

Reduction of warping of welded ...

S/600/61/000/000/018/0,  
D205/D303

In this case the partial hardening occurring during welding does not induce residual stresses near the joint. Various parameters of plasticity were measured for welded and non-welded specimens, the results indicating that the welded samples possess almost the same plasticity as the non-welded. The fatigue limit at cyclical bending ( $20 \times 10^6$  cycles) was, however, superior in the non-welded samples ( $12 \text{ kg/mm}^2$ ) as compared with the welded ( $5 \text{ kg/mm}^2$ ). Conclusions: To lower stresses and prevent warping, articles made of the D20 alloy should be quenched in a heated medium. In order to increase the strength of welded constructions they should be welded in hardened or hardened and aged state. There are 1 figure and 5 tables. ✓

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DOBATKIN, V.I.; KOZLOVSKAYA, V.P.; GOLOKHMATOVA, T.N.

Slaty structure of the fracture of extruded D16 aluminum alloy-  
products. Metalloved. i term. obr. met. no.12:7-12 D'63.  
(MIRA 17:2)

ACCESSION NR: AT4037665

S/2981/64/000/003/0237/0250

AUTHOR: Shilova, Ye. I.; Nikitayeva, O. G.; Kozlovskaya, V. P., Vasil'yeva, Ye. N.

TITLE: Heat resistant alloy D 19

SOURCE: Alyuminiyevy\*ye splavy\*, no. 3, 1964. Deformiruyemy\*ye splavy\* (Malleable alloys), 237-250

TOPIC TAGS: aluminum, aluminum alloy, alloy D 19, heat resistant aluminum alloy, copper admixture, manganese admixture, magnesium admixture, duraluminum, duraluminum mechanical property, duraluminum corrosion resistance

ABSTRACT: According to its composition, the heat-resistant aluminum alloy D 19 of the Al-Cu-Mg-Mn system is an intermediate alloy between D 16 and D17, and is intended for sheets, pressed semifinished products, and rivet wire. The alloy contains 3.2-4.3% Cu, 1.8-2.6% Mn, 0.03-0.15% Ti, 0.0005-0.005% Be and no more than 0.3-0.5% Fe or Si, and 0.1% Zn. In the present paper, the authors report the results of a general investigation of the mechanical properties of D 19 alloy semifinished products. Initial studies concerned the influence of natural aging time (0-30 days) on the mechanical properties of quenched sheet specimens having various compositions, i. e.: Cu and Mg at the lower limit; Cu and Mg at the higher limit; Cu at the higher limit and Mg at the lower limit; Cu at the lower

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limit and Mg at the higher limit. Before quenching, the specimens were in the annealed or cold rolled condition. Other tests were made to determine the effect of heating to 200 and 250 C on the mechanical properties at room temperature of sheet specimens with different histories of heat-treatment and strain hardening. The mechanical properties of sheet and wire specimens were also determined at elevated temperatures (up to 300 C). Furthermore, creep rupture tests were performed on sheet specimens at 175-300 C, and zero-to-tension fatigue tests on specimens previously subjected to various heat treatments or strain hardening operations. Rivets of D 19 P and V 95 were tested at repeated zero-to-maximum shear loads at room temperature and at 175 C. Finally, specimens of D 19 and D 16 alloys under various conditions were tested for corrosion resistance in 3% NaCl or 3% NaCl + 0.1% H<sub>2</sub>O<sub>2</sub>. On the basis of the results obtained, it was concluded that: the duraluminum type alloy D 19 is a heat-resistant alloy; at temperatures of 20 - 150 C its strength is equal to the strength of D 16 alloy, while at 170-250 C its strength is higher than that of D 16 alloy by approximately 8-10%. Under a repeated static load, the strength of D 19 alloy is similar to that of D 16. Alloy D 19 has a reduced rate of strengthening during natural aging; therefore, cold working operations can be performed with this alloy during a longer period of time (6-8 hours) than with alloy D'16; this property is particularly desirable for riveting material. Products made of alloy D 19, in contrast to D 16, do not exhibit a tendency to intergranular corrosion during heating in the temperature range

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150-250 C because of a more favorable phase composition. In this connection, semifinished products of D 19 alloy can be used in the naturally aged condition in structures working at 20-250 C. "The corrosion resistance was determined by Eng. S. M. Ambartsumyan, the tests with repeated shear loads were carried out by Eng. B. F. Bogdanov under the direction of Doct. Tech. Sci. N. I. Marin, and M. F. Akinfiyeva, V. N. Zhuravleva and T. N. Golokhmatova also took part in the experimental work." Orig. art. has: 5 figures and 8 tables.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

Card 3/3

ACCESSION NR: AT4037666

S/2981/64/000/003/0251/0262

AUTHOR: Kozlovskaya, V. P., Vasil'yeva, N. I.; Nepomnyashchaya, E. Z.

TITLE: Methods for eliminating the coarse-grained rim on pressed parts made of aluminum alloys

SOURCE: Alyuminiyevy\*ye splavy\*, no. 3, 1964. Deformiruyemy\*ye splavy\* (Malleable alloys), 251-262

TOPIC TAGS: aluminum, aluminum alloy, pressed aluminum, coarse grained rim, manganese admixture, aluminum recrystallization, magnesium admixture, copper admixture, zirconium admixture, titanium admixture, iron admixture, aluminum alloy strength, aluminum alloy resistivity

ABSTRACT: Recrystallization occurring during the heating of pressed aluminum alloys may result in a coarse-grained structure in the peripheral zone leading to a marked variation in the mechanical properties across the section. Previous experiments have shown that the formation of a coarse-grained rim can be combatted by the creation of uniform deformation during pressing and by slowing down the recrystallization. Furthermore, the depth of the coarse-grained rim depends significantly on the manganese content in the alloy. The present authors have carried out a systematic study on the effect of

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ACCESSION NR: AT4037666

alloying elements and admixtures tending to increase the recrystallization temperature of aluminum on the degree of formation of a coarse-grained rim in pressed aluminum alloys. Tests were performed on specimens of the Al-Cu-Mg-Mn type alloys D16, D19, D1 and VD17 and alloys AK8, AK6, and AD33. In addition to the formation of a coarse-grained rim the electrical resistivity and mechanical properties were investigated (see Figures 1 to 3 of the Enclosure). Finally, the effect of Zr, Fe, and Ti on the formation of a coarse-grained rim was studied in alloys D1, D16, and V95. On the basis of the results obtained, the authors conclude that the following factors slow down recrystallization and grain growth in the peripheral zone of pressed aluminum alloys: introduction of Mn, Zr or Cr as alloying elements; use of non-homogenized ingots for pressing; increasing the ingot and container temperatures during pressing; decreasing the quenching temperature and reducing the soaking time. Pressed products can be obtained from alloys D16, D1, AK8 and AK6 with a shallow-coarse-grained rim or no rim at all by pressing by the straight method without lubrication of the container; for this purpose, the minimal content of manganese is 0.6%, non-homogenized ingots should be used, the container temperature is 400-450C, and the ingot temperature is 420-450C. If the minimal content of manganese is set at 0.8%, however, then homogenized ingots can be used and pressing can be conducted at a lower ingot temperature (340-380C), resulting in shorter pressing cycles and, consequently, in higher productivity. With alloy AD 33, pressed parts without a coarse-grained rim

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ACCESSION NR: AT4037666

or with only a shallow rim can be obtained at an ingot temperature of 500C and a container temperature of 400-450C. In bars of pressed aluminum alloys with a shallow rim, the ultimate strength is higher, and the relative elongation is lower. This is caused by the fact that measured leading to a reduction of the coarse-grained rim (increasing the Mn content and the pressing temperature) lead to preservation of the pressing effect. "L. I. Leonova, I. I. Molostova and M. K. Rubleva took part in the experimental work." Orig. art. has: 6 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 04Jun64

: ENCL: 03

SUB CODE: MM

NO REF SOV: 006

OTHER: 000

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Card



ACCESSION NR: AP4040685

S/0129/64/000/006/0005/0008

TITLE: The effect of iron on the formation of a coarse crystalline ferrule in Al-alloys

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 6, 1964, 5-8

AUTHOR: Gorelik, S. S.; Kozlovskaya, V. P.; Tomilova, L. A.

TOPIC TAGS: ferrule, crystalline ferrule, saturated solid solution, grain coarseness, Fe, Al alloy, recrystallization

ABSTRACT: The authors verify earlier investigations concerned with the formation of a coarse crystalline ferrule in saturated solid solutions. They also study the effect of individual alloying elements in different concentrations on the formation of ferrule. In this connection, the effect of Fe was observed in hot-pressed specimens. The authors account for the coarsening of the structure under the effect of Fe additions in excess of 0.2% to Al-Cu, Al-Mn, Al-Si, Al-Cu-Mn and "D16" alloys by the formation of finely dispersed and unevenly distributed particles of the ferrous second phase

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ACCESSION NR: AP4040685

during the decomposition of the saturated solid solution of Fe in Al in the process of pressing as well as by the local dissolution of the excess phases during hardening. The structure with a variable grain size that forms on the periphery of pressed 40 diam, 90 mm-long rods as a result of primary recrystallization tends to coarsen drastically during secondary recrystallization under the action of hardening. The higher the iron contents, the coarser the grains during secondary recrystallization. In the zone around the core the grain size reaches a maximum after the addition of 0.16% Fe and decreases gradually upon further Fe additions. A zone of potentially coarse grained ferrule in hot-pressed Al alloys appears in the form of a dull ferrule with an etchability that differs from that of the core. The orig. art. has: 3 figures and 1 table.

ASSOCIATION: Moskovskiy institut stali i splavov, (Moscow Institute of Steel and Alloys)

SUBMITTED: 00

ENCL: 00

SUB CODE: NM

NR REF SOV: 004

OTHER: 001

Card 2/2

I 13530-66 EWT(m)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) IJP(c) JD/HW

ACC NR: AP5028981

SOURCE CODE: UR/0149/65/000/004/0126/0130

AUTHOR: Gorelik, S. S.; Kozlovskaya, V. P.; Tomlova, L. A.

