

KONFORTI, B.; PANEVA-KHOLEVICH, E.; BUNEV, G.

Results of surgery of congenital hip dislocation using Zahradnicek's and Zahradnicek-Colonna's methods. Khirurgia, Sofia 8 no.6:509-528 1955.

1. Institut za spetsializatsiia i usuvrshenstvuvane na lekarite klinika po ortopediia i travmatologiia.

(HIP, dislocations,
congen., surg., Zahradnicek's - Zahradnicek-Colonna's
technics)

(DISLOCATIONS,
hip, congen., surg., Zahradnicek's & Zahradnicek-Colonna's
technics)

PANEVA-KHOLEVICH, E., ml. asistent

Malunited fractures of the extremities; causes and therapy.
Khirurgija 7 no.3:154-171 1954.

1. Institut za spetsializatsia i usuvurshenstvuvane na lekari.
Klinika po ortopediia i travmatologija. Zav. katedrata: prof.
B.Boichev.

(FRACTURES,

*extremities, malunited, causes & ther.)

(EXTREMITIES, fractures,

*malunion, causes & ther.)

PANEVA-KHOLEVICH, E.

Fracture of the radius in a typical case. Khirurgia, Sofia
8 no.4: 340-347 1955.

1. Institut za spetsializatsia i usuvurshestvuvans na lekarite--
Sofia Katedra po ortopediia i travmatologiia. Zav.katedrata:
prof. B. Boichev.

(RADIUS, fractures)

(FRACTURES,
radius)

IDENTITY : RUSSIA
CATEGORY : General Problems of Pathology. Immunity ✓
ABS. JOUR. : REBiol., No. 12 1958, No. 56222
AUTHOR : Panevich, B.
LAST.
TITLE : The Influence of Vaccination on the Titer of Complement in Guinea Pigs
ORIG. PUB. : Acta Veterin., 1956, vol.6, No.1, 63-65
ABSTRACT : Vaccination against Salmonella enteritidis Gertner in the guinea pig reduces the titer complement (TC) during the course of 10 days; the lowest TC occurs on the 8th day after the 2nd vaccination; by the 30th day the TC returns to normal levels.
-- K.A.M.

CARD: 1/1

VEDERNIKOV, M.; PRIZHKO, M.; PANEVIN, D., starshiy master; KOBOZEV, V., pre-
podavatel'

Personnel for the giants of the chemical industry. Prof. tekhn. obr.
21 no.1:8-9 Ja '64. (MIRA 17:3)

1. Direktor professional'no-tekhnicheskogo uchilishcha No.53, Lu-
ganskaya obl. (for Vedernikov). 2. Zamestitel' direktora professio-
nal'no-tekhnicheskogo uchilishcha No.53, Luganskaya obl. (for Prizh-
ko).

26.2131

25119
S/535/60/000/119/003/009
E194/E435

AUTHOR: Padavin, I.G., Candidate of Technical Sciences
TITLE: Fluid distribution in the spray from impinging jet
nozzles

PERIODICAL: Moscow, Aviatsionnyy institut, Trudy, No 119, 1960,
Rabochiye protsessy v teplovykh dvigatel'nykh
ustanovkakh, pp.72-84

TEXT: Impinging jet nozzles are widely used in rocket engines and fire fighting equipment. Previous work on these nozzles which is sparse, is briefly reviewed. The impingement of two jets of non-viscous incompressible fluid is given brief theoretical consideration. The problem is simplified because the process is symmetrical about the main plane which bisects the angle of intersection of the jets. By applying Bernoulli's equation (of the conservation of energy) and also equations of the conservation of flow and of momentum, an equation is derived for the film thickness at any position. It is found that the film thickness does not depend upon the rate of flow of fluid but is a function of the diameter and angle of impact of the jets. Tests were made to study the flow and mixing of fluids in impinging jet nozzles and to
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Fluid distribution ...

study the influence of the main injection parameters. Two test chambers were used, one at atmospheric pressure made of transparent plastic and the other for a back-pressure of 5 atm. The angle between the nozzles could range from 40 to 180°, the nozzle diameter from 1 to 2 mm, the jet length from 2 to 50 mm and the jets could be displaced laterally up to 2 mm. The tests were made with jets of water and kerosene. To determine the fluid distribution in the spray, collecting heads were made up with a number of receiving cells each capable of collecting 10 ml of fluid. A study was made of the fluid distribution in the main plane. The amount collected at any position corresponds to the film thickness there. Change in rate of flow, diameter and length of jets does not basically alter the distribution law which somewhat resembles a normal Gaussian distribution curve. A systematic difference is observed at small angles of impact between the test results and the film thickness calculated by the recommended formula and this is perhaps due to the assumed absence of tangential flow and may be due to surface tension. The following experimental relationship is found for $0 \leq \alpha \leq 60^\circ$ (it is
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E194/E435

Fluid distribution ...

meaningless when $\alpha \rightarrow 90^\circ$).

$$\bar{h}_{\varphi R} = \frac{1 + \sin^2 \alpha - 2 \sin \alpha}{1 + \sin^2 \alpha - 2 \sin \alpha \cos(a\varphi)}$$

where $\bar{h}_{\varphi R}$ is the actual relative film thickness;
 α - the angle between the nozzle and the normal to the main plane;
 $a = \cos^{2/3} \alpha$ - an experimental coefficient.
 Increasing the angle of impact promotes uniform fluid distribution in the main plane but increases the flow backwards from the main plane. The radial distribution of fluid is next considered. The theory of this case is more difficult because the film formed by the impinging jet is destroyed by interaction with the ambient atmosphere; this problem is considered in another paper of the author, pp.85-101 of this symposium. The character of the distribution depends mainly on the angle of impact, increasing the speed and diameter of the jets somewhat reduces the radial scatter of fluid, and the liquid distribution becomes more uniform. Although the curves have the general appearance of
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E194/E435

Fluid distribution ...

Gaussian distributions, application of the Gaussian laws does not yield satisfactory results. The ratio of the two components at different parts of the spray is considered. The ratio of the components by weight is denoted k which is defined as the ratio of the product of the specific gravity and amount of water collected in the measuring glass to the corresponding product of kerosene. Lines of equal values of k are parallel to the main plane. Some spread occurs across the main plane probably because jet flow conditions are not steady near to the point of impact. Increasing the angle of contact gives more uniform distribution of components in the radial section and increasing the speed of flow somewhat improves the mixing. The influence of various injection parameters on the distribution of liquids is considered. Speed difference can be important if one jet speed is more than 20% greater than the other, one jet then penetrates the other and impairs mixing. This does not occur if jets of the same speed are of different diameters. If the jets are not coaxial (eccentric) the main plane is rotated towards the central axis and if this rotation is more than 30° mixing is impaired. Increasing the length of the jets has the effect of increasing the eccentricity

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Fluid distribution ...

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and should, therefore, be restricted to less than five times the diameter. Back pressure has little influence. Nozzles with two jets tend to throw back from the main plane, nozzles with three jets in one plane meeting at a point do not do so. The central jet prevents throw-back and is split into two, otherwise the distribution is generally similar to that for two jets and the influence of angle speed and jet diameter on the fluid distribution of a three jet nozzle is much the same as for a two jet. Thus, in many cases a three jet nozzle is better than a two jet. A good distribution was obtained with the two outer nozzles delivering water and the central one kerosene at a speed 1.35 times greater. The work described was carried out in 1954-1955. There are 5 figures and 4 references: 2 Soviet and 2 non-Soviet. The two references to English language publications read as follows: Bond W., "The Proceedings of the Physical Society", 1935, Vol.47, No.261; Kretschmar G., Wedaa H. Journal of the Optical Society of America, 1953, Vol.43, No.6.

