

USSR / Cultivated Plants. Potatoes, Vegetables, Melons.

M-4

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58589

Author : Gladkov, A.

Inst : All-Union Acad. Agricul. Sci. im. Lenin

Title : Dynamics of Growth of Potato Root Systems

Orig Pub : Dokl. VASKhNIL, 1957, No 8, 28-30

Abstract : Observations on the growth of potato roots were conducted in dugouts at the Bashkir agricultural institute. The side walls of these dugouts contained recesses which were made at depths of 15, 25, 35 and 45 cm underneath potato sowings. These seeds were implanted according to the square-nidus method at a depth of 10 cm. The experiments were carried out with Lorkh and Ul'yanovskiy varieties with various agricultural backgrounds (N₄₅P₆₀K₉₀ and without fertilization). The root distribution, according to weight, was determined at the time of the fall harvest

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USSR / Cultivated Plants. Potatoes, Vegetables, Melons.

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Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 58589

GLADKOV, A.A.

MATSKIN, L.A.; KOVALENKO, K.I.; BABUKOV, V.G.; KONSTANTINOV, N.N.;
PONOMAREV, G.V.; PAL'CHIKOV, G.N.; PHELINICHKO, L.G.; SHAMARDIN,
V.M.; GLADKOV, A.A.; BRILLIANT, S.G.; SHEVCHUK, V.Ya.; SOSHCHEN-
KO, Ye.M.; ALEKSANDROV, A.M.; BUNCHUK, V.A.; KRUPENIK, P.I.;
MAYEVSKIY, V.Ya.; YELSHIN, K.V.; GAK, Kh.A.; POTAPOV, G.M.;
KARDASH, I.M.; STEPURO, S.I.; KAPLAN, S.A.; SELIVANOV, T.I.;
YEREMENKO, N.Ya.; ZHUZH, A.D.; USTINOV, A.A.; GIRKIN, G.M.;
VOLOBUYEV, P.P.; CHERNYAK, I.L., nauchnyy red.; DESHELYT, M.G.,
vedushchiy red.; GENNAD'YEVA, I.M., tekhn.red.

[Combating losses of petroleum and petroleum products; materials
of the All-Union Conference on Means of Combating Losses of
Petroleum and Petroleum Products] Bor'ba s poteriami nefiti i
nefteproduktov; po materialam Vsesoiuznogo soveshchaniya po bor'be
s poteriami nefiti i nefteproduktov. Leningrad, Gos.nauchno-tekhn.
izd-vo nef. i gorno-toplivnoi lit-ry, 1959. 157 p. (MIRA 13:2)

1. Nauchno-tekhnicheskoye obshchestvo neftyanoy i gazovoy pro-
myshlennosti.

(Petroleum industry)

IVANOV, F.M., kand.tekhn.nauk; GLADKOV, A.A., kand.tekhn.nauk; NOVIKOV,
Ya.N., inzh.

Waterproofing culverts on railroad lines. Transp. stroi. 10 no.10:
53-54 O '60. (MIRA 13:10)

(Culverts)

TSIGANEK, Vilem [Ciganek, Vilem], inzh.; GOL'DENBERG, G.M., inzh. [translator];
GLADKOV, A.A., kand.tekhn.nauk, nauchnyy red.; SHABALIN, Yu.P.,
red.izd-va; RUDAKOVA, N.I., tekhn.red.

[Waterproofing] Gidroizoliatsiia. Moskva, Gos.izd-vo lit-ry po
stroit., arkhitekt. i stroit.materialam, 1961. 179 p. Translated from
the Czech. (MIRA 14:6)

(Waterproofing)

10.1000

21351
S/040/61/025/006/019/021
D299/D304

AUTHORS: Galkin, V.S., and Gladkov, A.A. (Moscow)
TITLE: On the lifting force at hypersonic speeds
PERIODICAL: Prikladnaya matematika i mekhanika, v. 25, no. 6,
1961, 1138 - 1139

TEXT: It is established that the lifting force of many types of bodies (wedges, cones, etc.) is negative at hypersonic speeds for any values of Knudsen's number and for any angle of attack α ($0 < \alpha \leq \pi/2$). A very simple case is considered: Free-molecule flow past a wedge with semiangle δ ; the flow velocity $V \gg c$, i.e. $S = V/c \gg 1$, where c is the most probable thermal velocity of the oncoming molecules. The lifting force of the wedge is

$$Y \approx \sin 2\alpha \cos 2\delta \text{ for } \delta > \alpha, \quad Y \approx \sin 2(\delta + \alpha) \\ \text{for } \delta \leq \alpha.$$

Then the case $S \ll 1$ is considered. The conclusion is reached that for any S , one can find values of δ , larger than some $\delta = \varphi$, for

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D299/D304

On the lifting force at ...

which the lifting force of an infinite wedge is negative. With $S > 2$, when the base pressure can be neglected, this conclusion is extended to an actual wedge of finite length. An exception to this rule are cylinder- and plate shaped bodies under angle of attack, for which $Y \geq 0$. In the case of hypersonic velocities, the above results are particularly noticeable at large values of the ratio of the temperature T_r of reflected molecules to the temperature T of the undisturbed r flow. It can be readily shown that the conclusion arrived at, (i.e. negative lifting force for any α ($0 < \alpha \leq \pi/2$)), is also valid for hypersonic flow of a continuous medium, when the pressure distribution over the body can be calculated by Newton's theory. In this connection, a simple example is considered: nonviscous hypersonic flow past a wedge. One arrives at the formula

$$Y \approx \alpha \sin \delta (2 - 3 \sin^2 \delta) \text{ for } \delta > \alpha$$

for the lifting force. Hence it can be shown that $Y < 0$ for $0 \leq \alpha \leq \pi/2$, if $\sin \delta \geq \sqrt{2/3}$. The conclusion about the negative lifting force is valid for any type of reflection in free-molecule flow. There is 1 figure.

SUBMITTED: July 11, 1961 Card 2/2

BAZZHIN, A.P., (Moskva); GLADKOV, A.A. (Moskva)

Solution of the inverse problem by the series-expansion method.
Inzh. zhur. 3 no.3:517-518 '63. (MIRA 16:10)

(Series) (Aerodynamics)

ACCESSION NR: AP4022659

S/0207/64/000/001/0116/0117

AUTHOR: Gladkov, A. A. (Moscow)

TITLE: Effect of relaxation entropy layers

SOURCE: Zhurnal priklad. mekhan. i tekhn. fiz., no. 1, 1964, 116-117

TOPIC TAGS: shock wave, entropy layer, relaxation entropy layer, front critical point

ABSTRACT: Conditions in a hypersonic stream of a nonviscous, nonheat-conducting, gas flowing around a blunt-nosed object are considered, assuming that relaxation processes occur in the gas directly behind the shock wave. If the characteristic relaxation time $t > \Delta k / u_\infty$, where $k = \rho_1 / \rho_\infty$ is the ratio of gas densities (the index ∞ refers to conditions in front of the shock wave, the index 1 - behind) and Δ is the distance from the shock wave to the nose of the body, then a relaxation entropy layer develops in the entropy layer at the body. This layer has an essential influence on the boundary layer and on the process of heat exchange between the gas and the body. At the front critical point the thickness of the layer in which no relaxation takes place is given by $x_p = \Delta(1 - \exp(-t u_1 / \Delta))$. Hence, for large t the

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ACCESSION NR: AP4022659

thickness of the relaxation entropy layer at the critical point is small. Then, considering the shock wave to have the form $y = cx^n$ and using the known equations for the entropy layer, estimates of the conditions in the relaxation entropy layer are found: the pressure differential across the layer,

$$\frac{\Delta p_m}{p} \approx \frac{\gamma^2 \delta_c^{2+\gamma}}{\Delta} c^{\frac{1+\gamma}{\gamma-1}};$$

the gas density in the layer,

$$\rho_m \sim k \rho_{\infty} \gamma^{2/\gamma} \exp \frac{\Delta s_p}{c_p};$$

the gas velocity in the layer,

$$u_m = \left(u_{\infty}^2 - 2s - \frac{2\gamma}{\gamma-1} \frac{p_m}{\rho_m} \right)^{1/2};$$

and the relative thickness of the layer,

$$\frac{\Delta y_m}{y} \sim \frac{\gamma^2}{k} \frac{u_{\infty}}{u_m} \frac{\delta^{2+\gamma}}{\Delta} c^{\frac{1+\gamma}{\gamma-1}} \exp \left(- \frac{\Delta s_p}{c_p} \right).$$

In these relations,

ACCESSION NR: APh022659

$$\tau \sim c_2^{n-1}$$

$$k = \frac{\gamma+1}{\gamma-1}$$

$$\phi = \frac{n}{1-n} (1 + \nu) - \frac{2}{\gamma}$$

Δs_p is the entropy change as a result of the relaxation processes, e is the energy of the inert degrees of freedom, and the dimensions of the relaxation region are of the order δ_c . Orig. art. has: 26 equations.

