S/020/63/148/004/020/025
B144/B101

AUTHORS: Kreshkov, A. P., Myshlyayeva, L. V., Soboleva, D. A.

TITLE: Synthesis of tris-(triphenyl-siloxy) aluminum and tetra-(triphenyl-siloxy) sodium polyalumoxane

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 4, 1963, 843-845

TEXT: Monomeric tris-(triphenyl-siloxy) aluminum (I) was economically synthesized for the first time from 0.02 M triphenyl-ethoxy silane (II) and 11 g sodium aluminate solution (III): $(C_6H_5)_3SiOC_2H_5 + H_2O \rightarrow (C_6H_5)_3SiOH + C_2H_5OH$; $3(C_6H_5)_3SiOH + NaAlO_2 \rightarrow [(C_6H_5)_3SiO]_3Al + NaOH + H_2O$. A mixture of II obtained by distillation in vacuo at 196-201°C and reprecipitation with petrol ether, along with III containing 19.2% Al_2O_3 and 20.3% Na_2O, was stirred for 40 min without heating and then for 4.5 hrs at 50-60°C. I forming at the surface of the mixture as a white solid substance was separated. The yield was 35% (related to II)

Card 1/3

and 1 - 2 (related to the molar Si:Al ratio). I is a nonmelting powder, soluble in diethyl ether and benzene and resistant to alkalies and heat. The product recovered in the filter after extraction of I contained 12.59% SiO_2, 17.96% Al_2O_3, 7.68% Na_2O, 46.34% C and 5.20% H. This yielded the formula $\left[(C_6H_5)_3SiO\right]_2AlO\left[\underset{\underset{ONa}{|}}{Al}-O\right]_5Al\left[(C_5H_5)_3SiO\right]_2 \cdot 18H_2O$ for tetra-(triphenyl-siloxy) sodium polyalumoxane (IV), a white powder insoluble in organic solvents and stable to alkalies; yield 55 - 60%. The new substances were subjected to thermal, spectral and x-ray analyses. The thermogram of I revealed 3 exothermic effects corresponding to a subsequent splitting-off of the triphenyl-siloxy groups at 500, 600, and 700°C. This is confirmed by the thermogram of IV which shows two exothermic effects due to the 2 triphenyl-siloxy groups bound to Al and 1 endothermic effect produced by dehydration. The IR spectra indicated an absorption maximum at 1065 cm^{-1} characteristic of the SiOAl group and further maxima at 700, 740, 997, 1123, 1432, and 1596 cm^{-1} which are indicative of phenylated silanes and siloxanes. X-ray analysis showed that I and IV have crystalline structure. There are 2 figures.

S/020/63/148/004/020/025
B144/B101

Synthesis of tris-(triphenyl-siloxy) ...

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D.I. Mendeleyeva (Moscow Institute of Chemical Technology imeni D.I. Mendeleyev)

PRESENTED: July 2, 1962, by A.N. Nesmeyanov, Academician

SUBMITTED: June 10, 1962

Card 3/3

ACCESSION NR: AP4009839 S/0191/64/000/001/0065/0067

AUTHORS: Kreshkov, A.P.; My*shlyayeva, L.V.; Krasnoshchekov, V.V.

TITLE: Methods of silicon determination in silico-organic compounds and a comparative evaluation of these methods

SOURCE: Plasticheskiye massy*, no. 1, 1964, 65-67

TOPIC TAGS: substituted silanes, polysiloxanes, silicone rubber, oxysilanes, silicon determination, analytical chemistry

ABSTRACT: Because the recommended method of silicon determination by fusion in a bomb is not always expedient, the authors investigated and proposed other methods of Si determination in silico-organic compounds (SOC): most precise, but time consuming, is wet oxydation by a mixture of oleum and fuming nitric acid in quartz flasks with subsequent Si-determination by gravimetric and volumetric methods. SOC oxidation in a platinum cricible with the same acids is less precise than in a quartz flask but the volumetric tests is faster.

Card 1/2

ACCESSION NR: AP4009839

A fast method is based on the oxidation of SOC by a mixture of sulfuric and chromic acid in a stream of oxygen but it cannot be used with volatile substances. Si-determination by fusing in bomb with sodium peroxide corrodes the bomb and contaminates the substance. Some improvements, which give greater analytical accuracy, consist in oxidizing in open crucibles cooled in liquid air and in the use of sodium fluoride instead of ammonium fluoride in acidimetric titration. The use of nickel or Cr-Ni bombs instead of steel is recommended to avoid contamination. About 40 mono- and polymer SOC were analyzed by the authors using the most appropriate of the above methods and the results are consolidated in tables. The methods are explained and described in detail. Orig. art. has no figures, 3 formulas, 4 tables.

ASSOCIATION: None

SUBMITTED: 00	DATE ACQ: 10Feb64	ENCL: 00
SUB CODE: CH	NO REF SOV: 010	OTHER: 007

Card 2/2

KRESHKOV, A.P.; MYSHLYAYEVA, L.V.; GENSHAFT, Yu.S.; KRASNOSHCHEKOV, V.V.

Interaction of silicohydrofluoric acid with benzidine. Zhur.neorg.khim. 9 no.1:183-186 Ja '64. (MIRA 17:2)

MYSHLYAYEVA, L.V.; MIKHAYLENKO, Yu.Ya.; KRASNOSHCHEKOV, V.V.; KUCHKAREV, Ye.A.

Rapid method of determining chlorine in alkyl(aryl)chlorosilanes.
Trudy MKHTI no.44:139-142 '64. (MIRA 18:1)

MYSHLYAYEVA, L.V.; KRASNOSHCHEKOV, V.V.; SHATUNOVA, T.G.; SEDOVA, I.V.

Determination of iron in ferrocene and its organosilicon derivatives. Zav. lab. 30 no.8:944 '64. (MIRA 18:3)

1. Moskovskiy khimiko-tekhnologicheskiy institut imeni Mendeleyeva.

L 23512-65 EWT(m)/EPF(c)/EWP(v)/EPR/EWP(j)/T Pr-4/Pc-4/Ps-4 WW/RM

ACCESSION NR: AP4047126 S/0080/64/037/010/2278/2283

AUTHOR: Kreshkov, A. P.; My*shlyayeva, L. V.; Soboleva, D. A.