ORG: Moscow Institute of Steel and Alloys, Radiography and Physics of Metals Dept  
(Moskovskiy institut stali i splavov, Kafedra rentgenografii i fiziki metallov)

TITLE: Effect of manganese on the formation of macrocrystalline rim around pressed aluminum-alloy products

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 4, 1965, 126-130

TOPIC TAGS: macrocrystalline rim, metal pressing, aluminum alloy, manganese, metal recrystallization, solid solution

ABSTRACT: According to V. P. Kozlovskaya et al. (Alyuminiyevyye splavy. Deformiruyemye splavy. Mashgiz, v. 3, 1964), increasing the Mn content of aluminum alloys to 0.6% wt. is a means of combatting the formation of macrocrystalline rim by maintaining a recrystallized structure throughout the volume of the pressed product. Since, however, the determination of the mechanism of the effect of Mn on the formation of macrocrystalline rim on products made of industrial multicomponent alloys is difficult, the authors investigated this mechanism for hot-pressed rods of binary alloys of the

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UDC: 669.7715

L 13530-66

ACC NR: AP5028981

Al-Mn system following heat treatment (quenching from various temperatures in the 500-620°C range). Micro- and macrostructural examination confirmed that the formation of such rim takes place on heat treatment of products pressed from aluminum alloys representing supersaturated solid solutions. The (opaque) rim forms if the pressing is performed at temperatures (420-450°C) lying in the two-phase region and if the heating during heat treatment is performed at a temperature at which particles of the disperse phase get intensively redissolved. The peripheral zone in which the rim forms on heat treatment is characterized by a more intensive decomposition of the solid solution and formation of heterograin structure (in the process of primary recrystallization) associated with nonuniform conditions of the growth of recrystallization nuclei owing to the nonuniform distribution of disperse particles. Like the decomposition, the dissolution proceeds more intensively in the rim zone and pertains primarily to the high-disperse particles of the second phase whose dissolution is evidently associated with the vigorous growth of the grains on secondary recrystallization, resulting in the formation of the macrocrystalline structure. Increasing the Mn content beyond the necessary minimum does not eliminate the possibility of rim-formation but merely displaces it in the direction of higher temperatures; at the same time this leads to an increasing anisotropy of grain size in the longitudinal cross section of the rim zone. Grain size in the direction at right angles to the pressing axis decreases whereas in the direction parallel to this axis it increases. Orig. art. has: 8 figures, 1 table.

SUB CODE: 11, 13, 20/ SUBM DATE: 18Jun64/ ORIG REF: 004/ OTH REF: 000

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L 5028-66 EWI(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) IJP(c)  
ACC NR: AP5022379 MJW/JD/IW SOURCE CODE: UR/0136/65/000/009/0067/0071

AUTHOR: Kozlovskaya, V. P.; Bavykina, I. M.; Rad'kova, R. N.  
ORG: none

56  
55  
B

TITLE: Mechanical properties and structure of cold-extruded aluminum-alloy tubes and bars

SOURCE: Tavetnyye metally, no. 9, 1965, 67-71

TOPIC TAGS: aluminum alloy, alloy extrusion, extrusion, alloy tube, alloy bar, tube extrusion, bar extrusion, alloy mechanical property

ABSTRACT: The feasibility of cold extrusion of aluminum alloy tubes and bars has been investigated. AD1, AV, D1, and D16 alloy tubes 9, 8, or 7.2 mm in diameter, with respective wall thickness of 1.5, 1, or 1.1 mm, were cold extruded from hot extruded shells, at extrusion ratios of 14.2, 23.3 or 40. The mechanical properties of tubes 300-400 mm long were roughly equal to those of tubes produced by conventional methods (hot extrusion and cold rolling). For instance, cold-extruded D16 alloy tubes after heat treatment had a tensile strength of 43-50 kg/mm<sup>2</sup>, a yield strength of 26 to 38 kg/mm<sup>2</sup>, and an elongation of 14-20%, compared to 42 kg/mm<sup>2</sup>, 26 kg/mm<sup>2</sup>, and 14%, respectively, for conventionally made tubes. The mechanical properties of cold-extruded AV and D1 alloy tubes 1500 mm long decreased toward the rear end (a result of grain coarsening), but not below the values required by specifications. Cold-ex-

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UDC: 669.715-126:621.78

L 5028-66

ACC NR: AP5022379

truded D1 alloy tubes 16 mm in diameter and 1500-2000 mm long, tested in the as-extruded, annealed, and heat-treated conditions, were found to have technological properties (in bending, expanding, and squeezing tests) similar to those of conventionally made tubes, but a somewhat lower tensile strength (by 1 kg/mm<sup>2</sup>) and yield strength (by 3 kg/mm<sup>2</sup>) and a 5% higher elongation. An insignificant anisotropy of mechanical properties was observed in cold-extruded V96 alloy tubes tested in the as-extruded condition. The AD1, AV, and D16 alloy bars, 30, 25, 18, or 16 mm in diameter cold extruded at extrusion ratios of 7, 10, 19, or 24 had better mechanical properties than those of bars produced by conventional methods;  $\sigma_{13}$ ,  $\sigma_{0.2}$ , and  $\sigma_{0.05}$  were 40 kg/mm<sup>2</sup>, 26 kg/mm<sup>2</sup>, and 12%, respectively. Orig. art. has: 3 figures and 4 tables.

[NW]

SUB CODE: MM/ SUBM DATE: none/ ORIG REF: 000/ OTH REF: 000/ ATD PRESS: 4432

Card 2/2

L 36117-66 EWT(m)/T/EWP(t)/ETI IJP(c) JH/JD/GD

ACC NR: AT6016423

(A)

SOURCE CODE: UR/0000/65/000/000/0158/0165

AUTHORS: Gorelik, S. S.; Kozlovskaya, V. P.; Tomilova, L. A.

ORG: none

TITLE: The mechanism of formation of large crystalline grain rims in pressed objects manufactured from aluminum alloysSOURCE: AN SSSR. Institut <sup>1</sup>metallurgii. Metallovedeniye legkikh splavov (Metallography of light alloys). Moscow, Izd-vo Nauka, 1965, 158-165TOPIC TAGS: metal grain structure, aluminum alloy/ D16 aluminum alloy

ABSTRACT: The mechanism of formation and the properties of the so-called large crystalline grain rim (which forms in aluminum alloy objects as a result of compression) were studied. The study was carried out on the following binary systems: Al--Cu, Al--Mn, Al--Mg, Al--Si, Al--Fe, and ternary systems Al--Cu--Mn, Al--Cu--Fe, Al--Mn--Fe, and Al--Si--Fe, as well as the quaternary system Al--Cu--Mn--Fe, the iron free alloy D16, and the alloy D16 containing 0.3% Fe. The macro- and micro-structure and lattice parameters of the alloys were investigated as a function of annealing temperature and composition. The electrical resistance of the central, intermediate, and rim sections of rod specimens was determined. The effect of annealing temperature on the alloy grain size was also determined. The experimental results are presented in graphs and tables (see Fig. 1). These results corroborate

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L 36117-66

ACC NR: AT6016423

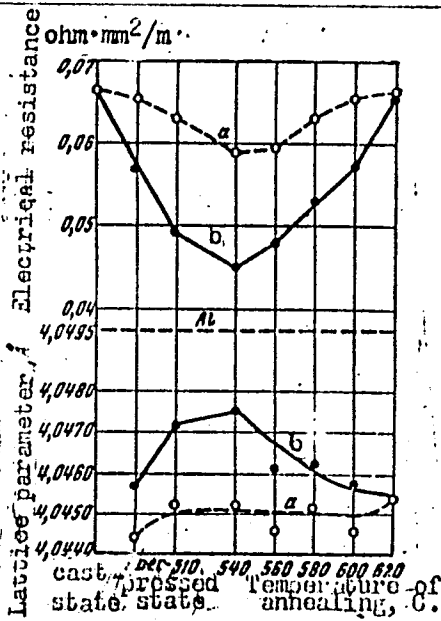


Fig. 1. Dependence of the electrical resistance and lattice parameter of the solid solution formed by alloy 6 (Al + 1.38% Mn) on the annealing temperature in the central (a) and peripheral section (b) of the rod specimen.

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the view that the large crystalline grain rim forms as a result of formation of supersaturated solid solutions in the alloy. It was found that both iron and manganese aid in the formation of large crystalline grains. The authors give thanks to V. I. Dobatkin for his critical assessment of the experimental results. Orig. art. has tables and figures.

SUB CODE: 1130/

SUB DATE: 16 Sep 65/

OTH. REF: 007



L 37165-66 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(e) JD/GD

ACC NR: AT6016424

SOURCE CODE: UR/0000/65/000/000/0166/0172

AUTHORS: Dobatkin, V. I.; Kozlovskaya, V. P.; Bavykina, I. M. 43

ORG: none 251

TITLE: Influence of structure on the mechanical properties of pressed products manufactured from alloy D16 for different types of applied loads

SOURCE: AN SSSR. Institut metallurgii. Metallovedeniye legkikh splavov (Metallography of light alloys). Moscow, Izd-vo Nauka, 1965, 166-172

TOPIC TAGS: solid mechanical property, tensile strength, aluminum alloy / D16  
aluminum alloy 27

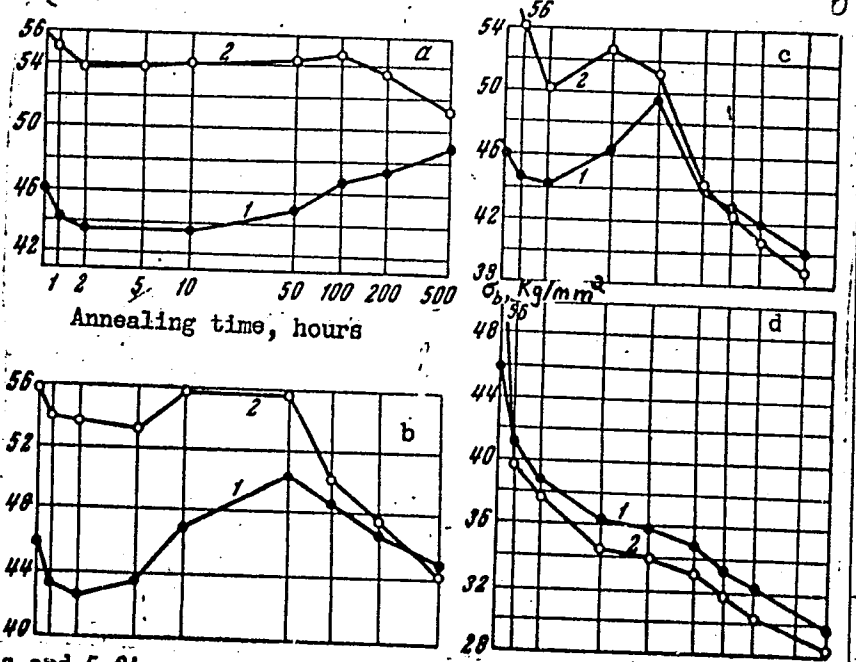
ABSTRACT: The effect of recrystallization on the mechanical properties of parts manufactured from alloy D16 was investigated. The investigation supplements the results of V. I. Dobatkin (O presseffekte v alyuminiyevykh splavakh, Sb. Issledovaniye splavov tsvetnykh metallov, vyp. 3 Izd-vo AN SSSR, 1962). The mechanical properties and microstructure of nonrecrystallized and recrystallized specimens were determined as a function of the type and magnitude of applied load. The experimental results are presented in graphs and tables (see Fig. 1). It was found that artificial aging of the alloy at elevated temperatures tended to smooth out any differences in the mechanical properties of non- and recrystallized specimens.

