

84917

S/096/60/000/011/003/018
E073/E135

Increasing the Power of a Gas Turbine Installation by Injecting Water into the Combustion Chamber

the drop in temperature t_1 in the case of a constant power output (idling, nominal r.p.m.) as a function of the amount of water injected into the combustion chamber.

There is 1 figure.

ASSOCIATION: Nevskiy mashinostroitel'nyy zavod
(Nevsk Engineering Works)

X

Card 3/3

26530
S/114/61/000/009/001/002
E194/E455

26.2124

AUTHORS: Kuznetsov, L.A., Candidate of Technical Sciences
Kuznetsov, A.L., Engineer

TITLE: The influence of cooling on gas turbine characteristics

PERIODICAL: Energomashinostroyeniye, 1961, No.9, pp.5-8

TEXT: Gas turbine performance is improved by raising the inlet gas temperature which, in modern gas turbines, is 650 to 825°C. To achieve these temperatures the blading is made of expensive scarce material or cooling is used. Cooling complicates construction and gives rise to additional losses but reduces the demand for expensive scarce material or permits of higher gas temperature. Significant temperature increase can only be secured by cooling all the parts of the flow path including the blading. Cooling gives rise to additional losses because: the gas temperature is reduced and so it can do less work; the cooling agent (air) must be compressed; regenerative air heating is reduced because the gas is cooled more in the turbine. Other minor causes are enumerated. The balance of advantage is assessed by comparing cooled and uncooled turbines. For

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X

26530
S/114/61/000/009/001/002
E19 1/4/E455



The influence of cooling on gas ...

purposes of analysis, it is assumed that the metal is cooled to a more or less uniform temperature throughout the flow path and that this temperature is lower than the gas temperature. Theoretical expressions are then derived from which the exhaust gas temperatures in cooled and uncooled turbines can be calculated and these and other expressions are used to calculate the various power losses due to cooling enumerated above. For concreteness, a numerical analysis is made of cooling losses in gas turbines in the 3 to 12 MW range with the following methods of cooling:

1) liquid screen cooling of rotor discs, as described by G. Fusner (Ref. 6: Mechanical Engineering, 1950, N 4); 2) air cooling of rotor as by blowing air through blade roots; 3) cooling of rotor and blades by circulating a cooling liquid. The blade speed at the root diameter is taken to be 180 m/sec and the stage heat drop is 17.5 kcal/kg. Other design details are given. The cooled metal temperature is taken as 500°C to permit the use of pearlitic steel. The maximum cooling air temperature is 400°C. The calculations admittedly underestimate the cooling losses. Fig. 2 shows graphs of turbine characteristics as functions of gas temperature, namely the efficiency η_g , the relative useful power delivered ψ and the specific gas consumption G_{sp} .

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26530

S/114/61/000/009/001/002

E194/E455

The influence of cooling on gas ...

The dotted lines correspond to no cooling; the numbers against the other curves correspond to the cooling methods enumerated above. Further data are given for power loss and for losses specific to air cooling. The following conclusions are then drawn; all kinds of cooling appreciably reduce the efficiency but losses with screen cooling are much less than with air. If the savings in turbine manufacturing costs are set off against extra fuel and air consumption, it is found that air cooling is unprofitable, although it may still be needed in some cases to improve starting and operating conditions. Liquid cooling, even of runner blades alone, gives still greater losses which are not covered by the savings in construction costs. Screen cooling combined with partial air cooling is thus the most promising for gas turbines of medium output. Air should mainly be used to prevent leakage of gas through the labyrinth glands and only incidentally for cooling. There are 4 figures and 6 references: 5 Soviet and 1 non-Soviet. The reference to an English language publication reads as follows: G.Fusner, Mechanical Engineering, 1950, N 4. X

Card 3/4

KUZNETSOV, A. I.

Experimental study of heat transfer from a rotating disk in
free space. Trudy LKI no.38:183-186 '62. (MIRA 16:7)

1. Kafedra sudovyykh parovykh kotlov Leningradskogo korablestroitel'-
nogo instituta.

(Disks, Rotating) (Heat—Transmission)

BR

ACCESSION NR: AP4041637

S/0114/64/000/006/0008/0011

AUTHOR: Kuznetsov, A. L. (Candidate of technical sciences); Sudarev, A. V. (Engineer)

TITLE: Aerodynamics and heat transfer of a flat turbulent jet spreading along a plane surface

SOURCE: Energomashinostroyeniye, no. 6, 1964, 8-11

TOPIC TAGS: gas turbine, gas turbine plant, gas turbine cooling

ABSTRACT: Formulas and graphs are presented for approximating the width of the boundary (near-wall) layer, length of initial section, heat-transfer coefficient, and velocity distribution in the boundary and free-turbulence zones. Laminar and transition sections of the boundary layer are neglected. The case of a semi-constrained jet in a cumulative stream and of a submerged jet are considered. Published data is used throughout and compared with some experimental results

Card 1/2

ACCESSION NR: AP4041637

obtained by the authors. Orig. art. has: 6 figures, 14 formulas, and 1 table.

