Sitnikov, T.S.

7
2 May
4E 2C

The effect of reclaim on the quality of cable rubbers.
T. S. Sitnikov, G. A. Blokh, N. N. Garmer, and R. V.
Nikulina. Shornik Trudov Kiev. Teklnol. Inst. Lezkoi
Prom. 1954, No. 6, 65–9; Referal.Zhur., Khim. 1955, Abstr.
No. 60701.—The partial replacement of butadiene-styrene
rubber with the reclaim P-20 in the production of cable
cover and core stock, and its effect on the phys. and mech.
properties of the mixts. is investigated. In the cover stock,
the best results are obtained by using 15% of reclaim and the
uv. performance is not lowered. In the core stock it is pos-
sible to replace 50% of the rubber with reclaim.

N. Vasileff

DEMIN, K.A.; SITNIKOV, S.S.

Mechanized procurement of resinous stumpwood. Gidroliz. i lesokhim.
prom. 17 no.7:28-30 '64.   (MIRA 17:11)

1. Karel'skiy proyektnyy i nauchno-issledovatel'skiy institut lesnoy
i derevoobrabatyvayushchey promyshlennosti.

387

AUTHOR: Sitnikov, T.S., Engineer.

TITLE: Screened cables for coal mines. (Ekranirovannye kabeli dlya ugolnykh shakht.)

PERIODICAL: "Vestnik Elektropromyshlennosti" (Journal of the Electrical Industry) 1957, Vol. 28, No. 4, pp. 24 - 25 (U.S.S.R.)

ABSTRACT: Flexible rubber cables are the weak link in the system of electricity supply to underground machines in coal mines. For reasons of safety it is necessary that faults should be cleared before they have had time to reach a dangerous value. The protection should be operated by earth leakage currents which should not themselves be big enough to be dangerous and should be measured. High speed protective apparatus can only be operated if special screened cables are used. Two types of screening are employed, either of copper or steel wires wound on the individual cores or as an envelope round the entire cable; alternatively, the screen may consist of sem-conducting elastic material. Metal screens have good conductivity and mechanical strength but make the cable larger, heavier and less flexible. Elastic screens do not affect the weight and flexibility of the cable and they may be applied to individual cores or as an envelope. Semi-conducting rubbers from which the screens are made contain up to 50% of graphite. The main types of cable construction are described and cables are illustrated with three main and three auxiliary cores for a working

voltage of 1 kV with a common screen, another with individual screens for each core and a seven core cable with individual elastic screens. Most of these cables are intended for a working voltage of 660 V. Experimental lengths of screened cables of different constructions with semi-conducting and metal screens have been manufactured by the Ukrainian Cable Factory and tested in coal mines of the Donbas. Most of the cables successfully operated the high speed devices. The trials demonstrated the advantages of these cables over unscreened in respect of safety in operation. The design and quality of screened cables should be improved by increasing the electrical and mechanical strength of the insulation of the cable cores; by using elastic screens of higher electrical conductivity; by using insulation of high quality between the screens; by improving the mechanical strength and flexibility and reducing the size and weight of the cable.

4 figures, no literature references.

SITNIKOV, Tikhon Sergeyevich [Sytnykov, T.S.], laureat Stalinskoy premii

Thus a cable is born. Znan. ta pratsia no.8:8-9 Ag '61.
(MIRA 14:8)

1. Glavnyy tekhnolog zavoda "Ukrkabel'", g. Kiyev.
(Ukraine—Cables)

SOSUL'NIKOV, A.; STAFEYEV, A.; ALEKSANDROV, N.; SITNIKOV, V.; LEVIN, A.;
KHOKHLUSHIN, V.; KARSHENBAUM, S.

Take into consideration experience in changing over to the seven-
hour and six-hour day. Sots. trud. no.6:99-117 Je '58.   (MIRA 11:6)

1.Zamestitel' nachal'nika otdela organizatsii truda Kuznetskogo
metallurgicheskogo kombinata (for Sosul'nikov). 2.Nachal'nik
otdela organizatsii truda gornogo upravleniya Kuznetskogo metallurgi-
cheskogo Kombinata (for Stafeyev). 3.Nachal'nik otdela truda i
zarabotnoy platy Upravleniya khimicheskoy promyshlennosti Moskovskogo
oblastnogo sovnarkhoza (for Sitnikov). 4.Starshiy inzhener otdela
truda i zarabotnoy platy Upravleniya khimicheskoy promyshlennosti
Moskovskogo oblastnogo sovnarkhoza (for Levin). 5.Direktor Moskovskogo
instrumental'nogo zavoda "Kalibr" (for Khokhlushin). 6.Nachal'nik
otdela truda i zarabotnoy platy Moskovskogo instrumental'nogo zavoda
"Kalibr" (for Karshenbaum).
          (Hours of labor) (Industrial management)

GALKOV, V.; SITNIKOV, V.

Work of a plant production and labor organization laboratory.
Biul. nauch. inform.: trud i zar. plata 3 no. 11:45-49 '60.
(MIRA 14:1)

(Stalingrad--Metallurgical plants--Production standards)

SITNIKOV, V.I.

Tectonics and oil and gas poter'ials of the southe... ern part of
the Karakul' trough and adjacent uplifts. Nauch. trudy TashGU
no.256 Geol. nauki no.22:155-156 '64   (MIRA 18:2)

SITNIKOV, V.I.

Geology and prospects for finding oil and gas in the Karakul'
trough and the Ispanli-Chandyr and Dengizkul' uplifts. Uzb.
geol.zhur. 8 no.3:24-28 '64.

(MIRA 18:12)

1. Institut geologii i razrabotki neftyanykh i gazovykh
mestorozhdeniy AN UzSSR. Submitted April 15, 1962.

SITNIKOV, V.K.

Subsurface flow into rivers in the Far East. Trudy GGI no.114:
161-170 '64.   (MIRA 17:11)

SITNIKOV, V.K.

Calculation of the mean inclination of rivers and slopes. Meteor.
i gidrol. no.3:34-35 Mr '64.   (MIRA 17:3)

1. Odesskiy gidrometeorologicheskiy institut.

SITNIKOV, V.K.

Characteristics of base flow in the Zeya and Bureya basins
in the winter low-water period. Trudy Dal'nevost. NIGMI
no.20:86-92 '65.   (MIRA 18:11)

130 - 6 - 18/27

AUTHORS: Galkov, V.A. (Head of operational research laboratory and
Sitnikov, V.L. (Head of the rolling group of the laboratory).

TITLE: Procedures and working methods of gas de-seamers Ye. F.
Abrosimov and D. P. Semikhatov. (Priemy i metody raboty
gazovyrubshchikov Ye.F.Abrosimova i D.P.Semikhatova).

PERIODICAL: "Metallurg" (Metallurgist), 1957, No.6, pp.35-36 (USSR).

ABSTRACT: Flame de-seaming has been used at the "Krasnyi Oktyabr"
works since 1948. The rate of working of two workers,
Abrosimov and Semikhatov, is 15-20% greater than that of
the other workers and the ways in which this higher produc-
tivity has been achieved are described in this article.
Among the special features of the work of these two men
are control of oscillation frequency of the torch and its
inclination; the use of maximal oxygen flow rate and rat-
ional torch movement over the work, the use of optimal
techniques for each type of flow and well-trained assist-
ants also contribute.

ASSOCIATION: "Krasnyi Oktyabr" works. (Zavod "Krasnyy Oktyabr'")

AVAILABLE:

Card 1/1

USKOV, A.A., red.; RZHEVSKIY, V.V., prof., doktor tekhn. nauk, red.; SOKOLOVSKIY, M.M., red.; MIKHAYLENKO, I.G., red.; BUGOSLAVSKIY, Yu.K., red.; SCBITSKIY, V.V., red.; VINITSKIY, K.Ye., red.; STAKHEVICH, Ye.B., red.; KENIS, S.I., red.; MERZON, A.S., red.; SITNIKOV, V.P., red.; SOPELIKO, N.F., red; BLAYVAS, M.S., red.