ASSOCIATION: none

SUBMITTED: 27Nov62

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: FH

NO REF SOV: 002

OTHER: 000

GLADKOV, Aleksandr Aleksandrovich, kand. tekhn. nauk; SAMOYLOV,
Vladimir Pavlovich, kand. tekhn. nauk; NIKIFOROV, I.A.,
kand. tekhn. nauk, nauchnyy red.

[Waterproofing]Gidroizoliatsionnye raboty. Moskva, Gosstroif-
izdat, 1962. 199 p. (Waterproofing) (MIRA 15:9)

GLADKOV, A.A., professor.

History of the development of otorhinolaryngology in Moldavia.
Vest.oto-rin 17 no.4:61 J1-Ag '55. (MLRA 8:10)

1. Iz kafedry bolezney ukha, gorla i nosa (zav.-prof. A.A. Gladkov) i iz kafedry organizatsii zdravookhraneniya (zav.-- dotsent M.Ia. Gekhtman) Kishinevskogo meditsinskogo instituta.
(OTORHINOLARYNGOLOGY, history,
in Rumania)

GLADKOV, A.A., prof.

"Methods for mild otorhinolaryngological (diagnostic and
therapeutic) measures" by V.I. Votachok. Reviewed by A.A. Gladkov
Vest.oto-rin. 20 no.5:131-133 S-O '68 (MIRA 11:12)
(OTORHINOLARYNGOLOGY)

GLADKOV, A.A.; FRIK, N., red.; BELOUSOVA, L., tekhn.red.

[Endophotocinematography in otorhinolaryngology] Endofoto-
kinematografiia v otorinolaringologii. Kishinev, Gos.izd-vo
"Karta Moldoveniaske," 1959. 118 p. (MIRA 13:9)
(OTOLARYNGOLOGY) (PHOTOGRAPHY, MEDICAL)

KOLOMIYCHENKO, A.I., prof., Laureat Leninskoy premii, zasl. deyatel' nauki, red.; LUKOVSKIY, L.A., prof., red.; ZARITSKIY, L.A., prof., zasl. deyatel' nauki, red.; PITENKO, M.F., prof., red.; GLADKOV, A.A., prof., red.; KURILIN, I.A., prof., red.; MOSTOVOY, S.I., doktor med. nauk, red.; BARLYAK, B.A., prof., red.; SHFAIENKO, B.A., dots., red.; ROZENGAUZ, D.Ye., dots., red.; KHARSHAK, B.M., dots., red.; CHERNOVA, I.A., kark.med. nauk, red.

[Current problems of clinical and experimental otolaryngology]
Aktual'nye voprosy kliniko-eksperimental'noi otolaringologii.
Kiev, Zdorov'ia, 1964. 350 p. (MIRA 18:2)

1. Nauchno-issledovatel'skiy institut otalaringologii. 2. Otdel profpatologii Nauchno-issledovatel'skogo instituta otolaringologii (for Pitenko).

GLADKOV, Aleksandr Aleksandrovich. ZALINA, V.G., ed.

[Diseases of the nose, throat and ear] Bol'shaya
garla i ukha. Moskva, Meditsina, 1965. 365 p.
(MIRA 18.2)

GLADKOV, A. D.

Dissertation: The Effect of Various Companion Plants on the Growth of Oak Trees."
Cand Agr Sci, Inst of Forestry, Acad Sci USSR, 24 Jun 54. (Vechernyaya Moskva,
Moscow, 15 Jun 54)

SO: SUM 318, 23 Dec 1954

GLADKOV, A.I.

Combined resections of the lung in tuberculosis. Probl. tub. 42
no.11:75-76 '64. (MIRA 18:8)

1. Legochno-khirurgicheskaya bol'nitsa (glavnyy vrach G.A.Vyadro)
kurorta "Borovoye", Kokchetavskaya oblast'.

GLADKOV, A.M.

Water supply system with equalizing reservoirs. Vod. i san. tekhn.
no.4:3-5 Ap '58. (MIRA 1154)
(Water-supply engineering)

GLADKOV, A.M.; YUNTSOY, M.A.

Operation of clarifiers with reduced coagulation doses. Vol. 1
san. tekhn. no. 7:31 J1 '58. (MIRA 11:7)
(Water--Purification)

AGRANONIK, Ye.Z., kand.tekhn.nauk; BELOV, A.N., dotsent; GLADKOV, A.M.,
inzh.; GLUSKIN, S.A., inzh.; IVANOV, L.V., dotsent, kand.tekhn.
nauk; LIPKIN, Ye.V., kand.tekhn.nauk; NIKIFOROV, G.N., dotsent,
kand.tekhn.nauk; PEBENSON, I.B., inzh.; PRUGER, Ye.A., dotsent,
kand.tekhn.nauk; PYATOV, Ye.N., inzh.; ROKHCHIN, Ye.Z., inzh.;
FEDOROV, N.F., prof., doktor tekhn.nauk; SHVARTS, K.B., inzh.;
SHIGORIN, G.G., dotsent, kand.tekhn.nauk; SHIFRIN, S.M., prof.,
doktor tekhn.nauk; POPRUGIN, I.V., inzh., retsenzent; KATS, K.F.,
inzh., retsenzent; ROTENBERG, A.S., red.izd-va; VORONETSKAYA,
L.V., tekhn.red.

[Manual of water-supply engineering and sewerage] Spravochnik po
vodosnabzheniiu i kanalizatsii. Pod red. N.F.Fedorova. Lenin-
grad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam,
1959. 410 p. (MIRA 13:3)

1. Moscow. Gosudarstvennyy proyektnyy institut Vodokanalproyekt.
Leningradskoye otdeleniye.
(Water-supply engineering) (Sewerage)

GLADKOV, A.M. (Leningrad)

Standard plans for water-supply pumping stations with a diurnal
capacity of 5,000-80,000 m³. Vod.i san.tekh. no.7:11-32 J1 '59.
(KIRA 12:9)

(Pumping stations)

AGRANONIK, Ye.Z., kand.tekhn.nauk; BELOV, A.N., dotsent; GLADKOV, A.M.,
inzh.; GLUSKIN, S.A., inzh.; IVANOV, L.V., dotsent, kand.tekhn.
nauk; LIPKIN, Ye.V., kand.tekhn.nauk; NIKIFOROV, G.N., dotsent,
kand.tekhn.nauk; PESENSON, I.B., inzh.; PREGGER, Ye.A., dotsent,
kand.tekhn.nauk; PYATOV, Ya.N., inzh.; ROKHCHIN, Ye.Z., inzh.;
FEDOROV, N.F., prof., doktor tekhn.nauk; SHVARTS, R.B., inzh.;
SHIGORIN, G.G., dotsent, kand.tekhn.nauk; SHIFRIN, S.M., prof.,
doktor tekhn.nauk; ROTENBERG, A.S., red.izd-va; VORONETSKAYA,
L.V., tekhn.red.

[Water-supply and sewerage manual] Spravochnik po vodosnabzheniu
i kanalizatsii. Pod red. N.F.Fedorova. Izd.2., ispr. i dop.
Leningrad, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam,
1960. 420 p. (MIRA 13:12)

1: Moscow. Vodokanalproyekt. Leningradskoye otdeleniye.
(Water-supply engineering) (Sewerage)

GLADKOV, A. M. (Leningrad)

Water towers in city water-supply systems. Vol. 1 san. tekhn.
no.5:5-8 My '60. (MIRA 13:10)
(Water towers)

GLADKOV, A. T., Doc Agr Sci, "CULTIVATION OF POTATOES IN
BASHKIRIYA (URALS AREA, TRANS-URALS, SOUTHERN URALS). LENIN-
GRAD-PUSHKIN, 1961. (MIN OF AGR RSFSR. LENINGRAD AGR INST).
(KL-DV, 11-61, 224).