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L 37165-66

ACC NR: AT6016424

Fig. 1. Change in the tensile strength at room temperature of 20-mm diameter rods manufactured from alloy D16 having a recrystallized (1) and non-recrystallized (2) structure as a function of annealing time at temperatures of 150C (a), 175C (b), 200C (c), and 250C (d).



Orig. art. has: 2 tables and 5 figures.

SUB COIE: 11/ SUBM DATE: 16Sep65/ ORIG REF: 007/ OTH REF: 002

Card 2/2 of

KOZLOVSKAYA, V.P.; BAVYKINA, I.M.; RAD'KOVA, R.N.

Mechanical properties and structure of cold extruded aluminum  
alloy tubes and bars. TSvet. met. 38 no.9:67-71 S '65.  
(MIRA 18:12)

L 04193-67 EWT(m)/EWP(t)/ETI/EWP(k) LIP(a) JB/121  
ACC NR: AP6028590 (N) SOURCE CODE: UR/0129/66/000/008/0062/0064

AUTHOR: Raytbar, L. Kh.; Kozlovskaya, V. P.; Babykina, I. S.; Petrov, Ye. A. 4/

ORG: none B

TITLE: The dependence of the properties of cold-extruded semifinished products made from aluminum alloys on the billet condition 1-6

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 8, 1966, 62-64

TOPIC TAGS: aluminum alloy, extrusion, extruded aluminum, mechanical property, heat treatment, cast structure, annealing, homogenization heat treatment, grain structure, metallographic examination / AD1 aluminum alloy, AV aluminum alloy, AMg aluminum alloy, D1 aluminum alloy

ABSTRACT: Optimal heat treatments were developed for aluminum alloy billets used in making cold-extruded tubes. Alloys AD1, AV, AMg, and D1 were extruded on a mechanical press into tubes having diameters of 15 x 12, 16 x 14, and 16 x 15. The original temperature of 15-20°C increased to 250-350°C after extrusion. Mechanical properties are given for cast, annealed, and homogenized billets and tubes made from each. Cast and previously extruded billets of AD1 and AMg alloys performed identically in tube extrusion; extruded AV alloy billets had better yield strength and reduction in area; and annealed D1 billets had the highest plasticity. Microstructures of cast and ex-

UDC: 620.17:669.716:621.78

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i. 04198-67

ACC NR: AP6028590

truded D1 billets and the semifinished tubes made from these were shown. The grain structure of tubes made from cast billets was smaller and more uniform, while those made from extruded D1 billets--large grained and elongated. Optimum quenching temperatures for cold extruded AV tubes were 515-520°C. By heating in a circulating-air pit furnace after quenching, the maximum properties were obtained after holding for 10 min; the properties did not improve if the holding time was increased to 30 min. An increase in quenching temperature from 480 to 500°C for alloy D1 resulted in raising the yield strength by 2 kg/mm<sup>2</sup>. Orig. art. has: 1 figure, 2 tables.

SUB CODE: 11,13,20/SUBM DATE: none

Card 2/2 LC

KOZLOVSKAYA, Ya.I.

Relationship between the principles of didactics during the process  
of studying foreign languages. Sbor. metod. rab. Bel. politekh.  
inst: no. 1:157-161 '59. (MIRA 14:1)  
(Language and languages--Study and teaching)

YAMPOL'SKIY, Leonid Semenovich; KOZLOVSKAYA, Yadviga Kazimirovna;  
KUL'CHITSKAYA, O., red.; LEUSHCHENKO, N., tekhn. red.

[Civil engineering; an English language textbook] Civil  
engineering; uchebnoe posobie po angliiskomu iazyku.  
Kiev, Gosstroizdat, 1962. 338 p. (MIRA 16:7)  
(Civil engineering)

KOZLOVSKAYA, Ye.

First attempts to work under new conditions; letter from Leningrad.  
Okhr. truda i sets. strakh. no.1:39-41 JI '58. (MIRA 11:12)

1. Deverennyy vrach Leningradskego oblastnogo professional'nogo soвета  
po Smol'ninskomu rayonu.  
(LENINGRAD PROVINCE--MEDICAL CARE),



KOZLOVSKAYA, Ye., doverennyy vrach

Great deeds of a small group. Okhr.truda i sots.strakh.  
no.3:71-72 Mr '59. (MIRA 12:4)

1. Leningradskiy sovprof.  
(LENINGRAD--MEDICINE, INDUSTRIAL)

KOZLOVSKAYA, Ye. (g.Leningrad)

Out of touch with practical work.. Okhr.truda i sets.strakh.  
no.5:54-56 My '59. (MIRA 12:9)

1. Doverennyy vrach soveta profsoyuzov.  
(Medicine, Industrial--Research)

CA KOZLOVSKAYA, Ye. I.

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Chromium plating of steel articles without an under-coat. B. I. Kozlovskaya and V. A. Il'in. *Med. Prom. S.S.S.R.* 1949, No. 7, 23-4. - The article is polished with fine emery, or buffed, degreased cathodically in a soln. of NaOH 10; Na<sub>2</sub>CO<sub>3</sub> 25; Na<sub>3</sub>PO<sub>4</sub> 25; Na<sub>2</sub>SiO<sub>3</sub> 3 g./l.; 1-2 min. at 60-70°, 5 amp./sq. dm. (longer degreasing should be avoided), rinsed; etched 5-10 sec. in 5% HCl; rinsed; and plated in a soln. of CrO<sub>3</sub> 3.50-70, H<sub>2</sub>SO<sub>4</sub> 3-3.5, trivalent Cr 2-3 g./l., at 52-53°, 24-6 amp./sq. dm., 30 min. The Cr coating is 0.5  $\mu$  thick and proves to be less porous than a 15  $\mu$  Ni deposit on the same basis surface. The Cr deposit is milky and can be polished.  
N. Thon

KOZLOVSKAYA, Ye. I.

USSR/Chemical Technology. Chemical Products and Their Application - Silicates. Glass. Ceramics. Binders. I-9

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12577

Author : Keler E.K., Kozlovskaya Ye.I., Nosikov O.V.  
 Title : Determination of Resilient Properties of Glass and Fine Ceramics by the Ultrasonic Impulse Method

Orig Pub : Steklo i keramika, 1956, No 5, 7-13

Abstract : Investigations of the resilient properties of glass and fine ceramics have been carried out by the ultrasonic method developed by S.Ya. Sokolov, which is based on periodic emission of short ultrasonic impulses and their subsequent reception after passage over a given distance within the specimen. In the determinations is registered the time  $t$  during which the ultrasound covers the distance  $S$ , and propagation velocity of the ultrasound is determined. By means of suitable formulas a determination is made of the displacement modulus  $G$ , elasticity

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USSR/Chemical Technology. Chemical Products and Their Application - Silicates. Glass. Ceramics. Binders. I-9

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12577

modulus  $E$  and Poisson coefficient  $\mu$ . The work was carried out with the use of S. Ya. Sokolov's flaw-detector UZD-12. The specimens used were bars 30x30x200 mm and 30x30x100 mm and circular rods  $d = 20-30$  mm and  $l = 500$  mm made from U-10 steel (standards), glass (window pane and optical) and ceramics (technical and insulator porcelain, radio ceramics). It was found that the resilience constants of the investigated materials, determined by the ultrasonic impulse method, have values which are sufficiently close to those known from literature sources. Discrepancy in values of the moduli  $G$  and  $E$  of the same specimen are within 1-2.5% for  $G$  and up to 4% for  $E$ . Different specimens made from the same material show a scattering in values of 1.2-13.5% for  $G$  and 3.0-14.5 for  $E$ . Study of the effects of temperature on the resilient properties of ceramics and glass did not reveal any

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USSR/Chemical Technology. Chemical Products and Their  
Application - Silicates. Glass. Ceramics. Binders.

I-9

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12577

changes therein up to the temperature of occurrence of  
plastic deformation.

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*Kozlovskaya, Ye. I.*

20-2-16/50

AUTHORS: Keler, E. K. , Kozlovskaya, Ye. I.

TITLE: The Elastic Properties of Glass (Ob uprugikh svoystvakh stekla)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 2, pp. 221 - 224 (USSR)

ABSTRACT: The present paper contains experimental data concerning the modification of the elastic properties of glass in the case of a torsion in dependence on temperature. It is known that glass, below the temperature at which softening begins, is a brittle solid body, and at room temperature it obeys Hooke's law up to the point of fracture. A diagram shows the curve deformation temperature of glass in the case of constant stress as well as the experimental curves of momentary elastic, delayed elastic, and remanent deformation. In the interval between 20° and the temperature  $T_g$  of beginning softening there is only a momentaneous, elastic deformation. In the interval between  $T_g$  and the temperature of the beginning of the delay of the deformation a delayed-elastic and a remanent deformation were observed. As soon as 720° is attained, the elastic deformations vanish nearly entirely, and instead remanent deformation develops. A second diagram illustrates the curve stress deformation of glass, i.e. the hysteresis loops for different stages of a truly elastic behavior of glass in the interval of temperatures

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20-2-16/50

## The Elastic Properties of Glass

of between  $20^\circ$  and  $T$ . The third diagram illustrates the dependence of deformation  $\epsilon$  on time. The domains of these curves correspond to the following processes: momentary elastic deformation at the moment of stress, delayed elastic deformation, plastic flow, momentary-elastic restoration after removal of stress, delayed-elastic restoration. The experimental data found served as a basis of the determination of the shearing modulus of glass when heated. The dependence of the properties of glass on temperature studied here was observed by several authors in the case of different types of glass such as window glass, various types of optical glass, and in sodium-boron silicate glass. Also pure quartz glass was investigated. In conclusion something was said about the physical-chemical processes upon which the here discussed phenomena are based. There are 4 figures and 1 Slavic reference.