[Studies of the All-Union Scientific and Technical Conference on improving the equipment and technology of mining minerals by the open pit method] Materialy Vsesoiuznogo nauchno-tekhnicheskogo soveshchaniia po sovershenstvovaniiu tekhniki i tekhnologii razrabotki poleznykh iskopaemykh otkrytym sposobom. Moskva, Nedra, 1965. 285 p.
(MIRA 18:6)

1. Vsesoyuznoye nauchno-tekhnicheskoye soveshchaniye po sovershenstvovaniyu tekhniki i tekhnologii razrabotki poleznykh iskopayemykh otkrytym sposobom, Cheremkhovo, 1964. 2. Moskovskiy institut radioelektroniki i gornoy elektromekhaniki (for Rzhevskiy). 3. Glavnyy spetsialist Gosudarstvennogo komiteta tyazhelogo, energeticheskogo i transportnogo mashinostroeniya pri Gosplane SSSR (for Bugoslavskiy).

L 29672-66   EEC(k)-2/EWT(d)

ACC NR: AP6009172   SOURCE CODE: UR/0146/65/008/005/0024/0026

AUTHOR: Shikhov, V. N.; Sitnikov, V. P.; Petrov, O. A.

ORG: Ural Polytechnic Institute im. S. M. Kirov (Ural'skiy politekhnicheskiy institut); Chelyabinsk Polytechnic Institute (Chelyabinskiy politekhnicheskiy institut)

TITLE: Semiconductor instrument for measuring static-electricity charge

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 5, 1965, 24-26

TOPIC TAGS: electricity, static electricity measurement

ABSTRACT: The development of a new semiconductor instrument for measuring electrostatic potential or surface charge density is briefly reported. Operating on the well-known electrostatic-generator principle, the instrument includes a 3-stage transistorized (P13A) amplifier with a gain of 30--40 in each stage; the instrument's circuit diagram is shown. The laboratory model has a range of 10^{-12}--10^{-9} coulombs/cm^2. The instrument is intended for measuring static electricity charges in the textile, printing, petroleum, paper, and other industries. Orig. art. has: 1 figure.

SUB CODE: 09 / SUBM DATE: 04Jul64 / ORIG REF: 008

UDC: 621.317.713

Card 1/1

SITNIKOV, Vasiliy Sergeyevich; PRAVKIN, G., red.; YELAGIN, A., tekhn. red.

[Obtaining 238 poods of millet per hectare] Dvesti tridtsat' vosem' pudov prosa s gektara. Moskva, Izd-vo "Sovetskaia Rossiia," 1961. 12 p. (MIRA 14:8)

1. Starshiy traktorist zvena kompleksnoy mekhanizatsii kolkhoza "Krasnaya zvezda" Gorshechenskogo rayona Kurskoy oblasti (for Sitnikov)

(Millet)

NIKOLAYEVSKIY, Georgiy Konstantinovich; PANOV, Vladimir Stepanovich;
TOMAREVSKAYA, Yevgeniya Stepanovna; SITNIKOV, Vladimir
Stepanovich; CHETVERUKHIN, N.F.; LEVITSKIY, V.S.;
PRYANISHNIKOVA, Z.I.; TEVLIN, A.M.; FEDOTOV, G.I.;
DMITRENKO, Ye.P., otv. red.; KURILOVA, T.M., red.;
NESTERENKO, A.S., red.; ALEKSANDROVA, G.P., tekhn.red.

[Required practice work in descriptive geometry] Obiaza-
tel'nyi praktikum po nachertatel'noi geometrii. Khar'kov,
Khar'kovskii gos.univ., 1963. 122 p.   (MIRA 17:1)

SITNIKOV, YA. M.

7845.   BELITSKIY, M. S. I. SITNIKOV, YA. M. uvelichi-vat' srok sluzhbykazhdogo agregata m, avtotransizdat, 1954. 32 C. 20 sm. (Opyt novatorov avtotransporta) 5000 ekz. 50k. soderzh: M. S. Belitskiy. peredoboy opyt ekspluatatsii avtomobilya.- ya. m. sitnikov. uvelichivat srok sluzhby kazhdogo agregata.--(55-430) P

656.13st

SO: <u>Knizhuaya Letopis</u>', Vol. 7, 1955

BRO, G.; SOKOLOV, A.A.; SITNIKOV, Ye.

Problems in neuropathology and psychiatry. Zhur.nerv.i psikh.
62 no.6:942-945 '62.   (MIRA 15:11)
          (PSYCHIATRY)   (NERVOUS SYSTEM—DISEASES)

SITNIKOV, YE A.

620 Issledovaniye raslichnykh variantov konusno Vytyazhnogo ustroystva
     parovoza 1-4+4-2. Kolomna, sektor, tekhn. informatsil, 1954. 27s.
     s chert. 20sm. (M-vo transp. Mashinostroyeniya SSSR. Tsentr. nauch-
     ispytatel'naya laboratoriya transp. mashinos-royeniya Tekhn-informatsiya
     Vyp. No 5 (20)). 300 ekz. Bespl. - Aut. ukazany v Vyp dan. &
     (54-14390 zh) 621.133.4.0014

SO: Knizhnaya Letopis', Vol 1, 1955

SITNIKOV, Ye. A., Cand Tech Sci -- (diss) "Increase in the efficiency of locomotive butter refrigeration cars." Kolomna, 1960. 15 pp; (Ministry of Railroads USSR, Moscow Order of Lenin and Order of Labor Red Banner Inst of Railroad Transport Engineers im I. V. Stalin); 170 copies; free; (KL, 25-60, 134)

SITNIKOV, Ye.A., inzh.

Average temperature pressure for a crossflow of working liquids.
Vest.TSNII MPS 19 no.1:50-52 '60.   (MIRA 13:4)
        (Diesel engines--Cooling)

SITNIKOV, Ya.M. (Kherson)

Pneumoencephalography in chronic schizophrenia (Preliminary
report). Zhur. nevr. i psikh 61 no.8:1251-1254 '61. (MIRA 15:3)
(SCHIZOPHRENIA)   (ENCEPHALOGRAPHY)

L 31831-65   EWT(1)/EWA(h)   Peb

ACCESSION NR: AR5005663   8/0058/64/000/012/H017/H017

SOURCE: Ref. zh. Fizika, Abs. 12Zh110

AUTHORS: Sitnikov, Yu. K.

TITLE: Random number generator with adjustable distribution law

CITED SOURCE: Sb. aspirantsk. rabot. Kazansk. un-t. Matem., mekhan., fiz.
Kazan', 1964, 144-148

TOPIC TAGS: random number generator, binary number, quantized pulse generator,
numerical series

TRANSLATION: A block diagram is described of a random binary number generator.
The random pulses are shaped from noise. The operating speed of the flipflop
devices reaches 5 Mc/sec in this case. It is possible to obtain first a uniform
distribution, and then combinations of pulses from parallel channels with uniform
distribution can be used to obtain the desired distribution. Another way of ob-
taining the desired distribution is to regulate the operating thresholds of the

Card 1/2

L 31831-65

ACCESSION NR: AR5005663   0

shaping circuits. The generation rate can reach 1--2 x 10^6 numbers per second in the latter method and 5 x 10^5 numbers per second in the former. Yu. Romanovskiy

SUB CODE: MA, EC   ENCL: 00

Card 2/2

L 62836-65   EWT(m)/EWG(s)-2   Pw-4   JAJ

ACCESSION NR: AP5019033

UR/0286/65/000/012/0067/0067
624.023.671
624.072.32

AUTHOR: Matselinskiy, R. N.; Sitnikov, Yu. V.; Katin, N. I.; Stul'chikov, A. N.;
Gambarov, G. A.