GLADKOV, A . V.

Haymaking machinery Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit.
lit-ry, 1954. 94 p. (V pomoshch'kolkhoznikom, rabotnikam MTS i sovkhozov) (55-15500)

S695.G55

Category : USSR/Acoustics - Ultrasound

J-4

Abs Jour : Ref Zhur Fizika, No 1, 1957, No 2132

Author : Gladkov, A.

Title : Determination of Velocity of Ultrasonic Waves in Solid Bodies, Using the Compound Piezo-Quartz Resonator Method.

Orig Pub : Primeneniye ul'traakustiki k issled. veshchestva. Vyp. 3, M., MOPI, 1956, 199-204

Abstract : Description of a compound piezoelectric quartz resonator with which it is possible, using the zero-beat method, to measure the dependence of the elastic properties of solid bodies on the temperature and on the chemical composition. The natural frequency (f_1) of the quartz oscillator is found first, after which the investigated specimen is attached to the resonator and the natural frequency (f) of the compound resonator is determined. Knowing f_1 and f , one determines the natural frequency of the specimen and the velocity of sound in the investigated substance is determined. The velocities of sound were measured in glass and in sodium metasilicate. The average velocity of sound in sodium metasilicate is 4877.21 m/sec, the temperature coefficient of the velocity of sound is 23.68×10^{-4} m.sec⁻¹deg⁻¹. Bibliography, 10 titles.

Card : 1/1

GLADKOV A.V.

112-1-2213

Translation from: Referativnyy Zhurnal, Elektrotekhnika, 1957,
Nr 1, p. 329, (USSR)

AUTHOR: Gladkov, A.V.

TITLE: Determination of the Ultrasound Velocity in Glass by the
Method of the Compound Piezoquartzitic Resonator
(Opredeleniye skorosti ul'trazvuka v steklakh metodom
sostavnogo p'yezokvartsevogo rezonatora)

PERIODICAL: Tr. Mosk. khim.-tekhnol. in-ta, 1956, Nr 21, pp.34-38

ABSTRACT: The methods and results of velocity measurements of
ultrasound propagation in sodium-silicate glasses of
various compositions at room temperature and temperature
of liquid nitrogen are described. The values of the
temperature coefficient of sound velocity are determined.

Card 1/2 The nature of the method is the following: the resonant

Determination of the Ultrasound Velocity in Glass (Cont.) 112-1-2213

frequencies of the compound resonator, consisting of a piezoquartzitic core of square cross section of the X-shear and of a sound-transmitting rod made from melted quartz which is pasted at the end of the piezoquartzitic core, are measured by the method of zero beat; a sample core made from the investigated glass is glued at the end of the sound-transmitting rod and resonant frequencies of the 3-unit resonator are measured; the values of resonant frequencies are utilized for calculating self-resonant frequencies of the sample core and for determining the sound velocity in it.

Card 2/2

L.M.L.

GLADKOV, A.V.

Compressibility of binary glass. Trudy MKFTI no.24:228-232 '57.
(Glass--Testing) (MIRA 11:6)

PA - 2793

AUTHOR: GLADKOV, A.V.
TITLE: Structure of a Glass Forming Frame and Ultrasound Velocity.
(Struktura stekloobrazuyushchego karkasa i skorost' ultrazvuka, Russian)
PERIODICAL: Zhurnal Tekhn. Fiz.: 1957, Vol 27, Nr 4, pp 682 - 687 (U.S.S.R.)
Received: 5 / 1957 Reviewed: 6 / 1957

ABSTRACT: In the present paper the attempt is made to explain the role played by Na_2O in the process of destroying the continuous threedimensional lattice of silica. For this purpose the simple and exact ultrasonic method of the compound vibrator was applied. This method is based on the longitudinal vibrations of a piezoquartz oscillator. More than ten two-component sodium-silicate glass samples of different composition, which were produced in the laboratory from chemically pure substances were used. The principle of measuring the velocity of the propagation of the ultrasonic waves is described. On the occasion of this investigation the process of the "weakening" of the silica lattice was explained. The structure of the ramified glass forming frame gradually loses its ramified character with the increase of the content of the modifier, and it changes into an irregularly twisted anion-chain. This effect leads to an increase of the compressibility. The decrease of the ultrasonic velocity with a reduction of the silica-modulus in sodium-silicate glass unmistakably shows that the depolymerization of sodium-silicate glass ends with

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Structure of a Glass Forming Frame and Ultrasound Velocity.

a sodium-monosilicate. In this case the ratio between the number of oxygen atoms to that of silicon atoms is equal to three.

It was found that it is always possible to find a technically valuable composition of silicate glass in which ultrasonic velocity is independent of temperature. It was shown that sodium-silicate glass with the composition $8\text{Na}_2\text{O} \cdot 92\text{SiO}_2$ possesses this property.

(2 tables, 5 illustrations, and 10 citations from Slav publications)

ASSOCIATION: Moscow Chemical-Technological Institute D.I.MENDELJEW of the Order of Lenin.

PRESENTED BY:

SUBMITTED:

AVAILABLE: Library of Congress.

Card 2/2

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CIA-RDP86-00513R000
CIA-RDP86-00513R0005

GLADKOV, A. V., Candidate Chem Sci (diss) -- "Investigation of the polymeric structure of inorganic glass based on data concerning compressibility and the rate of ultrasound". Moscow, 1959. 16 pp (Min Higher Educ USSR, Moscow Order of Lenin Chem-Tech Inst An D. I. Mendeleev), 150 copies (KL, No 23, 1959, 161)

GLADKOV, A.V.

[Study of the polymer structure of inorganic glasses based on the data of compressibility and velocity of ultrasound; author's abstract of his dissertation for the degree of candidate of chemistry] Issledovanie polimernogo stroeniia neorganicheskikh stekol po dannym szhimaemosti i skorosti ul'trazvuka; avtoreferat dissertatsii na soiskanie uchenoi stepeni kandidata khimicheskikh nauk. Nauchn.rukovoditel' V.V.Tarasov. Moskva, M-vo vysshego obrazovaniia SSSR. Mosk.khimiko-tehnologicheskii in-t im. D.I. Mendeleeva, 1959. 15 p. (MIRA 13:3)
(Glass) (Ultrasonic waves)

5/071/60/000/05/031/033
2003/2008

BYRITABAYEV, I. M.

3rd All-Union Conference on the Vitreous State

Steklo i keramika, 1960, No. 3, pp. 43-46 (USSR)

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 Chemical Physics (Institute of the Chemistry of Silicates AS USSR), Vsesoyuznyy khimicheskoye obshchestvo imeni D. I. Mendeleeva (All-Union Chemical Society named D. I. Mendeleev) and Gosudarstvennyy opticheskoy Institut imeni S. I. Lavriyeva (State Optical Institute named S. I. Lavriyev). Reports on the scientific and technical progress in the field of the vitreous state, the mechanisms 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 dielectric materials, 9 with the coloring of glasses and the influence of the additives and 4 reports with technical properties of glasses. At the 8th meeting, V. V. Yargin and V. V. Yembar, "Coloring of Glasses in Connection With Their Structure", I. V. Yarov, "The Influence of the Structure of Glasses on Their Properties", and M. M. Kuznetsov, "The Influence of the Structure of Glasses on Their Properties", reported on the influence of the structure of glasses on their properties. G. O. Karyevskiy reported on the influence of the structure of glasses on spectral and chemical properties of the colorants. E. V. Kiselev reported on the coloring of quartz glass by gamma radiation. The influence of the structure of glasses on their properties was also reported by V. I. Yermolova on physicochemical investigations of salts of refractory oxides in a state of equilibrium. I. V. Yarov, "The Importance of the Vitreous Phase in the Formation of the Dielectric Body and the Cement Clinker", V. A. Puzhev reported on the physicochemical

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fundamentals of the coloring of glass and metal. The 9th meeting dealt with physical chemistry and mechanical properties of glass. E. S. Yevstrop'yev, O. M. Barstevy and S. K. Zubov made comprehensive reports. A. A. Appen reported on the physical structural parameters which determine the properties of the glass. A. V. Chukov, V. I. Zhurav, V. I. Zhurav, "The Influence of the Structure of Glasses on Their Properties", and I. I. Zhurav reported on the properties of the expansion of oxides in silicate glasses. V. G. Sharypov reported on the subject "The Energy of Covalent Bonds in Glass and Their Role in the Process of the Viscous Flow". M. M. Yermolova reported on physicochemical properties of aluminophosphate glasses. I. A. Shmidt reported on the dependence of the properties of alkali silicate glasses on the composition of the optical properties of phosphate glasses on the system and the optical constants of glass. M. G. Astasova reported on "Refractive Properties of Glass". G. M. Yermolova, A. S. Yermolova made a report on the mechanical properties of refractory glasses in the annealing interval and on the properties of glasses and on the influence of the composition of the glasses on their mechanical