TITLE: The reactions of certain alkyl-alkyloxy silanes with aqueous alkali zincate and beryllate solutions

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 10, 1964, 2278-2283

TOPIC TAGS: alkylalkyloxysilane, alkylsilanolate zincate, alkylsilanolate beryllate, impregnant, surfactant impregnant, glass cloth impregnant

ABSTRACT: The reactions of trimethylmethoxy silane (I) and of dimethyldimethoxysilane (II) with aqueous alkali solutions of sodium zincate (III) and sodium beryllate (IV) were investigated. Reactions of I with III and IV within a wide molar ratio of the reactants (Si:Zn(Be) = 2:1, 1:1, 1:2 and 1:3) all gave products having the molecular compositions $6(CH_3)_3SiONa \cdot Na_2ZnO_2 \cdot 3OH_2O$ (sodium monozincate of 6-trimethylsilanolate), and $3(CH_3)_3SiONa \cdot Na_2BeO_2 \cdot 22H_2O$ (sodium monoberyllate of 3-trimethylsilanolate), respectively. The

Card 1/2

L 23512-65

ACCESSION NR: AP4047126

$3(CH_3)_2Si(OH)ONa.Na_2ZnO_2.10H_2O$ (sodium monozincate of 3-dimethylhydroxylsilanolate) and $3(CH_3)_2Si(OH)ONa.Na_2BeO_2.22H_2O$ (sodium monoberyllate of 3-dimethylhydroxysilanolate) were obtained by reaction of II with III and IV solutions only when the reactant molar ratio was such that Si:Zn(Be) was 4:1. Other reactant ratios gave mixtures of products of variable compositions. The obtained products were subjected to IR spectroscopic, ionizing x-ray and microcrystalloscopic analyses. The products could be applied to cotton and glass cloth as impregnants in the form of aqueous alcoholic solutions to reduce their adhesion to polymeric materials such as polyvinyl chloride. Orig. art. has: 4 figures

ASSOCIATION: None

SUBMITTED: 02Oct62 ENCL: 00

SUB CODE: OC, GC NO REF SOV: 010 OTHER: 001

Card 2/2

L 38118-66 EWT(m)/EWP(j)/EWP(t)/ETI IJP(c) JD/RM

ACC NR: AP6014141 (A) SOURCE CODE: UR/0075/65/020/012/1325/1329

AUTHOR: Kreshkov, A. P.; Myshlyayeva, L. V.; Kuchkarev, Ye. A.; Shatunova, T. G.

ORG: Moscow Chemico-technological Institute im. D. I. Mendeleyev (Moscovskiy khimiko-tekhnologicheskiy institut)

TITLE: Quantitative determination of titanium in titanium-organic and titanium-silicon-organic compounds

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 12, 1965, 1325-1329

TOPIC TAGS: quantitative analysis, titanium, titanium compound, silicon compound

ABSTRACT: The article describes two methods for the determination of titanium, a titration (complexometric) and a spectroscopic method. In the titration method, a weighed portion of the compound to be analyzed, containing 10-15 mg of titanium, is introduced into 5-7 ml of concentrated sulfuric acid. The mixture is heated for 10-15 minutes up to the evolution of H_2SO_4 vapors. The solution is cooled to 90-100° and complete mineralization of the weighed portion is carried out with ammonium persulfate. The solution is cooled and 30 ml of water are

Card 1/2 UDC: 543.70:543.80

carefully added and the solution is boiled for 5-10 min to decompose the ammonium persulfate. The silicic acid is filtered off and the silicon is determined by weighing in the form of SiO_2. Final titration of the titanium in the filtrate is done with a 0.05 M solution of $ZnSO_4$. The relative error of the method does not exceed 2.5%. In the spectroscopic method, the titanium is determined in the form of tetrabutoxytitanium and silicon in the form of tetraoxysilane. In this method, the standard relative error in the determination is 2.2% for titanium and 4% for silicon. Comparative results by the two methods are shown in tabular form. According to the article, the spectroscopic method is to be preferred in practice, since no preliminary mineralization is required. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 07/ SUBM DATE: 28Nov64/ ORIG REF: 010/ OTH REF: 002

L 53089-65 EWT(m)/EPF(c)/EWP(j)/EWA(c) Pc-4/Pr-4 JW/RM

ACCESSION NR: AP5014166 UR/0080/65/038/005/1170/1171

547.245

28
27
B

AUTHOR: Myshlyayeva, L. V.; Soboleva, D. A.

TITLE: Synthesis of poly(triphenylsiloxyalumooxydiphenylcyclooxane)

SOURCE: Zhurnal prikladnoy khimii, v. 38, no. 5, 1965, 1170-1171

TOPIC TAGS: polymer, silane, aluminum, organo metallic compound, heterocyclic polymer, resin

ABSTRACT: Poly(triphenylsiloxyalumooxydiphenylcyclooxane) was synthesized by adding 8 g of alkaline aqueous solution of sodium aluminate (containing 19.2% Al_2O_3 and 20.3% Na_2O) to a mixture of 3 g of triphenylethoxysilane and 2.7 g of diphenyl-diethoxysilane. The reaction mixture was agitated for 2 hours at room temperature and then for 6 hours at 50-60°C. Two products were obtained: a solid benzene-insoluble powder with empirical formula $C_{30}H_{29}Si_2Al$ and a benzene soluble resin with empirical formula $C_{30}H_{29}Si_2Al$. Both of these products as well as a by-product of the synthesis of *tris*-(triphenylsiloxy) aluminum (A. P. Kreshkov, et al., *Dokl. Akad. Nauk SSSR*, 148, 4, 843, 1963) with empirical formula $C_{120}H_{110}Si_8Al_4$ are

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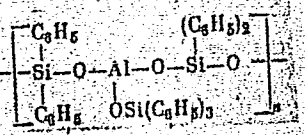
L 53889-65

ACCESSION NR: AP5014166

noncrystalline according to X-ray examination. The IR absorption spectra of all these three products are identical. A maximum at 1080 cm^{-1} indicates Si-O-Al group and maxima at frequencies of 700, 740, 997, 1123, and 1432 cm^{-1} are characteristic for diphenylsilanes. It is postulated on the basis of the above information that the basic structural unit of these three compounds is:



Orig. art. has: 1 table and 2 formulas.