TITLE: A structural element. Class 37, No. 172015

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 12, 1965, 67

TOPIC TAGS: structural element, construction method, reinforced concrete

ABSTRACT: This Author's Certificate introduces a structural element for the upper
lattice boom of a reinforced concrete arch with a cross beam. The carrying capaci-
ty of the arch is increased by making the structural element in the form of a unit
which has a polygonal cross section. At the vertices of the polygon are rods paral-
lel with the longitudinal axis of the unit which are circular in cross section and
are connected by diaphragms.

ASSOCIATION: none

Card 1/3

L 62836-65

ACCESSION NR: AP5019033   0

SUBMITTED: 26Nov62   ENCL: 01   SUB CODE: GO, MT

NO REF SOV: 000   OTHER: 000

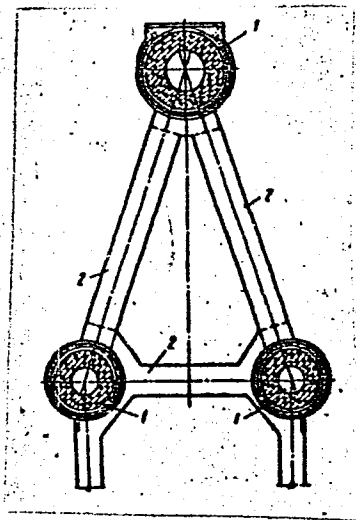Card 2/3

L 62836-65
ACCESSION NR: AP5019033

ENCLOSURE: 01

Fig. 1. 1--rods; 2--diaphragms

Card 3/3

TEPLYAKOVA, Z.F.; SITNIKOVA, A.S.; KARAGUYSHIYEVA, D.

Azotobacter distribution in some Kazakhstan soils. Mikrobiologiya 22, 164-70 '53.

(MLRA 6:3)

(CA 47 no.22:12717 '53)

1. Soil Research Inst., Acad. Sci. Kazakh. S.S.R., Alma-Ata.

SITNIKOVA, A.S.

Role of soil bacteria in making available difficultly soluble
phosphoric acid compounds. Trudy Inst. pochv. AN Kazakh. SSR 5:
153-159 '55. (MIRA 10:4)
    (Soil micro-organisms)   (Phosphates)

SITNIKOVA, A.S.

Effect of the treatment of seeds before sowing on the drought resis-
tance and yield of the Sudan grass under the conditions of Karaganda
Province. Trudy Karag, bot. sada 1:96-104 '60.   (MIRA 15:1)
                    (Karaganda Province--Sudan grass)

SITNIKOVA, A.S.

Effect of the treatment of seeds before planting on the physiological
processes and yield of corn. Trudy Karag. bot. sada 1:105-122 '60.
(MIRA 15:1)

(Karaganda Province--Corn (Maize))

SITNIKOVA, A.S.

Effect of fertilizers on the corn yield. Trudy Karag. bot. sada

(MIRA 15:1)

1:123-128 '60.

(Karaganda Province--Corn (Maize)--Fertilizers and manures)

SITNIKOVA, A. S.

Cand Bio Sci, Diss -- "Increasing the draught resistance and yield of corn and Sudan grass in conditions of the Karaganda region". Karaganda, 1961. 27 pp, 20 cm (Acad Sci KazSSR. Karaganda Botanical Gardens of the Inst of Botany), 150 copies, Not for sale (KL, No 9, 1961, p 180, No 24318). /61-5035 /

SITNIKOVA, A.S.

Characteristics of water balance and carbohydrate metabolism in
some trees and shrubs of the Karaganda industrial area. Trudy
Inst.bot.AN Kazakh.SSR 14:170-184 '62.   (MIRA 16:4)
            (Karaganda region—Woody plants)
        (Carbohydrate metabolism)   (Plants, Transpiration)

SITNIKOVA, A.S.; KORNEYCHIK, Zh.N.

Chemical composition of apple and pear fruit in the Karaganda
Botanical Garden.   Trudy Inst.bot.AN Kazakh.SSR   17:90-97 '63.
(MIRA 17:3)

SITNIKOVA, A.S.

Physiological study of trees and shrubs in the smoke- and gas-polluted air. Trudy Inst.bot.AN Kazakh.SSR 17:98-109 '63.   (MIRA 17:3)

SITNIKOVA, A. M.

Sitnikova, A. M. - "The status of the blood pressure in operations on the stomach carried on under spinal-cerebral and infiltration anesthesia", Trudy Astrakh. gos. med. in-ta, Vol. IX, 1947, p. 161-64.

SO: U-3042, 11 March 53, (Letopis 'Zhurnal 'nykh Statey, No. 3, 1949).

EXCERPTA MEDICA Sec 8 Vol 12/7 Neurology   July 59

3235. POLYNEURITIS AS COMPLICATION AFTER ANTIRABIES INOCULATIONS
(Russian text) - Sitnikova A. V. - ZDRAVOOKHR. KIR. 1957, 4 (55-57)
The author observed 2 cases after inoculations with Fermi vaccine. In the
vaccination period the patients noticed general weakness, indisposition and paraes-
thesiae. The disease arose 3 to 4 days after the conclusion of a course of inocula-
tions and was marked by gradual development of weakness in the extremities; in
both cases recovery ensued. A number of persons who had been subjected to anti-
rabies vaccination simultaneously with the described patients likewise noticed
general weakness and numbness of the extremities. Since Fermi vaccine remains
virulent during storage in the refrigerator for 2 to 3 months, it is essential to
use carefully controlled vaccine, and, should initial symptoms of polyneuritis or
other complications appear, to discontinue immediately vaccination with the batch
of vaccine being employed.   (S)

15-2250

15.2260

27064
S/080/61/034/003/004/017
A057/A129

AUTHORS: Sazonova, M. V., Sitnikova, A. Ya., Appen, A. A.

TITLE: Protection of carbon and graphite from oxidation at temperatures of up to 1,200°C

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 3, 1961, 505-512

TEXT: The preparation and application of high-quality glass-carbide-sili-cide coatings effective as protection of various carbon-graphite products from oxidation at 1,200°C during more than 100 hours is described. The considerable effect of the composition of the binder on the properties of the coating is demonstrated. Thus properties may be regulated by changing the composition of the binder. It was observed that the suitability of the binder cannot be esti-mated by considering data on wetting properties obtained by the drop-spilling method. More accurate information can be obtained by applying a mix of powdered glass on the surface of the sample and determining the wetting properties. The present investigations were necessary since literature data concerning protection of carbon-graphite products against corrosion at high temperature are patents, e.g., US patent 2449254, June 5, 1956, or West German patent 1009093, December 21,

Card 1/7

27064
S/080/61/034/003/004/017
A057/A129

Protection of carbon and graphite ...

1957, and do not contain any detailed information on the efficiency or composition of the described protective coatings, like data given by R. G. Higginbotham and M. Y. Kemp [Ref. 5: Ceram. Age. 71, 2, 28-31, 42 (1958)]. In the present experiments glass-silicide, glass-carbide and glass-carbide-silicide coatings were investigated, which were applied on various carbon and graphite samples (20 x 10 x 5 mm) with a porosity of 11 to 35%. The coating was prepared with molybdenum disilicide, silicon carbide (particle size 50-63) and vitreous binders of a different composition (Table 1). To improve the wetting of the surface with the mix, the samples were preliminarily prepared by vacuum-treatment at $1,100^\circ$ - $1,200^\circ$C or by rubbing with water. Since both treatments showed good results, the latter was used in the present experiments. The samples were first dried at 110 - 150°C and then sintered in an argon atmosphere at 1,200 - $1,600^\circ$C for 3-4 minutes. Three layers of the mix were applied and thus 0.1 - 0.2 mm protective coatings were manufactured. Heat-resistance of the latter was tested (by heating to 700 - $1,200^\circ$C for a certain time), as well as the coefficient of linear thermal expansion (measured at 20° - $1,000^\circ$C on a dilatometer), micro-structure (on a МИМ-6 (MIM-6) microscope), thermal stability (by thermal shock tests 20 - 1,200 - 20°C) etc. Compositions of the coatings and optimum sintering temperature are presented in Table 2. Glass-silicide coatings were applied on