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properties. A. V. Arzhan reported on the subject "Stability of Molten Silicate Beads by Quenching". A. V. Arzhan reported on the subject "Stability of Molten Silicate Beads by Quenching". S. K. Zubov reported on the synthesis and investigation of hafnium silicate glasses. S. K. Zubov reported on physicochemical properties of gallium silicate glasses. V. A. Dubrovskiy and I. G. Pyrkovskiy reported on the surface film forming on silica-sodium glass in the acidic, neutral and basic media. Working persons reported on the stability of glasses on vitrification of glasses in a humid atmosphere. L. Ya. Markov on vitrification and properties of borate glasses. B. Z. Mikhovskiy, Ye. A. Materova and I. V. Kiselev on the reaction of aluminosilicate glasses with solutions. Doctor Vegal and Kostig spoke as guests from Eastern Germany. Academician V. Sidorov, M. A. Sidorov, I. I. Kitigorodskiy, and E. I. Isler also spoke at the final session.

Card 8/8

IS 2120

1142 3109, 3309

U.S. DEPT. OF COMMERCE
1980/12/1

AUTHORS:

Blizkov, A.V., Izrael, V.V.

TITLE

An investigation of polymer structure of inorganic glasses

PERIODICAL

Referativnyy zhurnal Fizika, no. 6 1981, 223, abstract 6576 (1) et.
"Steklocraznaya fizika" - Moscow Lectures, AN SSSR, 1980, 314-
318, Discus. 343-344.

TEXT:

In order to produce a glass structure which is not of ordinary disorderly type in space, a set of freedom of changing and order is necessary which is provided in silicate glasses by the addition of polymer. In this way a polymer skeleton of inorganic glasses is formed. In solving the problem of polymer structure of glasses, the authors investigated vibrational compressibility of silicate, borate and phosphate glasses by the ultrasonic method. The velocity of ultrasonic waves in sodium silicate glasses decreases with increasing Na₂O concentration, which is explained by local ordering effect of Na⁺ ions. The curve of ultrasonic velocity in silicate glasses has a minimum at the composition in which the ratio of the number of Na⁺ ions to the tetrahedra is equal to 2. This corresponds to a local structure of a certain intermediate structure of Na⁺.

Card 1/2

An investigation

1960 10 10 1000 1000 / 1056 / 1000
A001 A001

Van Wazer "J. Amer. Chem. Soc." 1950 v. 72 pp. 1000-1005
An increase in impedance of shear locking and the appearance of shear
stress waves, take place in trans-metaphosphate type of glasses investigated by
him. Observations have shown that temperature dependence of shear stress waves
in molten quartz and glasses of zinc metaphosphate composition has an anomalous
course. This phenomenon is explained by crosslinking of chains in the process of
polymerization of ZnO-tetrahedra in the structure that occurs. ZnO plays a
depolymerizing role with respect to the structure of glass-like silica and other
silicate glasses. The role of Na₂O in a rate glasses is to act as a depolymerizer
in silicate glasses where it is a depolymerizer of the network. The velocity of
transverse waves in annealed glasses is higher in comparison with that in hardened
glasses; apparently the number of transverse crosslinkages increases on annealing
resulting in an increase of glass elasticity.

A. G. Galkina

[Abstract of the original translation]

Part 2 2

L 4220h-66 EMP(e)/EMT(m)/EMK(k) MD/31

ACC NR: AT6013185

SOURCE CODE: UR/0000/61/000/000/0361/0371

AUTHOR: Gladkov, A. V

40

ORG: none

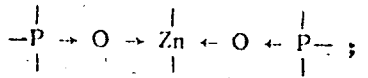
ET-1

TITLE: Application of ultrasound in the study of the polymer structure of inorganic glasses

SOURCE: Moscow. Oblastnoy pedagogicheskiy institut. Primeneniye ul'traakustiki k issledovaniyu veshchestva, no. 14, 1961, 361-371

TOPIC TAGS: ultrasound, polymer structure, polymer cross linking, ultrasonic degeneration, borate glass, silicate glass, phosphate glass

ABSTRACT: The modifying effect of oxide additives on the flexibility of inorganic oxygen-containing glasses has been studied using an ultrasound resonator, described by A. V. Gladkov in an earlier paper (Dissertatsiya, MKhTI, M., 1959). The work was undertaken to clarify the internal structural changes related to the phenomena of depolymerization as well as cross linking of the glass skeleton. It was established that the modifying oxide plays a double part: 1) it may copolymerize with the glass, as observed in (SiO₂-PbO), (B₂O₃-Na₂O), (P₂O₅-ZnO) glasses, and is illustrated by donor-acceptor interaction



Card 1/2

L 42201-66

ACC NR: AT6013185

2) it may act as a depolymerizing agent, in which case the glass skeleton loses its branched character and the glass flexibility drops, as observed in $(SiO_2-B_2O_3)$,

(SiO_2-Na_2O) glasses. It was also found that the flexibility of sodium silicate glasses increases after annealing, which can be explained by the disruption of the bonds and, consequently, enhancement of the branching in the glass skeleton. Orig. art. has: 3 tables, 4 figures, and 3 formulas.

SUB CODE: 07, 20, 11/ SUBM DATE: 22Apr61/ ORIG REF: 011/ OTH REF: 009

Card 2/2 of

3/058/62/000/002/000/001
AC58/A101

15.2120

AUTHOR: Gladkov, A. V.

TITLE: Application of ultrasonic waves to the study of the polymer structure of inorganic glasses

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1962, 44, abstract 23344
(V sb. "Primeniye ul'traakust. k issled. veshchestva", no. 14, Moscow, 361-371)

TEXT: The effect of addition of modifying oxides on the elasticity of inorganic oxygen glasses was investigated by the ultrasonic method of the composite resonator. The purpose of these measurements was to examine the phenomenon of internal structural changes in glasses, changes associated with depolymerization and with processes of the "cross-linking" of the glass frame under different conditions. It was established that modifying oxides play a double rôle. On the one hand, the modifying oxide may take part in the formation of the glass frame on an equal footing with the vitrifier. For this to happen, the modifying oxide must be capable of copolymerization with the vitrifier. In this process, donor-acceptor bonds play a great rôle. Copolymerization of the modifier is observed

Card 1/2

Application of ultrasonic waves ...

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A000/000

in the following glasses: $(SiO_2 - PbO)$, $(B_2O_3 - Na_2O)$ and $(P_2O_5 - SnO)$. On the other hand, the modifier may play a depolymerizing rôle with respect to the three-dimensionally branched polymer frame of glass formation. In this case, as the modifier content is increased, the frame of the vitrifier gradually loses its branched character and the elasticity of the glasses decreases. The purely depolymerizing rôle of the modifier is observed in the following glasses: $(SiO_2 - B_2O_3)$, $(SiO_2 - Na_2O)$, etc. It was found that annealing of sodium-silicate glasses is accompanied by an increase of elasticity. This effect is explained by the cross-linking of disturbed bonds and, consequently, by an increase of the branching of the frame of the vitrifier. There are 20 references.

[Abstracter's note: Complete translation]

S/194/62/000/006/133/232
D256/D308

AUTHOR: Gladkov, A.V.

TITLE: Ultrasonic investigation of polymer structure of
inorganic glasses

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,
no. 6, 1962, abstract 6-5-49 1 (V sb. Primeneniye
ul'traakust. k issled. veshchestva, no. 14, M., 1961,
361-371)

NOTE: The effect of an admixture of modifying oxides upon the
elasticity of inorganic oxide glass was investigated by means of an
ultrasonic method. Conclusions concerning the changes of elasticity
were derived from measurements of the velocity of ultrasound. It
was necessary to consider the processes of internal structural chan-
ges in the glass related to the depolarization as well as to the
processes involved in 'joining' the glasses frame in various cir-
cumstances. 20 references. [Abstracter's note: Complete translation]

Card 1/1

GLADKOV, A.V.