ASSOCIATION: none

SUB CODE: GC, OC

SUBMITTED: 10Nov63

ENCL: 00

NO REF SOV: 004

OTHER: 000

Card 2/2

MYSHLYAYEVA, L.V.; SOBOLEVA, D.A.

Synthesis of poly (triphenylsiloxyalumoxydiphenylsiloxane).
Zhur. prikl. khim. 38 no.5:1170-1171 My '65.
(MIRA 18:11)

L 29728-66 EWP(j)/EWT(m) RM/WW

ACC NR: AP6019449 SOURCE CODE: UR/0303/66/000/003/0060/0062

53

B

AUTHOR: Kreshkov, A. P.; Shatunova, T. G.; Myshlyayeva, L. V.; Kuchkarev, Ye. A.

ORG: none

TITLE: Accelerated methods for determining aluminum and silicon in organic compounds containing aluminum and silicon

SOURCE: Lakokrasochnyye materialy i ikh primeneniye, no. 3, 1966, 60-62

TOPIC TAGS: ~~heteroorganic compound, aluminum determination, silicon determination~~ TITRIMETRY, ALUMINUM COMPOUND, SILICON COMPOUND, CHEMICAL DETECTION, SPARK IGNITION

ABSTRACT: Current methods for determining Al and Si in Al- and Si-containing organic compounds (ASOC) require complete mineralization of such compounds and are time-consuming. The authors have developed two accelerated methods for determining these elements in ASOC. The first method is the determination of aluminum by titration involving complex ion formation. The $\geq$Si—O—Al$\leq$ bond is hydrolyzed with a 2N aqueous solution of HCL in acetone or methanol medium. The $\geq$Si—C$\leq$ bond is not affected under these conditions. The organic solvents contribute to the fast hydrolysis by readily dissolving and stabilizing the hydrolysis products. Titration is conducted in aqueous-methanol or aqueous-acetone solutions. The titrant is zinc sulfate; the indicator is Xylenol Orange or dithizone. The second method is spectroscopic for simultaneous determination of aluminum and silicon involving spraying of ASOC cumene solutions into a low-power spark discharge. The two methods were verified with ASOC

UDC: 543.42

Card 1/2

L 29728-66
ACC NR: AP6019449

of known composition. Both methods give reproducible results which are in general agreement with those of the gravimetric method. Accuracy of the first method is from -1.50 to +0.91%; accuracy of the second method is: for Al, from -2.98 to +3.15%; for Si, from -4.8 to +3.8%. The procedures are described in the source. Orig. art. has: 1 figure and 2 tables. [BO]

SUB CODE: 07/ SUBM DATE: none/ ORIG REF: 008/ ATD PRESS: 5013

Card 2/2

ACCESSION NR: AP4043302 S/0032/64/030/008/0944/0944

AUTHOR: My*shlyayeva, L. V.; Krasnoshchekov, V. V.; Shatunova, T.G.; Sedova, I. V.

TITLE: Determination of iron in ferrocene and its organosilicon derivatives

SOURCE: Zavodskaya laboratoriya, v. 30, no. 8, 1964, 944

TOPIC TAGS: iron determination, ferrocene, ferrocene organosilicon derivative

ABSTRACT: A new rapid method for the quantitative determination of iron in ferrocene and ferrocene organosilicon derivatives was developed at the Moscow Chemical Technology Institute imeni D. I. Mendeleyev. The method is based on decomposition of the sample with a mixture of hydrochloric acid and ammonium persulfate followed by iodometric or complexometric determination of Fe^{3+}. The method is claimed to be satisfactorily accurate and reproducible and considerably to exceed other methods in the rapidity of sample decomposition.

Card 1/2

ACCESSION NR: AP4043302

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Chemical Technology Institute)

SUBMITTED: 00	ATD PRESS: 3084	ENCL: 00
SUB CODE: GC	NO REF SOV: 000	OTHER: 000

Card 2/2

MYSHLYAYEVA, N. A.

MYSHLYAYEVA, N. A. -- "Wild Cherry Seedlings for Moscow Oblast." Moscow, 1956. (Dissertation for the Degree of Candidate in Agricultural Sciences).

So.: Knizhnaya Litopis', No. 7, 1956.

MYSHLYAYEVA, N.A., kand. sel'skokhozyaystvennykh nauk

Propagating fruit trees by grafting. Biol. v shkole no. 3:40-46 My-Je '58. (MIRA 11:8)

1. Institut metodov obucheniya APN RSFSR.
(Grafting--Study and teaching)

MYSHLYAYEVA, N.A., kand.sel'skokhozyaystvennykh nauk; FEDOROVA, V.N., kand.ped.nauk

Lessons in studying the subject "Roots. Absorption of water and mineral substances from the soil." Biol.v shkole no.5:34-41 S-O '59. (MIRA 13:8)

1. Institut metodov obucheniya APN RSFSR.
(Botany--Study and teaching)
(Roots (Botany))

MYSHLYAYEVA, N.A., kand.sel'skokhozyaystvennykh nauk

Conducting experimental and practical work in the cultivation of agricultural plants on a school experimental plot. Biol. v shkole no.5:34-39 S-O '61. (MIRA 14:9)

1. Institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR.
(School gardens)

FEDOROVA, V.N., starshiy nauchnyy sotr.; MYSHLYAYEVA, N.A., mlad. nauchnyy sotr.; GRIGOR'YEVA, N.P., mlad. nauchnyy sotr.; KIVOTOV, S.A., zasl. uchitel shkoly RSFSR; SHADRINA, M.S., red.; NOVOSELOVA, V.V., tekhn. red.