Card 2/7

graphite samples of the type $\mathcal{H}\Gamma\text{-}2\mathcal{Y}$ (EG-2U) and a considerable effect of the composition of the mix on properties of the coating was observed. Thus a decreasing content of glass increased the thermal resistance and heat-resistance, but deteriorated adhesion of the coating on the sample. Thus coatings no. 1-3 showed low thermal and heat-resistance while coating no. 4 (containing only 10% less binder than no. 1) had 4-fold improved values of heat and thermal resistance, maintaining even the macrostructure of the covered sample after 100 hours holding time at 700°C. On the other hand coatings no. 18-23 did not adhere on the carbon-graphite samples, while coating no. 17 (having only 10% more binder than no. 18-20) showed good adhesion on the sample. In coatings no. 8, 12, 16 (containing 40-60% binder) formation of gas bubbles was observed after heat-resistance tests, while in no. 6, 20, and 14 no bubbles were detected. Best results were obtained with coating no. 6. In the microstructure of the latter a decrease of the $MoSi_2$ particle size from 50 - 63 to 4-6μ was observed after heat-resistance tests. Also the amount of the vitreous phase increased with the duration of the test. With coatings no. 4, and 6 good results were obtained on 18 different carbon and graphite types. No coatings with good properties were obtained with barium glass. $MoSi_2$ apparently reacts with the latter during sintering. For practical use coatings no. 6, 10, 14 were suggested by the authors, especially

Card 3/7

27064
S/080/61/034/003/004/017
A057/A129

Protection of carbon and graphite ...

no. 10 and 14 for higher temperatures. Determinations of the linear thermal expansion demonstrated that coatings with binders no. 238 and 366 have similar values (α = 597 - 6.62 $\cdot$ 10^{-6}) in spite of the different values of the binders (238 - α = 6.67 $\cdot$ 10^{-6}, and 366 - α = 3.88 $\cdot$ 10^{-6}). The high value of α for the binder no. 238 indicates a considerable content of non-vitrified quartz. Glass-carbide coatings no. 24-31 did not show any protective properties against oxidation for carbon and graphite at higher temperatures. Glass-carbide-silicide coatings no. 32-35 had properties better than the last-mentioned, but worse than glass-silicide coatings. Considering the considerable influence of the vitreous binders on the property of the coating, the wetting property of the binder was estimated by the drop-spilling method. Ball-shaped pieces (0.01 cm^3) of the investigated binder were placed on samples of EG-2V graphite, MoSi$_2$ and SiC$_2$ and heated in air or argon atmosphere to 1,500°C. The obtained results (Fig. 4) demonstrate no wetting ability of the binder no. 238, while barium glass showed good wetting on MoSi$_2$ and SiC$_2$. Since high-quality coatings were obtained with 238 binder while barium glass binders showed low properties, this test is insufficient. More accurate results were obtained by melting the powdered binder on the surface of the sample and estimating the formation of a thin glass film. These tests showed best results with binder 238 and 2010 being in agreement with the

Card 4/7

27064
S/080/61/034/003/004/017
A057/A129

Protection of carbon and graphite ...

protective property of coatings based on these binders. There are 4 figures, 3 tables and 8 non-Soviet-bloc references. The reference to the English-language publication reads as follows: R. G. Higginbotham and M. Y. Kemp, Ceram. Age, 71, 2, 28-31, 42 (1958).

ASSOCIATION: Institut khimii silikatov AN SSSR (Institute of Silicate Chemistry AS USSR)

SUBMITTED: July 8, 1960

Table 1: Composition of the vitreous binders
Table 2: Composition of the investigated coatings and sintering temperatures

Table 1: Т. 1.

Binder Сплава	Content of oxides Содержание окислов (вес. %) (%) by weight)										
	SiO₂	Al₂O₃	B₂O₃	TiO₂	ZrO₂	La₂O₃	CoO	BeO	BaO	ZnO	CaO
238	80	2.5	17.5	—	—	—	—	—	—	—	—
366	59	3	20	6	3	2	5	6	—	—	—
2010	48.5	31.5	—	—	—	—	20	—	—	—	—
Barium Бариевое glass стекло *containing 1 part by weight Co₂O₃	37.5	1.0	6.5	—	2.5	—	—	—	44	5	3.4

Card 5/7

SHAROV, A. ; SHIMKO, A.Ya.

Effect of ceramic metal fillers on the acid resistance of silicate enamels. Zhur. prikl. khim. 37 no.6:1210-1217 Je '64.   (MIRA 18:3)

1. Institut khimii silikatov AN SSSR.

L 52309-65   EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EWP(i)/EWP(v)/EPR/EPA(w)-2/T/EWP(t)/
EPA(bb)-2/EWP(b)   Pab-10/Pr-4/Ps-4/Pt-7   JD/WW/JG/RM/WH
ACCESSION NR: AP5008813   S/0080/65/038/003/0663/0664

AUTHOR: Sitnikova, A. Ya.

TITLE: Effect of cermet fillers on the properties of silicate enamels

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 3, 1965, 663-664

TOPIC TAGS: enamel, silicate, enamel filler, metallo-ceramic filler, bending
strength, thermal stability, enamel adhesion

ABSTRACT: This is the third in a series of articles on production of silicate
enamels with heat- and chemical-resistant cermet fillers. The effect of the con-
centration of various fillers on bending strength and thermal stability of silicate
enamel coatings on steel was studied. Ten and twenty per cent concentrations of
Si, Mo, Ti, Zr, SiO_2, TiO_2, ZrO_2, Cr_2O_3, and $MoSi_2$ were used. Ten, twenty, and
thirty per cent concentrations of TiB_2 and ZrB_2 were used. Incorporation of
metals and metal borides increases the bending strength of the enamel coatings by
a factor of 2 to 3. In the case of borides the bending strength increase is pro-
portional to the filler concentration. In the case of all metals but silicon the

Card 1/2

L 52309-65

ACCESSION NR: AP5008813

optimal filler concentration is between 10 and 20 per cent. Strength of coating
adhesion to metal base was tested on samples of enamel coatings 0.6 mm thick.
Samples were repeatedly heated to 300°C and quenched in water at 20°C. Metal and
metal boride as well as molybdenum disilicate fillers improve the enamel coating
adhesion to the steel base while larger quantities of oxides of titanium and
chromium do not improve adhesion. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: none

SUBMITTED: 08Jul64   ENCL: 00   SUB CODE: MT

NO REF SOV: 007   OTHER: 002

LL
Card 2/2

L 51449-65   EWT(d)/EWT(m)/EWP(w)/EPF(c)/EWA(d)/EWP(r)/T/EWP(t)/EWP(k)/
EWP(z)/EWP(b)/EWA(c)   Pf-4   M.W/JD/EM/HW/WB/EM

ACCESSION NR: AP5009675

UR/0135/65/000/004/0028/0031

621.791.856:669.15-194

AUTHOR: Livshits, L. S. (Doctor of technical sciences); Sitnova, M. V. (Engineer)

TITLE: Corrosion resistance of joints produced in steel 1Kh18N9T by carbon dioxide shielded welding

SOURCE: Svarochnoye proizvodstvo, no. 4, 1965, 28-31

TOPIC TAGS: steel piping, gas shielded welding, weld joint corrosion, corrosion resistance, stabilization annealed joint / 1Kh18N9T steel, Sv-08Kh18N9T welding wire, Sv-08Kh18N10B welding wire

ABSTRACT: The authors welded steel pipes (1Kh18N9T, diameter = 207-358mm, wall thickness=9-21 mm) in a carbon dioxide atmosphere, using welding wires Sv-06Kh18N-9T, Sv-08Kh18N10B and Sv-04Kh19N11M3, and tested the weld seams for corrosion stability after various types of thermal treatment (stabilization annealing, induction heating, etc). They relate the optimal Ti/C ratios in the various seam layers to welding conditions and indicate the optimal welding environment. It was found that Sv-08Kh19N10B wire, 1 mm in diameter, is best for carbon dioxide shielded welding and provides joints suitable for normal and high-temperature

Card 1/2

L 51449-65
ACCESSION NR: AP5009675   2

exposure in aggressive media. Stabilization annealing (850C, 3 hrs.) is recommen-
ded for operations above 350C. Joints obtained with Sv-06Kh19N9T wire are suitable
at temperatures above 300C only where a chemically aggressive environment is
absent, and should be stabilization annealed (850C, 3 hrs.) for low-temperature
operation in aggressive media. Orig. art. has: 4 tables and 4 figures.