Polymeric structure of inorganic glass. Trudy MKHTI no.37:58-
63 '62. (MIRA 16:12)

GLADKOV, A.V.

Role of the donor-acceptor bond in the formation of borate and phosphate glasses. Zhur.fiz.khim. 37 no.2:272-279 F '63.

(MIRA 16:5)

1. Khimiko-tekhnologicheskii institut imeni D.I.Mendeleyeva.
(Glass manufacture—Chemistry) (Ultrasonic testing)
(Chemical bonds)

SIL'VESTREVICH, N.I.; FIRSOV, V.M.; GLADKOV, A.V.

Change in the structural and physical state of glass hardened in molten metal. Dokl. AN SSSR 162 no.3:552-555 My '65. (MIRA 18-5)

1. Moskovskiy khimiko-tehnologicheskiy institut im. D.I.Mendeleyeva.
Submitted December 11, 1964.

L 13570-66 EWP(e)/EWT(m)/EWP(b) WH

ACC NR: AR6000267

UR/0081/65/000/014/B076/B076
14B503

22
B1

SOURCE: Ref. zh. Khimiya, Abs. 14B503

AUTHOR: Gladkov, A.V.

TITLE: The effect of the donor-acceptor bond in the formation of boron and phosphate glasses

CITED SOURCE: Sb. Stekloobrazn. sostoyaniya. T. 3. Vy]. 4. Minsk, 1965, 124-129

TOPIC TAGS: glass, borate glass, phosphate glass, glass properties

TRANSLATION: The strengthening of boron glass ¹⁵⁴⁴ by adding the modifying oxide (Na₂O or PbO) results from the copolymerization of boric anhydride chains, based on donor-acceptor bonds of B and O atoms. In this case, the oxygen of the modifier acts as a bridge between the B atoms in two contiguous anhydride chains. Contrary to this, in phosphate glass the donor-acceptor bond hinders the copolymerization of the chains which comprise the phosphoric anhydride structure, and which in the process of modifying the phosphoric anhydride chain are transformed gradually into meta-phosphate chains, which are consequently divided in smaller parts.

Author's summary

SUB CODE: 07, 11

JW

1/1

L 04093-67 EWP(k)/EWP(l)/EWP(m)/T/EWP(e) WH

ACC NR: AR6023280

SOURCE CODE: UR/0058/66/000/003/009/010

AUTHOR: Gladkov, A. V.; Tarasov, V. V.; Yunitskiy, G. A. 4/8 15

TITLE: Velocity of ultrasound and compressibility in lead-borosilicate glasses

SOURCE: Ref zh. Fizika, Abs. 3E68

REF SOURCE: Sb. Primeneniye ul'traakust. k issled. veshchestva. Vyp. 20, M., 1964, 181-185

TOPIC TAGS: glass property, ultrasonic velocity, silicate glass, borate glass

ABSTRACT: Measurements were made of the velocity of ultrasonic waves by the resonance method at frequency ~136 kcs. The velocity of sound in lead-borosilicate glasses first decreases with increasing content of B₂O₃, i.e., the structure of the lead-borate component becomes stronger and joining together of the silicon-oxygen frame develops, after which the velocity decreases as a result of the transition of the boron atoms from the triple coordination into the quadrupole coordination. The compressibility of borate glasses as a function of the B₂O₃ concentration passes through a minimum, and that of lead-silicate glass increases smoothly with increasing of lead oxide in it. P. Bokin. [Translation of abstract]

SUB CODE: 11

kh

Card 1/1

GLADKOV, A. Z.

PHASE X TREASURE ISLAND BIBLIOGRAPHICAL REPORT AID 745 - X

Call No.: AF333606

BOOK

Author: GLADKOV, A. Z., Engineer

Full Title: PRODUCTION OF ELECTRICAL INSULATING VARNISHES

Transliterated Title: Proizvodstvo elektroizolyatsionnykh lakov

PUBLISHING DATA

Originating Agency: None

Publishing House: State Power Engineering Publishing House
("Gosenergoizdat")

Date: 1951

No. pp.: 171

No. of copies: 4,000

Editorial Staff: Shishkin, S. V., Editor

PURPOSE AND EVALUATION: This monograph is intended for technicians and foremen working in industries which produce or use electrical insulation varnishes. The book is based on the work of Soviet scientists and may be interesting to American chemists and electrical engineers because special attention is given to descriptions of electrical insulation varnishes widely used in the Soviet Union and produced by the plants of the Ministries of the Electrical and Chemical Industries, USSR. All-Union Standards (GOST and OST) are frequently cited with specifications, as well as various trademarks. The book is clearly written and well illustrated.

TEXT DATA

Coverage: According to the author, this is the first Soviet

Proizvodstvo elektroizolyatsionnykh lakov

AID 745 - X

monograph dealing with all problems related to the production of electrical insulation varnishes. Soviet experience in this manufacture and use was represented only by articles in periodicals, by catalogs, or by some data in manuals on electrical materials in general. This is an attempt to gather as completely as possible, all information on the manufacturing of electrical insulation varnishes. Their processing is characterized by special features and differs from the production of other kinds of varnishes. The author gives a classification of electrical insulation varnishes and explains their purpose and methods of use. Raw materials, equipment, industrial flow sheets, the control of production and the questions of industrial safety are discussed. The book is provided with many illustrations, tables and diagrams.

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protection in the varnish industry 164
28. Standardization and the Stakhanov
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No. of References: 25 (All Russian, 1938-1950)
Facilities: Prof. K. A. Andrianov, Laureate of Stalin Prize, and
other scientists are mentioned in the text. Plants of the
Ministries of Electrical and Chemical Industries, USSR.

6/6

GLADKO, I. I., aka. name

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(MIRA 18:8)

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Problems of listeriosis. Veterinariia 21 no.149-53 Ja '64.
(MIRA 2:3)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy veterinarnyy
institut (for Annagiyev). 2. Tselinogradskaya nauchno-issledovatel's-
skaya veterinarnaya stantsiya (for Vinogradov). 3. Voronezhskiy
sel'skokhozyaystvennyy institut (for Gladkov).

GLADKOV, B.

35312. Chudo-Stanki. (Agregatnye Stanki Po Obrabotke Detaley). Ill.
M. Simakov. Znanie-Sila, 1949, No 10, S. 27-28

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

GLADKOV, Boris Aleksandrovich; NOSKIN, P.A., red.; SUKHAROVA, E.A., tekhn.
~~red.~~

[Modernization of lathes] Modernizatsiia tokarnykh stankov.
Moskva, Mosk. dom nauchno-tekhn. propagandy im. F.E.
Dzerzhinskogo, 1957. 29 p. (Peredovoi opyt proizvodstva. Ser.
"Mashinostroenie," no.11). (MIRA 11:10)
(Lathes)

GLADKOV, B.A.; KASATKIN, A.G.; KUDINOV, V.A.; PROKOPOVICH, A.Ye., red.;
SHEMSHURINA, Ye.A., red.izd-va; EL'KIND, V.D., tekhn.red.

[Modernization of single-spindle multicutter lathes; instructions]
Modernizatsiia odnospindel'nykh tokarnykh mnogoreztsovykh stankov;
rukovodiashchie materialy. Pod red. A.E.Prokopovicha. Moskva, Gos.
nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 118 p. (MIRA 11:2)

1. Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut
metallorezhushchikh stankov.
(Lathes)

~~GLADKOV, Boris Vladimirovich~~, KARLSEN, G.G., professor, doktor tekhnicheskikh nauk, redaktor; NIKOLAYEV, Yu.V., kandidat tekhnicheskikh nauk, nauchnyy redaktor; KOTIK, B.A., redaktor izdatel'stva; PEARSON, M.N., tekhnicheskiiy redaktor

[Prefabricated wooden houses; methods of general research] Derevian-nyi zhiloi dom zavodskogo izgotovleniia; metod kompleksnogo issledovaniia. Pod red. G.G.Karlseua. Moskva, Gos.izd-vo lit-ry po stroit. i arkhit., 1957. 243 p. (MLRA 10:8)
(Buildings, Prefabricated)

25 (1,7)

PHASE I BOOK EXPLOITATION

SOV/1688

Gladkov, B. A., V.N. Alekseyev, A.N. Totakiy, V.A. Kudinov, and G.M. Azarevich

Modernizatsiya universal'nykh sverlil'nykh stankov; rukovodyashchiye materialy
(Modernization of Universal Drilling Machines; Instructions) Moscow, Mashgiz,
1958. 214 p. 5,000 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy institut
metallorezhushchikh stankov.