PRESENTED: May 28, 1957, by A. A. Lebedev, Academician

SUBMITTED: July 6, 1957

AVAILABLE: Library of Congress

Card 2/2

**AUTHORS:** Korelova, A. I., Candidate of Technical Sciences, Shmidt, Yu. A., Candidate of Chemical Sciences, Kozlovskaya, Ye. I.

**TITLE:** Works Carried out by Hungarian Scientists in the Field of Chemistry and Silicate-Technology (Raboty vengerskikh uchenykh v oblasti khimii i tekhnologii silikatov)

**PERIODICAL:** Vestnik Akademii nauk SSSR, 1958, Nr 6, pp. 92 - 94 (USSR)

**ABSTRACT:** A group of collaborators of the Institute of Silicate-Chemistry of the AS USSR, together with the authors of this article, was sent to the Hungarian People's Democracy in December 1957 in order to become acquainted with the scientific works on the chemistry and technology of silicates (mainly glass and ceramics). These works were collected at the Institute of Chemical Research of the Hungarian AS, at the Central Research Laboratory for Building Materials, the Research Institute of the Chemical Heavy Industry, the professorial chairs of a number of universities, as well as at the laboratories of industrial plants. In Budapest and Vespem they had the opportunity of becoming acquainted with

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Works Carried out by Hungarian Scientists in the Field <sup>SOV</sup>50-58-6-17/45  
of Chemistry and Silicate-Technology

the works by leading specialists in the field of the chemistry and technology of silicates:

1) I. Narai-Sabo, Institute of Chemical Investigations, investigates the relations between the structure and the properties of glass.

2) B. Lend'yel, Professorial Chair for General and Inorganic Chemistry, investigates the electric conductivity as well as the dielectric properties of glass in dependence on both durability and structure.

3) E. Beretskiy, Professorial Chair of the Chemical-Technical College at Vespem, investigates the composition and properties of various kinds of clay and kaolin occurring in Hungary for the purpose of replacing imported materials.

4) Ya. Grofohik, Institute of the Investigations of the Chemical Heavy Industry (Vespem), investigates the process of the formation of mullite.

5) M. Korakh, Central Institute for the Investigation of Building Materials, investigates Hungarian minerals for the purpose of replacing imported raw-materials.

6) R. Moldvai, Technical College, produced and investigated ceramic masses in the  $\text{Li}_2\text{O}-\text{Al}_2\text{O}_3-\text{SiO}_2$ -system which have a negative thermal

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Works Carried out by Hungarian Scientists in the Field SOV 30-58-6-17/45  
of Chemistry and Silicate-Technology

coefficient of expansion.

7) L. Erdei proposed new methods of chemical analysis.

8) I. Shayo, Institute of Metallurgy, proposed rapid methods of the analysis of ore, minerals, silicates, slags, refractory materials and alloys, this method is based on the determination of components without separating the same.

1. Chemistry--Hungary    2. Scientific research--Hungary

Card 3/3

KOZLOVSKAYA, Ye. I.

58/5015

PAGE 1 FROM 15-01121010

Vsesoyuznyye soobsheniye po stekloobrazovaniyu, Leningrad, 1959.

Stekloobrazovaniye sostoyaniye: Trudy Tret'yego vsesoyuznogo sovetskoyu nauku Leningrad, 1959. 16-20 noyabr'ya 1959. (Vitroreous State; Transactions of the Third All-Union Conference on the Vitroreous State, held in Leningrad on November 16-20, 1959) Moscow, Izdatvo AN SSSR, 1960. 534 p. Erata slip inserted. 3,250 copies printed. (Series: It's: Trudy)

Sponsoring Agencies: Institut khimii silikatov Akademi nauk SSSR. Vsesoyuznyye khimicheskoye obshchestvo imeni D.I. Mendeleeva and Gosudarstvennyy ordena Lenina opticheskoy Institut imeni S.I. Vavilova. Editorial Board: A.I. Avgustinik, V.P. Baranovsky, M.A. Barchakov, O.K. Botvinkin, V.V. Yargin, A.G. Vlasov, E.S. Yevstrop'ev, A.M. Lebedev, M.A. Mezev, V.S. Molchanov, R.L. Nyaller, Ye.A. Pory-Kochits, Chairman, E.A. Torozov, V.A. Floridskiy, A.K. Yabinski; Ed. of Publishing House: I.V. Sivtsov; Tech. Ed.: V.T. Kochever.

PURPOSE: This book is intended for researchers in the science and technology of glasses. SCOPE: The book contains the reports and discussions of the Third All-Union Conference on the Vitroreous State, held in Leningrad on November 16-20, 1959. The reports deal with the methods and results of studying the structure of glasses, the relation between the structure and properties of glasses, the nature of the physical bond and glass structure, and the crystallinity of glass. A number of the reports deal with the dependence of glass properties on composition, the tinting of glasses and radiation effects, and mechanical, electrical, and chemical properties of glasses. Other papers treat glass sheets 90 degrees from Soviet and East German scientific organizations. Among the participants in the discussions were S.V. Solzmin, Ye. V. Karvashnitskiy, Yu.A. Gusev, V.P. Fryanishnikov, Yu. Ye. Golib, O.P. Mchedlov-Petropavl, M.Khabylov, S.M. Kuznetsov, E.V. Degtyareva, G.V. Lavina, A.V. Shatilov, R.T. Pichashvili, A.Ye. Kuznetsov, P.Ye. Bakin, E.K. Keller, Ye.A. Byrganovskaya, A.A. Maimon, M. Elomov, Z.G. Plinker, and O.S. Molchanova. The final session of the conference was addressed by Professor I.I. Litayzovskiy, Emeritus Scientist and Engineer, Doctor of Technical Sciences. The following institutes were cited for their contribution to the development of glass science and technology: Gosudarstvennyy opticheskoy Institut (State Optical Institute), Institut khimii silikatov AN SSSR (Institute of Silica Chemistry, AS USSR), Fizicheskoy Institut AN SSSR (Physics Institute AS USSR), Fiziko-tekhnicheskoy Institut AN SSSR (Physicochemical Institute AS USSR), Institut fiziki AN SSSR, Minsk (Institute of Physics, Academy of Sciences, Belorussian SSR, Minsk), Laboratoriya khimii AN SSSR, Minsk (Institute of General and Inorganic Chemistry, Academy of Sciences, Belorussian SSR, Minsk), Institut vysokomolekulyarnykh soedyneniy AN SSSR (Institute of High Molecular Compounds, AS USSR), Gosudarstvennyy nauchnoy tsentra (State Institute for Glass Fibers), Gosudarstvennyy Institut elektrotekhnicheskoy optiki (State Institute for Electrical Glass), Bibrskiy fiziko-tekhnicheskoy Institut, Kazak (Siberian Physicochemical Institute, Kemerovo, Khabarovskiy gosudarstvennyy universitet (Leningrad State University), Leningradskiy tekhnicheskoy Institut (Moscow Institute of Chemical Technology), Leningradskiy tekhnicheskoy Institut im. Leninskaya (Leningrad Technological Institute, Leningrad), Belorusskiy politekhnicheskoy Institut Minsk (Belorussian Polytechnic Institute, Minsk), Novosibirskiy politekhnicheskoy Institut (Novosibirsk Polytechnic Institute), and Sverdlovskiy politekhnicheskoy Institut (Sverdlovsk Polytechnic Institute). The Conference was sponsored by the Institute of Silicate Chemistry AN USSR (Acting Director - A.S. Golib), the Vsesoyuznyye khimicheskoye obshchestvo imeni D.I. Mendeleeva (All-Union Chemical Society) Institut imeni S.I. Vavilova, D.I. Mendeleeva (All-Union Chemical Society) Institut imeni S.I. Vavilova (State Order of Lenin) Opticheskoy Institut imeni S.I. Vavilova. The 15 resolutions of the Conference include recommendations to organize a Center for the purpose of coordinating the research in glass, to publish a new periodical under the title "Fizika i khimiya stekla" (Physics and Chemistry of Glass), and to join the International Commission on Glass. The Conference thanks A.A. Lebedev, Academician, Professor, Chairman of the Organization of Committees, Ye.A. Pory-Kochits, Doctor, Physics and Mathematics, Member of the Organizational Committee, and R.L. Nyaller, Doctor of Chemical Science, Member of the Organizational Committee. The editorial board thanks G.M. Bartenev, M.V. Vol'krantskiy, L.I. Beskudina, D.P. Bobychin, N.K. Dubrov, V.A. Ioffe, and B.F. Kolmanitskiy. References accompany individual reports.

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0618

3/058/61/000/008/025/044  
A058/A101

15.2610

AUTHOR: Kozlovskaya, Ye. I.

TITLE: Elastic properties of glass as a function of temperature

PERIODICAL: Referativnyy zhurnal, Fizika, no. 8, 1961, 199, abstract 8D74 (V sb. "Stekloobrazn. sostoyaniya". M.-L., AS USSR, 1960, 387-391, Disc. 415-417)

TEXT: The author studied the distinctive features of the deformation of silicate glasses and materials of a mixed glass-crystalline type as a function of temperature, the character of the load and the time of its action. Measurements were carried out by static methods of torsion with mechanical and optical indicator systems. The results are presented graphically in the form of deformation versus temperature curves for optical and industrial glasses, fused quartz and glazes. Incident to heating of the glass above  $T_g$  its mechanical properties undergo pronounced changes connected with structural changes. The endothermic effects detected in the thermograms of the glasses in the temperature range  $T_g - T_d$  ( $T_d$  is the point of beginning of deformation delay) indicate that the structural changes are effected with absorption of heat. In the softening range

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Elastic properties of glass ...

together with instantaneous-elastic deformation delayed-elastic and plastic deformation become characteristic. Experiments with mixtures of window pane and 40 - 20% Electrocorundum showed that the character of the deformation of the investigated materials is determined by the properties of the vitreous phase.