[Tie between teaching botany and the work of students in plant growing]Sviaz' obucheniia botanike s trudom uchashchikhsia po rastenievodstvu. Pod red. V.N.Fedorovoi. Moskva, Izd-vo Akad. pedagog.nauk RSFSR, 1962. 146 p. (MIRA 15:9)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut obshchego i politekhnicheskogo obrazovaniya.
(Botany—Study and teaching)

MYSHLYAYEVA, N.A., kand.sel'skokhozyaystvennykh nauk

Content and organization of experimental work in agriculture in urban schools. Biol. v shkole no.2:49-54 Mr-Ap '62.
(MIRA 15:2)

1. Institut obshchego i politekhnicheskogo obrazovaniya Akademii pedagogicheskikh nauk RSFSR.
(Agriculture--Study and teaching)

MYSHLYAYEVA, V. V. Cand. Tech. Sci.

Dissertation: "Search for Sulfate-Resistant Portland-Cements." Moscow Order of Lenin Chemicotechnological Inst imeni D. I. Mendeleyev, 17 Dec 47.

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

MYSHLYAYEVA, V. V.

26326 Korroziya tsementov razlichnogo mineralotich-eskogo sostava. Sbornik nauch. Rabor po vyazhushchim materialam. m., 1949, s. 99-110.

SO: LETOPIS' NO. 35, 1949

MYSHLYAYEVA, V. V.

Yung, V. N. and Myshlyayeva, V. V. - "Cements from sulphated lime-ash pits," Trudy Mosk. khim.-tekhnol. in-ta im. Mendeleyeva, Issue 15, 1949, p. 51-62

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

MYSHLYAYEVA, V. V.

35336. Vliyanie Gipsana Portlandtsementy Razlichbogo Mineralogicheskogo Sostava. Trudy Mosk. Khim. -Tekhnol. In-Ta Im. Mendeleeva, Vyp. 16, 194 9, S. 30-42

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

MYSHLYAYEVA, V. V.

SUSBACH, YE. I. - inzh. i, MYSHLYAYEVA, V. V. - Kand. tekhn. nauk., ROYAK, S. M. - Kand. tekhn. nauk.

Vsesoyuznyy nauchno-issledovatel'skiy institut tsementnoy promyshlennosti (NIITSement)

ULUCHSHENIYE KACHESTVA MAGNEZIAL'NOGO SILIKATTSEMENTA Page 107

SO: Collection of Annotations of Scientific Research Work on Construction, completed in 1950, Moscow, 1951

15-57-5-6572

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5, p 124 (USSR)

AUTHORS: Royak, S. M., Myshlyayeva, V. V., Tandilova, K. B.

TITLE: An Investigation of Hydraulic Admixtures of Volcanic Origin (Issledovaniya gidravlicheskikh dobavok vulkanicheskogo proiskhozhdeniya)

PERIODICAL: Sb. nauch. rabot po khimii i tekhnol. silikatov. Moscow, Promstroyizdat, 1956, pp 95-111.

ABSTRACT: Hydraulic admixtures investigated were the Ani pemza (pumice), the Yadrino, Abbastapinskiy, and Tedzamskiy tufy (tuffs), and tuff "B." The Abbastapinskiy and Tadrino tuffs and tuff "B," oversaturated with silica (and containing quartz, chalcedony, feldspar, and biotite), have a high activity (140 to 256 mg CaO per g) and at the same time a high loss in weight during roasting. They also have a high content of soluble alumina, up to nine percent. All cements containing a proportion of 50 percent admixture of these materials

Card 1/2

An Investigation of Hydraulic Admixtures of Volcanic Origin (Cont.)

are sulfate-resistant. The formation of calcium sulfo-aluminate in puzzolan portland cements, both from C_3A clinker and from alumina impurities, has a negative influence on the sulfate resistance of puzzolan portland cements in those cases in which the activity ratio of 1 mg of CaO to percentage of "soluble" Al_2O_3 in the mixture is less than 10 to 15. The specified technical conditions for the required content of C_3O (no more than eight percent) in the clinker of sulfate-resistant puzzolan cement that contains admixtures of sedimentary origin should be preserved by using a 30 percent proportion of the above-mentioned admixtures of volcanic material. Admixtures of volcanic origin, suitable for the manufacture of sulfate-resistant puzzolan portland cements, have a ratio of

$$\frac{1 \text{ mg CaO}}{\% \text{ "Soluble" } Al_2O_3}$$

greater than 10 to 15.

Card 2/2

V. P. Ye.

MYSHLYAYEVA V V

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

Abs Jour : Referat Zhur - Khimiya, No 4, 1957, 12656

Author : Royak S.M., Myshlyayeva V.V., Tandilova K.B.
Inst : All-Union State Scientific Research Institute of Cement Industry
Title : Sulfate Stability of Cements with Active Additions of Volcanic Origin

Orig Pub : Tr. Gos. vses. n.-i. in-ta tsement. prom-sti, 1956, No 9, 82-108

Abstract : A study was made of the correlations between sulfate stability of puzzuolanic Portland cements (P) containing acid and basic additions of volcanic origin, and the nature of the additions and their content in alumina. Confirmed was the correlation between amount of extraneous admixtures, content of soluble alumina and activity of CaO absorption, in the case of tuffs. With increase in

Card 1/3 - 108 -

YUNG, V.N., doktor tekhnicheskikh nauk, professor; BUTT, Yu.M., doktor tekhnicheskikh nauk, professor; MYSHLYAYEVA, V.V., kandidat tekhnicheskikh nauk.

Effect of alkalis on the properties of calcium silicate. TSement 17 no.6:9-13 N-D '56. (MLRA 9:8)
(Calcium silicates) (Alkalies)

MYSHLYAYEVA, V.V., kandidat tekhnicheskikh nauk; LUKINA, M.N., inzhener.

Rapid determination of calcium oxide and magnesium by the trilonometric method. TSement 22 no.5:23-25 S-O '56. (MLRA 10:1)
(Cement--Analysis) (Trilon B)

BUTT, Yu.M., doktor tekhn. nauk, prof.; MYSHLYAYEVA, V.V., kand. tekhn. nauk; OSOKINA, T.A., inzh.