Ed.: A.Ye. Prokopovich; Ed. of Publishing House: N.A. Ivanova; Tech. Eds.:
Ye.S. Gerasimova, and A.F. Uvarova; Managing Ed. for Literature on Metal
Working and Tool Making: R.D. Beyzel'man, Engineer.

PURPOSE: This book is intended for mechanics and designers engaged in modernizing
machine tools.

COVERAGE: A brief description is given of modern universal drilling machines and
machines of obsolete design which predominate in the operating stock. Their
utilization is analyzed and on the basis of the analysis, the basic require-
ments for modernizing this type of machine tools are developed. Recommenda-
tions and concrete design solutions concerning increase of speed, feed power,
Card 1/4

Modernization of Universal (Cont.)

SOV/1688

rigidity, vibration-stability, and life of drilling machines in the operating stock are presented. Special attention is given to problems of reducing auxiliary time. Equipping universal drilling machines with various attachments and auxiliary devices in order to widen their applicability is also described. No personalities are mentioned. There are 42 references of which 38 are Soviet, 3 English, and 1 German.

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Modernization of Universal (Cont.)

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AVAILABLE: Library of Congress (TJ1260.M65)

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6-17-59

25 (1,7)

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SOV/1687

Gladkov, B. A., L.N. Grachev, P.M. Shpigel'shteyn, V.A. Kudinov,
A.S. Lapidus, G.M. Azarevich, Yu. A. Leshchenko

Modernizatsiya tokarnykh stankov; rukovodyashchiye materialy
(Modernization of Lathes; Instructions) Moscow, Mashgiz, 1958.
286 p. 6,800 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy
institut metallorezhushchikh stankov.

Ed.: A.Ye. Prokopovich; Ed. of Publishing House: N.A. Ivanova;
Tech. Ed.: Ye. N. Matveyeva; Managing Ed. for Literature on
Metal Working and Tool Making: R.D. Beyzel'man, Engineer.

PURPOSE: This book is intended for manufacturing personnel dealing
with the operation of machine tools, and for designers in plant
machine-shops, and engineer-technologists.

Card 1/5

Modernization of Lathes; Instructions

SOV/1687

COVERAGE: The book presents an analysis of the existing operating stock of lathes and establishes basic trends in modernization. It includes examples of designing and design solutions related to modernization of the main drive and feed drive, classification and description of various attachments for reducing auxiliary time and easing the work of an operator, description of various devices for widening the range applicability of machine tools, examples of modernizing the basic tool types of the engine-lathe group, and discusses problems concerning improvement of vibration-stability and reliability in the operation of machine tools and how to prolong their life. No personalities are mentioned. There are 35 references, all Soviet.

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AVAILABLE: Library of Congress (TJ1218.M657)

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6-8-59

PHASE I BOOK EXPLOITATION

1136

Ekspperimental'nyy nauchno-issledovatel'skiy institut metallovezhu-shchikh stankov

Modernizatsiya tokarno-karusel'nykh stankov (Modernization of Vertical Turning Lathes) Moscow, Mashgiz, 1958. 265 p. 6,000 copies printed.

Authors: Gladkov, B.A., Grachev, L.N., Levit, G.A., Lapidus, A.S., Leshchenko, Yu.A., and Kudinov, V.A.; Ed.: Prokopovich, A.Ye.; Ed. of Publishing House: Ivanova, I.A.; Tech. Ed.: Tikhanov, A.Ya.; Managing Ed. for Literature on Metal Working and Tool Making (Mashgiz): Beyzel'man, R.D., Engineer.

PURPOSE: This book is intended for production personnel employing machine tool equipment, for designers of engineering departments, engineers and technicians.

COVERAGE: Vertical turning lathes in an actual operation are reviewed and basic trends and methods of modernizing them are discussed. Design examples and solutions of various design problems in

Card 1/6

Modernization of Vertical (Cont.)

1136

modernizing the main drive, feed drives, table rests, and spindles are presented, and various devices for reducing the auxiliary operation time and increasing the versatility of operations are described. The problems of vibration stability of machines and safety measures are also discussed. No personalities are mentioned. There are 69 references, 66 of which are Soviet and 3 English.

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GO/nah
2-20-59

GLADKOV, B.A.; GRACHEV, L.N.; SHPIGEL'SHTAYN, P.M.; KUDINOV, V.A.; LAPIDUS,
A.S.; AZAREVICH, G.M.; LESHCHENKO, Yu.A.; PROKOPOVICH, A.Ye.;
IVANOVA, N.A., red. izd-va; MATVEYEVA, Ye.N., tekhn. red.

[Modernization of lathes; instructions] Modernizatsiia tokarnykh
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Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958.
286 p. (MIRA 11:7)

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metallorezhushchikh stankov.

(Lathes)

S/121/61/000/008/001/006
DO41/D113

AUTHORS: Gladkov, B.A.; Mayorova, E.A.; Shilkin, O.D.; Shiferson, M.M.

TITLE: The use of plastics for manufacturing large-size components
of machine-tools

PERIODICAL: Stanki i instrument, no. 8, 1961, 1-4

TEXT: The article describes experimental investigations carried out with plastics in order to determine the extent to which they may be used for manufacturing large-size components of metal cutting machine-tools. These components can be manufactured by casting or by contact molding, the latter producing better mechanical properties in the components. The hardness of large-size components manufactured by the casting method can be raised by improving the properties of the binding and fiber fillers. As glass fibers in the form of cloth etc. can be used as fillers, the use of glass plastics for making lathe components was considered. Since there was practically no data on the stability of glass plastics, their swelling-up and creep characteristics were investigated in detail. The swelling-up of the specimens was tested in water-cooling liquids and mineral oil at a high relative hu-

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The use of plastics...

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D041/D113

midity (95±5%) and temperature (50±5°C). The creep characteristics were investigated by loading the specimens so as to produce bending, i.e. by applying a concentrated force to the center of the specimen which was placed on two supports. Plastic specimens obtained by contact molding from ПН-1 (PN-1) polyester gum and Т (T) glass cloth, and by hot pressing from KACTB (KAST V) glass textolite, АГ-4С (AG-4S) glass plastics and RA glass textolite (CSR brand), were tested. The creep of plastics made of epoxy resin and a metal filler by mold casting, was also investigated. The specimens were covered either by a protective layer or by "924" nitro-enamel. They were weighed on an analytical balance with an accuracy of up to 0.0004 g. The following results were obtained: KAST V glass textolite showed the largest change in weight (1.26%), the saturation point being reached after 19 days; glass plastics made of PN-1 polyester gum showed a weight increase of 0.6% and did not attain the saturation point after 83 days; AG-4S glass plastics had the least change in weight (0.19% after 83 days), and RA glass textolite attained a maximum water absorption (0.77%) after 6 days. Tests in the humidity chamber showed that KAST V glass textolite had the largest humidity absorption, while AG-4S and glass plastics obtained by contact

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D041/D113

The use of plastics...

molding showed the lowest hygroscopicity. The nitro-enamel layer did not protect the specimens from humidity and the oil cooling liquids. Linear changes in the plastics depended on the medium in which they were placed, on the method of their manufacture, on their machining, and on the type and quantity of the binding agent. Cooling liquids and a high relative air humidity reduced the mechanical properties by 1.5-2 times. Creep tests were carried out at room temperatures using the ПК-2 (PK-2) device designed by ENIMS. This device permitted deformations during bending at constant load to be measured. KAST V glass textolite served as a reference specimen. The results show that AG-4S and RA have the lowest creep, while cast specimens of epoxy resins with a metal filler have the highest (15-20 times higher than the reference specimen's creep at a bending stress of 100-200 kg/cm²), and cannot be used for making high-duty components of metal-cutting machine-tools. It is concluded that glass plastics can be used only for large-size machine-tool components. ENIMS and NIIP have manufactured a series of large-size components for the 1K62 (1K62) screw-cutting lathe in order to validate the obtained results. The zavod "Stankokonstruktsiya" ("Stankokonstruktsiya" Plant) has manufactured the following parts for the 1K62

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The use of plastics...

