overlapping joints between titanium
 and aluminum or between their alloys. Class 21, No. 167265

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 1, 1965, 27

TOPIC TAGS: welding, welding technique, welding technology, arc welding, argon,
 aluminum, titanium

ABSTRACT: This Author Certificate introduces a method for arc welding under argon
 of overlapping joints between titanium and aluminum or between their alloys. To
 obtain a direct joint, aluminum is melted by the heat generated in the course of
 laying a welding bead in titanium, so that only aluminum is melted at the joint,
 while titanium remains in the solid state.

ASSOCIATION: none

SUBMITTED: 22Nov61

ENCL: 00

SUB CODE: MM, IE

NC REF SOV: 000

OTHER: 000

Card: 1/1

MIKHAYLOV, A.S., inzh.; SICHENKIN, Ye.V., inzh.; ...
inzh.; SUKHORUKOV, A.P., inzh.

Welding of titanium alloys to copper and its alloys. Sov.
proizv. no.8:1-3 Ag 165.

L 25461-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/T/EWP(l)/EWP(v)/EWP(t) JD/HM
 ACC NR: AP6011219 SOURCE CODE: UR/0413/66/000/006/0055/0055

INVENTOR: Kopelevich, S. Kh.; Mikhaylov, A. S.; Tumanova, Ye. A.

32
B

ORG: none

TITLE: A manipulator for making annular weld joints. Class 21, No. 179864

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 6, 1966, 55

TOPIC TAGS: welding equipment, welding

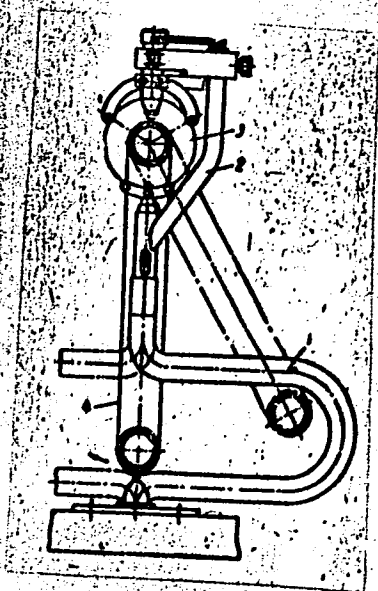
ABSTRACT: This Author's Certificate introduces a manipulator for making annular weld joints. The device contains a base with two stands and a frame placed on the axes of these stands for holding the article to be welded. The unit is designed for welding annular joints in toroidal tanks made up of separate curved tubular sections. In the center of the base is a curved collapsible rotating tube with hoses passing through it. This tube is connected to a carriage for holding the welding head so that the tank may be rotated through more than one revolution during welding.

UDC: 621.791.039-462

Card 1/2

L 25461-66

ACC NR: AF6011219



SUB CODE: 13/

SUBM DATE: 13Nov64/

ORIG REF: 000/

OTH REF: 000

Card 2/2 CC

ACC NR: AP6021798

(A)

SOURCE CODE: UR/0413/66/000/012/0062/0062

INVENTORS: Mikhaylov, A. S.; Oleshchuk, M. F.; Slonimskiy, Ye. V.; Magnitskiy, O. N.

ORG: none

TITLE: A chamber for hand welding in a controlled atmosphere. Class 21, No. 182810

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 62

TOPIC TAGS: welding, metal welding, welding equipment, welding technology

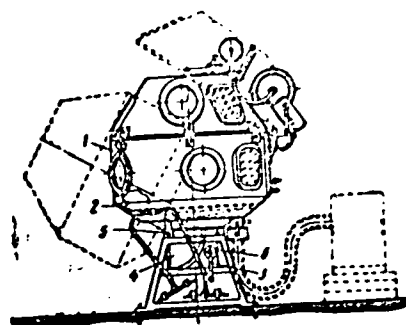
ABSTRACT: This Author Certificate presents a chamber for hand welding of chemically active materials in a controlled atmosphere. The chamber consists of a casing with a lid (see Fig. 1). To provide for turning the welded product into a position (necessitated by the technical requirements and the shape of the object) without opening the lid, the chamber is provided with a mechanism for turning the welded object horizontally, and also with a mechanism for turning the casing through a certain angle in respect to the vertical axis.

UDC: 621.791.753.9.039.

Card 1/2

ACC NR: AP6021798

Fig. 1. 1 - casing of the chamber; 2 - holders;
3 - hand-operated reducer; 4 - worm
gear sector; 5 - axle; 6 - handle



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 21May64

Card 2/2

AUTHOR: Mikhaylov, A. S.