Effect of alkalis on the clinkering process and strength of the cement. TSement 23 no.5:9-14 S-O '57. (MIRA 11:1)
(Alkalies) (Cement--Testing)

Distr: 4E2c

Effect of rapid cooling of high-magnesia clinker on the properties of the cement. S. M. Rovnak and V. V. Mychlyaeva. *Tsement* 23, No. 6, 1-4(1957).—Rapid cooling of a portland cement clinker arrests the crystn. of the mineral components in the liquid phase and leaves a relatively large portion in the glassy condition. Moreover, crystal size is smaller than after normal cooling. This effect is especially noticeable in cements with high MgO content, which is manifest in reduced periclase content and small crystal size and, consequently, lower autoclave and final setting expansion. Exptl. work involved quenching the clinker from 1350° with water, followed by optical and chem. analysis in parallel with a sample cooled normally. On a typical pair of samples 5 and 5, (after normal and rapid cooling, resp.) the percentage contents of C_3S were 47 and 50; C_2S 23 and 21; size of crystals (μ) 20-40 and 3-25; MgO content 10.2 and 10.2; periclase content 2.0 and 8.0; dimensions of periclase crystals 5-15 and 2-8; sp. surface (sq. cm./g.) 3410 and 3570; compressive strength (kg./sq. cm. after 28 days). 407 and 434; tensile strength (as above) 23.8 and 26.7. On the basis of the data obtained rapid quenching is considered beneficial, especially with respect to the improvement in tensile strength. H. L. Olin

SOV-28-58-4-23/35

AUTHORS: Myshlyayeva, V.V., Nagerova, E.I., Candidates of Technical Sciences, and Lukina, M.N., Engineer

TITLE: Methods of Chemical Analyses of Portland Cements (Metody khimicheskogo analiza portlandtsementov). Revision of GOST-Standards 5382-50 (K peresmotru GOST 5382-50)

PERIODICAL: Standartizatsiya, 1958, Nr 4, pp 73 - 75 (USSR)

ABSTRACT: The revision of existing standards for methods of chemical analyses of Portland cements was necessary in order to include into the standards classical methods of analysis specified in practical use as well as new speed-up methods, such as trilonometric determination of magnesium oxide and photocolorimetric determination of ferric and manganese oxide. The proposed modifications and additions to classical methods will provide data of higher accuracy relating to the chemical composition of Portland cements. The new speed-up methods will enable cement workers to control and evaluate rapidly the yield quality.

ASSOCIATION: NIITsement

1. Cement--Chemical analysis 2. Chemical analysis--Standards

Card 1/1

BUTT, Yu.M.; MYSHLYAYEVA, V.V., kand.tekhn.nauk; OSOKINA, T.A., inzh.

Interaction of cement alkalies and reactive concrete fillers.
Stroi.prom. 36 no.4:29-32 Ap '58. (MIRA 11:4)

1. Chlen-korrespondent Akademii stroitel'stva i arkhitektury (for Butt).
(Alkalies) (Cement)

Myshliaeva, V.

Chemical control in the cement industry of the Soviet Union. p. 170.

REVISTA DE CHIMIE. (Ministerul Industriei Petrolului si Chimiei si Asociatia Stiintifica a Inginerilor si Technicienilor din Romianta) Bucuresti, Rumania. Vol. 10, no. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI) LC, Vol. -, no. 8, Aug. 1959

Uncl.

MYSHLYAYEVA, V.V., kand.tekhn.nauk; NAGEROVA, E.I., kand.tekhn.nauk;
OSOKINA, T.A., kand.tekhn.nauk

Developing methods of detecting boron and flourine in cement materials.
Nauch.soob.NIITSementa no.8:23-28 '60. (MIRA 14:5)
(Boron--Analysis) (Flourine--Analysis) (Cement)

ROYAK, S.M., dotsent, kand.tekhn.nauk; MYSHLYAYEVA, V.V., kand.tekhn.nauk; OSOKINA, T.A., kand.tekhn.nauk

Effect of various additives on the properties of magnesia cements. Nauch. soob NIITSementa no.9:38-42 '60. (MIRA 14:5)
(Magnesia cement)

MYSHLYAYEVA, V.V., kand.tekhn.nauk; NAGEROVA, E.I., kand.tekhn. nauk

Methods of analyzing barytic and boron-containing cements and materials. Nauch. soob. NIITSementa no.11:39-42 '61. (MIRA 15:2)

(Cement--Analysis)
(Materials--Analysis)

ROYAK, S.M., prof.; MYSHLYAYEVA, V.V., kand. tekhn. nauk; CHERNYAKHOVSKIY, V.A., inzh.

Study of the properties of cement with an increased magnesium oxide content after prolonged hardening. Trudy NIITSement no.19:30-51 '63. (MIRA 17:11)

MYSHLYAYEVA, V.V., kand. tekhn. nauk; OSOKINA, T.A., kand. tekhn. nauk; LUKINA, M. N., inzh.; SAN'KO, T.M., inzh.

Using the FET-UNIY for determining calcium oxide and magnesium in materials for cement production by phototrilonometric titration. Trudy MIITSement no. 19:107-112 '63. (MIRA 17:11)

MUSLJEVA, V. [Myshlyaeva, V.]

Portland cement with high magnesium content. Epitoanyag 16 no. 5:183-186 My '64.

1. Vsesoyuznyy gosudarstvennyy nauchno-issledovatel' skiy institut tsementnoy promyshlennosti, Moskva.

ROYAK, S.M., prof.; MYSHLYAYEVA, V.V., kand. tekhn. nauk; CHERNYAKHOVSKIY, V.A., inzh.