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D041/D113

lathe from glass plastics: front and rear legs, rear leg inserts, tray,
gearbox and feeding box covers, and housings. Test runs gave good results.
There are 4 figures.

Card 4/4

GLADKOV, B.A.; MAYOROVA, E.A.; SHILKIN, O.D.; SHIFERSON, M.M.

Using plastics in manufacturing large machine-tool parts.
Stan.i instr. 32 no.8:1-4 Ag '61. (MIRA 14:8)
(Machine-tool industry) (Plastics)

AYZENSITADT, L.A.; PEN'KOV, P.M.; GLADKOV, B.A.; LIKHT, L.O.;
KRIMMER, T.Ye.; KASHEPAV, Y.Ya., kand. tekhn. nauk;
MERPERT, M.P., kand. tekhn. nauk; KOPERBAKE, B.L.;
CHERNIKOV, S.S., kand. tekhn.nauk; BELOV, V.S.; ZHURIN,
B.F.; MONAKHOV, G.A., kand.tekhn.nauk; MOROZOV, I.I.;
MUSHTAYEV, A.F.; OGN'EV, N.N.; PALEY, M.B., kand. tekhn.
nauk; FURMAN, D.B.; LIVSHITS, A.L., kand.tekhn.nauk;MECHETNER,
B.Kh.;SOSENKO,A.B;AVDULOV, A.N.; LEVIN, A.A., kand.tekhn.
nauk; YAKOBSON, M.O., doktor tekhn.nauk; MAYOROVA, E.A.,
kand.tekhn.nauk; MOROZOVA, Ye.M.; ZUSMAN, V.G., kand.tekhn.
nauk; NAYDIS, V.A., kand.tekhn.nauk; VLADZIYEVSKIY, A.P., prof.,
doktor tekhn. nauk, red.; BELOGUR-YASNOVSKAYA, E.I., red.;
CHIGAREVA, E.I., red.; ASVAL'DOV, M.Ya., red.; KOGAN, F.L.,
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[Machine-tool industry in capitalist countries] Stanko-
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disl. A.P.Vladzevskogo. Moskva, 1962. 822 p. (MIRA 15:7)

1. Moscow. Tsentral'nyy institut nauchno-tekhnicheskoy in-
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Kogan).

(Machine-tool industry)

~~GLADKOV, B.A.~~ YUKHVID, M.Ye.; LARIONOVA, V.M.

Effect of structural components of a lathe and cutting conditions
on the precision of shape and roughness of machined surface
in fine turning. Stan.i instr. 34 no.4:7-11 Ap '63. (MIRA 16:3)
(Lathes) (Turning)

GLADKOV, B.A.; ETIN, A.O.; SHUMYATSKIY, B.L.

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no.3:27-33 Mr'64. (MIRA 17:5)

GLADKOV, B.A., aspirant

Pathomorphology of influenza in ducklings. Veterinaria 41 no.4:41-43
Ap '65. (MIRA 18:6)

1. Voronezhskiy sel'skokhozyaystvennyy institut.

GLADKOV, B. N.

MURASHEV, V.A., prof., doktor tekhn.nauk; MIRONOV, S.A., prof., doktor tekhn.nauk; ALEKSANDROVSKIY, S.V., kand.tekhn.nauk; TAL', K.E., kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; KULIN, N.M., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; NEMIROVSKIY, Ye.M., kand.tekhn.nauk; TABENKIN, N.L., inzh. [deceased]; KALATUROV, B.A., kand.tekhn.nauk; BRAUDE, Z.I., inzh.; KRYLOV, S.M., kand.tekhn.nauk; POKIN, K.F., doktor tekhn.nauk; GUSEV, N.M., prof., doktor tekhn.nauk; YAKOVLEV, A.I., inzh.; KORBNEV, B.G., prof., doktor tekhn.nauk; DERESHKEVICH, Yu.V., inzh.; MOSKVIN, V.M.; LUR'YE, L.L., inzh.; MAKARICHEV, V.V., kand.tekhn.nauk;

SHVACHENKO, V.A., inzh.; VASIL'YEV, D.P., inzh.; KOSTYUKOVSKIY,

M.G., kand.tekhn.nauk; MAGARIK, I.D., inzh.; LARIKOV, A.F., inzh.; SPULOVA, T.T., inzh.; TRUSOV, L.P., inzh.; LYUDKOVSKIY, I.G., kand.tekhn.nauk; POPOV, A.N., kand.tekhn.nauk; VINOGRADOV, N.M., inzh.; USHAKOV, N.A., kand.tekhn.nauk; SVERDLOV, P.M., inzh.; TER-OVANESOV, G.S., inzh.; GLADKOV, B.N., kand.tekhn.nauk; KOSTOCHKINA, G.V., arkh.; KUREK, N.M.; OSTROVSKIY, M.V., kand.tekhn.nauk; PEREL'SHTEYN, Z.M., inzh.; BUKSHTEYN, D.I., inzh.;

(Continued on next card)

MURASHEV, V.A.--(continued) Card 2.

MIKHAYLOV, V.G., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk;
GVOZDEV, A.A., prof., retsenzent; MIKHAYLOV, V.V., prof., retsen-
zent; PASTERNAK, P.L., prof., retsenzent; SHUBIN, K.A., inzh.,
retsenzent; TEMKIN, L.Ye., inzh., nauchnyy red.; KOTIK, B.A., red.
izd-va; GORYACHEVA, T.V., red.izd-va; MEDVEDEV, L.Ya., tekhn.red.

[Handbook for designers] Spravochnik proektirovshchika. Pod ob-
shchei red. V.I.Murasheva. Moskva, Gos.izd-vo lit-ry po stroit.,
arkhit. i stroit.materialam. Vol.5. [Precast reinforced concrete
construction elements] Sbornye zhelezobetonnye konstruksii.
1959. 603 p.

(MIRA 12:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledo-
vatel'skiy institut betona i zhelezobetona, Perovo. 2. Deystvitel'-
nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Murashev,
Gvozdev, Mikhaylov, V.V., Pasternak, Shubin). 3. Chlen-korresp. Aka-
demii stroitel'stva i arkhitektury SSSR (for Mironov, Gusev, Moskvina,
Kurek).

(Precast concrete construction).

~~GLAZKOV, B.V., kand.tekhn.nauk; SEMENOV, B.N., kand.tekhn.nauk~~

Standardization of large-panel wall elements of heated industrial
buildings. Prom. zdan. no.1:36-51 '59. (MIRA 13:8)
(Factories--Design and construction) (Walls)

S/052/61/006/004/004/005
C111/C222

16.0000

AUTHORS: Bol'shev, L.N., Gladkov, B.V., Shcheglova, M.V.

TITLE: Tables for calculation of B and Z-distribution functions

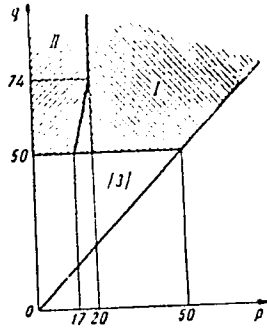
PERIODICAL: Teoriya veroyatnostey i yeye primeneniye, v. 6, no. 4, 1961,
446 - 455

TEXT: Tables I and II for the determination of the B and Z - distribution functions $I_x(p,q)$ and $F_{2p,2q}(z)$ are given on four pages. The tables complement the tables given by K. Pearson (Ref. 3 : Tables of the Incomplete Beta-function, Biometric Laboratory, London, 1934). The figure

X

S/052/61/006/004/004/005
C111/C222

Tables for calculation of B ...



shows the regions of the (p, q) - plane in which tables I, II and those of (Ref. 3), respectively, are to be used. Table I gives the values of $10^5 \psi_1(u, v)$ and $10^5 \psi_2(u, v)$, where ψ_1 and ψ_2 are the correction terms

Card 2/4

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C111/C222

Tables for calculation of B . . .

in the formula

$$I_x(p, q) = F_{2p, 2q}(z) = \phi(u) + \psi_1(u, v) + w^2 \psi_2(u, v) + O(\sqrt{v^3 + w^3}) \quad (1)$$

of J. Wishart. An approximate formula for the cumulative χ^2 -distribution. Ann. Math. Statistics, 28, 2 (1957), 504-510. Table II gives the values of $\psi(y, p)$ in the formula

$$I_x(p, q) = F_{2p, 2q}(z) = I(y, p) + \frac{1}{6(2q+p-1)^2} f(y, p) + O(x^{-4}) \quad (6)$$

of L.N. Bol'shev (ref. 10: Ob otsenkakh veroyatnostey (On estimates of probabilities), Teoriya veroyat. i yeye primen., V. 4 (1960), 453-457).