SOV/7-59-5-5/14

TITLE: Some Characteristic Features of the Geochemistry of Molybdenum in the Soils of Central Kazakhstan (Nekotoryye osobennosti geokhimii molibdena v pochvakh Tsentral'nogo Kazakhstana)

PERIODICAL: Geokhimiya, 1959, Nr 5, pp 432 - 436 (USSR)

ABSTRACT: In August-September 1955, approximately 200 km² of the granite intrusion region of Bokhta, 80 km in the east of the town of Karkaralinsk, Central Kazakhstan, were investigated with respect to aureoles of molybdenum. The results are entered as isoconcentration lines into a map 1:100000 (Fig 1). A part of the region was investigated again in June-July 1956 and considerable deviations were found. It is impossible that these deviations are caused only by measuring errors (profile Fig 2). The investigation showed that the upper part of the relief contains only a small quantity of molybdenum, approximately 5% of the total quantity; valleys and other negative forms of the relief contain up to 100% of the total quantity (up to 0.01% Mo). Slopes have a central position. Molybdenum occurs in soluble form; the content and the distribution depend on

Card 1/2

Some Characteristic Features of the Geochemistry
of Molybdenum in the Soils of Central Kazakhstan

SOV/7-59-5-5/14

the precipitation. There are 2 figures and 7 Soviet refer-
ences.

ASSOCIATION: Tsentral'naya Kazakhstanskaya geofizicheskaya ekspeditaiya
(Central Kazakhstan Geophysical Expedition)

SUBMITTED: October 20, 1959

Card 2/2

MIKHAYLOV, A.S.

Experimental studies of electrochemical oxidation and
solving of molybdenum. Geokhimiia no.9:818-825 '62.
(MIRA 15:11)

1. Siberian Scientific Research Institute of Geology,
Geophysics and Mineral Raw Materials.
(Molybdenum)
(Oxidation, Electrolytic)

MIKHAYLOV, A.S.

Formation of molybdenum containing iron hydroxides. Geo-
khimiia no.10:925-928 '62. (MIRA 16:4)

(Molybdenum) (Iron hydroxides)

MIKHAYLOV, A.S.

Formation of the halos of dispersion of molybdenum and the estimation
of their potential. Trudy SNIIGGIMS no.25:187-194 '62. (MIRA 16:4)
(Molybdenum) (Geochemistry)

MIKHAYLOV, A.S.

Geochemistry of molybdenum in an oxidation zone. Geokhimiya no.11:1171-
1181 N '64. (MIRA 18:8)

MIKHAYLOV, A.S.

Trace elements and the problem of trace-element fertilizer in
Western Siberia. *Biul. nauch.-tekh. inform VIMS* no.2:17-22 '63.

(MIRA 18:2)

1. Sibirskiy nauchno-issledovatel'skiy institut geologii, geofiziki
i mineral'nogo syr'ya.

Microfilm

Microfilm
Microfilm

Microfilm
Microfilm

BAKUMENKO, S.P., inzh.; MIKHAYLOV, A.S., inzh.; TOLKACHEV, A.F., inzh.

Double tapered ingots. Stal' 24 no.12:1110-1112 D '64.

(MIRA 18:2)

1. Izhevskiy metallurgicheskiy zavod.

L 63952-65 EPA(s)-2/BWT(m)/KPF(c)/EPF(n)-2/EMP(v)/T/EMP(t)/EMP(k)/EMP(b)/
ENA(c) LJP(c) MJW/JD/RM/JW/JG

ACCESSION NR: AP5020156

UR/0135/65/000/008/0001/0003 64
621.7911669.295.51669.35 2/4

AUTHOR: Mikhaylov, A. S. (Engineer); Slonimskiy, Ye. V. (Engineer); Senin, A. M. (Engineer); Sukhorukov, A. P. (Engineer)

TITLE: Welding titanium alloys to copper and its alloys

SOURCE: Svarochnoye proizvodstvo, no. 8, 1965, 1-3

TOPIC TAGS: welding, TIG welding, titanium alloy, copper, copper alloy, titanium alloy copper welding, dissimilar metal welding, molybdenum containing alloy, niobium containing alloy, tantalum containing alloy/VT15 alloy, BrKh08 bronze, Ti copper alloy

ABSTRACT: The feasibility of welding titanium alloy to copper and its alloys has been investigated. Sheets 1.5-2 mm thick of β -titanium alloy VT15 (3.50% Al, 7.50% Mo, and 11.30% Cr) and experimental β -alloys containing 20 Mo, 30 Mo, 20 Nb, 30 Nb, or 30 Ta were TIG welded to M3 copper. The best results were achieved with Ti-30 Nb and VT15 alloy: a tensile strength of 18.0-25.4 and 20.5-24 kg/mm², and a bend angle of 172-180 and 142-180 deg, respectively. (The

Card 1/2

L 6952-65

ACCESSION NR: AP5020156

5
failure occurred in copper. With other alloys failure occurred mostly in the weld. Good results were also obtained in welding Ti-30 Nb alloy to BrKh08 bronze and VT15 alloy to copper-cobalt-beryllium alloy 11. The weld strength was roughly the same as that of the copper alloys at all temperatures up to 800C. Thus, copper alloys can be directly welded to titanium alloys with a stable β structure. Such an alloy can also be used as an insert in welding copper alloys to other types of titanium alloys. Orig. art. has: 4 figures and 4 tables.