Structure of periclase in cement clinkers. Trudy NIITSement no.18: 29-49 '63. (MIRA 18:9)

L 44391-66 EWT(m)

ACC NR: AP6021384 (A) SOURCE CODE: UR/0101/66/000/002/0009/0009

AUTHOR: Myshlyayeva, V. V. (Candidate of technical sciences); Osokina, T. A. (Candidate of technical sciences)

ORG: none

TITLE: New standard for chemical analysis methods

28

B

SOURCE: Tsement, no. 2, 1966, 9

TOPIC TAGS: analytic chemistry, quantitative analysis, chemical composition, cement, structural mineral product

ABSTRACT: The substitution of GOST 5382-65 for GOST 5382-58, to be effective July 1, 1966, is discussed. GOST 5382-65 refers to "Cements. Methods of Chemical Analysis." The old standard was established in 1958 before methods based on Trilon B and photoelectrocolorimetry had been perfected. It is stated that the GOST 5382-65 calls for photocolorimetric analysis for the basic components in Portland cements and for CaO determination by photoelectric titration using the FET-UNIIZ instrument. The GOST 5382-65 standard also requires that the same analytical methods be employed in testing clinkers and slips. It is suggested that the GOST 5382-65 standard be put into practice in all quality control laboratories of the cement industry. It is claimed that the analytical methods recommended by the GOST 5382-65 are faster and more accurate than those required by the old GOST 5382-58 standard.

SUB CODE: 07,11/ SUBM DATE: none

Card 1/1 pb

UDC: 666.94 : 543.06

MYSHOLIVSKIY, Ya.S.

Calculation of thawing foundation beds of public buildings according to deformations. Osn., fund. i mekh. grun. 6 [i.e.7] no.2:10-11 '65. (MIRA 18:8)

MYSHOLIVSKIY, Ya.S., inzhener.

Precast concrete foundations and reinforced concrete foundation girders for on-and two-story apartment houses. Stroi.prom. 35 no.2:18-19 F '57. (MLRA 10:3)
(Apartment houses) (Foundations) (Girders)

MYSHOLIVSKIY, Ya.S. (Vladivostok)

Designing apartment houses to be constructed on permafrost. Osn. fund. i mekh. grun. 2 no.6:19-20 '60. (MIRA 13:12)
(Frozen ground) (Magadan Province—Apartment houses)

MYSHOLEVSKIY, Ye.S.

Calculation based on the deformations of [illegible] foundation beds of administrative buildings with reinforced beams. Sbor. [illegible] NIIosn. no.54:34-55 [illegible]. (MIRA [illegible])

MYSHONKOV, N.I.

Dissertation: "Investigation of the Condition of Transition of Phosphorus From Metal Bath Into Slag." Cand Tech Sci, Donets Industrial Inst.,Stalino, 1953 (Referativnyy Zhurnal, Khimiya, Moscow, No 15, Aug 54)

SO: SUM 393, 28 Feb 1955

SUKACHEV, A.I., kand.tekhn.nauk; MYSHONKOV, N.I., kand.tekhn.nauk

Smelting steel with use of oxygen. Trudy Ukr.nauch.-issl.inst. met. no.5:103-113 '59. (MIRA 13:1)
(Steel--Metallurgy)
(Oxygen--Industrial applications)

SOV/133-59-5-6/31

AUTHORS: Derfel', A.G., Dubina, Yu.G., Kotin, A.G., Myshonkov, N.I., Sologub, S.L., Tret'yakov, Ye.V., Khmirov, V.I., Chernenko, F.A. and Shneyerov, Ya.A.

TITLE: Efficiency of the Use of Sinter and Briquettes Instead of Ore and Limestone in Open-hearth Furnaces (Effektivnost' primeneniya v martenovskikh pechakh aglomerata i briketov vzamen rudy i izvestnyaka)

PERIODICAL: Stal', 1959, Nr 5, pp 400 - 407 (USSR)

ABSTRACT: In order to compare the efficiency of using fluxed sinter and ore-lime briquettes instead of ore and limestone in open-hearth furnaces as well as to determine the optimum composition of the above agglomerated materials, experimental heats were carried out in 370-ton open-hearth furnaces at the imeni Dzerzhinskiy Works during 1957-1958. Altogether 63 heats with briquettes, 76 with sinters of various compositions and 90 comparative heats using ore and limestone were made. All heats were made in the same furnaces and during the same periods. The composition of briquettes and sinters tested is given in Table 1 (basicity of briquettes varied from 0 - 5.4 and of

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Efficiency of the Use of Sinter and Briquettes Instead of Ore and Limestone in Open-hearth Furnaces

sinters from 0.4 to 2.2). Changes in the basicity and FeO content in slag in the course of smelting are shown in Figures 1 and 2, respectively, the main indices of the experimental and comparative heats in Table 2, the comparison of the amounts of CaO, SiO_2 and ΣFeO transferred to slag from various granular materials - Table 3, changes in the SiO_2 content of slag in the course of smelting for various heats - Figures 3 and 8, the same changes in slag basicity - Figure 4, the same changes in the P_2O_5 content - Figures 5 and 9, the same changes in the CaO content - Figure 6, the same changes in the ΣFeO and CaO and ΣFeO contents - Figures 7 and 11, the same changes in the content of sulphur - Figure 10. It was found that the use of fluxed briquettes or sinters instead of ore and limestone leads to a considerably faster formation of slag during the melting down period, to an earlier slag removal and to a corresponding decrease in the melting

Efficiency of the Use of Sinter and Briquettes Instead of Ore and Limestone in Open-hearth Furnaces

period. The use of fluxed briquettes or sinter of a basicity 2.0 - 2.5 without additions or with minimal additions of ore and limestone made it possible: 1) to decrease the melting period in 370-ton furnaces by 40-45 min with an increase in the furnace productivity of 6-7%; 2) to decrease the duration of heating up successive layers of granular materials during the charging period as well as their heating after the charging is completed (which permitted a further decrease of 10-15 min in the duration of heats); 3) to increase slag basicity in the course of smelting and to decrease the FeO content of slag at the beginning of the melting period and to increase its FeO content at the end of this period; 4) to increase the dephosphorising and desulphurising ability of slag due to its earlier formation and higher basicity throughout the whole course of smelting and 5) to exclude blow-outs from the furnace during melting. The briquettes and sinters can also be used with success during refining. The organisation of a large-scale

Efficiency of the Use of Sinter and Briquettes Instead of Ore and Limestone in Open-hearth Furnaces

production of fluxed briquettes and sinters for the open-hearth furnaces and their wide application in steel-making practice is recommended. There are 11 figures, 3 tables and 6 Soviet references.