Card 5/5

25120

S/535/60/000/119/004/009

E194/E435

26.1131

AUTHOR: Panevin, I.G., Candidate of Technical Sciences

TITLE: The atomization of fluid by a nozzle with impinging jets

PERIODICAL: Moscow, Aviatsionnyy institut. Trudy, No.119, 1960.
Pabochiye protsessy v teplovykh dvigatel'nykh ustanovkakh, pp.85-101

TEXT: Previous work on this subject is briefly reviewed, there appears to be no general agreement about the theory and the problem of stability of a plane fluid layer moving in a gas atmosphere is not fully solved. Previous work does not adequately consider short waves, which predominate in films in the speed range covered, and does not give formulae for calculating the optimum wavelength. In the author's preceding paper ("Fluid distribution in the spray from impinging jet nozzles", pp.72-84 of the present symposium) the flow of a fluid film formed by two impinging jets is considered. The present work considers breakdown of the film into drops. This is done in three stages: consideration of film stability; consideration of break up of film into "strings"; consideration of break up of "strings" into drops.
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S/535/60/000/119/004/009
E194/E435

The atomization of fluid ...

It is assumed that the liquid film is flat and of unlimited extent in the xz plane, that it moves progressively and that the film and surrounding gas are non-viscous and incompressible. To assess film stability, motion of a film of liquid in a stationary gas atmosphere acted upon by forces of surface tension and inertia is considered. It is assumed that small oscillations of broad frequency band occur at the interface. These oscillations may be damped, may remain harmonic or may increase in amplitude and destroy the film. Expressed mathematically, it is necessary to solve simultaneously the equations of main motion of the film and of the small oscillations of liquid in the gas and to investigate the stability of the solution. Finally, the following expressions are obtained:

$$\sigma_c = \alpha_c \pm i\beta_c \qquad \sigma_H = \alpha_H \pm i\beta_H, \qquad (7)$$

where

$$\alpha_c = -\frac{\rho V cth(kh)}{\rho + cth(kh)}, \quad \beta_c = k \sqrt{\frac{\rho cth(kh) V^2}{[\rho + cth(kh)]^2} - \frac{T k}{\rho [\rho + cth(kh)]}}; \qquad (8)$$

Card 2/7

$$\alpha_H = -\frac{\rho V th(kh)}{\rho + th(kh)}, \quad \beta_H = k \sqrt{\frac{\rho th(kh) V^2}{[\rho + th(kh)]^2} - \frac{T k}{\rho [\rho + th(kh)]}} \qquad (9)$$

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E194/E433

The atomization of fluid ...

where h is half the film thickness; T is the period of oscillation; $c = 2\pi/T$; $\lambda =$ wavelength; $k = 2\pi/\lambda$; V is speed of flow; $\bar{\rho} = \rho_1/\rho_0$ is the relative density of the gas, which is usually small. The suffix c corresponds to symmetrical and the suffix H to asymmetrical oscillations. It is shown that stability depends upon the value of β . if $\beta > 0$ the oscillation is damped; if $\beta = 0$ oscillation is harmonic and if $\beta < 0$ it is increasing. With both symmetrical and asymmetrical oscillations we may have $\beta < 0$. It is then shown that for any rate of motion of the surface there are damped short waves and undamped long ones. Waves of length corresponding to $\beta = 0$ are of limiting stability and waves of optimum wavelength λ_{opt} correspond to maximum values of β . In this way the following expressions are derived for the optimum wavelengths of symmetrical and asymmetrical oscillations.

$$(\lambda_{opt})_c = 2\pi \frac{T}{\rho_1 V^2} \phi_2(a) \quad (12)$$

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The atomization of fluid ...

$$(\lambda_{opt})_H = 2\pi \frac{T}{\rho_1 v^2} \phi_2(a) \quad (13)$$

Formulae are given for $\phi_2(a)$ and $\psi_2(a)$ which, however, remain constant for long waves at values of $\phi_2 \approx 1.3$ and $\psi_2 \approx 2.0$ when the wavelength is over ten times the half film thickness, these values are approximately true down to wavelengths of five times the half film thickness. The boundary of stability for both types of oscillation is given by the following

$$\lambda_c \approx 2\pi \frac{T}{\rho_1 v^2} \quad (16)$$

Break up of the film into strings is then considered. Waves of optimum wavelength are assumed to cause film break up. The annular cords are assumed to be equal in width to the optimum wavelength. Hence one can calculate the section of the ring and the film thickness at the place where the film breaks. At first, the rings are not of circular section and so the usual methods of assessing stability are not suitable and Blinov's method must be used. Card 4/7

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The atomization of fluid ...

used to assess the stability. Expressions are then derived for the period of oscillation of the ring and of drops whence an expression for the drop diameter is readily derived by equating the two times (T) giving

$$d_k = \pi \sqrt{\frac{Th}{\rho_1 v^2}} \quad (19)$$

The experimental work was carried out on the same equipment as that used for the work described in the previous article (pp.72-84 same symposium). The influence of the main injection parameters was studied on water using nozzle diameters of 1 to 2 mm, angles of impingement of 40 to 160° and nozzle pressure drops of 1 to 15 atm. Drops were trapped on a smoked plate with a soot layer greater than 1.5 times the drop diameter. Arrangements were made to expose these sheets for very short times. They were examined microscopically. Spark photography of the spray was also used. The photographs showed that break up could be due to both symmetrical and asymmetrical oscillations. The wavelength is Card 5/7

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E194/E435

X

The atomization of fluid ...

generally in agreement with the theoretical values given above but at high fluid speeds the actual values are somewhat greater than the theoretical. The particle size was principally affected by three factors. The influence of film speed is well represented by the following expression

$$x_M = 0.320 - 0.0028 V, \text{ mm}$$

where x_M is the mean drop diameter; V is the speed in m/sec. Agreement with theory was good. Droplet diameter was always proportional to jet diameter and the agreement between theory and practice was again good. The angle of impact is the third main factor and it was found experimentally that the diameter was greater than theory at high angles of impact, probably because in this case the film flows more slowly than the jet from which it is formed. Other factors considered were of much less influence, including the back pressure, and slight deviations from the coaxial provided that these do not greatly increase the film thickness. The influence of the main injection parameters is much the same when a three jet nozzle is used. In order to check the
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E194/E435

The atomization of fluid ...

conclusions more fully, further experimental study should be made of the influence of surface tension and other physical properties of the liquid. V.N.Blinov, K.Veber and A.S.Predvoditelev are mentioned in the paper. There are 7 figures and 11 references: 5 Soviet and 6 non-Soviet. The four most recent references to

English language publications read as follows:

York Y., Stubbs H., Tek M., Trans. ASME, 1953, Vol.75, No.7;

Fry J., Thomas P., Engineering, 1953, Vol. 179, No.7;

Hagerty W., Shea J., Journ.Appl.Mech., 1955, Vol.22, No.4;

Squire H., Brit. Journ. Appl. Phys., 1953, Vol.4, pp.167-169.

X

Card 7/7

ACCESSION NR: AP4000401.

S/0294/63/001/001/0056/0063

AUTHORS: Kulik, P. P.; Panevin, I. G.; Khvesyuk, V. I.

TITLE: Theoretical calculation of the viscosity, thermal conductivity, and Prandtl number of ionized argon

SOURCE: Teplofizika vy*sokikh temperatur, v. 1, no. 1, 1963, 56-63

TOPIC TAGS: argon, ionization, viscosity, thermal conductivity, viscosity, aerodynamics, high temperature, gas dynamics, argon ionization, ionized argon

ABSTRACT: It is shown that the presence of electrically charged particles in the ionized gas gives rise to long-range Coulomb forces between the particles along with the short-range atomic forces, and this increases the effective cross sections for the elastic interactions. One of the consequences is a sharp decrease in the viscosity coefficient of the gas and its pressure dependence. It is also

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ACCESSION NR: AP4000401

pointed out that knowledge of the gas kinetic properties of gases at temperatures much higher than experimentally feasible is of great importance in specific problems of aerodynamics and gas dynamics. Information is culled from a large number of Soviet and western sources, and the final results are presented in graphic and tabular form. Thermodiffusion effects are neglected. Original article has 2 tables, 4 figures, and 15 formulas.

ASSOCIATION: None

SUBMITTED: 08Apr63

DATE ACQ: 13Dec63

ENCL: 03

SUB CODE: AS

NO REF SOV: 010

OTHER: 026

Card 2/5
2

ACCESSION NR: AP4017719

S/0294/63/001/003/0394/0398

AUTHORS: Panevin, I. G.; Kulik, P. P.