[NU]

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NO REF SOV: 005

OTHER: 000

ATD PRESS: 4071

Card: 2/2

MIKHAYLOV, Aleksandr Timofeyevich; KUZHELEV, N.S., nauchnyy red.;
BRAILOVSKIY, V.A., red. izd-va; GURDZHIYEVA, A.M., tekhn.
red.

[Proportion in production and how to achieve it under socialism
and communism] Proportional'nost' proizvodstva i sposob ee do-
stizheniya pri sotsializme i kommunizme. Leningrad, Ob-vo po
rasprostraneniю polit. i nauchn. znaniy RSFSR, 1962. 58 p.
(MIRA 16:1)

(Russia--Economic policy)

MIKHAYLOV, A.V., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii.

[Head-gate systems for filling navigation locks and their calculation]

Golovnye sistemy pitaniia sudokhodnykh shchilusov i ikh raschet.

Moskva, Izd-vo Ministerstva rechnogo flota SSSR, 1951. 171 p.

(MLRA 7:4)

(Locks (Hydraulic engineering))

MIKHAYLOV, A.V., kandidat tekhnicheskikh nauk, laureat Stalinskoy premii;
LAGAR'KOV, N.I., inzhener, redaktor; SAFONOV, P.V., redaktor; PERSOEV,
M.N., tekhnicheskii redaktor

[Boat locks] Sudokhodnye shliuzy. Moskva, Gos.izd-vo lit-ry po
stroitel'stvu i arkhitekture, 1955. 383 p. (MLRA 9:1)
(Locks (Hydraulic engineering))

MIKHAYLOV.A.V., kandidat tekhnicheskikh nauk; KALMYKOV,V.T., inzhener

Placing concrete on foundation tops in frozen ground. Bet. i zhel.
no.6:207-210 S '55. (MIRA 8:9)
(Concrete construction--Cold weather conditions)

AGAPOV, D.S.; ARTIBILOV, B.M.; VIKTOROV, A.M.; GINTS, A.M.; GOR'KOV, A.V.;
 GUSYATINSKIY, M.A.; KARPOV, A.S.; KOLOT, I.I.; KOMAREVSKIY, V.T.;
 KORYAGIN, A.I.; KRIYSKIY, M.M.; KRAYNOV, A.G.; KRESTKOVA, I.N.;
 OBMS, I.S., kandidat tekhnicheskikh nauk; SOSNOVIKOV, K.S.; SUKHOT-
 SKIY, S.F.; CHLENOV, G.O.; YUSOV, S.K.; ZHUK, S.Ya., akademik, glavnyy
 redaktor; KOSTROV, I.M., redaktor; BARONENKOV, A.V., profesor,
 doktor tekhnicheskikh nauk, redaktor; KIRZHNER, D.M., professor,
 doktor tekhnicheskikh nauk, redaktor; SHESHKO, Ye.F., professor, doktor
 tekhnicheskikh nauk, redaktor; AVERIN, M.D., inzhener, redaktor
 [deceased]; GOR'KOV, A.V., inzhener, redaktor; KOMAREVSKIY, V.T.,
 inzhener, redaktor; ROGOVSKIY, L.V., inzhener, redaktor; SHAPOVALOV,
 T.I., inzhener, redaktor; RUSSO, G.A., kandidat tekhnicheskikh nauk,
 redaktor; FILIMONOV, M.A., inzhener, redaktor; VOLKOV, L.N., inzhener,
 redaktor; GRISHIN, M.M., professor, doktor tekhnicheskikh nauk, redak-
 tor; ZHURIN, V.D., professor, doktor tekhnicheskikh nauk, redaktor;
 LIKHACHEV, V.P., inzhener, redaktor; MEDVEDEV, V.M., kandidat tekhnicheskikh nauk, redaktor; MIKHAYLOV, A.V., kandidat tekhnicheskikh nauk, redaktor; PETROV, G.D., inzhener, redaktor; RAZIN, N.V., redaktor; SOBOLEV, V.P., inzhener, redaktor; PERINGER, B.P., inzhener, redaktor; TSYPLAKOV, V.D., inzhener, redaktor; ISAYEV, N.V., redaktor; TISTROVA, O.N., redaktor; SKVORTSOV, I.M., tekhnicheskii redaktor

[The Volga-Don Canal; technical report on the construction of the
 Volga-Don Canal, the TSimlyanskaya hydro development and irrigation
 works (1949-1952); in five volumes] Volgo-Don; tekhnicheskii otchet
 (continued on next card)