ASSOCIATIONS: Ukrainskiy institut metallov (Ukrainian Institute of Metals) and Zavod imeni Dzerzhinskogo (imeni Dzerzhinskiy Works)

MASLENNIKOV, N.D., kand.tekhn.nauk; MYSHONKOV, N.I., kand.tekhn.nauk; ALEKSEYEV, B.I., kand.tekhn.nauk; SHUMOV, Ye.N., inzh.; MASLOV, A.A., inzh.; YANKELEVICH, V.M., inzh.; IZYUMSKIY, F.P., inzh.

Investigating gas saturation of cast iron smelted in a cupola furnace. Mashinostroenie no.6:33-36 N-D '62. (MIRA 16:2)
(Cast iron—Defects)

MASLENNIKOV, N.D., kand. tekhn. nauk; MYSHONKOV, N.I.; MASLOV, A.A.

Treating liquid pig iron with magnesium salts. Sbor. trud. UNIIM no.9:255-265 '64 (MIRA 18:1)

MYSHTSYN, N.D.

Bibliography of Soviet patents. Metalloved. i term. obr. met. no.10:3 of cover O '63. (MIRA 16:10)

SOV/137-58-9-18758

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 87 (USSR)

AUTHOR: Mysh'yanov, N.P.

TITLE: Cobalt Hydrometallurgy Processes (Protsessy gidrometallurgii kobal'ta)

PERIODICAL: Materialy Soveshchaniya po vopr. intensifik. i usoversh. dobychi i tekhnol. pererabotki medno-nikelevykh i nikelevykh rud. 1956 g. Moscow, Profizdat, 1957, pp 210-218

ABSTRACT: The following are the raw materials used at the cobalt plant of the Noril'sk Kombinat: 1) Converter slags (Co 0.25-0.3%, Ni 1.5-2.0%, Cu 1.5%), a reducing smelting of which yields an Fe-Co alloy containing Co 1.-1.5%, Fe 40-70%, Ni 23-28%, 2) Fe-Co cakes (products of bulk removal of Co and Fe from nickel-extraction anolyte by black Ni hydrates) containing 3.4% Co, 28-30% Ni, 10-12% Fe. The ratio of the amount of Co delivered in the slags to the Co in the cakes is 1:1. The Fe-Co alloy is subjected to electrochemical or chlorine dissolution, and the resultant Co solution is treated by a hypochlorite method. A description is presented of the changes made by the plant in the hydrometallurgical portion of the flow sheet,

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Cobalt Hydrometallurgy Processes

namely, the process of chlorine dissolution of Fe-Co alloy, an improved removal of Fe from the solutions and treatment of the Fe-Co cakes, and filtration of the pulp on drum-type vacuum filters.

N.P.

1. Slags--Processing 2. Slags--Reduction 3. Cobalt-iron alloys--Separation
4. Cobalt-iron alloys--Electrochemistry 5. Hydrates--Performance

Mysicka, Jan

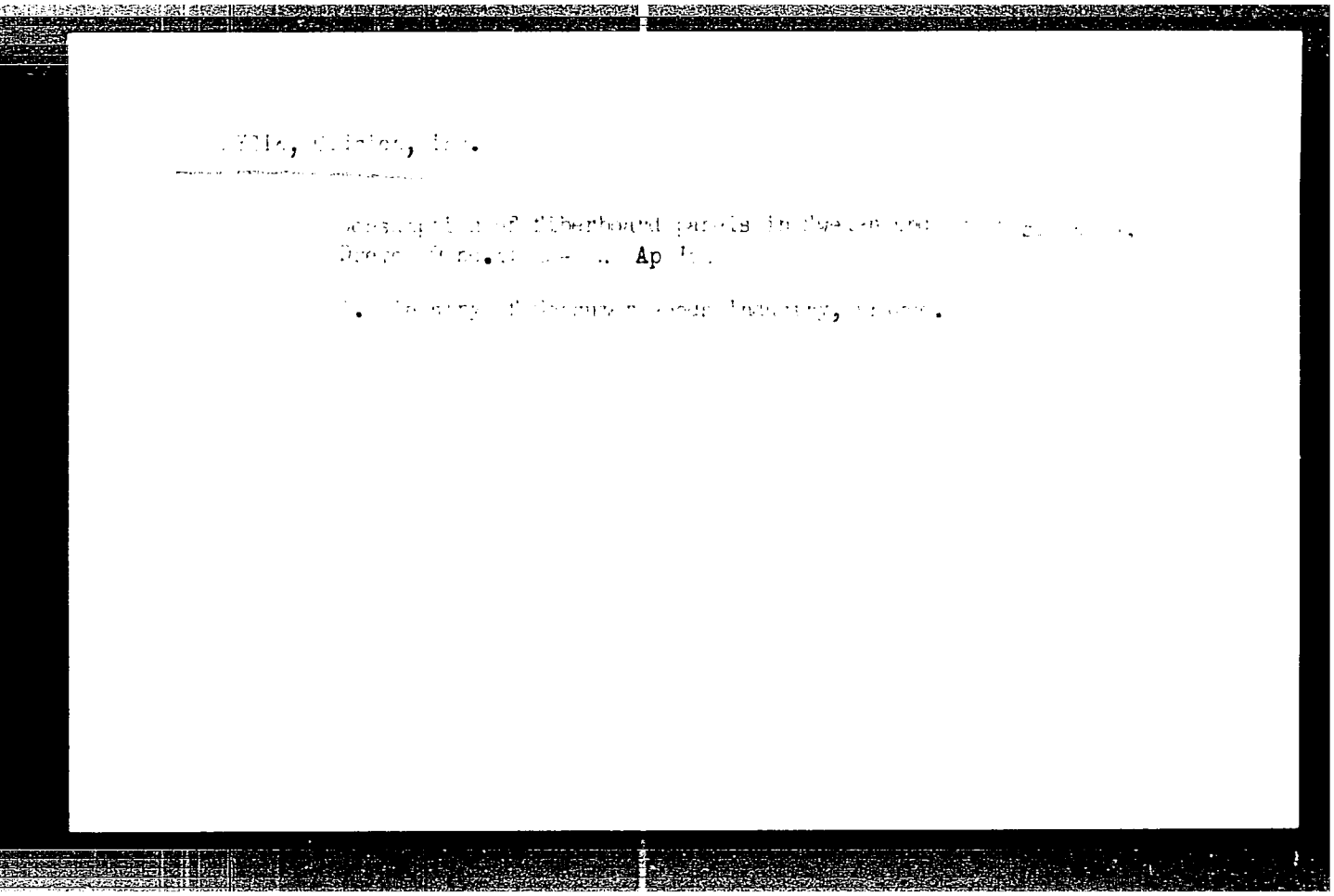
Mineralogical-geological bibliography of Czechoslovakia for 1952. Vaclav Bartulek, Jan Mysicka, Bretislav Tyrznik, and Milada Grossmannova. Naklad Ceskoslov. Akad. Ved. 1953, 116 pp; cf. C.A. 47, 6823g. Michael Fleischer