TITLE: Method for experimental determination of the coefficient of thermal conductivity of a high temperature gas

SOURCE: Teplofizika vy*sokikh temperatur, v. 1, no. 3, 1963, 394-398

TOPIC TAGS: high temperature gas, high temperature gas flow, streamline, blunt body, critical point, molecular heat conduction, laminar boundary layer, molecular thermal conductivity, thermal conductivity coefficient

ABSTRACT: An experimental method is presented which is based on the fact that regardless of the conditions in an incident flow around a blunt body, the stream in a small area around the critical point is always laminar. Since heat transport transverse to the

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ACCESSION NR: AP4017719

laminar boundary layer is due only to molecular heat conduction, measurement of the temperature profile in the boundary layer near the critical point and determination of the heat flux at this point yields the value of the coefficients of molecular thermal conductivity in a larger range of temperatures than possible heretofore. The experimental set-up has been described elsewhere (V. B. Tikhonov, Ye. A. Yakovlev, Sb. tr. MAI, A. V. Kvasnikov, ed, Oborongiz 1960). The experimental results agreed within 9% at $T = 12,000K$ and 5% at $T = 14,000K$ with approximate theoretical values calculated by the method of W. Lochte-Holtgreven (Repts. Progr. Phys. v. 21, 312, 1958). It is pointed out that the method is most effective at high pressures. Orig. art. has: 7 figures and 3 formulas.

ASSOCIATION: None

SUBMITTED: 09Jul63

DATE ACQ: 23Mar64

ENCL: 01

SUB CODE: PH, AI

NO REF SOV: 002

OTHER: 004

Card 2/3

1. PANEVIN, K. S.
2. USSR (600)
4. Viticulture
7. Our method for growing seedlings. Vin SSSR 13 No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

(PANVIN) V.S.

PANVIN, V.S.; ARAKHOV, S.V.

Lvov chemopharmaceutical plant. Med.prom. 11 no.10:40-44 0 '57.
(LVOV--DRUG INDUSTRY) (MIRA 11:1)

PANEVIN, L.

Young specialists in charge of important sections. Obshchestv.
pit. no.9:12-13 S '59. (MIRA 12:12)

1. Direktor Belgorodskogo tresta stolovykh, kafe i restoranov.
(Belgorod--Restaurants, lunchrooms, etc.)

PANEVIN, V.S

Compressing the taboret seats made of wood waste. Bum. i der. prom.
no.1:38-39 Ja-Mr '64. (MIRA 17:6)

Excitation of atoms in a rare-gas discharge. V. A. Fabrikant and K. Panevkin. *Compt. rend. acad. sci. U. R. S. S.* 20, 441-4 (1938) (in English). Satn. in the condens. of excited rare-gas atoms observed by Kopfermann and Ladenburg (*Z. A.* 25, 1733), Krebs (*Z. A.* 30, 8019) and Schön (*Z. A.* 31, 45919) cannot be explained in terms of equil. established between collisions of the first and second kind. The drop of electronic temp. with current is the main cause for the observed change in condens. of excited atoms with current intensity. L. B. Steiner

ADD SEA DETAIL/OPNAI LITERATURE CLASSIFICATION

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PROCESSES AND PROPERTIES INDEX

3

Excitation of atoms in a rare-gas discharge. K. Paneykin. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 9, 1007-14 (1939) (in Russian); *J. Phys.* (U. S. S. R.) 2, 39-48 (1940) (in English); cf. *C. A.* 33, 3688. --Based on the data presented by Kopfermann and Ladenburg (*C. A.* 22, 4364) on the concn. of excited atoms and with the help of the approx. function of excitation, calcs. have been made of the dependence of electron temp. on the current. Contrary to K. and L.'s standpoint, the author advances the view that the dependence of the concn. of the excited atoms on the current is on the whole detd. by changes in the electron temp. with current. Frank Conrat

A S T L A METALLURGICAL LITERATURE CLASSIFICATION

GROUPS

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

PANEVKIN, K.

bc

Excitation of atoms in a rare gas discharge. K. Panevkin (*J. Physics, U.S.S.R.*, 1940, 2, 30-48).—Existing theoretical and experimental data on the influence of current on concn. of excited atoms in rare-gas discharges (He, Ne, and A) are critically discussed. Existing data and probe measurements indicate that the dependence of concn. of excited atoms on current is determined by variation in the electron temp. with current. With increase of current the electron temp. falls but the electron concn. increases. The superposition of these two factors gives a max. for the no. of exciting collisions with a certain magnitude of current at which saturation concn. of the excited atoms occurs. Previous theories assume shortening of the life of excited atoms by collisions of a de-activating type whilst from the viewpoint presented the life is considered const. W. R. A.

A-1

3

Moscow, Molotov Power Inst, All Electrotech. Inst.

PALEVKIN, K. I.

"The Excitation of Atoms During a Discharge in Inert Gases,"
Iz. Ak. Nauk SSSR, Ser. Fiz., 4, No. 1, 1940.

Dept. of Physics, V. M. Molotov Inst. of Power Engineering, Moscow

PANEVIN, Vladimir Semenovich; POTUL'NITSKIY, Nikolay Mikhaylovich
[Potul'nyts'kyi, M.M.]; DOROSHENKO, M., red.; NEDOVIZ, S.,
tekh. red.

[Standard-bearers of communist labor] Praporonostsi komuni-
stychnoi pratsi. L'viv, L'vivs'ke knyzhkovo-zhurnal'ne vyd-
vo, 1961. 53 p. (MIRA 15:11)
(Lvov---Drug industry)

PANEVKIN, K. I., Engr.

Cand. Tech. Sci.

Dissertation: "Excited Atoms in the Positive Discharge Column of a Fluorescent Lamp."
Moscow Order of Lenin Power Engineering Inst imeni V. M. Molotov, 20 Jun 47.

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

CA

3

Metastable atoms in the fluorescent lamp. K. Panevkin (Molotov Inst. and All-Union Electrotech. Lenin Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* 59, 683-6 (1948); *Chem. Zentr.* (Russian Zone Ed.) 1948, II, 1262.— The life period of excited Hg atoms in the pos. column of the discharge of a fluorescent lamp was detd. under normal operating conditions (300 ma., vapor pressure of Hg 0.01 mm., diam. of tube 26 mm., A pressure 4 mm. Hg). The following values are reported for the different states: 6^1P_1 , 4×10^{-3} sec; 6^3P_1 , 1×10^{-3} sec; 6^1P_2 , 6×10^{-3} sec. These values correspond to those calcd. for collisions of the 2nd type with electrons. The intensity of the line 2537 A., was 59.5% of the elec. output of the lamp; of the line 1850 A., only 25%. In the absence of A the intensity of the line 2537 A. was about 75% less; the line 1850 A. was unaffected.

M. G. Moore

ACCESSION: NR: AT4017003

S/3057/63/000/000/0144/0147

AUTHOR: Tikhomirov, V. B.; Panevkina, Ye. A.

TITLE: The use of epoxy shieldings for protecting metal and concrete surfaces

SOURCE: Zashchitnyye pokrytiya v atomnoy tekhnike (Shielding in nuclear engineering); sbornik statey. Moscow, Gpsatomizdat, 1963, 144-147

TOPIC TAGS: epoxy resin, corrosion, nuclear shielding, atomic reactor, shielding, epoxy shielding, radiation protection

ABSTRACT: Shieldings made of epoxy resins are the most widely used protection against corrosion for buildings, communications, and equipment, including nuclear devices. In the U.S.A., epoxy shieldings are used to protect steel and concrete surfaces from a radiation of 10^9 rad and the simultaneous action of boiling water. Of the resins being manufactured in the Soviet Union, the high-molecular epoxy resins can be used for nuclear shielding. This type of epoxy resin has the best physical and mechanical properties. Different compositions of epoxy resins and solvents are listed in the article. Both air and heat drying can be used for them. An addition of 1% of melamino-formaldehyde resin is used to lower the surface tension of the epoxy compound, thus improving the coating. The viscosity of the resin is also important for the coating method. Common spray guns can be used

Card 1/2

ACCESSION NR: AT4017005

8/3057/63/000/000/0154/0157

AUTHOR: Panevkina, Ye. A.; Tikhomirov, V. B.