A. Yakhkind

[Abstracter's note: Complete translation]

Card 2/2

Kozlovskaya, Ye I.

Author: Sritshchaya, I. M.  
S/O72/60/000/03/021/025  
0003/0008

Title: 3rd All-Union Conference on the Vitreous State  
Staklo i keramika, 1960, Nr 3, pp 43-46 (USSR)

SYNOPSIS:  
ABSTRACT:

The 3rd All-Union Conference on the Vitreous State was held in Leningrad at the end of 1959. It was organized by the Institute of Chemistry of the Academy of Sciences of the USSR (Institute of Chemical Physics of the USSR Academy of Sciences), the Institute of Chemistry, Leningrad University, and the Institute of Chemistry, Kazan University. The conference was held in the State Optical Institute (S. I. Vavilov). More than 100 reports on the structure of glass, investigation methods of the vitreous state, the mechanism of vitrification and physicochemical and technical properties of glasses were delivered. The Conference was opened by Academician A. A. Lebedev.

At the 7th meeting, 6 reports dealt with glasses as semi-crystalline and 4 reports with technical properties of glasses. The reports were: V. V. Valgin and K. M. Yezhov, "Coloring of Glasses in Connection with their Structure"; M. I. Vasova, Ye. I. Kozlovskaya, A. A. Kozlov, "Absorption Spectra of the  $Co^{2+}$  Ion as Indicator for the Determination of Boron and Aluminum in Glasses"; V. P. Buzlov and V. Y. Zaytsev, "Reports on the Change of the Spectral Absorption of Glasses of Simple Composition under the Influence of Gamma Rays"; V. V. Valgin, "Mechanism of the Vitrification of Glasses"; V. V. Valgin, "On Spectral and Chemical Properties of the Crystalline State of Glasses"; K. M. Yezhov and K. I. Shuster, "Reports on the Physicochemical Nature of Pore Formation in Silicate Salts (Zeolite, Seraxite)"; Ye. V. Kozlovskaya, "Reports on Physico-chemical Investigations of Salts of Refractory Oxides in a State of Equilibrium"; I. P. Kuznetsov, "The Importance of the Vitreous Phase in the Formation of the Ceramic Body and the Cement Clinker"; V. A. Frenkel, "Reports on the Physicochemical Fundamentals of the Coloring of Glass and Metal". The 8th meeting dealt with physical, chemical, and mechanical properties of glasses. K. E. Yevseyev, G. M. Kartanov and S. K. Dubrovno made comprehensive reports. A. A. Lyzin reported on the fundamental structural parameters which determine the properties of the glass. A. V. Gladkov, V. A. Maloyukhina, V. F. Tarasov reported on research results of the polymeric structure of inorganic glasses. I. I. Demkina reported on peculiarities of the expansion of oxides in silicate glasses. V. G. Ginzantsev reported on the subject "The Energy of Covalent Bonds in Glass and their Role in the Process of Vitrification". K. E. Yevseyev, Ye. V. Kozlovskaya reported on the dependence of the properties of alkali silicate glasses on the composition. S. K. Dubrovno reported on investigation of the dependence of the optical properties of phosphate glasses on the composition. A. E. Khabibov reported on the subject "The Particulate System and the Optical Constants of Glass". M. J. Aslanova reported on "Mechanical Properties of Glass Fibers". G. M. Kartanov, A. S. Yevseyev made a report on the mechanical properties of inorganic glasses in the anomalous interval and on their structure. Ye. V. Kozlovskaya reported on the elastic properties of glasses and on the influence of the composition of the glasses on their mechanical properties. A. Ye. Abrasym reported on the subject "Teaching of Molten Silicate Masses by Aqueous Solutions of Acids and the State of the Oxides in the Structure of Glass Basalts". G. M. Kartanov and V. E. Zaytsev reported on synthesis and investigation of hafnium silicate glasses. S. K. Dubrovno reported on the chemical properties of gallium silicate glasses forming on calcium and V. E. Zaytsev reported on the chemical properties of sodium silicate glasses formed at the final melting. V. P. Kobrin on the glassiness of the alkaline earth oxides on the chemical stability of glasses in a humid atmosphere. L. Ye. Maslov on vitrification and properties of borate glasses. B. Y. Kuznetsov, Ye. A. Matrova and I. V. Kozlovskaya reported on the reaction of electrode glasses with solutions. Boster Vogel and Mosler spoke as guests from Eastern Germany. Academician E. V. Belov, E. A. Bezdadev, I. I. Kityagorskiy and S. E. Koler also spoke at the final meeting.

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Card 8/6

APPEN, A.A.; KOZLOVSKAYA, Ye.I.; GAN' FU-SU [Kan Fu-hsi]

Investigation of the elastic and acoustic properties of silica  
glasses. Zhur. prikl. khim. 34 no.5:975-981 My '61.  
(MIRA 16:8)

(Glass)



L 18964-63 EWP(q)/EWT(m)/BDS AFFTC/ASD Pq-4 WE/JD/JG  
ACCESSION NR: AP3006599 S/0020/63/151/006/1368/1370

AUTHORS: Keler, E. K.; Kozlovskaya, Ye. I.

TITLE: Elasticity and crystal formation in glasses. *69*

SOURCE: AN SSSR. Doklady\*, v. 151, no. 6, 1963, 1368-1370.

TOPIC TAGS: glass, heat treatment, glass crystallization,  
high temperature microscope, strength of glass,  
endothermic effect, exothermic effect, Al, K,  
Li, Si, Mg, Ti.

ABSTRACT: Mechanical properties of Al-K-Li-Si and Al-Mg-Ti-Si glasses were investigated. In temperature range from  $T_{OC}$  to vitrification temperature ( $T_g$ ), the glass deformation is uniform. From  $T_g$  to temperature of effective crystallization  $T_c$ , a sudden increase of deformation occurs. An exothermic effect accompanies this step. After that, deformation rate declines slightly. Then, with a further increase in temperature, a second increase of deformation takes place. After that, the deformation curve is parallel

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ACCESSION NR: AP3006599

to the abscissa up to temperature at which the glass completely liquefies. Decline and rise in deformation rate coincides with endo- or exothermic effects. Extent and nature of deformations was investigated by heat treatment and observation in high temperature microscope. These observations show that, up to temperature  $T_x$ , no crystal formation can be observed, but, between temperatures  $T_x - T_x$ , the formation of crystalline inclusions can be observed, which, with increase of temperature, grow in size until all glass is converted into one fine crystalline structure. Modulus of elasticity of this structure at room temperature is higher than that of corresponding original glass. Orig. art. has: 4 figures. 2

ASSOCIATION: Institut khimii silikatov im. I. V. Grebenshchikova Akademii nauk SSSR (Institute of silicate chemistry, Academy of sciences, SSSR).

Card

2/3

KOZLOVSKAYA, Z.A.

Nantokite from the zone of oxidation of the Dzhezkazgan deposit.  
Izv. AN Kazakh. SSR. Ser. geol. no.1:45-50 '61. (MIRA 14:6)  
(Dzhezkazgan District--Nantokite)

KOZLOVSKAYA, Z.A.; MITRYAYEVA, N.M.

Rhenium in some copper-porphyrific deposits of central Kazakhstan.  
Izv. AN SSR. Ser. geol. no.1:95-99 '61. (MIRA 14:6)  
(Kazakhstan--Rhenium)

AUBAKIROVA, R.B.; KOZLOVSKAYA, Z.A.; POTOK, S.I.; SHISHALOV, V.A.

Antofagastite and botallackite from the oxidation zone of the  
Dzhezkazgan deposit. Izv. AN Kazakh. SSR. Ser. geol. 21 no.5:  
90-95 S-O '64. (MIRA 18:5)

1. Institut geologicheskikh nauk im. K.I.Satpayeva AN Kaz SSR,  
Alma-Ata.

ZHELIAZKOV, D.K.; KOZLOVSKI, G.; NIKOLOVA, M.P.; IGNATOVA, E.P.

Experimental and clinical studies on hair growth stimulating effect of trichloroethylamine (TS-160). Suvrem. med., Sofia 8 no.10: 72-83 1957.

1. Iz Katedrata po farmakologija pri VMI--Sofia (zav. katedrata: prof. P. Nikolov) i Katedrata po dermatologija pri VMI--Sofia (zav. katedrata: prof. L. Popov).

(NITROGEN MUSTARDS, effects,  
trichloroethylamine on hair growth (Bul))

(ETHYLAMINES, effects,  
same)

(HAIR, effect of drugs on,  
trichloroethylamines on growth (Bul))

GEORGIEV, G.; MUSTAKOV, G.; KOZLOVSKII, G.

Pyoderma and microtrauma in workers of the Georgi Dimitrov railroad shop.  
Suvrem. med., Sofia 9 no.1:60-68 1958.

1. Iz Katedrata po kozhni i venericheski bolesti pri VMI - Sofia (sav.  
katedrata: prof. L. Popov).

(PYODERMA, epidemiology,  
in railroad workers (Bul))

(ACCIDENTS, INDUSTRIAL,  
microtrauma in railroad workers (Bul))

(OCCUPATIONAL DISEASES, epidemiology,  
pyoderma in railroad workers (Bul))

ORAKHOVATS, D.; GOTSEV, T.; KOZLOVSKI, G.

On the effect of adrenalin on blood vessels of the lower extremities  
in man. Nauch. tr. vissh. med. inst. Sofia 39 no.2:1-14 '60.

1. Predstavena ot akad. D. Orakhovats, zav. Katedrata po fiziologiya,  
i ot prof. d-r L. Popov, zav. Katedrata po kozhno-venericheski bolesti.

(EPINEPHRINE pharmacol) (VASOMOTOR SYSTEM pharmacol)



GOTSEV, T.; KOZLOVSKI, G.

Effect of acetylcholine on blood vessels of the lower extremities in man. Nauch. tr. vissh. med. inst. Sofia 39 no.2:15-22 '60.