ASSOCIATION: none

SUBMITTED: 00

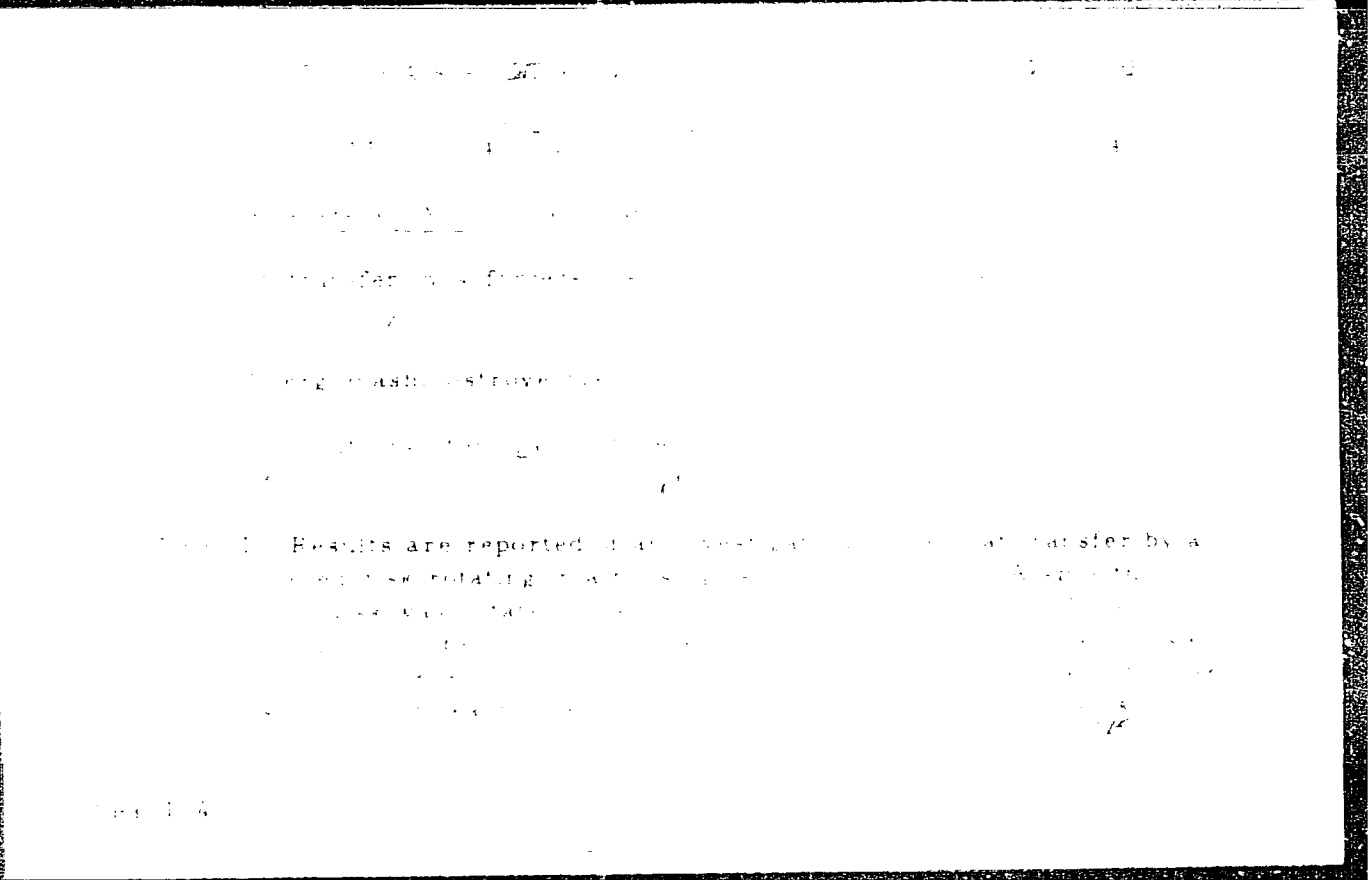
ENCL: 00

SUB CODE: FR

NO REF SOV: 003

OTHER: 007

Card 2/2



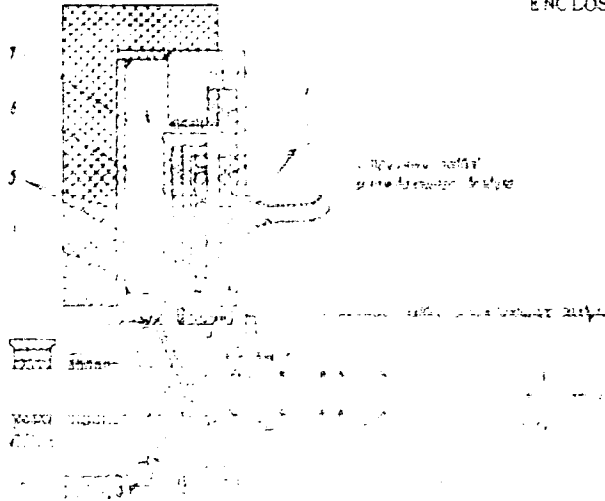
... (NK) APS972224

... cooling air was forced through nozzles of various number and size
... experiments ...
...
... experiments ...
many nozzles with each diameter half as large results in a heat transfer 1.355
... this favorable trend ...
... and 20 formulas.

... (NK) Nevskiy Mashinostroyeniya (Mashinostroeniya) (Machinobuilding Plant)

ACCESSION NR: AP5002224

ENCLOSURE: 01

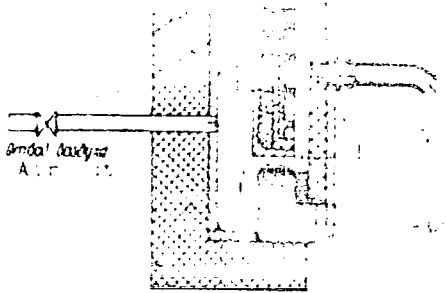


continued to Enclosure 02

Card 1 4

REF ID: A6500224

ENCLOSURE 02



KUZNETSOV, L.A., dktor tekhn. nauk; BOGORADOVSKIY, G.I., inzh.;
KRINSKIY, A.A., inzh.; KUZNETSOV, A.L., kand. tekhn. nauk;
MAL'TSUROV, I.I., inzh.

Principal results of the tests of an experimental industrial
GT-750-6 gas turbine system. Energomashinostroenie 11 no.5:
1-4 My '65. (MIRA 18:6)

L 27934-66 EWP(f)/EPF(n)-2/T-2/ETC(m)-6 WW

ACC NR: AP6017727

SOURCE CODE: UR/0114/65/000/005/0001/0004

AUTHOR: Kuznetsov, L. A. (Doctor of technical sciences); Bogoradovskiy, G. I. (Engineer); Krinskiy, A. A. (Engineer); Kuznetsov, A. L. (Candidate of technical sciences); Mal'tsurov, I. I. (Engineer)

ORG: none

TITLE: Basic results of tests on an experimental-industrial sample of the GT-750-6 gas turbine unit of NZL

SOURCE: Energomashinostro... no. 5, 1965, 1-4

TOPIC TAGS: gas turbine, industrial blower, gas flow/GT-750-6 gas turbine, 370-12-1 industrial blower

ABSTRACT: This paper describes tests on the GT-750-6 gas turbine unit designed and built in 1963-1964 at NZL (Navskiy Machine-Building factory) and intended to drive a 370-12-1 centrifugal blower at the pumping stations of gas mains.

Some of the constants of the gas turbine are: Temperature of the gas ahead of the high pressure turbine 750° C; power at the blower coupling 6000 kw; fuel consumption 1.93 tons/hr; rpm of main shaft 9,600; degree of regeneration 0.70; efficiency of the unit 27.0%; gas flow through the turbine 190 tons/hour. The paper gives curves of temperatures, pressures, efficiencies and outputs for various operating conditions. Orig. art. has: 6 figures and 7 formulas. [JPRS]

SUB CODE: 13, 20 / SUBM DATE: none / ORIG REF: 002

Card 1/1

UDC: 621.438.001.45

L-04063-67 — EWP(h)/EWT(d)/EWT(m)/T-2

ACC NR: AP6027315

SOURCE CODE: UR/0114/66/000/005/0001/0006

AUTHOR: Kuznetsov, A. L. (Candidate of technical sciences)

ORG: none

TITLE: Experimental and calculated characteristics of gas turbines

SOURCE: Energomashinostroyeniye, no. 5, 1966, 1-6

TOPIC TAGS: gas turbine

, turbine design/GT-700-5 gas turbine,

GT-700-12 gas turbine

ABSTRACT: The article reports the results of a comparison of the experimental and calculated characteristics of gas turbines Types GT-700-5 and GT-700-12, made by the Nevskiy Machine Construction Plant.

The calculations are based on the results of tests using model stages and calculation for the flow through section of gas turbines, using the efficiency η'_u which is found from the expression:

$$\eta'_u = \eta'_\infty (1 - \mu) = \frac{h_1}{h_0} = f\left(\frac{u_1}{c_0}\right). \quad (1)$$

Here η'_∞ is the efficiency of the central portion of the flow, not including end effects; μ is the sum of the end losses and the loss due to flow through radial gaps; h_1 is the pressure drop used; h_0 is the

Card 1/2

UDC: 66-971.621.438.001.5

L 04063-67

ACC NR: AP6027315

drop with respect to the statistical parameters. Results for the two types of turbine are shown in tabular form. The article proceeds to calculation of the discharge characteristics of the two turbines, and the results are shown in a series of curves. Orig. art. has: 6 figures and 1 table.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 007

kh

Card 2/2

KUZHETSOV, A.M.

Braking the shuttle on a mechanical underpick loom. Tekst.prom. 14
no.9:21-26 S '54. (MLRA 7:11)

1. Master tkatskogo proizvodstva Ivanovskoy fabriki im. Dzerzhinskogo.
(Looms)

KUZNETSOV, A.M.

Shuttle braking on a mechanical loom with under-pick motion. Tekst.
prom.14 no.12:25-28 D'54. (MLRA 8:2)

1. Master tkatskogo proizvodstva Ivanovskoy fabriki im.Dzerzhinskogo.
(Looms)

KUZNETSOV, A.M.

Filling yarn contraction at the edge of the fabric. Izv.vys.-
ucheb.zav.; tekhn.tekst.prom. no.4:61-65 '61. (MIRA 14:9)

1. Ivanovskiy tekstil'nyy institut im. M.V.Frunze.
(Weaving)

KUZNETSOV, A.M.

Tension of the wrap in beating-up during the process of
linen-weave fabric formation. Izv.vys.ucheb.zav.; tekhn.
tekst.prom. no.5:78-88 '61. (MIRA 14:11)

1. Ivanovskiy tekstil'nyy institut imeni M.V. Frunze.
(Weaving)

L 24622-66 EWT(1)/EWT(m)/EPF(n)-2/EWP(j)/T/ETC(m)-6 IJP(c) GG/RM/WW

ACC NR: AP6012436 (A) SOURCE CODE: UR/0364/65/001/012/1434/1442

AUTHOR: Dogonadze, R. R.; Kuznetsov, A. M.; Chernenko, A. A.