ASSOCIATION: VNIIST

SUBMITTED: 00   ENCL: 00   SUB CODE: MM, IE

NO REF SOV: 003   OTHER: 000

cl.

Card   2/2

L 19051-65   EWP(e)/EPA(s)-2/EWT(m)/EPF(c)/EPF(n)-2/EPR/EPA(w)-2/EWP(t)/EPA(bb)-2/
EWP(b)   Pr-4/Ps-4/Pt-10/Pu-4/Pab-10   IJP(c)   WW/WH/JD/JG

ACCESSION NR: AP5000511   S/0080/64/037/011/2515/2517

AUTHOR: Appen, A. A.; Sitnikova, A. Ya.

TITLE: Effect of metalloceramic fillers on the alkali resistance of silicate enamels

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 11, 1964, 2515-2517

TOPIC TAGS: vitreous enamel, silicate enamel, enamel resistance, alkali-resistant
enamel, metalloceramic filler

ABSTRACT: A conventional silicate enamel to which up to 30% of molybdenum, titanium and
chromium silicides, molybdenum, titanium, zirconium and silicon borides, titanium,
zirconium, chromium and silicon oxides, and powdered silicon and zirconium had been
separately added was tested for alkali resistance by boiling in 10% NaOH. The resistance
was markedly increased by less than 10% metallic zirconium, somewhat improved by
zirconium boride, and slightly increased by ZrO2, Cr2O3 and increased by TiO2, while
the rest of the additives have no effect. Orig. art. has: 4 figures and 1 table.

ASSOCIATION: none

Card 1/2

ACCESSION NR: AP5000511

SUBMITTED: 31Dec63

NO REF SOV: 010

ENCL: 00

OTHER: 001

SUB CODE: MT

Card 2/2

L 15751-66   EWP(e)/EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b)   JD/GS/WH

ACC NR: AT5027953   SOURCE CODE: UR/0000/65/000/000/0170/0179

AUTHOR: Sitnikova, A. Ya.

ORG: none

TITLE: Glass-metal coatings

SOURCE: Seminar po zharostoykim pokrytiyam, Leningrad, 1964. Zharostoykiye pokrytiya (Heat-resistant coatings); trudy seminara. Leningrad, Izd-vo Nauka, 1965, 170-179

TOPIC TAGS: glass coating, metal coating, radiography, magnifying instrument, crystal lattice structure, X ray analysis, microscopy, glass to metal seal

ABSTRACT: Combined glass-metal coatings were produced and described by A. A. Appen and the author (ZHPKH, 37, No. 6, 1210, 1964). The results of X-ray and micro-scopic studies of the coatings made from silicate binder (metal: binder = 20:80) and metallic Cr, Si, Mo, Ti, and Zr powders are given in this work. The samples were baked at various temperatures in air and Ar atmosphere. A comparison of X-ray curves, taken by Cu-K α-radiation, showed a decrease in the intensity of

1/2

L 15751-66

ACC NR: AT5027953 _2_

the most characteristic lines of the metal-filler. The phase, formed after heat treatment, could be identified as oxides of the corresponding metals, but the lines (with lesser intensity) of the metals were always retained. The curves of samples baked in air and Ar were almost identical. This indicated that, (1) the oxidation of metals during baking occurred mostly by reaction of the metal with the binder and did not depend on the gas phase, and (2) the filler and binder reacted little with each other (only a surface disintegration of the binder was observed). Microscopic studies of the microstructure of coatings applied on steel St. 3 in air or Ar at 800, 850, 900, 950, 1050, and 1200C and at various exposure times showed that the intergrowth of filler particles (decomposition of the pyrosuspension) occurred in all samples at the above temperatures. A particle intergrowth was observed at 700C. Evidently a softening of the bond occurred at this temperature and a formation of the structure followed the pattern, causing sintering in the presence of the liquid phase. The etching of samples by a 5% alcohol solution of NHO$_3$ detected the presence of an intermediary layer between the steel and the coating in the samples baked in Ar and the absence of it in the samples baked in air. The weak reaction of the binder and the filler under optimal conditions of baking made possible the preservation in the coatings of the initial volumetric properties of the filler. It was thus possible to control the properties of the coatings by applying to them the valuable properties of the filler. Orig. art. has 1/2 4 figures.

SUB CODE: 11/ SUBM DATE: 20Jul65/ ORIG REF: 005/ OTH REF: 002   SYN

AUTHORS: Lopukhin, V.M., and Sitnikova, G.A.

TITLE: Calculation of the Power Produced by the Interaction
            Between an Electron Beam and the Field of a Delay System
            by Using the Approximation of the Given Field (Raschet
            moshchnosti vzaimodeystviya elektronnogo potoka s
            polem zamedlyayushchey sistemy v priblizhenii zadannogo
            polya)

ABSTRACT: The paper is concerned with a general solution of the
            problem of the interaction of an electron beam and an
            electromagnetic field of an arbitrary form. The field
            is represented as a sum of n harmonics which propagate
            at various phase velocities and whose amplitudes are
            increasing functions of the co-ordinates. It is
            assumed that the longitudinal component of the electric
            field is in the form of $E_x = E_1 F(\chi, t)$, where E_1 is the
            amplitude of the field while $F(\chi, t)$ is a given function
            of χ and t. The equation of motion of an electron can
Card 1/5   be solved by the method of successive approximations.

Calculation of the Power Produced by the Interaction Between an Electron Beam and the Field of a Delay System by Using the Approximation of the Given Field

From this it follows that the transit angle φ can be expressed by (in the first approximation):

$$\varphi = \varphi_0 - \varphi_\nu \sin(\omega t_0 + \chi_1) - \mu\omega^2 \int_{t-\frac{x}{\nu_0}}^{t} dt' \int_{t-\frac{x}{\nu_0}}^{t'} F\left[\chi_{00}(t'',t_0),t''\right] dt'' +$$

$$+ \ Q(\mu^2, \mu\nu, \nu^2) \quad (2)$$

where Q is a small parameter which can be neglected; $\varphi_0 = \omega x/\nu_0$, ν_0 is the direct component of the electron velocity, t_0 is the time of the entry of an electron into the interaction system and χ is initial phase of an electron. The current density can be expressed by:

$$j(x,t) = j_0 + j_0 \xi \sin(\omega t - \varphi + \chi_2) - j_0 \frac{\partial \varphi_1}{\partial \omega t}\bigg|_{\chi = \text{const}} \quad (4)$$

where j_0 is the direct component of the current density; ξ and ν are defined by Eq (1), where $j(o)$ and $\nu(o)$

Card 2/5

Calculation of the Power Produced by the Interaction Between an
Electron Beam and the Field of a Delay System by Using the
Approximation of the Given Field

denote the amplitudes of the current and velocity at the
input of the system. If $\varphi = \varphi_0 + \varphi_1$, on the basis of
Eq (2), φ_1 can be expressed by Eq (3). The average
power of the interaction can be evaluated from the
integral of Eq (5) or Eq (6) where $\mathcal{L}$ denotes the length
of the delay system. If the electric field E_x consists
of n harmonics, as expressed by the equation on page 220,
the transit angle φ and the alternating current density
component can be expressed by Eq (7) and (8) respectively.

$$\{P\} = P_\xi + P_\nu + P_\mu \qquad (9)$$

where P_ξ is expressed by Eq (10), P_ν is given by Eq (11)
and P_μ is expressed by Eq (12). P_ξ is the interaction
power due to the initial electron density modulation,
P_ν is the power due to the initial electron velocity
modulation and P_μ is the interaction power of a non-
modulated beam. If the travelling wave has a constant