The error resulting from using the tables is not larger than $5 \cdot 10^{-5}$. The possibility of using the tables to calculate the binomial distribution is mentioned.

Mentioned: A.N. Kolmogorov, Academician.

Card 3/4

Tables for calculation of B . . .

S/052/61/006/004/004/005
C111/0222

There are 3 tables, 1 figure, 5 Soviet bloc and 6 non-Soviet bloc references. The references to English language publications read as follows: K. Pearson, Tables of the Incomplete Beta-function, Biometrical Laboratory, London, 1934; Tables of the Binomial Probability Distribution, National Bureau of Standards, Applied Mathematics Series, 6, Washington, 1950; H.C. Romig, 50-100 Binomial Tables, New York, John Wiley & Sons, Inc., London, Chapman & Hall, Limited, 1953; J. Wisnart, An approximate formula for the cumulative z-distribution Ann. Math Statistics, 28: 2 (1957), 504-510. X

SUBMITTED: June 28, 1960

GEL'BERG, L.A.; FEDOROV, G.I.; ZALITSYAN, A.A.; KAFUSTYAN, Ye.D.;
BAYAR, O.G.; BELLE, V.I.; SHERENTSOIS, A.A.; MAKAROVA, T.G.;
KORNEI, Yu.B.; KOLOTILKIN, S.N.; GLADKOV, B.V.; ZAVALOV,
O.V., red.; GOLOVKINA, A.A., tekhn. red.

[Housing construction in the U.S.S.R.; present state and
prospects for development] Zhilishchnoe stroitel'stvo v SSSR;
sostoianie i perspektivy razvitiia. Moskva, Gosstroizdat,
1962. 202 p. (MIRA 15:11)
(Apartment houses) (Construction industry)

BOL'SHEV, L.N.; GLADKOV, B.V.; SHCHEGLOVA, M.V. (Moscow)

Tables for calculating P... distribution functions. Techn.
veroiat. i ee prim. 6... 446 455... (MIRA 14:11)
(Probabilities... etc.)

Transactions of the Sixth Conference (Cont.)

SOV/6371

71. Gladkov, B. V. Some Problems in the Tabulation of the Beta-Distribution 385
72. D'yachenko, Z. N. Surface of a Gamma-Type Distribution 389
73. Kagan, A. M. Some Properties of the Estimates of Maximum Likelihood 397
74. Chentsov, N. N. On the Asymptotic Effectiveness of an Estimate of Maximum Likelihood (comment on A. M. Kagan's report "Some Properties of the Estimates of Maximum Likelihood") 399
75. Krasulina, T. P. On Stochastic Approximation 403
76. Maniya, G. M. Quadratic Estimation of the Discrepancy of the Densities of a Normal Two-Dimensional Distribution From Sampling Data 407

Transactions of the 6th Conf. on Probability Theory and Mathematical Statistics and of the Symposium on Distributions in Infinite-Dimensional Spaces held in Vil'nyus, 5-10 Sep '60. Vil'nyus Gospolitizdat Lit SSR, 1962. 493 p. 2500 copies printed

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I. 7013-66

ACC NR: AP5026796

SOURCE CODE: UR/0286/65/000/017/0077/0077

AUTHOR: Gladkov, B. V.

ORG: none

TITLE: A piezoelectric transducer. ¹⁰ Class 42, No. 174392

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 77

TOPIC TAGS: piezoelectric transducer, pressure transducer

ABSTRACT: This Author's Certificate introduces a piezoelectric transducer made in the form of a hollow cylinder mounted on a cylindrical support rod with one end rigidly fastened to a fixed base. The frequency response is made more uniform by connecting the support rod to the walls of the internal cavity along its entire length, while the free end of the rod is connected to the source of mechanical oscillations which excites the transducer. Dampers in the form of cylindrical sleeves are mounted on the transducer.

UDC: 681.84.081.47

Card 1/2

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ACC NR: AP5026796

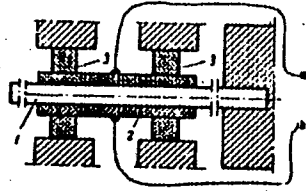


Fig. 1. 1--support rod; 2--transducer; 3--dampers

SUB CODE: EC,EM/ SUBM DATE: 28Ju64/ ORIG REF: 000/ OTH REF: 000

PC

Card 2/2

G. G. ADKOV D.

21(0); 1(0); 2(10) PHASE I BOOK EXPLOITATION SOV/2210

Atomnaya energiya v aviatsii i raketnoy tekhnike; sbornik statey
(Atomic Energy in Aviation and Rocket Engineering; Collection
of Articles) Moscow, Voen. Izd-vo M-va obor. SSSR, 1959. 500 p.
(Series: Nauchno-populyarnaya biblioteka) No. of copies printed
not given.

Ed. - Compiler: P.T. Astashenkov, Engineer, Lt.-Col; Ed.: Ya.M.
Kader; Tech. Ed.: A.M. Gavrilova.

PURPOSE: This book is intended for officers of the Soviet Armed
Forces, members of DOSAAF, and the general reader interested in
the uses of atomic energy and in the development of aviation and
rocket engineering.

COVERAGE: This collection of 46 articles, compiled by 28 Soviet
scientists and based chiefly on non-Soviet materials, discusses
various aspects of the use of atomic energy in rocketry and avia-
tion. The book surveys the development of atomic and thermonuclear

Card 1/9

Atomic Energy in Aviation (Cont.)

SOV/2210

weapons and weapon carriers, lays down the principles of anti-atomic defense, and evaluates the application of nuclear energy in aviation and rocketry. Fuel and construction materials, as well as actual physical and technological processes involved, are treated briefly. Fundamentals of atomic warfare and combat tactics are discussed at some length. The book is divided into four parts, of which the last consists chiefly of anti-Western propaganda. Section I is devoted to nuclear weapons and their use in aviation. Section II is on anti-atomic defense, especially the defense and decontamination of airfields and aircraft, and defense against radiation. Section III is on the use of nuclear energy in modern aircraft and rocket technology and flight techniques, including some speculations on space travel and on the energy of the future. There are 126 figures and 35 non-Soviet references (some in Russian Translation).

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Kurchatov, I.V. [Academician]. Achievements in Science and Tech-

Atomic Energy in Aviation (Cont.) SOV/2210

nology for the Benefit of Mankind 3

1. NUCLEAR WEAPONS AND THEIR CARRIERS

Pckrovskiy, G.I. [Professor, Doctor of Technical Sciences, General-Major of the Engineer-Technical Service]. Aircraft, Intercontinental Rockets and Other Carriers of Thermonuclear Weapons 9

Kucherov, I. [Engineer-Lt. Colonel], and D. Gladkov [Candidate of Technical Sciences, Engineer-Captain]. Flight Control in Intercontinental Rockets 37

Glukhov, V. [Candidate of Technical Sciences, Engineer-Lt. Colonel]. Types of Rocket Weapons 42

Galín, P. [Engineer -Lt. Colonel]. Aircraft and Rockets as Carriers of Tactical Nuclear Weapons 48

Petrov, A. [Engineer-Lt. Colonel]. Guided Missiles With an Atomic Charge in Aviation and Anti-aircraft Defense 78

Card 3/ 9

AUTHOR: Gladkov, L., Director of the School of the Stavropol' Territory, 027, 37-50-1-16, 01

TITLE: On the equipment of Stavropol' Territory mechanization school (Stavropol'ya)

PERIODICAL: Professional'no-tekhnicheskoye obrazovaniye, 1989, No 1, p. 16. (USSR)

ABSTRACT: The author outlines the scope and activities of the Blagodarnenskoye uchilishche mekhanizatsii sel'skogo khozyaystva (Blagodarnoye Agricultural Mechanization School) in the Stavropol' Territory. Up to now, the school has been attended by 15,000 students trained as combine mechanics, all-rounder tractor mechanics, drivers and various other agricultural professions. The school is equipped with 13 various-type tractors. There is one photo.

ASSOCIATION: Blagodarnenskoye uchilishche mekhanizatsii sel'skogo khozyaystva (Blagodarnoye Agricultural Mechanization School)

Card 1/1