TITLE: Investigation of the vortex method for applying polyethylene shielding to metallic objects

SOURCE: Zashchitny*ya pokry*tiya v atomnoy tekhnike (Shielding in nuclear engineering); sbornik statey. Moscow, Gosatomizdat, 1963, 154-157

TOPIC TAGS: polyethylene, polyethylene shielding, vortex coating method, nuclear shielding

ABSTRACT: Polymers and low-molecular resins are widely used for shieldings, obtained by the vortex coating method. V. S. Shifrin and N. N. Samosatskiy published an article about this method (Polietilen, pererabotka i primeneniye. L., Goskhimizdat, 1961). However, the laws of vortex atomization were not clearly specified in the article. The present investigation showed that the hydrodynamic laws for common suspension layers are applicable. Low-pressure grade T-085 polyethylene was used with particles of 200-300 μ m and a moisture content of not over 3%. The surfaces were first cleaned of rust, scale and dirt. The parts were heated in an electric oven to 350-400C to melt the polyethylene. (See

Card 1/3

ACCESSION NR: AT4017005

Fig. 1 of the Enclosure.) Smaller articles were heated to higher temperatures, due to the higher cooling rate. For a 200-250°C coating the article was lowered into the bath for 7-10 seconds. The polyethylene coating resisted temperatures as low as -50°C, as well as 20% nitric acid, 30% hydrochloric acid, 36% sulfuric acid, 35% hydrofluoric acid, 90% formic acid, at 20-60°C, and alkalis of various concentrations. The tests were performed for 2 to 12 months. The authors conclude that the vortex method will be widely used for coating polyethylene on chemical equipment, tools, instruments, and materials used for construction. The apparatus required for coating suspensions can be made at any factory having a machine shop. Orig. art. has: 3 figures and 2 equations.

ASSOCIATION: None

SUBMITTED: 00

DATE ACQ: 20Feb64

ENCL: 01

SUB CODE: OG NP

NO REF SOV: 000

OTHER: 000

Card 2/3

ACCESSION NR: AT4017005

ENCLOSURE: 01

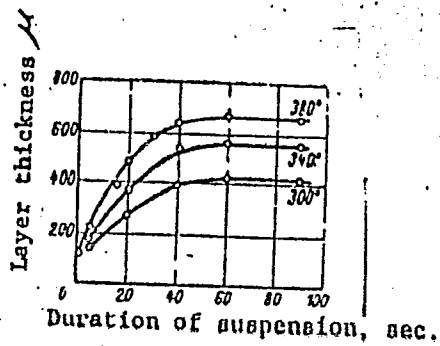


Fig. 1. Relationship between T-085 polyethylene coating surface, the duration of suspension and heating temperature.

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RESULTS OBTAINED GIVEN
in detail, proved this possibility, J. H. Gar

Distr: 4E2c/4E4j

J. H. Gar

VASIL'YEV, Vasiliy Vasil'yevich; KARAMAN, Mikhail Minovich; ~~PALEYSKIY,~~
Nikolay Petrovich; ZHILYAKOVA, O., red.; ISUPOVA, N., tekhn.
red.

[Collective farm on the upsurge]Kolkhoz na podⁿeme. Simfe-
ropol', Krymizdat, 1962. 30 p. (MIRA 15:11)
(Collective farms--Management)

PANEYAKH, B.P.

Extensions of some differential operators. Sib. mat. zhur.
2 no.4:574-581 J1-Ag '61. (MIRA 14:9)
(Operators (Mathematics))

PANEYAKH, B.P.

Some problems in harmonic analysis. Dokl. AN SSSR 142 no. 5:1026-
1029 P '62. (MIRA 15:2)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom P.S.Aleksandrovym.
(Harmonic analysis)

PANEYAKH, B.P.

General systems of differential equations with constant coefficients.
Dokl. AN SSSR 138 no. 2, 297-300 My '61. (MIRA 14:5)

1. Moskovskiy gosudarstvennyy univeristet im. N.V. Lomonosova.
Predstavleno akademikom A.N. Kolmogorovym.
(Differential equations)

GORDING, Lars [Garding, L.]; PANEYAKH, B.P. [translator]; DEZIN, A.A., red.;
SHIROKOV, V.F., red.; KHAR'KOVSKAYA, L., tekhn. red.

[Cauchy's problem for hyperbolic equations] Zadacha Koshi dlia
giperbolicheskikh uravnenii. Pod red. A.A. Dezina. Moskva, Izd-
vo inostr. lit-ry, 1961. 120 p. Translated from the English.
(MIRA 14:8)

(Differential equations)

PANEYAKH, B.P.

Existence and uniqueness of a solution for the n-metaharmonic equation in unbounded space. Vest.Mosk.un.Ser.mat., makh., astron.,fiz., khim. 14 no.5:123-135 '59. (MIRA 13:8)
(Harmonic functions)

69479

S/055/59/000/05/012/020

16.3800

AUTHOR: Paneyakh, B. P.

TITLE: On the Existence and Uniqueness of the Solution of the n-Metaharmonic Equation in the Unbounded Space

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya matematiki, mekhaniki, astronomii, fiziki, khimii, No. 5, pp. 123-136

TEXT: Let the n-metaharmonic equation

$$(M) \quad P(\Delta) u = \Delta^n u + a_1 \Delta^{n-1} u + \dots + a_n u = f(\vec{x}),$$

be given, where a_1, \dots, a_n are complex numbers, $a_n \neq 0$, \vec{x} point of the space R_p and $f(\vec{x})$ a finite function. Let (M) be written in the form

$$(2.20) \quad \prod_{l=1}^r (\Delta + \lambda^2)^{k_l} \prod_{j=1}^s (\Delta - \omega_j^2)^{m_j} u = f$$

The main result of the paper consists in the statement that there is a unique solution of (2.20) which is a linear combination with constant coefficients of the solutions of the equations

Card 1/2

69479

S/055/59/000/05/012/020

On the Existence and Uniqueness of the Solution of the n-Metaharmonic Equation in the Unbounded Space

$$(2.21) \quad (\Delta + \lambda_e^2)^k u_{\lambda_e}^{(k)} = f \quad (k = 1, \dots, k_e)$$

and

$$(2.22) \quad (\Delta - \mu_j^2)^t u_{\mu_j}^{(t)} = f \quad (t = 1, \dots, m_j)$$

The solutions in question of (2.21) and (2.22) are determined by certain conditions (order of growth). There are 10 theorems and 4 lemmata altogether.

The author mentions J. N. Vekua; he thanks G. Ye. Shilov for the subject and advices.

There are 4 Soviet references.

SUBMITTED: July 3, 1958

Card 2/2

34820

S/020/62/142/005/009/022
B112/B102

16,4200

AUTHOR: Paneyakh, B. P.

TITLE: Some problems of harmonic analysis

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 5, 1962, 1026-1029

TEXT: The author describes sets \mathcal{M} which fulfill the condition

$$\gamma(\mathcal{M}) = \sup_{\mathcal{M} \in \mathcal{M}} \left(\int |u(\xi)|^2 d\xi \right)^{1/2} < 1,$$

where the functions $u(\xi)$ are Fourier transforms. A necessary condition for such sets \mathcal{M} has been derived in an earlier paper of the author (DAN, 138, No. 1 (1961)). In the present paper, it is demonstrated that this condition is also sufficient for the case of a single variable. For the case of more than one variable, more general sufficient conditions are derived. The fundamental concept of the paper is that of the characteristic function $S(\mathcal{M}) = \lim_{r \rightarrow 0} S_{\mathcal{M}}(r)$, where

Card 1/2

PANEYAKH, B.P.

Some theorems of the Paley--Wiener type. Dokl.AN SSSR 138 no.1:
47-50 My-Je '61. (MIRA 14:4)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova.
Predstavleno akademikom A.N.Kolmogorovym.

(Spaces, Generalized) (Aggregates)

PANFIL', L.S., inzh.; MARFIN, N.I., inzh.; GORBASHOV, S.G., inzh.

Centrifuged reinforced concrete supports to be used in
areas with high ground-water level. Transp.stroi. 9
no.9:39-43 S '59. (MIRA 13:2)

(Electric lines--Poles)
(Precast concrete construction)

15 (8), 28 (5)

AUTHORS:

Gubenko, A. B., Panferov, K. V.