1. Predstavena ot akad. D. Orakhovats, zav. Katedrata po fiziologija, i ot prof. d-r L. Popov, zav. Katedrata po kozhno-venericheski bolesti.

(ACETYLCHOLINE pharmacol) (VASCUMOTOR SYSTEM pharmacol)

KOZLOVSKI, G.

BULGARIA

[Academic Degrees]

[Affiliation] Senior Assistant with the Skin Clinic of the  
Higher Medical Institute -- Sofia (Kozhna klinika  
na VMI -- Sofia).

[Source] Sofia, Sreden Meditsinski Rabotnik, No 5, 1962,  
pp 40-47.

[Data] "Care for the Skin."

KOZLOVSKI, G.

Correlation between the neurovegetative and allergic reactivity  
in some dermatoses. Dermato vener Sofia 2 no.1:14-16 '63.

1. From the Chair of Skin and Venereal Diseases at the Higher  
Medical Institute, Sofia (Head of the Chair: Prof. L. Popov).

NIKOLOVA, I.; KOCHEVSKI, G.

Effectiveness of the ultrasound treatment of ekterodermia. Dermatovener Sofia 3 no.1:29-31 1964.

From the Physiotherapeutic Department at the High Medical Institute, Sofia (Head: Nikolova, I., [kand. na med. n. sci]). and from the Chair of Skin and Venereal Diseases at the High Medical Institute, Sofia (Acting Head: Prof. Kr. Todorov).

KOZLOVSKIS, V., red.; EGLE, A., red.; ERENSTEINE, A., telhn. red.

[For high corn yield] Par augstu kukuruzas razu. Riga, Latvijas  
Valsts izdevnieciba, 1959. 125 p. (MIRA 14:12)  
(Latvia—Corn (Maize))

KOZLOVSKIY, A.A.

Effect of elk on the regeneration of pine and aspen in the  
central part of the European U.S.S.R. Soob.Inst.lesa no.13:  
97-101 '59. (MIRA 13:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lesovodstva  
i mekhanizatsii lesnogo khozyaystva. (Elk) (Pine) (Aspen)

KOZLOVSKIY, A.A.

[Protection of forests from damage caused by moose] Okhrana lesa  
ot povrezhdenii losiami. Moskva, 1960. 62 p. (MIRA 14:9)  
(Moose) (Forests and forestry)

KOZLOVSKIY, A. A.

Cand Agr Sci, Diss -- "Control of the elk population in forestry".  
Yelgava, 1961. 17 pp, 20 cm (Min of Agr LatvSSR. Latv Agr Acad),  
300 copies, Not for sale (KL, No 9, 1961, p 186, No 24391). [61-51131]



KOZLOVSKIY, A.A., inzhener.

Reconstructing the burner unit of "IDEAL-MK" type boilers.  
Gor.khoz.Mosk. 24 no.2:36-37 F '50. (MLRA 7:11)  
(Boilers)

KOZLOVSKIY, A.A.; IVANOV, V.A.

Building concrete bunkers in winter. *Biul.stroi.tekh.* 10 no.16:19 N '53.

(MLBA 6:11)

(Concrete construction--Cold weather conditions) (Coal--Storage)

KOZLOVSKIY, A.A.; KORZHETSKIY, V.P., laureat Stalinskoy premii; POLYAKOV, V.G.; KHROMOVOY, A.P.; KOGAN, I.Y.; BAZANOV, A.F., laureat Stalinskoy premii.

The BTK-30 crane. Rats. i izobr. predl. v stroi. no.110:3-5 '55.  
(Cranes, derricks, etc.) (MLRA 8:10)

KOZLOVSKIY, A.A., inzhener.

"Concrete-press" machine. Mekh.stroi.13 no.6:34-36 Je '56.  
(Reinforced concrete) (MIRA 9:9)

*Kozlovskiy, P.P.*

~~KOZLOVSKIY, A.A.~~; KOGAN, I.Ya.; SMIRNOV, G.Ya.; POLYAKOV, V.G.;  
KORZHETSKIY, V.P.; KHROMOV, P.P.

Equipment for a four-legged tower crane assuring efficient  
movement and operation within a small working range. Rats. 1  
izobr. predl. v stroi. no.2:46-48 '57. (MIRA 11:1)  
(Cranes, derricks, etc.)

KOZLOVSKIY, A., inzh.

The MBTK-80 mobile tower crane. Na stroi. Mosk. 2 no.2:9-11 F '59.  
(MIRA 12:3)

(Cranes, derricks, etc.)

STAROV, V.I.; SEYTMURATOVA, E.Yu.; KOZLOVSKY, A.A.

Determining the relative age of nepheline syenites by the method  
of thermoluminescence. Trudy Inst. geol. nauk AN Kazakh. SSR 12:  
129-132 '65. (MIRA 18:9)

KOZLOVSKIY, A.A., podpolkovnik meditsinskoy sluzhby (L'vov)

Syndrome of Kojevnikoff's epilepsy of psychogenic and viral  
etiology. Vrach.delo no.12:1255-1257 D '56. (MIRA 12:10)  
(EPILEPSY)



KOZIOVSKIY, A.A., podpolkovnik meditsinskoy sluzhby (L'vov)

Clinical aspects of universal cysticercosis. Vrach.delo no.1:89-91  
Ja '58. (MIRA 11:3)

1. Nauchnyy rukovoditel'-zasl. deyatel' nauki, prof. Ye.V.Maslov.  
(CYSTICERCOSIS)

KOZLOVSKIY, A.A., podpolkovnik med.sluzhby (L'vov)

Somnambulism as a syndrome in certain brain diseases. Vrach.delo  
no.7:751-753 J1'58 (MIRA 11:9)  
(SOMNAMBULISM)  
(BRAIN--DISEASES)

~~KOZLOVSKIY, A.A.~~

Diagnostic value of intracutaneous administration of Margulis-Shubladze specific vaccine in certain neurotropic virus infections [with summary in French]. Zhur.nevr. i psikh. 58 no.6:681-685 '58 (MIRA 11:7)

1. (Konsul'tant - prof. Ye.V. Maslov).  
(ENCEPHALOMYELITIS, diagnosis,  
serol. with Margulis-shubladze vaccine (Rus))

KOZLOVSKIY, A.A. (L'vov)

Viral encephalitis with the clinical aspects of somnam-  
bulism. Vrach. delo no. 8:138-139 Ag'63. (MIRA 16:9)  
(ENCEPHALITIS) (SOMNAMBULISM)

KOZLOVSKIY, A. A.; SVETINSKIY, Ye. V.; STECHKINA, N. A.

Ramming unit on a MRSK-100 erecting crane base. Osn., fund.  
i mekh. grun. 5 no. 4:18-20 '63. (MIRA 16:11)

YAKOVLEV, A. I., kand. tekhn. nauk; SVIRIDENKO, I. S., kand. tekhn.  
nauk; KOZLOVSKIY, A. B.

Characteristics of the performance of power transmissions in  
case of a joint and separate electric drive. Avt. prom. 29  
no.5:31-33 My '63. (MIRA 16:4)

I. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni  
nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut  
i Akademiya kommunal'nogo khozyaystva.

(Motor vehicles—Power transmissions)  
(Electric driving)

KOZLOVSKIY, A.D., inzh.; IBRAGIMOV, F.A., inzh.

Instrument for determining the tension of wire reinforcement.

Trudy BashNIISTroi no.1:216-227 '62.

(MIRA 17:3)

KOZLOVSKIY, A.D.

Sowing sunflower in late autumn. Zemledelie 5 no.9:85-86 s '57.

(MIRA 10:9)

1. Direktor sovkhosa "Trabotchinskiy," Lipetskoy oblasti.  
(Sunflowers)



DEMICHEV, A.D.; KISELEV, V.F., starshiy dorozhnyy master (stantsiya Ira-Iol' Pechorskoy dorogi); ~~KOZLOVSKIY, A.D.~~; KOMANDIN, A.A., starshiy dorozhnyy master (stantsiya Polotsk Belorusskoy dorogi); KURS, V.G., brigadir puti (stantsiya Cheremkhovo Vostochno-Sibirskoy dorogi); PAVLOV, V.N., brigadir puti (stantsiya Cheremkhovo Vostochno-Sibirskoy dorogi); SHAKHBALAYEV, A.M., dorozhnyy master (stantsiya Zenzeli Ordzhonikidzevskoy dorogi); TARASENKO, V.Ye., dorozhnyy master (stantsiya Irkutsk II)

Letters to the editor. Put' i put.khoz. no.11:43-45 N '58.

(MIRA 11:12)

1. Nachal'nik normativnoy stantsii tresta "Rekput'." (for Demichev).
2. Zamestitel' nachal'nika distantsii, stantsiya Kizel Sverdlovskoy dorogi (for Kozlovskiy).

(Railroad engineering)

KOZLOVSKIY, A.D. (stantsiya Kizel, Sverdlovskoy dorogi)

Prerequisite for an economic spending of allocations. Put' 1  
put.khoz. no.11:19 N '59. (MIRA 13:4)  
(Kizel--Railroads--Snow protection and removal)

KOZLOVSKIY, A.D.

Increase the responsibility of the track forces foremen. Put' i put.  
khoz. 5 no.4:20 Ap '61. (MIRA 14:7)

1. Zamestitel' nachal'nika distantsii puti, st. Kizel, Sverdlovskoy  
dorogi.

(Railroads--Employees) (Railroads--Track)

1 20351-66 EWT(m)/EWP(j) RM

ACC NR: AP6012083

SOURCE CODE: UR/0062/65/000/003/0580/0580

AUTHOR: Nesmeyanov, A. N.; Kozlovskiy, A. G.; Gubin, F. P.; Perevalova, E. G. 46  
BORG: Moscow State University im. M. V. Lomonosov (Moskovskiy gosudarstvennyy universitet); Institute of Organoelemental Compounds, AN SSSR (Institut elementoorganicheskikh soyedineniy)TITLE: Protolysis of mercury derivatives of ferrocene

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 3, 1965, 580

TOPIC TAGS: titrimetry, ferrocene, mercury compound, dioxane, chlorine compound

ABSTRACT: The Rate constants were determined for the protolysis of mercury derivatives of ferrocene -- chloromercuriferrocene and diferrocene-mercury using hydrochloric acid in 90% (by volume) aqueous dioxane. The quantity of acid not entering into reaction was determined by potentiometric titration. The reaction rate in all cases is described by a second-order kinetic equation. The protolysis rate of diferrocene mercury is six times greater than the cleavage rate of di-p-anisylmercury under the same conditions.