ORG: Institute of Electrochemistry, Academy of Sciences, SSSR (Institut elektrokhimii Akademii nauk SSSR)

TITLE: Theory of low-energy electrons in liquids

SOURCE: Elektrokimiya, v. 1, no. 12, 1965, 1434-1442

TOPIC TAGS: electron mobility, polar crystal, liquid property, high temperature effect, low temperature effect, temperature dependence, electric conductivity

ABSTRACT: Recent data are given from the theory of electron mobility in polar crystals as a basis for explaining the physical mechanism responsible for electrical conductivity in liquids. The theory of electron mobility in polar liquids is qualitatively analyzed with no attempt to derive any new formulas. The problem of electron mobility in nonpolar liquids is studied in greater detail since there is no satisfactory theory for this case at the present time. A qualitative model is proposed for the structure of the electron energy spectrum in a nonpolar liquid and analytical expressions are derived for electron mobility as a function of temperature in this case. It is shown that the temperature dependence of electron mobility in nonpolar liquids is qualitatively similar to the case of small-radius polarons in polar liquids. At

UDC: 541.13 + 541.15

Card 1/2

I. 24622-66

ACC NR: AP6012436

low temperatures, dispersion increases with temperature while the probability of electron migration decreases, which reduces mobility. On the other hand, mobility should increase with temperature when dispersion is high. We are grateful to corresponding member AN SSSR V. G. Levich for constant interest in the work, as well as to V. L. Bonch-Bruyevich, V. V. Tolmachev and Yu. A. Chizmadzhev for numerous discussions. 4

Orig. art. has: 2 figures, 29 Formulas.

SUB CODE: 07/

SUBM DATE: 04Aug65/

ORIG REF: 013/

OTH REF: 009

Card 2/2 PB

DOGONADZE, R.R.; KUZNETSOV, A.M.; CHIZMADZHEV, Yu.A.

Kinetics of some heterogeneous reactions at the semiconductor -
electrolyte interface. Zhur. fiz. khim. 38 no.5:1195-1202
My '64. (MIRA 18:12)

1. Institut elektrokhemii AN SSSR. Submitted June 8, 1963.

RYZHIKIN, V.Ya., doktor tekhn. nauk; KUZNETSOV, A.M., inzh.

Determination of a relative change in the efficiency of a steam turbine system using an equivalent heat drop method. Teploenergetika 12 no.6:51-55 Je '65. (MIRA 18:9)

1. Moskovskiy energeticheskiy institut.

KUZNETSOV, A.M., inzh.

Analysis of changes in the network of a turbine unit with intermediate steam superheating. Teploenergetika 12 no.7:66-69
Jl '65. (MIRA 18:7)

1. Moskovskiy energeticheskiy institut.

KRYLOV, A. YA.; KUZNETSOV, A.M.; SEREBRENNIKOVA, I.I.; UGODCHIKOV, A.G. (Gor'ky)

"On the solution of some plane problems of applied elasticity with the aid of electrical simulation of conformal mapping".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb '64.

KUZNETSOV, Aleksey Matveyevich; BUDNIKOV, P.P., akad., red.;
OVSYANNIKOVA, Z.G., red.; MURASHOVA, V.A., tekhn. red.

[Technology of binding substances and of products made from them] Tekhnologiya viazhushchikh veshchestv i izdelii iz nikh. Pod obshchei red. P.P.Budnikova. Moskva, Vysshaya shkola, 1963. 454 p. (MIRA 16:12)
(Binding materials)

KUZNETSOV, A.M., inzh.; CHISTYAKOV, G.N., inzh.

The Kizel-Perm' electrified railroad line. Transp.stroi. 7
no.5:30 My '57. (MIRA 10:11)

(Electric railroads)

KUZNETSOV, A.M., inzh.

Adjustment of ejectors. Energetik 10 no.7:11-12 JI '62. (MIRA 15:7)
(Turbogenerators)

RYZHKIN, V.Ya., kand. tekhn.nauk; KUZNETSOV, A.M., inzh.

Effect of the feed pump on the efficiency of a turbine system.
Teploenergetika 11 no.2:29-30 F '64. (MIRA 17:4)

1. Moskovskiy energeticheskiy institut.

RYZHKIN, V. IA.; doktor tekhn. nauk; KUZNETSOV, A.M., inzh.

Determination of the effect of the feed pump on the efficiency
of a steam turbine installation using equivalent heat reduc-
tion of the selected steam. Teploenergetika 11 no.12:50-53
D '64 (MIRA 18:2)

1. Moskovskiy energeticheskiy institut.

KUZNETSOV, A.M.; MAKSIMOVICH, G.A.

Characteristics of bromine ion accumulation in underground brines.
Dokl.AN SSSR 138 no.5:1179-1182 Je '61. (MIRA 14:6)

1. Permskiy universitet im. A.M.Gor'kogo. Predstavleno akademikom
D.I.Shcherbakovym.

(Bromine) (Water, Underground)

KUZNETSOV, A.M.; KUZNETSOV, V.A.

Symmetrical shapes of bodies of natural abrasion. Izv. AN SSSR.
Ser. geofiz. no.9:1462-1467 S '63. (MIRA 16:10)

1. Permskiy gosudarstvennyy universitet im. A.M.Gor'kogo.

S/276/63/000/002/041/052
A052/A126

AUTHOR: Kuznetsov, A.M.

TITLE: Problems of precision machining on centerless internal grinding automatics

PERIODICAL: Referativnyy zhurnal, Tekhnologiya mashinostroyeniya, no. 2, 1963, 208, abstract 2B1160 (Tr. Vses. n.-i. konstrukt.-tekhnolog. in-ta podshipnik. prom-sti, no. 4(28), 1961, 92-116)

TEXT: The results are reported of theoretical and experimental investigations on the precision of machining racers on centerless internal grinding automatics with a roll clamp. The effect of geometric errors of the machine on the precision of machining is considered (including the errors of the lateral feed mechanism, kinematic characteristics of grinding on a machine with a centerless clamp) as well as the effect of the setting of the diamond for the disk adjustment and the errors of datum surfaces on the precision of machining. An experimental investigation of initial errors in centerless internal grinding was carried out including the errors of machining resulting from the heat liberation in the grinding process.

Card 1/2

Problems of precision machining...

S/276/63/000/002/041/052
A052/A126

and those depending on the abrasive-disk wear. The results have shown the character and the degree of influence of various factors on the precision of machining which is of great importance for designing, modernizing and operating centerless internal grinding automatics. The results of the investigation make it possible to stipulate correctly technical conditions concerning the precision of datum and ground surfaces of elements subject to machining on the automatics in question. There are 20 figures and 4 references.

G. Lur'ye

(Abstracter's note: Complete translation.)

Card 2/2

KUZNETSOV, A.M.; VASIL'YEV, A.M.

Securing the precision of part shapes in circular center grinding.
Avt.prom. 30 no.2:32-35 F '64. (MIRA 17:4)

1. Moskovskiy avtomekhanicheskiy institut.

KUZNETSOV, A.M.; GOLOSOV, I.P.

Effect of geometrical parameters of synthetic diamond grains
on their cutting properties. Stan. i instr. 35 no.12:28-29
D '64 (MIRA 18:2)

UGODCHIKOV, A.G. (Gor'kiy); KUZNETSOV, A.M. (Gor'kiy)

Calculating static stresses in gear teeth. Inzh. zhur. 3
no.2:348-354 '63. (MIRA 16:6)

(Gearing)

KUZNETSOV, A.M.

Determining the stresses in the teeth of gear wheels. Trudy GISI
no.44:50-59 '63. (MIRA 17:11)

KUZNETSOV, A.M.

Solving systems of linear algebraic equations in the theory of
elasticity on high-speed electronic computers. Trudy GISI no.44:
72-80 '63. (MIRA 17:11)

AUTHOR: Kuznetsov, A.M., Engineer SOV/118-58-11-11/19

TITLE: ~~Hydraulic Truck Mounted Cranes, Type 4030 and 4031 (Gidravlicheskiye avtokrany 4030 i 4031)~~

PERIODICAL: Mekhanizatsiya trudoyemkikh i tyazhelykh rabot, 1958, Nr 11, pp 31-32 (USSR)

ABSTRACT: The L'vovskiy zavod avtopogruzchikov (the L'vov Truck-Mounted Loader Plant) has started serial production of hydraulic cranes mounted on trucks of the type ZIL-150 (type 4030) and GAZ-51 (type 4031). All operations of the crane (turning, hoisting, control of the boom and the stabilizer springs) are carried out by hydraulic drive. The hoisting capacity of the 4030 crane is 500 kg, of the 4031 crane - 250 kg; the maximum boom of the 4030 crane is 3,600 mm, that of the 4031 crane - 3,000 mm. The maximum lifting height is 6,000 and 5,000 mm respectively; the turning range of the crane boom is 200° for both types. Both cranes are equipped with claws and bucket. There are 2 photographs and 2 diagrams.