Card 3/5   amplitude, the power components are expressed by Eq (13);

Calculation of the Power Produced by the Interaction Between an
Electron Beam and the Field of a Delay System by Using the
Approximation of the Given Field

the efficiency of the tube for this case can be expressed
by Eq (14). If the field increases as a function of the
co-ordinate, the power components in the k-th harmonic
are given by Eq (15) and the efficiency is defined by
Eq (16). The case of a field consisting of two
harmonics is analysed in detail and it is shown that P_μ
is given by Eq (17). If the field in the delay system
is in the form of:

$$E_x(X,t) = E_1 e^{\alpha X} \sin(\omega t - \beta X) + E_o$$

where E_o is a constant increment to the alternating
field, the transit angle φ is given by Eq (28) and the
average interaction power is expressed by Eq (29). The
effect of the additional field E_o on the output power is
illustrated in Fig 1. The field due to the space charge
can be found as a sum of the successive approximations
calculated from Eq (30) where ε_o is the permittivity.
Consequently, the corrected value of the current density

Card 4/5

SOV/109-59-4-2-9/27

Calculation of the Power Produced by the Interaction Between an
Electron Beam and the Field of a Delay System by Using the
Approximation of the Given Field

can be written as Eq (32), while the interaction power
is given by Eq (33). The effect of the space charge on
the interaction power is illustrated in Fig 2, where P_0
is the power obtained in the absence of the space
charge effect. There are 2 figures and 14 references
of which 13 are Soviet and 1 English.

SUBMITTED: 20th June 1957

Card 5/5

SITNIKOVA, G-A.

Disaggregating effect of trypsin preparations. M. D. Reznichenko and G. A. Sitnikova. *Biokhimiya*, 3, 102-9 (1938). The first 2 hrs of trypsin action on a 5% gelatin soln., at p_H 6.7, is not attended by an increase of free NH_2 groups, although the viscosity of the soln. is now only 15-20% of the initial value. The disaggregating effect period continues for 24 hrs, in the case of pancreatin.
                                                  H. Cohen

Lab. of Biochemistry, Tomsk medicine inst.

SITNIKOVA, G. A.

"The Effect of the Toxin of Cl. Perfringens on Carbohydrate Metabolism," G. A. Sitnikova, L'vov Inst of Epidemiol and Microbiol

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 1, P 80

When 5-6 Dlm of Cl. perfringens toxin have been introduced into the heart of guinea pigs, or 12-15 Dlm have been administered intravenously to rabbits, a sharp increase of the lactic acid content in blood (by 90 to 44%) is brought about. The sugar content in blood remains near the normal level unless

the animals die quickly; then it increases in the case of rabbits and drops in the case of guinea pigs. Catalase activity is reduced after the injection of the toxin.

241T24

241T24

SITNIKOVA, G.A.

Capacity of blood serum to fix iron in patients with aplastic
anemia. Sbor. trud. L'vov nauch.-issl. inst. perel. krovi i
neotlozh. khir. no.4:71-75 '60   (MIRA 16:12)

SITNIKOVA, G.A.; VYGOVSKAYA, Ya.I.

    Functional state of the adrenal glands in hypoplastic and
aplastic anemias and leukemias. Sbor. trud. L'vov. nauch.-
issl.inst. perel. krovi i neotlozh. khir. nc.4: 100-109 '60
                                  (MIRA 16:12)

SITNIKOVA, G.A.

Serum iron and bilirubin in patients with aplastic anemia.
Sbor. trud. L'vov. nauch.-issl. inst. perel. krovi i ne-
otlozh. khir. no.4:126-131 '60   (MIRA 16:12)

SITNIKOVA, G.A.; SIMBIRTSEVA, G.D.

Amino acid composition of blood plasma and erythrocytes in hypo-
and aplastic states. Gemat. i perel. krovi 1:180-182 '65.

(MIRA 18:10)

1. L'vovskiy institut perelivaniya krovi.

ACC NR₁ AP6030289   SOURCE CODE: UR/0240/66/000/008/0081/0082

AUTHOR: Sitnikova, G. M.

ORG: Donets City Epidemiological Station (Donetskaya gorcdskaya sanepidstantsiya)

TITLE: Intestinal infections among adults and means of their transmission

SOURCE: Gigiyena i sanitariya, no. 8, 1966, 81-82

TOPIC TAGS: colitis, disease transmission, disease diagnosis, diagnostic medicine,
INTESTINAL DISEASE , CLINICAL MEDICINE

ABSTRACT: Mild and temporary (8—10 hrs) gastrointestinal illnesses among
35% of a group of adults under normal nutritional conditions
were diagnosed as colitis. The illness was characterized by
flatulence, abdominal pain, and soft stools; raised temperature,
nausea, vomiting, cramps, and other symptoms were not noted.
The incubation period was 3 1/2 to 12 1/2 hrs. Only those who
ate meat salad with mayonnaise were ill. Laboratory investigations
consisted of washings from the food preparation and distributing
units; feces examination of those with and without symptoms,
workers in the food preparation unit, and all serving personnel;
nasopharynx washings for virological tests; blood tests; and
nine tests of food products in the kitchen and storeroom. Patho-
genic 0-127 serological type intestinal bacillus was isolated

Card 1/2   UDC: 616.981.48-022.38

ACC NR: AP6030289

from feces of 52% of the subjects (3 workers in the food prepara-
tion unit and storeroom, 2 distributors, and 2 servers), 2 washings
from the hands and clothing of workers in the food preparation
unit, washings from the kitchen table, and tests of sour cream
and raw fish. Paratyphoid dysentery, and other anaerobic microbes
were not found. The isolated staphylococcal strains did not give
hemolytic reactions in agar precipitation, hemagglutination or
blood culture tests. The 0-127 serological type intestinal
bacillus was not isolated during 2 weeks of repeated tests. Raw
products (meat) were probably the infectious source. High air
temperature (35°C in the food preparation unit) contributed to
an increase of microbes.   [WA-50; CBE No. 12]

SUB CODE: 06/ SUBM DATE: 23Dec65/

Card 2/2

LOPUKHIN, V.M.; SITNIKOVA, G.S.

Calculation of the interaction power of an electron flow with the
field of a retarder system at the approximation of a given field.
Radiotekh. i elektron. 4 no.2:218-227 F '59.   (MIRA 12:2)
        (Electric fields)   (Microwaves)

SITNIKOVA, G.T.

Main symptoms of alimentary toxic aleukia caused by Fusarium
sporotrichioides. Trudy Vses. ob-va fiziol., biokhim. i farm.
4:167-168 '58.   (MIRA 14:2)

1. Kafedra farmakologii Izhevskogo meditsinskogo instituta
(zav. kafedroy dotsent A.K. Pukhidskiy).
                    (FUSARIUM) (ANEMIA)

PUKHIDSKIY, A.K.; SITNIKOVA, G.T.

Reactivity of the organism to acute experimental alimentary
toxic aleukia in dihydroergotexine. Trudy Izhev.gos.med.inst.
21:60-63 '64.
(MIRA 19:1)

1. Kafedra farmakologii (zav. - prof.A.K.Pukhidskiy) Izhevskogo
meditsinskogo instituta.

SIN'KOV, V.M., kand.tekhn.nauk; ZAKIDAL'SKIY, A.I., inzh.; ZASENKO, V.L., inzh.; SITNIKOVA, I.A., inzh.; FOL'KMAN, K.Yu., inzh.; KHOLMSKIY, D.V., inzh.

Computers for calculating the most favorable distribution of active loads in composite electric power systems. Avtom.i prib. no.2: 126-138 '61.
(MIRA 14:12)
(Electronic analog computers) (Electric power distribution)

LAPSHIN, V.V.; SITNIKOVA, I.V.; RYABCHENKOV, V.N.; LIKHOBABENKO, A.P.;
        Prinimali uchastiye: FEDOROVA, N.M.; LASTOVA, N.A.; OSIPOVA,
        A.P.; KOZ'MINA, N.M.