S/032/60/026/01/004/052
B010/B123

TITLE:

Answers to the Inquiry About the Test Methods of the Physical
and Mechanical Properties of Plastics

II

PERIODICAL:

Zavodskaya laboratoriya, 1960, Vol 26, Nr 1, pp 9 - 13 (USSR)

ABSTRACT:

The most important condition for universal studies of physical and mechanical properties of plastics is the standardization of all testing methods. At present state standard methods exist in the USSR 11 (Ref 2), which are, however, inadequate (Ref 3). Therefore a revision and essential expansion of the assortment of test methods of plastics is necessary. Revised standards should refer to the preparation of samples, capacity of testing machines, testing conditions and testing technique, types and characteristics of measuring apparatus for the deformation, and to investigations on the obtained test values. Not only the test methods of plastics, but also the test methods of their agglutination have to be standardized (similar to the VIAM Test for wood agglutination). Data of the agglutination conditions have to be given (pressing effect, temperature, duration of

Card 1/2

Answers to the Inquiry About the Test Methods of the Physical and Mechanical Properties of Plastics II S/032/60/026/01/004/052 B010/B123

pressure effect etc.). The suitability of testing the proportional limit according to GOST 4646-49 would have to be checked, and the application of the determination of the modulus of elasticity of plastics according to DIN should be considered. For applying the microsample method, comparative tests of standard and microsamples have to be made in order to be able to consider various factors causing an increase or decrease in rigidity characteristics. Standard tests for panels, blocks and constructions of plastics have to refer to the procedure and succession of loading, to types of apparatus measuring the deformation, and to loading conditions of the construction with respect to time etc. There are 4 Soviet references.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh konstruktsey (Central Scientific Research Institute for Building Constructions)

Card 2/2

YEGUDIN, I.; PANEVSKIY, N., nauchnyy sotrudnik

Our experiment station. Nauka i pered. op. v sel'khoz. 8
no.9:50-52 S '58. (MIRA 11:10)

1. Predsedatel' kolkhoza "Druzhba narodov," Krasnogvardeyskogo
rayona, Krymskoy oblasti, direktor kolkhoznoy opytnoy stantsii
(for Yegudin).

(Agriculture--Experimentation)

USSR/Farm Animals - General Problems.

Q-1

Abs Jour : Ref Zhur - Biol., No 10, 1958, 33273

Author : Yegudin, I., Garmashov, V., Panevskiy, N.

Inst : -

Title : Organizing Feeding Centers in Steppe Area Conditions.

Orig Pub : Zhivotnovodstvo, 1958, No 3, 18-21

Abstract : No abstract.

Card 1/1

PANEVSKIY, N.

YEGUDIN, I.; GARMASHOV, V., starshiy nauchnyy sotrudnik; PANEVSKIY, N.,
starshiy nauchnyy sotrudnik.

Organization of feed supply in steppe regions. Zhivotnovodstvo 20
no.3:18-21. Mr '58. (MIRA 11:2)

1. Predsedatel' kolkhoza "Druzha narodov" (for Yegudin). 2. Krymskaya
sel'skokhozyaystvernaya opytnaya stantsiya (for Garmashov, Panevskiy).
(Crimea--Feeding and feeding stuffs)

VOLEVICH, L.R.; PANEYAKH, B.P.

Some spaces of generalized functions and imbedding theorems.
Usp. mat. nauk 20 no.1:3-74 Ja-F '65. (MIRA 18:4)

PANEVA-KHOLEVICH, E.

KONFORTI, V., Dots.; PANEVA-KHOLEVICH, E.

Plastic repair of the internal collateral ligament in the elbow.
Khirurgia, Sofia 9 no.7-8:606-611 1956.

1. Institut za spetsializatsiia i usuvurshenstvuvane na lekarite--
sofiia klinika po ortopediia i travmatologija. Direktor: prof.
B. Boichev.

(ELBOW, surgery,
plastic repair of internal collateral ligament (Bul))

ADARYUKOV, Igor' Konstantinovich; PANFEROV, A. Aleksandr Dmitriyevich;
SEMINA, N.V., red.; GALAKTIONOVA, Ye.N., tekhn. red.

[Roads build with the help of the people; practice of road
construction in Perm Province] Dorogi - metodom narodnoi
stroiki; iz opyta stroitel'stva dorog v Permskoi oblasti.
Moskva, Nauchno-tekhn. izd-vo M-va avtomobil'nogo transp.
i shosseinykh dorog RSFSR, 1961. 39 p. (MIRA 15:3)
(Perm Province--Road construction)

L 22831-66 EWT(d)/FES-2/EWT(2)/ENF(1)/EWA(h) LJP(c) EC/HR

ACC NR: AP6009040 (A) SOURCE CODE: UR/0018/65/000/011/0078/0080

AUTHOR: Panferov, A. (Lieutenant colonel)

ORG: None

TITLE: Radar fire-control²⁷ analysis method

SOURCE: Voyenny vestnik, no. 11, 1965, 78-80

TOPIC TAGS: radar fire control system, antiaircraft weapon

ABSTRACT: The use of a radar gun-layer in connection with a MPO-2 oscillograph and a C-13 photo-gun for fire-control analysis is discussed. The deflection signals were photographically recorded and the obtained curves analyzed. The movements of photo-films and oscillograms were synchronized. The coincidence of an appropriate oscillogram section with the echo zero on the photo-film range scale was fixed. The maximum and minimum amplitudes of reflected signals were measured and the deflections of the mean point of a salvo burst

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L 22811-66

ACC NR: AP6009040

were determined. The radial deflections were calculated by using a calibration chart. An example of calculation was presented and the use of the radar control method for training purposes was recommended. Orig. art. has: 3 graphs.

SUB CODE: 19 / SUBM DATE: None / ORIG REF: 000 / OTH REF: 000

Card 2/2 ↙

PANFEROV, A. S.

PA 59/49179

USSR/Medicine - Veterinary Medicine
Medicine - Epizootic Diseases

Jan 49

"The Clinical Picture of A-Hypovitaminosis and Paratyphoid in Calves," Docent A. I. Protasov, A.S. Panferov, Sr Vet, Leningrad Vet Sci Inst, 3 pp

"Veterinariya" No 1

A-hypovitaminosis in gravid cows often caused premature drops, complications after birth, and an increase in the number of weak calves. A-hypovitaminosis also produced more rapid debilitation of the cows and weak calves. In the majority of cases, calves of cows with A-hypovitaminosis inherited low resistance to infectious diseases.

~~PANFEROV, Andrey Savenovich~~; DRYAGIN, S.V., redaktor; CHUMAYEVA, Z.V.,
tekhnicheskiy redaktor

[Raising healthy calves; the work practice of the "Sesnoye" state
farm] Vyrashchivanie zdorovykh teliat; opyt raboty sovkhoza
"Lesnoe." Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 63 p. (MLRA 9:8)

1. Glavnyy veterinarnyy vrach sovkhoza "Lesnoye" (for Panferov)
(Calves)

PANFEROV, Andrey Semenovich; POLYAKOV, P.Ya., red.; BARANOVA, L.G.
tekhn. red.

[Getting rid of brucellosis in cattle; work practices on the
"Lesnoe" State Farm] Likvidatsiia brutselleza krupnogo rogatogo
skota; opyt raboty sovkhoza "Lesnoe." Leningrad, Sel'khozizdat,
1962. 75 p. (MIRA 15:6)

(Brucellosis in cattle)

PANFEROV, B., master sporta SSSR.

My experience in adjusting motorcycle motors for racing.

Za rul. 15 no.2:9 F '57.

(Motorcycles)

(MLRA 10:5)

PANFEROV, B., master sporta

On the level of the country's championship. Za rul. 19 no.4:15
Ap '61. (MIRA 14:7)

(Motorcycle industry)

PANFEROV, D.P.

Work of over-all mechanized constructing and assembling brigades.
Transp.stroi. 9 no.6:11-12 Je '59. (MIRA 12:11)
(Kuybyshev Province--Railroads--Electrification)

307/79-29-8-72/81

5(3)

AUTHORS:

Gusakova, G. S., Panferov, E. A., Polubneva, E. P.