Orig. art. has: 1 table. [JPRS]

SUB CODE: 07 / SUBM DATE: 18Jan65 / ORIG REF: 002

Card 1/1 vab

UDC: 531.1+542.957

KOZLOVSKIY, A. I.

35390 Meropriyatiya Po Uluchsheniyu Kormovoy Bazyzhivotnovolstva V Sibiri. V  
SB: Michurinskuyu Nauku-V Praktiku Zhivotnovodstva. Novosibirsk, 1949, S. 117-59

SO: Letopis' Zhurnal'nykh Statey Vol. 34, Moskva, 1949

KOZLOVSKIY, A. I.

"The Ensilage of Fodders in Siberia, Novosibirsk, 1950, 80 pp.

KOZLOVSKIY, A. I.

"The Ensilage of Fodders in Siberia" Novosibirsk, 1950

Mikrobiologiya, VolXX, No 5, 1951

W-24635

KOZLOVSKIY, A. I.

Agriculture

Forage root crops, Novosibirsk, Novosibgiz, 1951.

Monthly List of Russian Accessions, Library of Congress, December 1952. UNCLASSIFIED.



KOZLOVSKIY, Anton Ignat'yevich.

Siberian Sci-Res Inst of Livestock Breeding, Academic degree of Doctor of Agricultural Sci-, based on his defense, 2 June 1954, in the Council of the All-Union Sci-Res Inst of Forage imeni Vil'yams, of his dissertation entitled: "The Biological Foundations of Agrotechnics and Seed Sci of Forage Tubers in the Forest-Steppe Zone of Western Siberia .

Academic degree and/or title: Doctor of Sciences

SO: Decisions of VAK, List no 7, 26 Mar 55, Byulleten' MVO SSSR, No. 14, July Moscow pp 4-22, Uncl.  
JFRS/NY-429

KOZLOVSKIY, A.I., doktor sel'skokhozyaystvennykh nauk; KOVALOV, V.N.,  
kandidat sel'skokhozyaystvennykh nauk; KAMLIYENKO, V.K., nauchnyy  
sotrudnik; KAVUN, P.K., redaktor; PAVLOVA, M.M., tekhnicheskiy  
redaktor; BALEOD, A.I., tekhnicheskiy redaktor

[Corn in 1955] Kukuruza v 1955 godu. Moskva, Gos. izd-vo sel'khoz.  
lit-ry. no.5. [Siberian regions] Raiony Sibiri. 1956. 198 p.  
(Siberia--Corn (Maize)) (MIRA 10:2)

KATYREV, A.Ye.; KAURTSEV, N.V.; KOZLOVSKIY, A.I., doktor sel'skokhozyaystvennykh nauk; KRASIKOV, Z.D., dotsent, kandidat sel'skokhozyaystvennykh nauk; SOBOLEVSKAYA, K.A.; LYKOV, M.S., redaktor; LISINA, V.M., tekhnicheskiy redaktor

[Experience in cultivating corn; based on papers at a province conference] Opyt vozdeleyvaniya kukuruzy; po materialam oblastnoi konferentsii [Novosibirsk] Novosibirskoe kn-vo, 1956. 226 p.

(MLR 9:12)

1. Novosibirskiy sel'skokhozyaystvennyy institut (for Krasikov)  
(Corn (Maize))

KOZLOVSKIY A.

USSR/Cultivated Plants - Fodders.

N.

Abs Jour : Ref Zhur - Biol., No 10, 1956, 44169

Author : Kozlovskiy, A., Krutova, Ye., Zhdil'tsova, A.

Inst : Siberian Scientific Research Institute for Animal Raising.

Title : Combined Sowings of Corn with Leguminous Cultures.

Orig Pub : S. Kh. Sibiri, 1956, No 3, 27-29.

Abstract : The 1954-1955 experiments of the Siberian Scientific and Research Institute of Animal Husbandry showed that with the combined sowings of corn with leguminous cultures the aggregate crop increased (corn in pure form produced 313 centners/ha of green bulk. Corn plus vetch 343 and corn plus peas 350 centners/ha). The presence of the leguminous plants in the crop increased the protein content to 22-49%. In dry years it is recommended to carry

Card 1/2

USSR/Cultivated Plants - Feeders.

M.

Abs Jour : Ref Zhur - Biol., No 10, 1958, 44169

put the sowing of vetch or peas into the corn sowings  
after the harrowing of the sprouts and after the first  
cultivation between rows. -- Ye.T. Zhukovskaya

Card 2/2

- 92 -

KOZLOVSKIY, A.I.

USSR/Cultivated Plants - Grains

M-4

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1502

Author : A.I. Kozlovskiy, A.G. Kalinina

Inst : Not Given

Title : Selection of Varieties of Corn for Seed and Ensilage for Cultivation in Siberia.

Orig Pub : Kukuruz, 1956, No 6, 28-30

Abstract : Results of experiments on corn varieties by the food production department of the Siberian National Research Institute for livestock raising (conducted 1954-1955). In all the rayons of the steppe and forested steppe zone of Siberia, by cultivating medium early corn varieties (Voronezhskaya 76, Peryomayskaya, Perlovskaya) a good yield of cobs in the lactic-waxy stage of ripeness and green stuff for the silo can be obtained. For the purpose of dry seed cultivation the local early varieties and populations (local white, white mosaic) are useful. Late varieties yield very low crops of cobs having lactic and lactic-waxy ripeness (54 centners per

Card : 1/2

USSR/Cultivated Plants - Grains

M-4

Ab's Jour : Ref Zhur - Biol., No 1, 1958, No 1502

per hectare)and are cultivated especially for the silo and  
for green feed (the yield of green stuff is 500 centners  
per hectare and more).

Card : 2/2

*Kozlov A.*  
COUNTRY : USSR  
CATEGORY : Cultivated Plants. Grains. Leguminous Grains.  
Tropical Cereals. M  
ABST. JOUR. : ZEMEL', No. 3 1959, No. 104  
AUTHOR : Kozlov, A.  
POST. :  
TITLE : The effect of snow retention, periods and means of sowing  
on the crop of spring wheat.  
ORIG. PUB. : A. Kh. Mez'mel'ov., 1958, No. 3, 11-28  
ABSTRACT : No abstract.

CAED: 11



KOZLOVSKIY, A.K.

The glass manufacturing plant "Proletarii" is meeting its 50th anniversary with labor achievements. Stek. 1 ker. 20 no.12:  
30-33 D '63. (MIRA 17:1)