        Effect of the degree of branching of high density polyethylene
        on the mechanical properties of tubes produced by extrusion.
        Plast. massy no.5:22-26 '65.   (MIRA 18:6)

SITNIKOVA, L.G.

Oribatid mites (Acariformes, Oribatei) of Ryazan Province [with summary in English]. Paras. sbor. 18:163-175 '58.

(MIRA 12:3)

1.Zoologicheskiy institut AN SSSR.
(Izhevskoye District--Mites)
(Shileve District--Mites)

SITNIKOVA, L. G.

"The Seasonal Dynamics of Wood Mites."

Tenth Conference on Parasitological Problems and Diseases with Natural
Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of
Sciences, USSR, Moscow-Leningrad, 1959.

Zoological Institute, USSR Academy of Sciences (Leningrad)

SITNIKOVA, L.G.

Life cycle of some oribatid mites and methods of cultivating them.
Zool. zhur. 38 no.11:1663-1673 N '59   (MIRA 13:3)

1. Zoological Institute of the Academy of Sciences of the U.S.S.R.,
Leningrad.
          (Mites)

SITNIKOVA, L.G.

Prelarvae of oribatid mites. Paraz.sbor. 19:220-236 '60.
(MIRA 13:8)

1. Zoologicheskiy institut Akademii nauk SSSR.
(Mites) (Insects--Development)

SITNIKOVA, L.G.

Vertical distribution and variations in the abundance of oribatid
mites in turf-Podzolic soils in the environs of Leningrad. Paraz.
sbor. 20:283-298 '61.   (MIRA 14:9)

1. Zoologicheskiy institut AN SSSR.
    (LENINGRAD PROVINCE--MITES)   (SOIL FAUNA)

SITNIKOVA, L.G.

Short survey of oribated mites (Acariformes, Oribatei) of Lenin-
grad Province. Trudy Zool.inst. 31:429-452 '62.   (MIRA 16:1)
(Leningrad Province--Mites)

SITNIKOVA, L.G.

Vertical distribution and quantitative fluctuations of oribatid mites in the turf-Podzolic soils of the Leningrad region. Report No.2: Forest associations. Paraz. sbor. 21:83-95 '63.   (MIRA 17:4)

1. Zoologicheskiy institut AN SSSR.

ACC NR: AT7004524

SOURCE CODE: UR/2563/66/000/268/0078/0088

AUTHOR: Korobkov, A. V.; Lapkin, D. T.; Sitnikova, L. I.; Khoroshaylov, V. G.

ORG: Leningrad Polytechnical Institute (Leningradskiy politekhnicheskiy institut)

TITLE: Concerning the improved properties of dispersion hardening heat-resistant alloys and steels

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy, no. 268, 1966. Metallovedeniye (Metal science), 78-88

TOPIC TAGS: heat resistant alloy, heat resistant steel, metal heat treatment, high temperature strength, aging process, dispersion hardening, metal aging

ABSTRACT: The effects of heat treatment on the mechanical properties of the heat-resistant alloys EI437BU and EI617, as well as the steel EI787, were studied. Samples of EI437BU and EI787 were cut from billets, and forgings of turbine discs and buckets. The alloy EI437BU was given two types of heat treatments: (1) air quenching after 8 hrs at 1080°C + aging for 16 hrs at 750°C and air cooling, (2) just aging for 16 hrs at 750°C. Tensile and impact testing were done at room temperature, 500, 600, and 700°C. Creep testing was done at 600, 700, and 750°C. Treatment #2 raised the strength, ductility, and impact resistance above that for #1 by as much as 10%. The creep resistance of #1 at 600°C and 70 kg/mm² was higher than for #2, but at 700 and

Card 1/2

ACC NR: AT7004524

75 0°C the creep resistances were similar. Annealed and cold worked (30 and 65% deformation) rods of EI617 were also given two heat treatments: (1) air quenching after 2 hrs at 1190°C + air quenching after 4 hrs at 1050°C + aging at 800°C for 16 hrs and air cooling, (2) just aging at 800°C for 16 hrs and air cooling. Room temperature tensile data and stress rupture data at 550 and 600°C were given. Again higher strength, ductility, and creep resistance resulted from #2. Similar conclusions were obtained for EI787 steel. Macrostructures of the three materials showed that after #1 a nonuniform grain distribution resulted, while #2 gave a fine-grained homogeneous structure. The dislocation arrangements occurring after the different heat treatments were discussed. Higher strengths resulted because of greater dislocation density. The plasticity was correlated with dislocation mobility. Orig. art. has: 6 tables, 2 figures.

SUB CODE: 11/   SUBM DATE: none/   ORIG REF: 003

Card 2/2

ACC NR: AT7004525   SOURCE CODE: UR/2563/66/000/268/0089/0096

AUTHOR: Korobkov, A. V.; Lapkin, D. T.; Sitnikova, L. I.; Khoroshaylov, V. G.

ORG: Leningrad Polytechnical Institute (Leningradskiy politekhnicheskiy institut)

TITLE: The effect of holding time at high temperatures on the properties of economical grades of heat-resistant steel

SOURCE: Leningrad. Politekhnicheskiy institut. Trudy, no. 268, 1966. Metallovedeniye (Metal science), 89-96

TOPIC TAGS: austenitic steel, stainless steel, boron steel, heat resistant steel, heat treatment, aging process, high temperature steel, impact strength, metallographic examination, metal aging

ABSTRACT: A study was done on the effects of aging EI696 and EI696A austenitic steels up to 500 hrs at 600 and 650°C. Also studied were the effects of reheating to 700 and 750°C after the first aging treatment, and the influence of boron additions. Four heats of steel were made having the following compositions: 0.06-0.08% C, 0.32-0.85% Mn, 0.31-0.82% Si, 11.24-11.77% Cr, 18.25-20.1% Ni, 2.66-3.08% Ti, 0.26-0.50% Al, nil--0.015% B, 0.005-0.012% S, and 0.016-0.06% P. Rod samples were heated to 1170°C, held for 2 hrs, air cooled, reheated to 750°C for 16 hrs, and air cooled. Aging was done by heating to 600 or 650°C for 16, 100, 200, and 500 hrs. Some samples were aged again

Card 1/2

ACC NR: AT7004525

at 700 or 750°C for 16 hrs. Tensile testing was done at room temperature and at 600,
650, and 700°C. Impact resistance was measured at room temperature and a metallo-
graphic examination of the heat treated samples was made. The aging treatment at 600
and 650°C for 100-500 hrs changed the mechanical properties: the tensile strength in-
creased by 10-15% and impact strength decreased by 25-50%. A recovery of properties
in EI696 and EI696A occurred after reheating to 750°C and holding for 16 hrs. A eu-
tectic phase developed in EI696 containing 0.015% B which segregated at the grain
boundaries and caused the greatest change in mechanical properties. In the low boron
steels, $Ni_3(Ti, Al)$ caused strengthening after aging at 600 and 650°C. The restora-
tion of mechanical properties by reheating to 700 and 750°C was caused by resolution
of the $Ni_3(Ti, Al)$ phase. Orig. art. has: 3 figures, 4 tables.

SUB CODE: 11/   SUBM DATE: none

Card 2/2

PARFENOVA, A.I.; SITNIKOVA, L.V.; TSYGANKOVA, A.D.; KARAKISHISHEVA, T.I.

Combined method for obtaining aureomycin and vitamin B_{12}. Med. prom. 11 no.8:10-12 Ag '57.   (MIRA 10:11)

1. Moskovskiy zavod meditsinskikh preparatov No.1.
    (AUREOMYCIN)   (VITAMINS - B)

SITNIKOVA, M.I.

Influence of the central nervous system on the effects of pessimum inhibition in the myoneural synapse. Vest. LGU 15 no.21:150-158
'60.
                                              (MIRA 14:4)
        (Inhibition)   (Nervous system)

CHERNOV, K.