1. Mobile hoists--Control systems 2. Mobile hoists--Performance
3. Cargo vehicles--Applications

Card 1/1

MASLOV, D.P., kand. tekhn. nauk, dots.; GURIN, F.V., kand. tekhn.
nauk, dots.; KUZNETSOV, A.M., inzh.; VASIL'YEV, A.M., inzh.;
LYKOV, A.G., inzh., ~~retsenzent~~; PINSKER, A.L., inzh., red.;
LESNICHENKO, I.I., red.; MODEL', B.I., tekhn. red.

[Technology in the motor-vehicle and tractor industry] Tekhnologia
avtotraktorostroeniia. [By] D.P. Maslov i dr. Moskva, Mashgiz, 1962.
432 p. (MIRA 16:2)

(Motor vehicles--Design and construction)
(Tractors--Design and construction)

LEVICH, V.G.; KUZNETSOV, A.M.

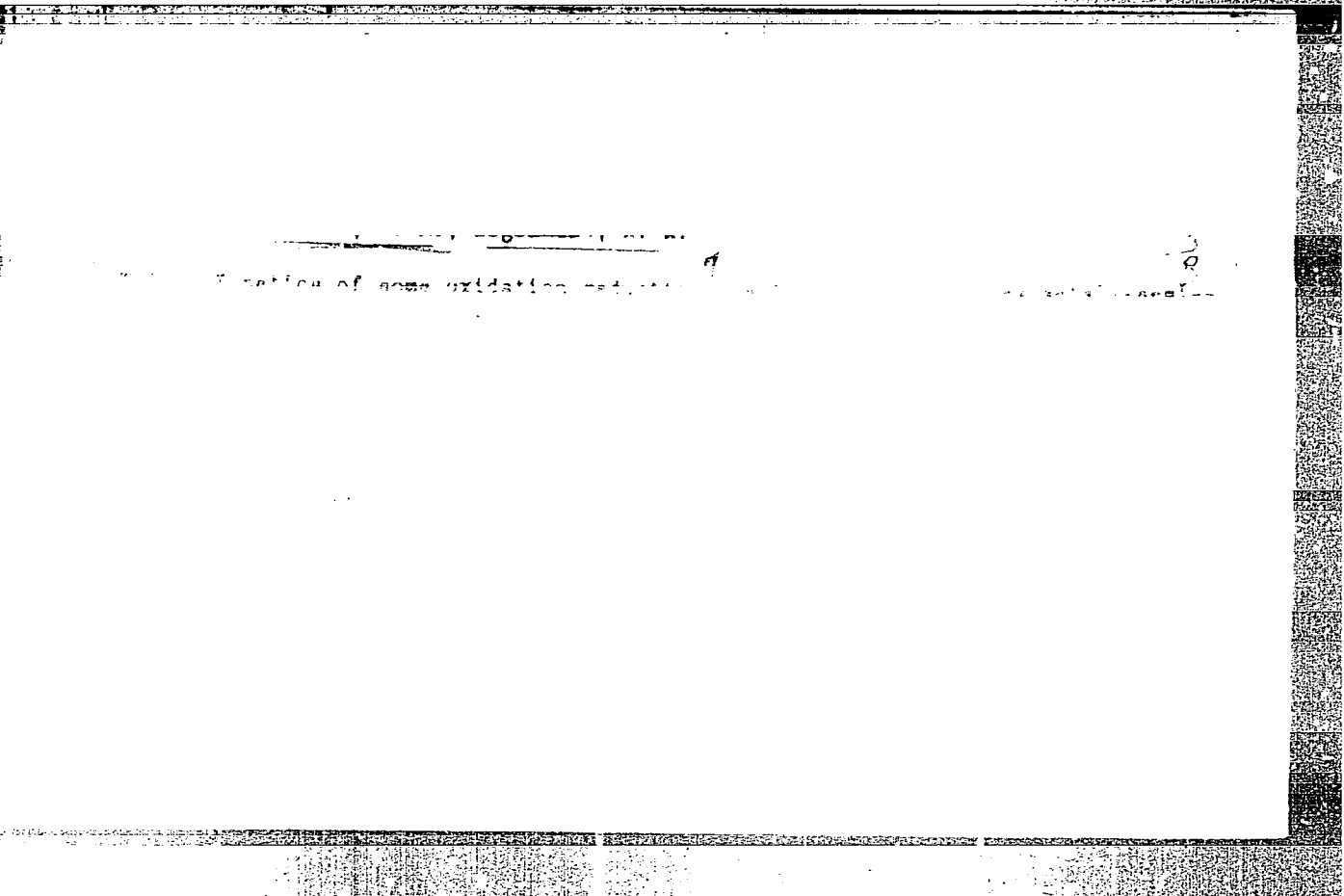
Motion of drops in liquids under the effect of surface active agents. Dokl. AN SSSR 146 no.1:145-147 S '62. (MIRA 15:9)

1. Institut elektrokhemii AN SSSR. 2. Chlen-korrespondent AN SSSR (for Levich).
(Hydrodynamics) (Surface active agents)

KUZNETSOV, A.M.; DOGONADZE, R.R.

Stationary photoelectric effect in the system semiconductor -
electrolyte solution. Izv. AN SSSR. Ser. khim. no.10:1885-
1887 O '64. (MIRA 17:12)

1. Institut elektrokhemii AN SSSR.



...
pending values for an infinite semiconducting ...
...

KOVALEV, A.L.; ISAYENKO, V.F.; KUZNETSOV, A.M.

Apparatus for determining the speed rates of air flow. Khim.
volok. no.4:72-73 '65. (MIRA 18:8)

1. VNIIMSV, Chernigov.

DOGONADZE, R.R.; KUZNETSOV, A.M.

Kinetics of redox reactions in the system impurity semiconductor -
electrolyte solution. Elektrokhimiia 1 no.6:742-744 Je '65. (MIRA 18:7)

1. Institut elektrokhemii AN SSSR.

18

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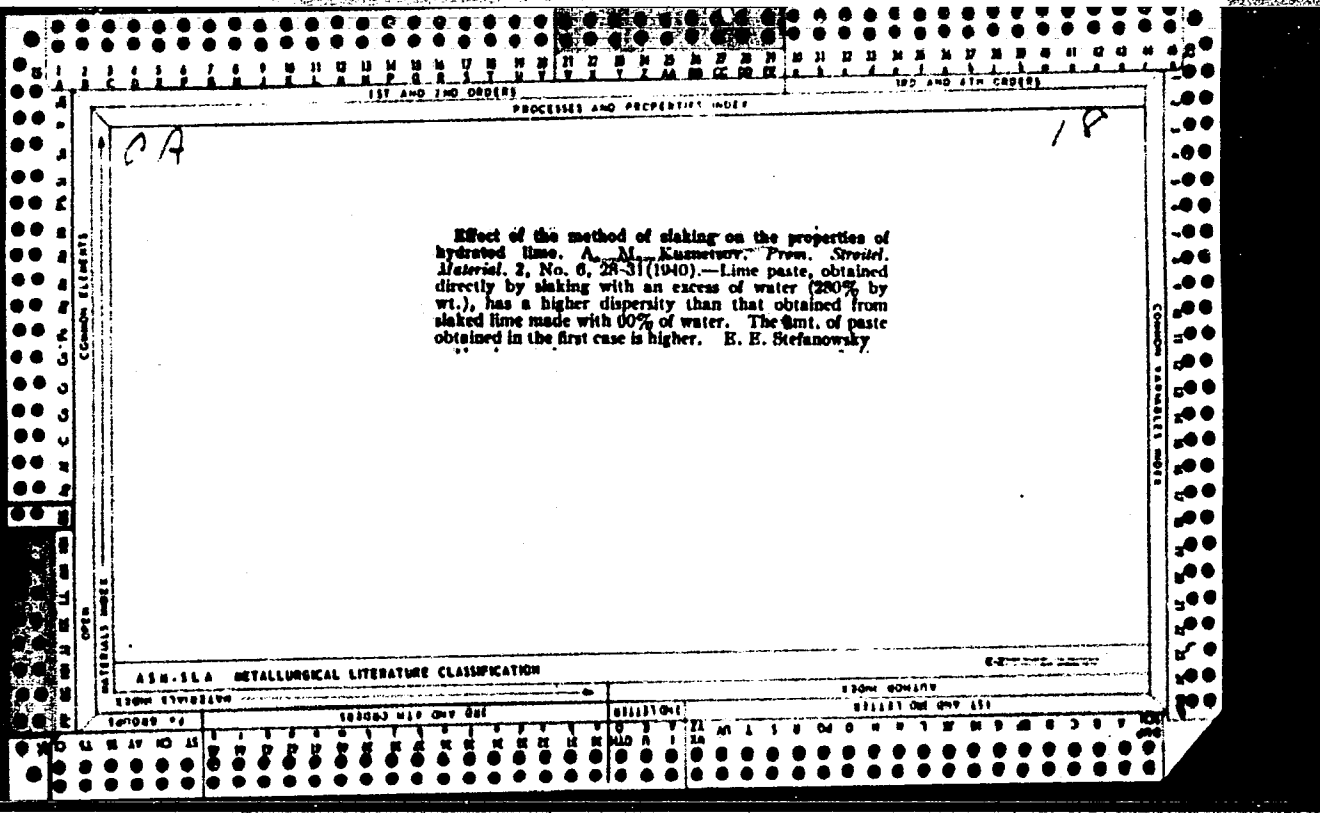
The effect of the method of hydration on the properties of slaked lime. A. M. Kazantsov. *J. Chem. Ind. (U. S. S. R.)* 14, 1333-4 (1937).—Lime slaked with a large excess of H₂O is more disperse than when only a slight excess of H₂O is used. H. M. Leicester