TITLE:

Oxymethylene Ketones. II. Synthesis of the Alkoxyethylene-cyclohexanones and Their Transformations in the Reduction Reactions (Ref 1)

PERIODICAL:

Zhurnal obshchey khimii, 1959, Vol 29, Nr 8, pp 2768 - 2772 (USSR)

ABSTRACT:

The formation of non-saturated aldehydes mixed with 1,3-glycols in the reduction of the β -dicarbonyl compounds to be enolized with aluminum-lithiumhydride was described by A. Dreiding and J. Hartman (Ref 2). The authors of the present paper found that in place of the β -dicarbonyl compounds the alkoxyethylene- β -carbonyl compounds behave in the same way (Ref 3). So the α -formylcyclohexanone ether (I, R=iso-C₄H₉) when reduced with aluminum-lithium hydride at 20° forms the aldehyde (III) with a 70% yield. When reduced with aluminum isopropylate in isopropyl alcohol at 95° (I) also transforms into (III) (24-25%). The reduction with hydrogen at the moment of separation takes place in such a way that all double bonds are satu-

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- Oxymethylene Ketones. II. Synthesis of the Alkoxy- SOV/79-29-8-72/81
methylenecyclohexanones and Their Transformations in the Reduction Reactions
(Ref 1)

rated. So the reduction of the compounds (I) with sodium in ether containing water leads to the compound (II) (Scheme 1). The ether (II) does not saponify under the influence of the diluted acids and forms derivatives at the hydroxyl group. The authors observed the directions given by L. Růžicka and co-workers (Ref 4) and tried to obtain the acetals of formylcyclohexanone by the effect of the ester of orthoformic acid upon it in the presence of concentrated hydrochloric acid. They then wanted to transform them by a further reduction into the oxyacetals. This reaction, however, failed under the conditions prescribed even when orthophosphoric acid was used instead of concentrated hydrochloric acid as an addition to *n*-toluenesulphonic acid. In experiments with ammonium nitrate the ethyl ether of α -oxymethylenecyclohexanone (I, R=C₂H₅) also formed with various yields (Scheme 2). The spectrum analysis confirmed the above results. The figure shows the very similar infrared absorption curves of compounds (I, R=iso-C₄H₉) and (I, R=C₂H₅).

Card 2/3

Thus the β -dicarbonyl compounds to be enolized behave ana-

Oxymethylene Ketones. II. Synthesis of the Alkoxy-
methylenecyclohexanones and Their Transformations in the Reduction Reactions
(Ref 1) SOV/79-29-8-72/81

malously in the reaction with orthoformic ester in that they form the ethyl ethers of the enol forms instead of the acetals. The authors conclude by thanking N. A. Preobrazhenskiy, G. I. Samokhvalov for their participation in the discussion of the results, and L. V. Luk'yanova for the photography and interpretation of the infrared spectra. There are 1 figure and 10 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy institut tonkoy khimicheskoy tekhnologii (Moscow Institute of Fine Chemical Technology)

SUBMITTED: July 18, 1958

Card 3/3

PANFEROV, F.

"Great Building," Velikie StroiKi Kommunizma (Great Constructions of Communism),
Acad. of Pedagogic Scis. of the RSFSR, Moscow, 1951, 383 p.

PANFEROV, Fedor.

Dream come true. Kryl.rod.3 no.5:3 My '52. (MIRA 8:8)
(Ghkalov, Valerii Pavlovich, 1904-1938) (Public works)

PANFEROV, F.

5633* Concentration of Stresses During Elasto-Plastic Deformations. Koncentratsiia napriazhenii pri uprugoplasticheskikh deformatsiakh. (Russian.) V. M. Panferov. Izvestiia Akademi Nauk SSSR, Otdelenie Tekhnicheskikh Nauk, 1954, no. 4, Apr., p. 47-60 + 2 plates. Mathematical analysis. Graphs, micrographs. 8 ref.

Handwritten mark

ANGELINA, Praskov'ya Nikitishna; PANFEROV, F.I., red.

[People of the collective-farm fields] Liudi kolkhoznykh polei;
literaturnaia zapis' Arkadiia Slavutinskogo. Stalino, 1959.

393 p.

(MIRA 13:12)

(Collective farms)

BELENKO, V.I.; BELENKO, R.M.; KRYLOV, A.G.; PANFEROV, I.M.;
ROMANOVA, G.V.; SENTSOVA, Yu.le.; SHILKINA, Z.S.

Zvenigorod Station of the Astronomical Council of the
Academy of Sciences of the U.S.S.R. (1960). Biul. sta. opt.
nabl. isk. aput. Zem. no.33:29-33 '63. (MIRA 17:7)

1. Zvenigorodskaya stantsiya Astronomicheskogo soveta AN SSSR.

ADMISSION NO: AT5001541

AUTHORS: Belenko, V. I.; Belenko, R. M.; Krylov, A. G.; Panferov, M. A.; Sazonova, G. V.; Sentsova, Yu. Ye.; Shilkina, Z. S.

TITLE: Observations on the satellites 1961 ϵ_1 , 1961 α_1 , 1961 π_1 , 1961 ξ_1 , and 1960 L_1 104
80
8-1

SOURCE: AN SSSR. Astronomicheskiy sovet. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli, no. 32, 1963, 43-47

TOPIC TAGS: artificial satellite, satellite tracking, satellite tracking camera/ 1961 α_1 satellite, 1961 π_1 satellite, 1961 ξ_1 satellite, 1960 L_1 satellite, NAPA 3e/25 camera, KIM 3 microscope, Ural computer

ABSTRACT: Observations were made on the indicated satellites in August, September, and October 1963. A NAPA 3e/25 camera and the KIM 3 microscope were used. Computations were made by Yu. Ye. Sentsova. Observation times were reduced to standard time. The last column of the table shows maximum possible error in coordinates

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2 7213.4
ACCESSION NR: AT5003549

because of unreliability of determining optical center within 1 cm. V. I. Belencko
and Z. S. Shilkina participated in the work. Results of observations are given.

ASSOCIATION: Stantsiya Astronomicheskogo Soveta AN SSSR (Station of the
Astronomical Council, AN SSSR)

SUBMITTED: 28Dec62

ENCL: 01

SUB CODE: SV, DC

NO REF SOV: 000

OTHER: 000

Card 2/3

L 27212-65

ACCKSSION NR: AT5003549

ENCLOSURE: 01

Station of the Astronomical Council, AN SSSR

No.	Date	U. T.	ΔT	α (1950.0)	δ (1950.0)	
1	2	3	4	5	6	7
	<u>1961</u>		<u>1961 E₁</u>			
1.	August 3	23 ^h 11 ^m 00 ^s .692	0 ^s .003	20 ^h 13 ^m 24 ^s .8	20 ^o 08'58"	12"
					
			<u>1961 D₁</u>			
76.	August 10	19 01 58.329	0.005	22 18 09.3	27 38 16	16

Card 3/3

1 00194-65 FEO-2/3MT(d)/FOD/ESP(h)/FSS-2, FAT(2)/FS(v)-3/280(k)-2/500(v)/FAV(d)
ACCESSION NR: AT5003597 S/2816/63/003/033, 0029/0033

AUTHORS: Belenko, V. I.; Belenko, R. M.; Krylov, A. G.; Panferov, I. M.; Romanova, G. V.; Sentscva, Yu. Ye.; Shilkina, Z. S.

TITLE: Results of Satellite Observations 77
B+1

SOURCE: AN SSSR. Astronomicheskii sovet. Byulleten' stantsii opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli, no. 33, 1963, 29-33

TOPIC TAGS: artificial satellite, satellite tracking, satellite tracking camera/

ABSTRACT: Observations were made on the satellite 1960-4, during August and October 1963. A WFA (W) camera was used. The observations were made by the method of reference stars and by the method of the Ural computer. Observation times were reduced to standard time. The last column of the table shows possible maximal error in coordinates because of unreliability of locating optical center within 1 cm. V. I. Belenko and Z. S. Shilkina participated in the work. Results of 125 observations are given in a table, part
Card 1/3

L 27196-65
ACCESSION NR: AT5003597

of which is reproduced on the Enclosure. Orig. art. has: 1 table.