1. Direktor stekol'nogo zavoda "Proletariy."

PUBLISHED AND PRESENTED BY

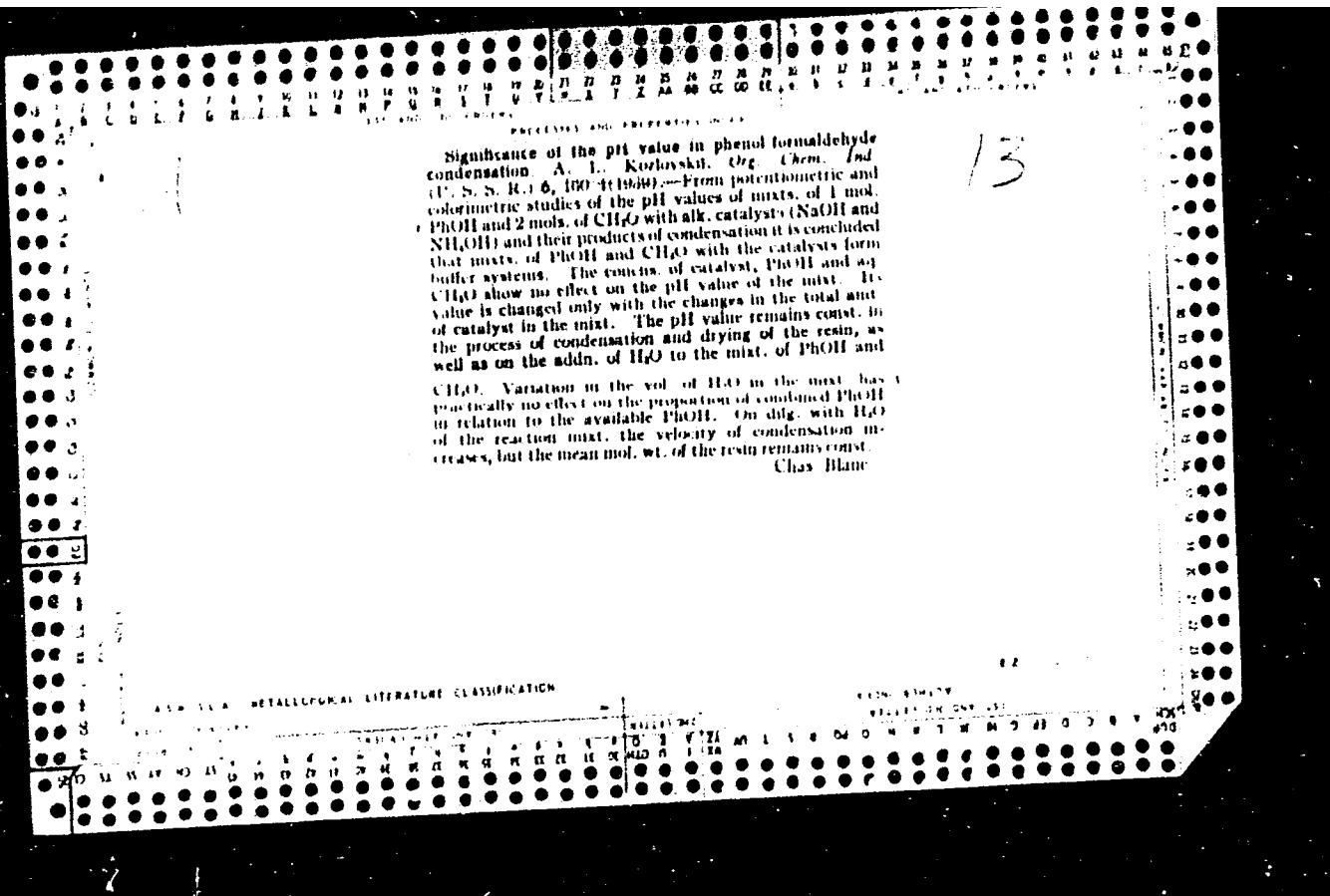
26

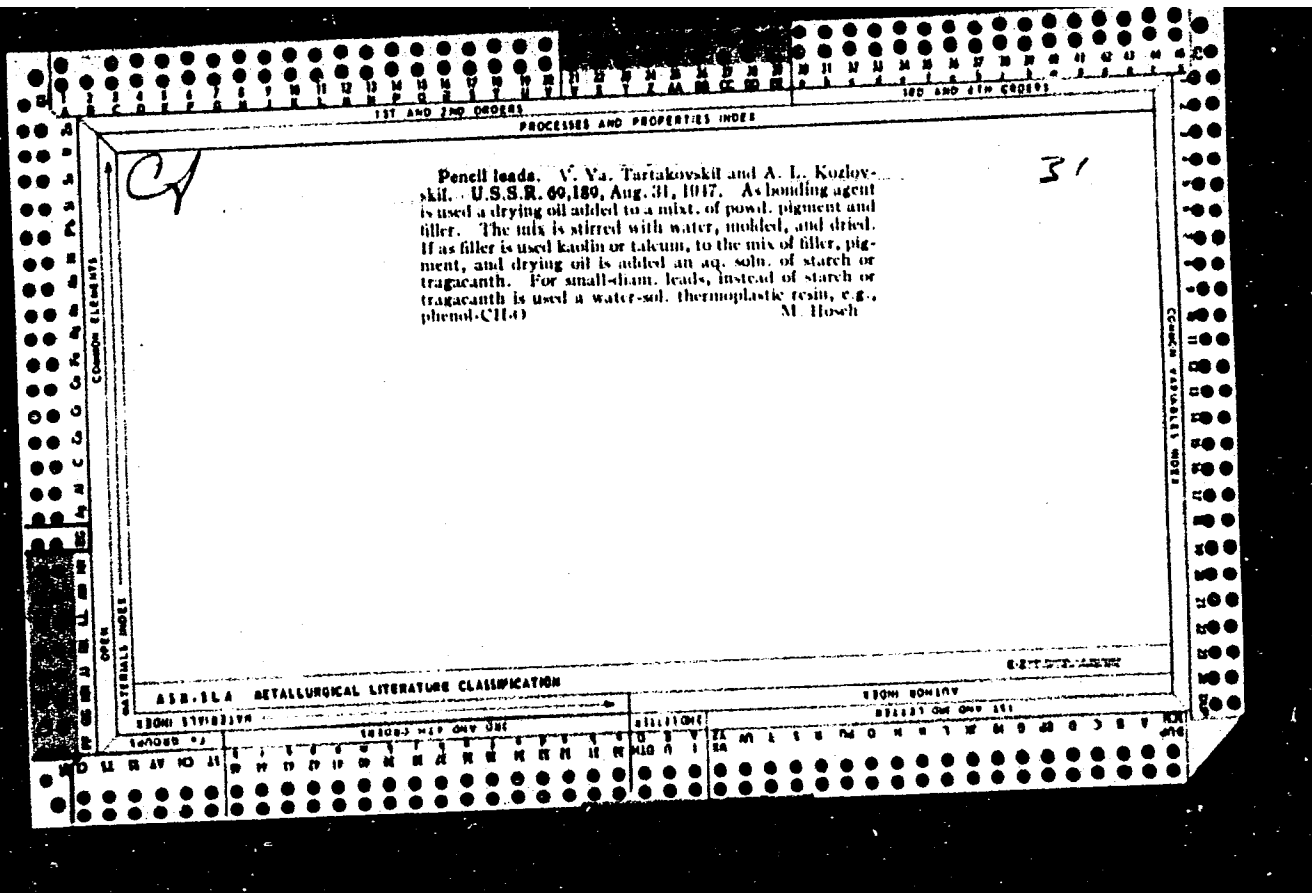
CA

Painting under water. A. L. Kozlovskii. *Byull. Akad. Nauk SSSR Tekh. Nauk*, 1939, No. 4, 4-7; *Khim. Referat. Zhur.*, 1939, No. 10, 118.—Phenol-aldehyde resins which can be obtained in the liquid state and which possess lyophobic properties are hardened without heating by the use of PbO, CaO or of their mixts. (cf. C. A. 31, 504<sup>g</sup>). The cresol and novolak "emulsion" resins contain 12-15% of free phenol. Optimum results were obtained with resins having a  $\eta$  of from 1.25 to 1.30 in a 10% alc. soln. Paints ground with alc. solns. of resin formed a turbidity in water and were, therefore, replaced by paints prepd. with "liquid" or "emulsion" resins. Iron oxide, red lead, PbCrO<sub>4</sub>, Cr<sub>2</sub>O<sub>3</sub>, talc and ZnO were used as pigments. The complete hardening process takes 20 days, but after 24 hrs. the 2nd coat of paint can be applied. A good protection from corrosion was obtained with 2 coats; the film lasted approx. 8-10 months. Paint contg. Cr<sub>2</sub>O<sub>3</sub> produced the least corrosion resistance. Painting under water requires 400-500 g./sq. m. of paint. W. R. H.

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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KOZLOVSKIY, A. L.      Cand. Tech. Sci.

Dissertation: "Investigation of the Technological Processes of Producing and Utilizing the Hydrophilic Phenolaldehyde Resins." Moscow Order of Lenin Chemicotechnological Institute D. I. Mendeleev, 26 Sep 47.

SO: Vechernyaya Moskva, Sep, 1947 (Project #17836)

KOZLOVSKIY, A. L.

Koalovskii, A. L. The manufacture and reprocessing of synthetic tars Moskva, Gos. izd-vo mestnoi promyshl. RSFSR, 1949. 199 p.

(49-28429) TP86.A2K68

DE BRUYNE, N.A.; HOUWINK, R.; KOZLOVSKIY, A.L. [translator]; ARNOL'DOV,  
V.V., redaktor; SHAPOVALOV, V.I., ~~tekhnicheskii~~ redaktor

[Adhesion of glue, cement, and solder. (Published in English as  
"Adhesion and Adhesives.")] Adgesia kloi, tsementy, pripoi. Pere-  
vod s angliiskogo A.A.Kozlovskogo. Moskva, Izd-vo inostrannoi lit-  
ry, 1954. 584 p. (MLRA 8:5)  
(Adhesives) (Adhesion)

*Kozlovskiy A.L.*  
KOZLOVSKIY, A.L.

Polyethylene coating of heat insulation materials. Trudy  
VNIIAvtogen no.4:125-136 '57. (MIRA 10:12)  
(Insulation (Heat)) (Polyethylene) (Gas torches)



SOV/137-59-3-7227

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 325 (USSR)

AUTHOR: Kozlovskiy, A. L.

TITLE: MGP-1-57 Apparatus for Applying Refractory Coatings (Apparat  
MGP-1-57 dlya naneseniya tugoplavkikh pokrytiy)

PERIODICAL: Byul. tekhn.-ekon. inform. Vses. in-t nauchn. i tekhn. inform.,  
1958, Nr 5, pp 5-7

ABSTRACT: A description is given of the design of an MGP-1-57 gas injector  
apparatus, developed by VNIIVTOGEN (All-Union Scientific Re-  
search Institute for Welding), with which coatings with a melting  
point of 2000°C and higher can be applied not only on refractory  
materials but also on Al and Mg alloy and on plastics.

N. L.

Card 1/1

S/137/60/000/01/05/009

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No 1, p 184,  
# 1231

18.7400

AUTHOR:

Kozlovskiy, A.L.

TITLE:

New Materials for the Application of <sup>18</sup>Coatings by the Method  
of Metal Pulverization

PERIODICAL:

Tr. Vses. n.-i. in-ta avtogen. obrabotki metallov, 1959, No 5,  
pp 260 - 262

TEXT: ✓

18 The use of a plastic vein ["zhilka"] is recommended for spraying  
hard antifriction alloys (e.g. NiCrB) and metals with high melting point (such  
as Ta) and coatings of multi-component alloys; the sprayed metal or alloy  
powder is used as the vein filler. Information is given on the process of the  
vein production. The amount of metal powder in the vein is 80 - 85% by weight;  
equal amounts of polyethylene and polyisobutane are used as binders. Spraying  
with the vein is performed on a wire device. The difference between spraying  
with a wire and a vein is pointed out. Coatings applied from a vein have a  
fine-grained structure and are denser than coatings applied in the form of powder  
or a wire.

Card 1/1

A.K.

S/788/60/000/006/002/004  
E202/E492

AUTHORS: Kozlovskiy, A.L., Candidate of Technical Sciences,  
Shlyakova, K.S., Candidate of Technical Sciences

TITLE: Interrelation between the various forms of  
aluminium oxide

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy  
institut avtogennoy obrabotki metallov. Trudy. no.6.  
1960. Kislородnaya rezka, metallizatsiya, payka. 136-139

TEXT: The authors found that gas flame deposited alumina passes from the alpha into the gamma form which contradicts the generally accepted view about the irreversibility of the alpha form. Compacted and sintered at 1600°C, alumina rod was sprayed by passing through the oxyacetylene spray gun. The original sintered and sprayed alumina was studied by means of X-ray powder photographs which showed three distinctly different patterns. Calculation of refractive indices showed that the untreated material contained both  $\alpha$  and  $\gamma$  forms while the sprayed one contained only the  $\gamma$ -form. However, the sprayed material was resistant to water, mineral and organic acids and alkalies and was considered a new modification of the  $\gamma$  form. The authors  
Card 1/2

Interrelation between ...

S/788/60/000/006/002/004  
E202/E492

suggest that the formation of the new  $\gamma$  form at 2000°C is not due to depolymerization of the  $\alpha$  form, but due to the destruction of trimeric polymers at high temperatures and the coating comprises the  $\alpha$  form debris or the products of interaction of the latter. The cross-linking between linear molecules of  $Al_2O_3$  is attributed to the hydrogen bridges, derived from OH groups or to the polyfunctional additives, e.g. titanates. There are 2 figures. ✓

Card 2/2