...fluence of the central nervous system on the personal reaction of my injured function. Vest. 100 19 n.5.9.26-8) '54.   (MIRA 17:1)

SITNIKOVA, M. M. (Veterinarian)

        "Clinic, treatment and prophylaxis of preventriculosis of cattle."

SO: Vet. 28 (9), 1951, p. 50

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Radiation balance at some points in Central Asia. Sbor.rab.
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(Soviet Central Asia—Solar radiation)

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    Straight radiation in Central Asia. Trudy Sred. -Az. nauch.-
issl. gidrometeor. inst. no.11:17-26 '63.

    Long-wave balance of some underlying surfaces. 41-53
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Albedo of some underlying surfaces. Trudy Sred.-Az.nauch.-issl.
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Monthly amount of the total and diffuse radiation in Central Asia.
Trudy Sred. - Az.nauch.-issl. gidrometeor. inst. no.16:41-49 '63.
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Results of measurements of the albedo of various underlying surfaces.
Trudy Sred.-Az.nauch.-issl. gidrometeor. inst. no.18:56-58 '64.
(MIRA 17:10)

L 44147-66 EWT(1) GW

AUTHORS: Lyapina, O. A.; Sitnikova, M. V.

ORG: none

TITLE: Intensity of direct solar radiation over Tashkent on smoggy days and on days of maximum visibility,

TOPIC TAGS: atmosphere, atmospheric contamination, solar radiation absorption

ABSTRACT: The extent of absorption of direct solar radiation by atmospheric dust was investigated. The investigation was carried out in the city of Tashkent over the period from 1960 to 1962. The experimental results are summarized in graphs and tables (see Fig. 1). The data of N. N. Kalitin (O maksimal'nykh velichinakh napryazheniya solnechnoy radiatsii. DAN SSSR. t. 52, No. 4, 1946) were used as standards for 100% transparency, The loss of solar energy by water vapor absorption was corrected for, using the Möller method
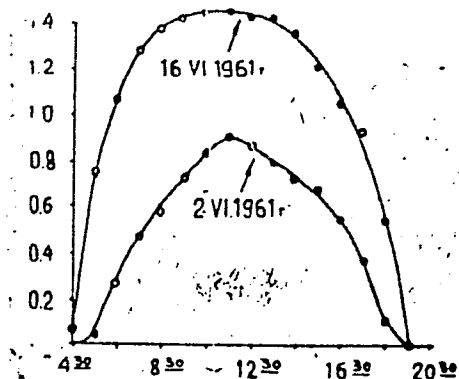
$$S_w = 0,172 (mw)^{0,303}$$

where S_w is the amount of direct solar radiation absorbed by water vapor, m — the

Card 1/2

ACC NR: AT6018243

Fig. 1. Daily change in the intensity of
direct solar radiation on a day with maximum
visibility—16/VI—1961 and on a smoggy day—
2/VI—1961. Abscissa: true solar time;
Ordinate: intensity of direct solar radiation
in cal cm^{-2} sec^{-1}.

mass of the atmosphere in the direction of the sun, approximately equal to sec θ
(here θ is the zenith angle, and ω_{oo} is the amount of water vapor in grams
contained in a column of 1 cm^2 base of the atmosphere). It is concluded that on
dusty days part of the solar radiation is absorbed by the dust. Orig. art. has:
3 tables and 1 graph.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 001

Card 2/2 hs

L-59518-65   EWT(1)/FCC/EWG(v)/EEC-4/EWA(h)'   Po-4/Pe-5/Pq-4/Pae-2/Peb/Pi-4
ACCESSION NR: AP5019318 GW   UR/0377/65/000/002/0035/0037

AUTHOR: Sitnikova, M. V.

TITLE: Ultraviolet radiation in Central Asia

SOURCE: Geliotekhnika, no. 2, 1965, 35-37

TOPIC TAGS: ultraviolet solar radiation, ozone, terrestrial atmosphere, aerosol, water vapor, sea level

ABSTRACT: Much ultraviolet, solar, downwelling radiation is absorbed by ozone in the terrestrial atmosphere. This type of radiation is investigated in the territory of Central Asia taking into consideration the absorption by water vapor and aerosols. Data of 19 radiation stations concerned with the spectral wavelengths from 2900 to 3800 Å were processed and the numerical values given in a table. Data were taken with the sun at a height 60° above the horizon because in the hours before and after noon, the solar radiation has the most ultraviolet rays. The intensity of the ultraviolet radiation depends upon the height of the station above sea level and the dust content and water vapor in the atmosphere. The downwelling radiation is strong in Central Asia in winter and weak in summer. Orig. art. has: 2 tables and 1 formula.   [EG]

Card 1/2

L 59518-65

ACCESSION NR: AP5019318

ASSOCIATION: Sredneaziatskiy n.-i. gidrometeorologicheskiy institut (Hydrometeoro-
logical Scientific Research Institute of Central Asia)

SUBMITTED: 23Nov64   ENCL: 00   SUB CODE: ES,AA

NO REF SOV: 003   OTHER: 000   ATD PRESS: 4054

Card 2/2

L 60996-65   E'/T(1)/E'iG(v)/FCC   Pe-5/P1-4   G'i

ACCESSION NR: AP5018703   UR/0050/65/000/008/0007/0012
                                                   630.551.521

AUTHORS: Belyayeva, I. P.; Rachkulik, V. I.; Sitnikova, M. V.

TITLE: The connection between the coefficient of brightness in a soil-vegetation system and the amount of vegetation

SOURCE: Meteorologiya i gidrologiya, no. 8, 1965, 7-12

TOPIC TAGS: brightness, soil, photometry, reflected radiation

ABSTRACT: An attempt has been made to discover the relationship between the coefficient of brightness in a soil-vegetation system and the amount of vegetation, considering the optical properties of the components of the system. The coefficient of brightness was measured by means of a tubular photometer with a view angle of 35°. Measurements were made normal to the surface, and sand, spread in an even layer on plywood, was used as a standard. The procedure involved measurement of the brightness of the standard, then the brightness of a selected segment of soil-vegetation, and then the standard again, repeated 3-4 times. The plant mass was then removed and weighed accurately (accuracy of ± 0.1 g). Types of vegetation included desert plants, pasture plants, wheat, and cotton (in both
Card 1/3

L 60996-65

ACCESSION NR: AP5018703

green and leafless states). It was found that the coefficient of brightness depends on amount of green material. In the soil-grass system, the coefficient of brightness depends little on the height of the sun from 28 to 68°. When the amount of green material is slight (up to 2000-2500 kg/hectare), the coefficient of brightness changes almost linearly with increase in green material. With further increase in green material the linear relation is disturbed, and, beginning at 5500-6000 kg/hectare, the coefficient remains practically constant for all amounts. For raw cotton, the coefficient increases linearly with increase in cotton from 400 to 3600 kg/hectare. The coefficient is not affected by the amount of cotton for amounts less than 400 kg/hectare. When the difference in reflecting properties between soil and the particular vegetation is rather large, the connection between coefficient of brightness and amount of vegetation may be satisfactorily expressed by

$$R(m,p) = \frac{R(\infty)[R(\infty)R(0)-1]+[R(\infty)-R(0)]e^{-\alpha Em}}{[R(\infty)R(0)-1]+R(\infty)[R(\infty)-R(0)]e^{-\alpha Em}}$$

where m is the amount of vegetation per unit area, R(0) is the reflectance of the soil, R(∞) is the reflectance of the plant cover, α is a constant characterizing

Card 2/3

L 60996-65
ACCESSION NR: AP5018703

the particular kind of vegetation, and

$$E = \frac{1 - R^2(\omega)}{R(\omega)}$$

Orig. art. has: 3 figures, 4 tables, and 2 equations.

ASSOCIATION: Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut (Central Asian Scientific Research Hydrometeorological Institute)

SUBMITTED: 09Apr65   ENCL: 00   SUB CODE:

NO REF SOV: 010   OTHER: 000

Card 3/3