ASSOCIATION: Leningradskayastantsiya Astronomicheskogo soveta AN SSSR
(Leningrad Station of the Astronomical Council, AN SSSR)

SUBMITTED: 17Feb63

ENCL: 01

NO REF SOV: 000

OTHER: 000

Cord 2/3

ACCESSION NO. AT5001527

Zvenigorodka Station of the Astronomical
Council AN SSSR

Date	U. T.	Δ T	α	δ	μ
<u>1961</u>					
August 10	20 ^h 52 ^m 26 ^s .564	0 ^s .007	15 ^h 38 ^m 31 ^s .5	09°37'34"	12"
.....					
October 32	01 25 32.953	0.006	09 06 15.6	16 09 54	

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197-65

ACCESSION NR: AT5003773

control of the computed coordinates, the coordinates of one reference star were

Results of 05 observations are presented in a table, partially reproduced in the
Enclosure. Orig. art. has: 1 table.

ASSOCIATION: Astronomicheskiv soviet AN SSSR (Staryaya No. 1072) (The Astronomical
Journal of the AN SSSR, Station No. 1072)

SUBMITTED: 16Nov63

ENCL: 01

SUB CODE: SV, DC

NO REF SOVI: 000

OTHER: 000

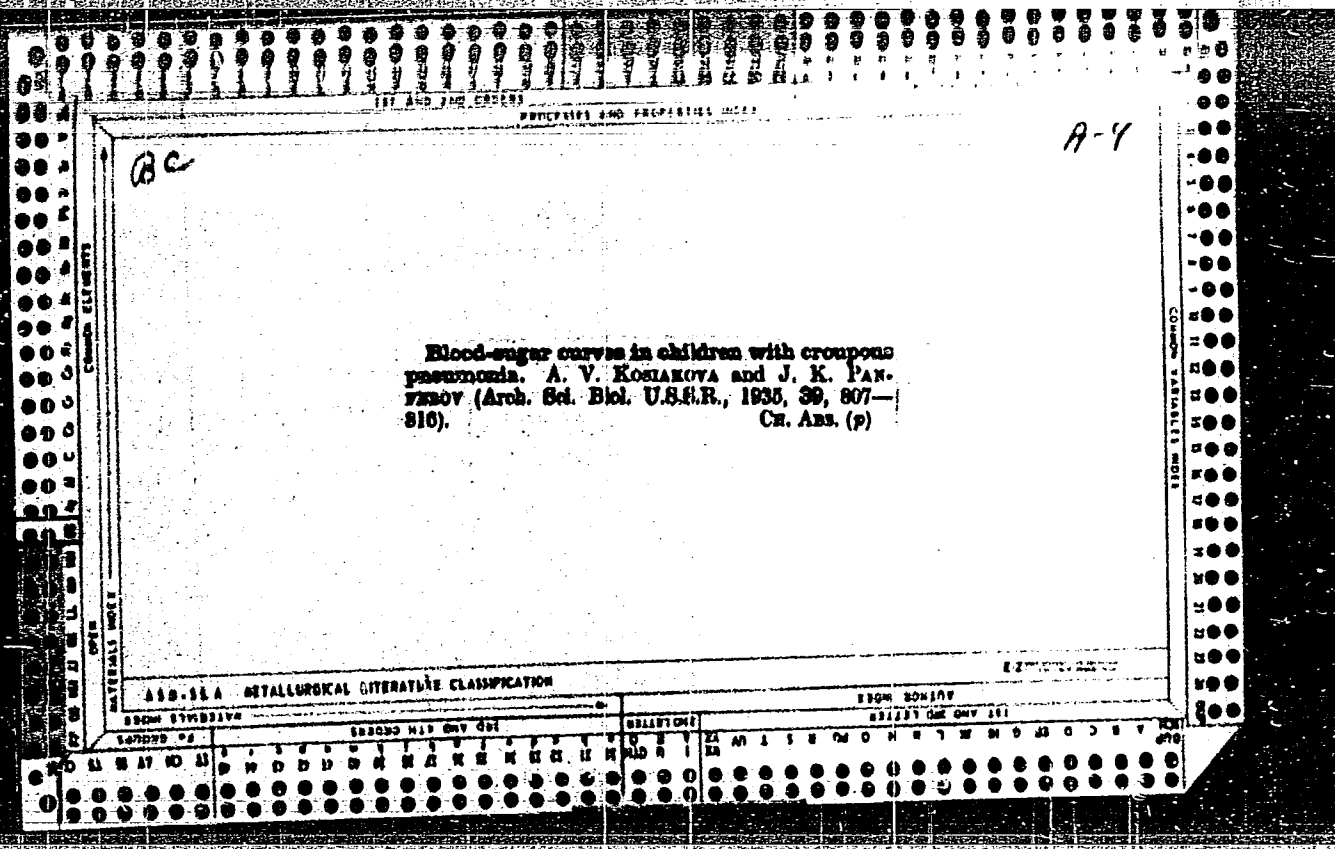
Card 2/3

BELENKO, V.I.; BELENKO, R.M.; KRYLOV, A.G.; PANFEROV, I.M.;
ROMANOVA, G.V.; SENTSOVA, Yu.Ye.; ~~SHILKINA, Z.S.~~

Station of the Astronomical Council of the Academy of Sciences
of the U.S.S.R. (1961 \mathcal{E} , 1961 α , 1961 π , 1960 ξ , 1960 ζ).
Biul. sta. opt. nabl. isk. sput. Zem. no. 32:43-47, 1963.

(MIRA 17:7)

1. Stantsiya Astronomicheskogo soveta AN SSSR.



PANFEROV, K.

In the battle for grain. Sov.mor.16 no.20:19-21 0 '56.

(MIRA 10:1)

(Pavlodar Province--Grain)

PANFEROV, K.

In the feverish days of the harvest. Prof.-tekh.obr.13 no.9:3-4
S '56. (MIRA 9:10)

1. Sovkhoz "Pogranichnik," Pavlodarskoy oblasti.
(Farm mechanization)

PANFEROV, K.

Miner new cadres. Prof.-tekhn. obr. 13 no. 6:15-16 Je '56. (MLRA 9:9)
(Verkhniy--Coal mines and mining--Study and teaching)

L 3570-66 EWT(d)/EWT(m)/EWP(w)/EPE(c)/EWP(j)/T
ACCESSION NR: AP5024819

VW/EM/RM
UR/0032/65/031/010/1243/1245
620.178.3:678.5.06

AUTHOR: Panferov, K. V.; Korabel'nikov, Yu. G.

TITLE: Effect of relaxation on the durability of plastics under static loading conditions

SOURCE: Zavodskaya laboratoriya, v. 31, no. 10, 1965, 1243-1245

TOPIC TAGS: tensile strength, plastic strength, synthetic material, relaxation process, polymethylmethacrylate, polyester plastic

ABSTRACT: Tensile tests of polyester and polymethylmethacrylate transparent plastic specimens under continuous and repeated loading conditions (with relaxation periods) show that the life of samples under loading with relaxation interruptions is considerably shorter (not counting relaxation periods) than that of specimens under constant loading. This is explained by an increase in the structure-sensitive coefficient γ due to the difference in stress relaxation processes, stretching and orientation in continuous and in interrupted loading. Orig. art. has: 3 formulas, 1 table.

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Card 2/2

L 15695-63

EMP(j)/EPF(c)/EWT(m)/BDS AFFTC/ASD Pe-4/Pr-4 EE/WW

ACCESSION NR: AR3003601

S/0081/63/000/008/0705/0706

SOURCE: RZh. Khimiya, Abs. 8T266

68
66

AUTHOR: Panferov, K. V.; Kolpakov, S. V.