ASB-56A METALLURGICAL LITERATURE CLASSIFICATION

COMMON SUBJECTS
COMMON VARIANTS INDEX
MATERIALS INDEX
OPEN

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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PROCESSES AND PROPERTIES INDEX																																																																																												
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<p>4A</p> <p>19</p> <p>Drum for the hydration of lime. A. M. Kuznetsov. Russ. 82,802, Jan. 31, 1938. Constructive details.</p>																																																																																												
METALLURGICAL LITERATURE CLASSIFICATION																																																																																												
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PROCESSING AND PROPERTIES DATA

CA

The manufacture of water glass for construction work
 M. A. Mal'nev and A. M. Kuznetsov. *Prosv. Stroitel. Material.* 2, No. 6, 66-71(1949).—There is suggested a method of obtaining water glass from solid silicate, based on the principle of dissolving Na silicate in a granulated condition. The preliminary expts. and the technological process and equipment of an industrial plant are described.
 B. E. Stefanovsky

ASB-SLA METALLURGY & LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

PROCESS AND PROPERTIES INDEX

18

Solution of lump sodium silicate by a process not including autoclaves. M. A. Matvey and A. M. Kuznetsov. *From. Soviet. Material.* 1941, 35-40; *Chem. Zvest.* 1942, II, 2264.—Lump Na silicate is dissolved in water by direct steam heating, by a paddle agitator. Lump silicate is cheaper to transport than the aq. material. B. M. Symmes

A 18-31A METALLURGICAL LITERATURE CLASSIFICATION

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

M

F

4195. EFFECT OF STEAM TREATMENT ON STRENGTH OF CONCRETE MADE WITH ACTIVATED BOILER CLINKER. Kuznetsov, A.M. and Kashina, A.S. (Dull. Stroitel. Tekh., 1946, vol.3, (9-10), 14-15; abstr., in Brit. Abstr., 51, June 1949, 523). The effect of steam, at 55-75° for periods from 8 to 24 hrs, on the cube strength at 9 and 28 days of specimens made from a mix containing boiler slag activated by grinding (45.8% through 0.15-m.m. mesh) 63, furnace ash 20, carbide mud 15, and gypsum 2% with sufficient H₂O to give a suitable consistence, was investigated. A cube strength of 100 k.g. per sq. c.m. was obtained with test blocks steamed for 20-24 hr. The 9- and 28-day strengths of the blocks were 104 and 108 k.g. per sq.c.m. compared with 80 k.g. per sq. c.m. for blocks stored in air; the former showed a small increase in strength between 9 and 28 days compared with the latter. B.A.

Molotov State U. in. Gor'kiy

G-117-22-1287

ASIS-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM DIVISION TO DIVISION

RECORDS COLLECTIONS

PROCESSES AND PROPERTIES INDEX

18

CA

Preparation of magnesia from electron-metal slag. A. M. Kuznetsov. *J. Applied Chem. (U.S.S.R.)* 19, 385-391 (1946).—The problem of isolation of useful materials from slag from melts of Mg and its alloys in conjunction with various protective fluxes was studied as to production of technically pure MgO. The slag can be readily calcined at 900-1000° after the product has been exposed to air in storage for about 2 months to insure oxidation of Mg residues to MgO and MgCO₃. The resulting MgO passes the U.S.S.R. standards for magnesia cements. (1) M. Kuznetsov

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

INDEX AND LITERATURE

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e 13-97

SULFIDE-SULFATE CORROSION OF CEMENTS, A. M. Kuanetsov,
J. Applied Chem. (U.S.S.R.), 19 [5-6] 489-91
(1946); abstracted in Chem. Zentr., 118 [5/6] 370 (1947). --
Cement of ten different compositions were exposed for four
years to the action of water containing, besides sulfates,
0.41 gm. H₂S in 1000 gm. of the liquid. Tests of the
cements for breaking strength revealed the strongly cor-
roding action of this water. Portland cements were es-
pecially deteriorated. Alumina-containing, Al-Si, and
slag-alumina cements were, however, resistant. The
cement structure was destroyed by the reaction of H₂S
with the Fe of the cement. Ca(OH)₂ diffuses partly into the
surrounding medium and partly reacts with the SO₄⁻,
forming gypsum. Those cements are most resistant which
contain very little Fe and Ca(OH)₂. M.Ha.

PROCESSES AND PROPERTIES INDEX

22

CA

Solubility of gypsum in hydrochloric acid as a factor in the acid treatment of wells. A. M. Kuznetsov. *Neftyanoe Khoz.* 24, No. 3/4, 21-1(1960). — Owing to large variations in the sol. of CaSO_4 in the system $\text{CaCl}_2\text{-HCl-H}_2\text{O}$, the conc. HCl when used in 30% concn. for acid-treating limestone or dolomite must contain less than 0.01% of H_2SO_4 (expressed as SO_4). Up to 0.1% SO_4 is permitted in the case of limestones free from CaSO_4 , but the acid concn. must not exceed 10% HCl . With 1-3% CaSO_4 in the rocks, the acid concn. is limited to 5-6%. B. C. M.

A S B - 5 L A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBLIVE										FROM DOWNEY									
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117 AND 118 SHEETS

120 AND 121 SHEETS

2

PROCESSES AND PROPERTIES INDEX

Common Elements

Common Variables

Materials

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYNONYMS

SYNONYM

EXPLANATION

SYNONYM

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

Stability of calcium sulfate in the system calcium chloride-hydrochloric acid-water. A. M. Kravtsov (Moskov State Univ.), *J. Applied Chem.* (U.S.S.R.) 19, 1335-9(1946) (in Russian).—Solubilities at 30° in HCl 4, 8, 12, 16, and 20% (by wt.), in CaCl₂ 8, 10, 15, 20 and 25%, and in their mixts., expressed in g. CaSO₄/1000 g. soln. ("gypsum capacity" ϵ), are given in tables and in a triangular diagram, with the binary curves. In HCl, ϵ is max. 19.20 at HCl 8.0% (1.94% CaSO₄ in 7.24% HCl). In CaCl₂, ϵ decreases with increasing CaCl₂, falling to 0.17 in 25% CaCl₂. In mixts. contg. over 5% of either HCl or CaCl₂, ϵ is approx. the same as in a soln. of the corresponding pure component; in particular, the soly.-depressing effect of CaCl₂ prevails definitely over that of HCl. In CaCO₃-bearing deposits, gradual neutralization of HCl leads to increased sepa. of CaSO₄. Exptl. powder mixts. of CaCO₃ + CaSO₄ up to 5% were readily sol. in an amt. of 10% HCl correspond-

ing to that of the CaCO₃; in the case of initial 1, 3, and 5% CaSO₄, voluminous pptn. of gypsum from the soln. occurred after 1.5 hrs., 50 and 20 min., resp., and was complete after 24 and 1 hr. in the 1st and 2nd case, resp. In the HCl attack of limestone and dolomitic petroleum-bearing rocks, the upper permissible limit of SO₄ content in the com. HCl used is 0.1% for CaSO₄-free rocks, not over 0.005-0.01% for the natural rocks contg. some amt. of CaSO₄. Higher SO₄ contents result in heavy deposition of gypsum, thus, from a 5% CaSO₄ rock, with 0.5% SO₄ in 20% HCl, up to 200 kg. CaSO₄ are pptd. in 20 cu.m. 15% HCl. From the soly. data obtained, the permissible concn. of HCl of a given SO₄ content can be detd. as a function of the CaSO₄ content of the rock: from rocks contg. 1, 2, 5% CaSO₄, 15% HCl (0.01% SO₄) may give rise to pptn. of 1.54, 3.68, 9.30 g. CaSO₄/kg. soln., 5% HCl to 1.03, 2.06, 5.15 g., 4% HCl to 0.63, 1.06, 2.65 g., resp.