TITLE: Mechanical properties of foam sheets with consideration of the factor of time

CITED SOURCE: Tr. Tsent. n.-i. in-ta stroit. konstruktsiy. Akad. str-va i arkhitekt. SSSR, vy*p. 11, 1962, 355-378

TOPIC TAGS: foam sheet strength, foam sheet

TRANSLATION OF ABSTRACT: Investigations were conducted for the determination of the strength characteristics of foam sheets (FS), which are necessary for the planning and design of building structures using FS in triple-ply honeycomb panels (THP). On the basis of an analysis of the working conditions of THP, the conclusion was: the chief stresses in structures with honeycomb filler are a shear and compression stress. It was shown that the data on strength characteristics, obtained by momentary loads, cannot be used as the calculated charac-

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L 15695-63

ACCESSION NR: AR3003601

teristics of real structures. With the aim of clarifying the shear strength (SS) and compression strength (CS) under conditions of prolonged loads the form of the sample and the method of testing were worked out. In testing samples for SS and CS, steps were taken to eliminate warping of the samples in the experimental devices. FS of types PS-1, PS-4, and PKhV-1 were tested. On the basis of experiments with momentary and prolonged loads on samples of FS, norms strengths were suggested, for materials of various kinds and specific gravity: for momentary stress -- for PS-4 (sp. gr. 40 kg/cu m) for compression and shear-2 kg/sq cm; for PS-1 and PKhV-1 (sp. gr. 100 kg/cu m) for compression-9 kg/sq cm, and for shear-7 kg/sq cm; for prolonged loads and relatively low deformations -- for PS-4 for compression and shear-0.7 kg/sq cm; for PS-1 and PKhV-1 for compression-2.5 kg/sq cm and for shear-2 kg/sq cm. Z. Ivanova

DATE ACQ: 12Jun63

SUB CODE: MA

ENCL: 00

Card 2/2

PANFEROV, K.V.; KOLPAKOV, S.V.

Methods of testing foam plastics in torsion. Zav. lab. 28
no.9:1121-1122 '62. (MIRA 16:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'-
nykh konstruktsiy. (Plastics--Testing)

L 17470-63

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Pc-4/Pr-4 RA/WW

ACCESSION NR: AP3004776

S/0191/63/000/008/0053/0055

AUTHORS: Panferov, K. V.; Kolpakov, S. V.

72

TITLE: Methods of mechanical testing of foam plastics ¹⁵

SOURCE: Plasticheskiye massy*, no. 8, 1963, 53-55.

TOPIC TAGS: foam plastics

ABSTRACT: The need for Government standards for mechanical testing of foam plastics is expressed. The use of Specification No. 410-52 as a basis for compression, stretch and impact strength tests is suggested. Strength test should be in manner worked out by TSNIISK; flex tests according to DIN specifications. Orig. art. has: 2 figures.

ASSOCIATION: none

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NO REF SCV: 005

OTHER: 006

Card 1/1

GUBENKO, A.B., doktor tekhn. nauk; PANFEROV, K.V., kand. tekhn. nauk;
ZUBAREV, G.N., kand. tekhn. nauk; BRUSILOVSKIY, A.I., kand.
tekhn. nauk; CHAPSKIY, K.A., inzh.; KLIMOVA, G.D., red. izd-va;
MIKHEYEVA, A.A., tekhn. red.

[Instructions for the design and calculation of structural
elements made with plastics] Ukazaniia po proektirovaniu i
raschetu stroitel'nykh konstruktsii s primeneniem plastmass.
Moskva, Gosstroizdat, 1963. 88 p. (MIRA 16:5)

i. Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut
stroitel'nykh konstruktsiy.
(Plastics) (Building materials)

FRYDIN, A.S.; PANFEROV, K.V.

Methods of shear tests for adhesive compounds of plastics
and other building materials. Plast.massy no.10:57-60
'62. (MIRA 15:11)
(Adhesives--Testing) (Building materials)

GUBENKO, A.B.; GODILO, P.V.; PANFEROV, K.V.; TYUZNEVA, O.B.

Use of wood fiber blocks in three-layer glued elements. Stroi. mat.
7 no.9:37-39 S '61. (MIRA 14:11)

(Wallboard)

PANFEROV, K.V.; KORABEL'NIKOV, Yu.G.; CHAPSKIY, K.A.

Deformation of plastics in a tensile test as a motion
component of the mobile clamp of a testing machine. Zav.
lab. 27 no.6:747-750 '61. (MIRA 14:6)

1. Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'nykh
knostruktsiy. (Plastics--Testing)

PANFEROV, K.V.; KORABEL'NIKOV, Yu.G.

Effect of relaxation in studying the longevity of plastics
under conditions of static loading. Zav.lab. 31 no.10:1243-
1245 '65. (MIRA 19:1)

1. Tsentral'nyy nauchno-issledovatel'skiy institut stroitel'-
nykh konstruktsiy imeni Kucherenko.

15,1000

S/032/62/028/004/019/026
B124/B101

AUTHORS: Panferov, K. V., and Freydin, A. S.

TITLE: Determination of the strength of adhesive bonds with small laboratory samples

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 4, 1962, 494 - 495

TEXT: Metal-to-metal adhesive bonds were tested by pulling apart two 2.20.60 mm aluminum foils with a glued length of 15 mm. This sample size has been accepted by the ГОСТ (GOST). A special device with clamps was used to perform compression tests on glued joints of asbestos cement and glass-reinforced plastic; the size of the samples used is 30.60 mm with a glued length of 30 mm for thicknesses of the glass-reinforced plastic sheet of more than 3 mm and 30.30 mm with a glued length of 10 mm for sheets less than 3 mm thick. Joints of the mentioned reinforcing materials with honeycomb plastics, low-density foamed plastics of the types ПС-4 (PS-4) and ПСБ (PSB), and expanded silicate were tested on three-layer samples, 50.75 mm, with a glued area of 50.50 mm. Glued joints with more compact foamed plastics such as ПС-1 (PS-1), ПХВ-1 (PKhV-1), and others, Card 1/2

VB

0, 0047 02, 001, 011, 004, 000

AUTHORS: Panferov, K. V., Candidate of Technical Sciences, Kolpakov, S. V.,
Engineer.

TITLE: The mechanical properties of foam-plastics and their time dependence.

SOURCE: Akademiya stroitel'stva i arkhitektury SSSR. Institut stroitel'nykh
konstruktsiy. Trudy. no.11. Moscow. 1962. Issledovaniya konstruktiv-
nykh plastmass i stroitel'nykh konstruktsiy na ikh osnove. pp.355-378.

TEXT: The paper comprises a literature survey and a report on lab tests.
Following a review of foreign literature and foreign manufacturing practice it is
reported that currently the USSR produces by the press method the foam plastics
(FP) ПС-1 (PS-1) and PS-4, based on polystyrene, and the FP ПХВ-1 (PKHV-1)
based on polyvinylchloride with a unit weight of 40-230 kg/m³. The non-press
method of making polystyrene FP ПСБ (PSB) is under development, with a 1965
production goal of 200,000 m³. The production of foam polyurethanes shows
marked growth. Costs are being reduced appreciably, and practical use in building
construction is on the rise. It is proposed that in its use as the central layer in
three-layer structural panels, the FP's should serve not only as heat- and sound-
insulators, but should also be utilized as a structural and strength-giving member.

Card 1/4

The mechanical properties of foam-plastics ...

S/804/62/000/011/004/005

To the knowledge of the authors, no long-term (LT) strength data were available by February 1960, and lab tests were undertaken on PS-1, PS-4, and PKhV-1 specimens. Shear tests: Current All-Union Standards (GOST) do not provide for a shear-testing methodology. The existing instruction no.410-52, which provides for torque tests of square specimens, is found lacking since it does not eliminate normal stresses, introduces nonuniformities, and is affected by variations in shearing stress from the specimen center to the outer fibers. Present tests employ hollow cylindrical specimens, which are described and illustrated. Specimen OD 75 mm, wall thickness 20 mm, height 50-80 mm. The specimens were cut out of FP sheets, and steel end disks of the same diam were glued onto the specimen with epoxy adhesives having a higher shear strength than the specimen. Measurements were made up to the point of the sharp increase of plastic deformation. PS-1 and PKhV-1 failed as brittle materials along a helical surface. PS-4 specimens formed a neck in their central zone. The torque-vs.-angle-of-twist curve does not exhibit any straight-line segment. Supplementary tests showed that a residual deformation in shear obtains from the very beginning of loading. It was concluded that a suitable shear-strength characteristic for FP could be the stress that corresponds to the point of breaking of the diagram of the twist-angle differences, a characteristic analogous to that proposed by Prof. Yu. M. Ivanov as a strength criterion for wood, which Ivanov terms the "plastic-flow limit" and which

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