N. Thon

PRECISION AND PROPERTY INDEX

19

CA

Comparative evaluation of the binding properties of caustic magnesite and caustic dolomite. A. M. Kozlov and N. N. Mikhailov. *J. Applied Chem. (U.S.S.R.)* 28, 257-64(1947)(in Russian).—In tests of masses made of fired magnesite or fired dolomite and MgSO₄, the former showed a tensile strength (σ) approx. 1.5-3.0 times higher than the latter, i.e., the ratio is lower than that expected from the ratio of MgO content (3-3.5); that this is not due to differences in the proportions MgSO₄/MgO was shown by expts. in which the amt. of MgSO₄ added was varied. Rather, the difference of the binding properties of MgO in both cases is due to the lower temp. (680-700°) at which dolomite is fired to avoid decompos. of CaCO₃; low-fired MgO is relatively more active as binding agent. This was demonstrated on masses made by mixing magnesites fired to a d. 3.50, 3.27, and 3.00, with 3 parts finely ground CaCO₃ (900 mesh/sq. cm.); only the mass with magnesite of d. 3.00 had a high σ (12.9 and 17.4 kg./sq. cm. after 1 and 7 days), despite a relatively lower content of total MgO. High firing, which is usual in the production of caustic magnesite, favors formation of periclase and lowers the activity of MgO; this is paralleled by the known fall of water-sol. the heat of hydration, and the rate of hydration of MgO heated at over 700-800° (Bednikov (C.A. 24, 4681)). Likewise, prolonged heating of magnesite, even at temps. as low as 600°, results in lowered activity of MgO: after 1 and 8 hrs., d. = 3.13 and 3.48, σ after 1 day, 30.9 and 16.2; after 28 days, 24.9 and 22.1. Dolomite, normally fired at 700° and fired again at 800° for 3, 4, and 6 hrs., also suffered some loss of σ (after 3 days, 9.2, 7.3, and 5.3 kg./sq. cm., against initial 21.7). Presence of CaO in caustic dolomite is not in itself harmful but it does indicate too high or too long firing, i.e., loss of binding activity of the MgO; as an empirical index, 1.5-1.7% CaO can be taken to indicate correct firing conditions of the dolomite; over 5% CaO definitely indicates overfiring and poor binding qualities. N. Thon

METALLURGICAL LITERATURE CLASSIFICATION

U.S. PATENT OFFICE

KUZNETSOV, A. M.

KUZNETSOV, A. M. The manufacture of caustic magnesite from local raw materials and its utilization. Moskva, Gos. izd-vo lit-ry po stroit. materialam, 1948. 210 p. (50-15553)

TN948.M2K8

KUZNETSOV, A. M. APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000928110015

KUZNETSOV, A. M.: "Investigation of the hardening of aluminate and sulfate-aluminate cement." Inst of Chemical Silicates, Acad Sci USSR. Moscow, 1956
(Dissertation for the degree of Doctor in Technical Sciences)

SO: Knizhnaya Letopis', No 36, 1956, Moscow.

Kuznetsov, A.
KUZNETSOV, A., kandidat tekhnicheskikh nauk.

High-production kiln for calcining lime. Stroi.mat.3 no.9:38
S '57. (MIRA 10:10)

(Pashan, China--Lime kilns)

SUBJECT: CHINA/Cement

101-4-6/13

AUTHORS: Kovalev, Ye.S., Engineer and Kuznetsov, A.M., Candidate of Technical Sciences.

TITLE: From Experiments to Produce Alumina Cement by Means of Clinkering in Rotary Kilns (Iz opyta polucheniya glinozemistogo tsementa spekaniyem vo vrashchayushchikhsya pechakh)

PERIODICAL: "Tsement", 1957, ¹³# 4, pp 23-24 (USSR)

ABSTRACT: Experiments with rotary kilns were conducted by the authors in a cement plant in the Chinese People's Republic in 1955-1956. Local high quality bauxite and limestone mined in the TSYUANSI province served as raw material. By employing the sintering method, different compositions of kiln charges were tested, mainly using low base calcium aluminates - $\text{CaO} \cdot \text{Al}_2\text{O}_3$ and $\text{CaO} \cdot 2\text{Al}_2\text{O}_3$. Fineness of grinding was found to be from 2.9 to 6.5 % on 0085 sieves. Calcination temperatures ranged from 1350-1370°, and were controlled by optical pyrometers. Based on 19 test charges, the contents of main oxides varied from 4.9-9.84 % for SiO_2 , 45.71-59.26% for Al_2O_3 and from 30.0-39.42 % for CaO.

Card 1/2 The strength of cement, using standard Chinese sand (1:3), was

AVAILABLE: At the Library of Congress
Card 2/2

KUZNETSOV, A., kand. tekhn. nauk

Manufacturing high-strength asbestos slate in China. Stroi. mat.
4 no. 7:37-38 J1 '58. (MIRA 11:7)
(T'ienhsing, China--Asbestos)

KUZNETSOV, A.M., kand.tekhn.nauk

Machine for making concrete pipes. Mekh. stroi. 15 no.4:29 Ap '58.
(MIRA 11:5)

(Pipe, Concrete)

KUZNETSOV, Aleksey Matveyevich, kand.tekhn.nauk; ISLANKINA, T.F., red.;
SAVCHENKO, Ye.V., tekhn.red.

[Building materials of China] Stroitel'nye materialy Kitaja.
Moskva, Izd-vo "Znanie," 1959. 31 p. (Vsesoiuznoe obshchestvo
po rasprostraneniю politicheskikh i nauchnykh znani. Ser.4,
Nauka i tekhnika, 4) (MIRA 12:3)
(China--Building materials ind try)

Кузнецов, А. М.

PHASE I BOOK EXPLOITATION 507/3592

Тезисы докладов химического конгресса имени Д.И. Менделеева
Силикатный отдел: сборник статей по химии и технологии силикатов, вып. 1 (Силикаты)
Сборник статей о химии и технологии силикатов, вып. 1
Москва, Стройиздат, 1979. 103 с. Фото альбом вставлен. 3,000 копий
печатаются.

Редакционный совет: М.А. Матвеев (зам. ред.), Ю.М. Бутт, и М.О. Юсупович
Издательство: В.А. Базарова; Тех. ред.: И.И. Бодалева.

ЦЕЛЬ: Этот буклет предназначен для химиков и геологов, заинтересованных в
анализе силикатов.

СОДЕРЖАНИЕ: В этом сборнике статей о химии и технологии силикатов
приведены тезисы докладов, представленных на конгрессе, а также
результаты исследований, проведенных в области силикатов. В нем
рассмотрены вопросы, связанные с получением силикатов, их свойствами
и применением. В частности, описаны процессы спекания, сintering
и др. В сборнике также приведены данные о физико-химических свойствах
силикатов, их растворимости, кинетике химических процессов и т.д.
В сборнике также приведены данные о методах исследования силикатов,
а также о методах их применения. В сборнике также приведены данные
о методах их применения. В сборнике также приведены данные о методах
их применения. В сборнике также приведены данные о методах их применения.

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Издательство
5-18-80

KUZNETSOV, A.M.; KOVALEV, Ye.S.

Using rotary kilns in producing aluminous cements. Silikaty no.1:70-77
'59.

(Cement) (Kilns, Rotary)

(MIRA 13:2)

KUZNETSOV, A.M.

Effect of lithium sulfate additives on aluminous gypsum-
cements and their use in industry. Silikaty no.2:58-66
'59. (MIRA 13:6)
(Cement)

BUDNIKOV, P.P., akademik; KUZNETSOV, A.M., kand. tekhn. nauk

Testing aluminum slags and using them in making binding materials. Stroi. mat. 5 no.5:30-31. My. 59. (MIRA 12:8)

1. AN USSR, chlen-korrespondent AN SSSR (for Budnikov)
(Slag Testing) (Binding materials)

MIKHAYLOV, N.N., kand.tekhn.nauk; KUZNETSOV, A.M., kand.tekhn.nauk

Investigating the binding properties of waste materials obtained
in kilning magnesite. Stroi.mat. 6 no.2:31-33 F '60.

(MIRA 13:6)

(Magnesite) (Binding materials)

MIKHAYLOV, N.N., kand.tekhn.nauk; KUZNETSOV, A.M., kand.tekhn.nauk

Artificial carbonization as a means for increasing the activity of dolomite binders. Stroi. mat. 6 no.9:28-30 S '60.

(MIRA 13:9)

(Carbonization)

(Binding materials)

KUZNETSOV, Aleksey Matveyevich; KOVALEV, Yevgeniy Semenovich; LYSAK, D.A.,
red.; KHRUSTALEVA, N.I., red. izd-va; VORONINA, R.K., tekhn. red.

[New means of manufacturing cement containing alumina] Novye sposoby
proizvodstva glinczemistogo tsementa. Moskva, Gos. izd-vo "Vysshaya
shkola," 1961. 86 p. (MIRA 14:7)

(Cement)

DOGONADZE, R.R.; KUZNETSOV, A.M.; CHERNENKO, A.A.

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in liquids. Usp.khim. 34 no.10:1779-1812 0 '65.

(MIRA 18:11)

1. Institut elektrokhimii AN SSSR.

DGONADZE, R.R.; KUZNETSOV, A.M.

Some steady-state processes in the system semiconductor - electrolyte solution. Elektrokimiia 1 no.8:1008-1011 Ag '65. (MIRA 18:9)

1. Institut elektrokimii AN SSSR.

STROKOV, V.I.; KUZNETSOV, A.M.

Position circuits of the automatic temperature regulation in
spinning heads with electric heating. Khim. volok. no.5:
63-64 '65. (MIRA 18:10)

1. VNIIMSV.

KUZNETSOV, A.N. (Leningrad)

The problem of the non-homogeneous plastic layer. Archiw mech
12 no.2:163-172 '60.

1. Leningrad State University, Leningrad.

S/120/62/000/001/002/061
E032/E514

AUTHORS: Gladyshev, V.A., Katsaurov, L.N. and Kuznetsov, A.N.

TITLE: On the use of a jet of vapour as a target for producing nuclear reactions

PERIODICAL: Pribory i tekhnika eksperimenta, no.1, 1962, 20-22

TEXT: In nuclear physics it is frequently necessary to have a thin target capable of withstanding large ion currents. The present authors report an investigation of the possible use of a jet of vapour for this purpose. The principle of the apparatus employed is illustrated in Fig.1. The vapour was introduced into a vacuum chamber through the nozzle 3 and was condensed by the liquid-nitrogen-cooled trap 4,5. Water vapour was employed as the working substance. The density of vapour in the central part of the jet was investigated by placing small rings inside the vapour trap and measuring the amount of water condensed on each of them. The experimental results obtained suggest that the water vapour jet does not follow the laws of gas dynamics. Empirical formulae are reported for the density distribution in the
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On the use of a jet of vapour ... S/120/62/000/001/002/061
E032/E514

jet. With a pumping speed of 1000 litres/sec and a vacuum of 10^{-5} mm Hg it is possible to release 0.1 g/sec through the nozzle. If it is assumed that the velocity of the jet approaches the velocity of sound, then the thickness of the vapour target turns out to be of the order of $2 \mu\text{g}/\text{cm}^2$. For 2 MeV protons the corresponding energy loss is of the order of 600 eV. However, in the latter case a considerable amount of vapour still misses the trap and enters the vacuum chamber. In order to obtain thicker targets, it is necessary to use vapours of liquids whose vapour pressure at, say, room temperature is $10^{-5} - 10^{-6}$ mm Hg, or to develop new types of nozzles which would confine the jet to a smaller angular range. It is stated that vapour targets having a thickness of a few keV can be produced for use with a focused beam having a cross section of about 1 cm^2 . There are 5 figures.

SUBMITTED: August 24, 1960

Card 2/3

ACCESSION NR: AT4016825

S/2604/63/000/048/0063/0065

AUTHOR: Kuznetsov, A. N.

TITLE: The accuracy of determining the parameter K by the telluric current method

SOURCE: Moscow. Vsesoyuznyy nauchno-issledovatel'skiy Institut geofizicheskikh metodov razvedki. Razvedochnaya i promy*slovaya (Prospecting and Industrial geophysics), no. 48, 1963, 63-65

TOPIC TAGS: telluric method, telluric current, geophysics, telluric current method

ABSTRACT: The telluric current method is widely used for the study of high electrical resistance horizons. The problem of accurate field observations for the telluric current method and rational map sections of the parameter K has been worked out only vaguely. In fact, the accuracy of K in previous publications was estimated only approximately (3-5%). The relative frequency of errors of K in the Western and Eastern parts of the West Siberian Basin is approximately the same. On the basis of probability theory it was found that anomalies of parameter K exceeding 6% are explained by features of the geoelectrical section. Plotting of isometric lines every 6% of the parameter K thus has a sufficiently sound basis. It

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ACCESSION NR: AT4016825

should be noted that all conclusions in the article based on probability theory took into account a large number of observations. Therefore, when separate points do not conform to the results of adjoining ones, the first observations should be excluded. Orig. art. has: 1 figure and 1 table.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki, Moscow (All-Union Scientific-Research Institute of Geophysical Prospecting, Moscow)

SUBMITTED: 00

DATE ACQ: 13Feb64

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

Card 2/2

KUZNETSOV, A.N.

Pneumatic-drive machinery for form removal. Mekh. stroi. 21
no. 3: 28-29 Mr '64. (MIRA 17:3)

1. Glavnyy inzh. Kemerovskogo domostroitel'nogo kombinata.

MAMALADZE, S.I.; ALAVIDZE, B.Z.; KUZNETSOV, A.N.

Loading and unloading bricks in circular kilns with the aid of
lightweight conveyers. Rats. i izobr. predl. v stroi. no.5:50-55
'58. (MIRA 11:6)

1. Saburtalinskiy kirpichnyy zavod polusukhogo pressovaniya,
GruzSSR, selo Saburtalo Tbilisskogo rayona.
(Brickmaking) (Loading and unloading) (Conveying machinery)

KAMENSKIY, I.V.; ITINSKIY, V.I.; KUZNETSOV, A.N.

Polymers on the basis of condensation products of furfurols
with acetone. Copolymers of difurfurylidereacetone with methyl
methacrylate and styrene. Plast. massy no.12:21-22 '62.

(MIRA 16:1)

(Pentadionone) (Methacrylic acid) (Styrene)

KUZNETSOV, A. N.

Kuznetsov, A. N. "Services of the TsNIIGA and K," Sbornik nauch.-
tikhn. i proizvod. statey po geodezii, kartografii, topografii, aeros'
yemke i gravimetrii, Issue 20, 1948, p. 51-58

SO: U-2888, Letopis' Zhurnal'nykh Statey, No. 1, 1949

1. KUZNETSOV, A.N.

2. USSR (600)

4. Astronomical Clocks

7. Parabolic equalization and interpolation of the results of observations made in the Time Service. Trudy TSNIIGAIAK no. 64, 1949. p. 7-34

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. KUZNETSOV, A. N.
2. USSR (600)
4. Longitude
7. Effect of errors in coordinated moments on the determination of longitude. Trudy
TSNIIGAIK no 64, '49. p. 35-47

9. Monthly List of Russian Accessions. Library of Congress, January 1953. Unclassified.

KUZNETSOV, A. N.

25501. O Sostavlenii Svodnykh Momentov Peredacl Ritmicheskikh Signalov Vremeni. Trudy Tsentr. Nauch.--Issled. In-ta Geodezii, Aeros''yemki I Kartografii, VYP. 64, 1949, s. 48-59

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

1. KUZNETSOV, A. N.
2. USSR (600)
4. Chronometer
7. Using chronometers for measuring shorttime intervals in cartographic and geodesic operations. Trudy TSNIIGAI1 no.64, 1949 - p-83-85

9. Monthly List of Russian Accessions, Library of Congress, January 1953, Unclassified.

1. KUZNETSOV, A. N.

2. USSR (600)

4. Astronomical Clocks

7. Smoothing out errors in Time Service clocks.
Trudy TSNIIGAIAK no. 64, 1949. p. 86-88

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

1. KUZNETSOV, A. N.

2. USSR (600)

4. Astronomy, Spherical and Practical

7. Using a shutter in determining time and longitude . Trudy TSNIIGAIK, no. 64 1949

p. 89-114

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

KUZNETSOV, A. N.

AUTHOR: Kuznetsov, A. N., Candidate of Technical Sciences. 6-12-2/14

TITLE: A Comparison of the Fundamental Methods for the Determination of Time (O sravnenii osnovnykh sposobov opredeleniya vremeni).

PERIODICAL: Geodeziya i Kartografiya, 1957, Nr 12, pp. 15 - 22 (USSR).

ABSTRACT: On the basis of this paper the following may be said. 1) Tsinger (references 1 and 4) is right when he says, that in determination of time the position of the "horizontal circle" (almukantharat) in the celestial sphere is simpler and more reliable to determine than the position of any vertical circle. Instruments of simplest construction are used in observations according to Tsinger's method. The influence of most of the accidental errors of observation is in this method smaller than in the meridian-method. It is only when the most favorable conditions of observation are observed that both methods are equally accurate. 2) The azimuthal methods of the determination of time are more subject to the influence of systematic errors of instruments than the Tsinger method. 3) Tsinger's method offers the best possibilities for excluding or reducing the influence of the star-coordinate-error. The repeated length-determinations of the starting points must be bilateral.

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A Comparison of the Fundamental Methods for the Determination of Time. 6-12-2/14

For the determination of the local time the Tsinger method with the use of a photoelectric recording of the star-passages is to recommend. This method shall also be employed for the determination of the clock-corrections in the time-services (offices).
4) Although S. Hayne ("A comparison of methods most frequently employed for the determination of time". Bulletin Geodesique. O-N.1938) gives the preference to the azimuthal methods of the determination of time, almost everything stated in this paper speaks against this. The azimuthal methods shall only be used for the determination of time when the employment of the Tsinger method becomes difficult. In high latitudes the Dellen method is to be employed.
There are 5 tables, and 13 references, 10 of which are Slavic.

AVAILABLE: Library of Congress.

Card 2/2

КОЗМЕНКО, А. Н. ~~ДУБОВИЦКИЙ~~
(Cand. Tech. Sci.)

"State and prospects of the development of geodetical astronomy," Geodeziya i Kartografiya, 1957, Nr 12, pp. 69-70 (USSR).

report presented at the Sci. Tech. Conf. for Geodesy, Aerial Photography and Cartography, 24-28 Oct 57, in honor of 40th Anniv. of October Revolution)
Organized by Main Office for Geodesy and Cartography, Home Office USSR,
The Military-Topographical Office and Inst. for Engineers of Geodesy, Air Survey and Cartography, Moscow.

KUZNETSOV, A.N., dots.

Zenithal and azimuthal methods for determining time and latitude.
Trudy MIIGAİK no.27:91-93 '57. (MIRA 11:1)

1. Kafedra astronomii Moskovskogo instituta inzhenerov geodezii,
aerofotos"yemki i kartografii.
(Astronomy, Spherical and practical)

3(2)

PHASE I BOOK EXPLOITATION

SOV/2152

Moscow. Institut inzhenerov geodezii, aerofotos^hyemki i kartografii

Trudy, vyp. 33 (Transactions of the Moscow Institute of Engineering Geodesy, Aerial Photography, and Cartography, Nr 33) Moscow, Geodezizdat, 1958. 123 p. 1,000 copies printed.

Editorial Board: A.I. Mazmishvili (Resp. Ed.), V.I. Avgeevich (Deputy Resp. Ed.), G.V. Bagratuni, N.Ya. Bobir, N.M. Volkov, A.I. Durnev, S.V. Yeliseyev, P.S. Zakatov, G.P. Levchuk, N.I. Modrinskiy, M.D. Solov'yev, B.V. Fefilov, and P.F. Shokin; Ed. of Publishing House: A.I. Inozemtseva; Tech. Ed.: V.V. Romanova.

PURPOSE: This issue of the Institute's Transactions is intended for geodesists, photogrammetrists, and cartographers.

COVERAGE: This collection of articles covers a variety of problems and questions of interest to personnel in the mapping field. Several instruments employed in cartography are investigated and evaluated. These include a photocartograph, the Photo Reductor MIIGA1K, and

Card 1/4

Transactions of the Moscow Institute (Cont.)

SOV/2152

marine chronometers. Other subjects treated include Stokes' formula, correction of instrumental errors, Dellen's Method, relief generalization, aerial camera orientation, and others. References accompany individual articles.

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8-12-59

KUZNETSOV

KUZNETSOV, A N

NAME: Podobedov, S. S., Docent
 TITLE: Chronicle (Shronika) I
 AUTHOR/CAL: Ivestiya Vysishn uchenykh svedeniy, Geodesiya i aerofotoz'yeha, 1958, Nr 2, pp 107-109 (USSR)

More than 500 specialists participated in the scientific and technical conference on geodesy, aerophotography, and cartography held from October 24 to 28, 1957. The following reports were given in the plenary sessions of the conference: A. B. Marzhanov, Candidate of Technical Sciences, "The Present State of Geodesy and Cartography over the Past Forty Years," I. S. Nikulin, Major-General, "The Present State of Geodesy and Cartography in the USSR," Professor P. S. Komarov, "The Present State of Geodesy and Cartography in the USSR," Docent S. S. Podobedov, "Today's Topography and the Fundamental Problems and Ways of Perfecting the Map," I. D. Balanaba, Doctor of Physical-Mathematical Sciences, "The Participation in the International Geophysical Year," In the section on geodesy reports were given by the following persons: V. A.

Card 1/3

Velikko, Candidate of Technical Sciences, reported on "The Use of Light Locations for the Establishment of Geodetic Nets," S. P. Kozlov, Docent, spoke on "The Tasks and Present State of the Section of Geodetic Instruments," Docent A. B. Kuznetsov, reported on "The Present State and Possibilities of Aerophotography in the USSR," I. Shillinger spoke on "The Present State and Possibilities of Leveling Instruments," In the section on aerophotography geodesy Professor N. D. Kuzmin gave a lecture on "The Inter-relationship of the Outer Orientation of Flying Elements, and Methods for Evaluating the Precision of the Instruments Used," Docent I. I. Sherebin reported on "The Basis Tasks of Further Developing aerial Cameras," Engineer I. D. Karpolov spoke on "The Rectification of Photogrammetrical Nets," I. M. Gol'dman, Candidate of Geographical Sciences, dealt with the problems of topographical deciphering of aerial photographs. In the section on cartography Docent P. A. Starostin spoke on "The Fundamental Problems of Mathematical Cartography," Professor Yu. V. Filippov dealt with the problems and prospects in the field of maps and atlases, Candidate of Technical Sciences, P. K. Kozlov, Candidate of Technical Sciences, spoke on "Ways and Means for Perfecting the Stereoscopic Reproduction of the Map Relief," Docent I. P. Zarutskaya spoke on "Cartographing Climatic Conditions in the USSR," M. P. Moryukov, Candidate of Technical Sciences, reported on "Non-rigidiferous Photosensitive Layers and Transparent Bases in Cartography," Engineer S. I. Krivulov spoke on "The Application of Microfilm Photographs in Cartography."

Card 2/3

KUZNETSOV, A. N., kand. tekhn. nauk, dotsent

Comparing Talcott's and Pevtsov's methods for determining latitudes.
Trudy MIIGAİK no. 32:37-40 '58. (MIRA 12:7)

1. Kafedra astronomii Moskovskogo instituta inzhenerov geodesii,
aerofotos"yemki i kartografii.
(Latitude) (Astronomical geography)

KUZNETSOV, A.N., dots. kand tekhn. nauk astronomii

Dellen's method. Trudy MIIGAIK no.33:25-26 '58. (MIRA 12:8)

1. Kafedra astronomii Moskovskogo instituta inzhenerov geodezii,
aerofotos"yemki i kartografii.
(Astronomy, Spherical and practical)