5-9-55

MYSIELSKI, Jan

Determination of arithmetical operations in Ackermann's model.
Alg. i log. 3 no.5/6:64-65 '64. (MIRA 18:6)

1. Instytut matematyczny Polskiej Akademii nauk.



MYSIK, Oldrich, ing.

Symposium on the sawmilling industry in Geneva. Drevo 2[illegible]
no.2:66-68 F '64.

1. Ministry of Consumer Goods Industry, Prague.

MYSIK, Oldrich, inz.

From the symposium on the sawmilling industry in Geneva. Drevo 20 no.3:92-96 Mr '65.

1. Ministry of Consumer Goods Industry, Prague.

BLAZHEK, L. [Hlazek,L.] (Chekhoslovakiya); DVORZAK, E. [Dvorak,E.] (Chekhoslovakiya); MYSHIK, S. [Mysik,S.] (Chekhoslovakiya)

Agglomeration of nutadiene-styrene latex particles by freezing. Part.1: Effect of the nature of emulsifier, pH of latex and temperature of freezing on the agglomeration of butadiene-styrene latexes. Koll.zhur. 26 no.6:657-661 N-D '64 (MIRA 18:1)

MYSIK, V.

The panel plant in Most. p. 638

POZEMNI STAVBY. (Ministerstvo stavbnicty) Praha, Czechoslovakia, Vol. 7, no. 12, 1959

Monthly List of East European Accessions (EEAI), LC. Vol. 9, no. 2, Feb. 1960

Uncl.

LANGER, Bedrich; MYSIK, Vladimir, inz.

Reduction of heat losses and investment costs in dwelling houses. Poz stavby 13 no.1:21-22 '65.

Thermal insulation of external walls of the experimental building No.351 in Novy Most. Ibid.:23-24

1. Pozemni stavby, Usti nad Labem.

MYSIK, V.A.

Studying the condition of insulation of cable systems in mine sections of the Karagandaugol' Combine. Nauch. trudy KNIUI no. 11:138-151 '62. (MIRA 17:7)

MYSIN, A. I.

Ethnological Museums and Collections - Mordovia

Ethnographical material in the Mordovian Republic Natural History Museum. Sov. etn., No. 3, 1952.

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

MYSINA, A. V.

The effect of growth-stimulating factors on the biochemical properties of early and late cotton varieties. A. G. Toshchevikova, A. V. Mysina, and N. A. Sokolova. *Trudy. Sredneaziat. Univ.* No. 53, *Biol. Nauki.* No. 17, 71–88 (1954); *Referat. Zhur. Khim., Biol. Khim.* 1955, No. 6214.—Peroxidase activity rises with the emergence of the third leaf, during bud formation at the onset of blooming and at early ripening. It is highest during bud formation but is sharply lowered with the appearance of the 11th leaf. Oxidative enzymes are less active in the early cotton varieties, but N is higher. In the early and late cotton varieties N is at its max. at the emergence of the 23rd leaf. It is then gradually lowered up to the time of the plants' complete ripening.

B. S. Levine

133-58-5-9/31

AUTHORS: Kolosov, M. I., Ayzenshtok, I. Ya., Komissarov, A. I., Mysina, G. Ye. and Povolotskaya, M. S.

TITLE: The Influence of the Weight of Ingots on the Quality of Structural Steels (Vliyaniye vesa slitka na kachestvo konstruktsionnykh staley)

PERIODICAL: Stal', 1958, Nr 5, pp 411-414 (USSR)

ABSTRACT: An investigation of the possibility of increasing the weight of ingots of steels 18KhVA, 40KhNMA, 12Kh2N4A and 30KhGSA from 1.2 and 2.65 t to 4.5 t was carried out. This increase in weight of ingots was necessary in order to increase the throughput of the casting pit and blooming mill as well as to increase the degree of deformation on rolling profiles of a large cross-section (250 to 300 mm). The investigation was carried out on eight heats made in a 30-ton electric furnace. The experimental metal was teemed into 1.18, 2.65 and 4.5 t ingots. In order to study the character of crystallisation three ingots of various sizes from each melt of each of the steels investigated were selected. After slow cooling and a softening heat treatment from the twelve selected ingots axial longitudinal plates were cut. The experimental ingots of 2.65 and 4.56 (charged hot into soaking pits)

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The Influence of the Weight of Ingots on the Quality of Structural Steels

were rolled on a blooming mill to a cross-section 250 x 250 mm and then on a mill 800 into semis 140 x 140 mm. Ingots weighing 1.18 t were rolled on a mill 800 into semis 140 x 140 mm. For the studies of the macrostructure and mechanical properties specimens were taken from semis 250 x 250 on the following distances from the top of ingots %:

Ingot 2.65 t 19, 58, 98
Ingot 4.5 t 19, 39, 58, 78, 98

The macrostructure of etched specimens was evaluated according to MAP-MChM scale. Thermal treatment of specimens for testing mechanical properties was done according to MPTU2333-49. The macrostructure of ingots is shown in Figs. 1-4. The results obtained indicated that: 1. Macrostructural defects in rolled steels were caused by defects in the cast structure of ingots. 2. Axial intercrystallite cracks in rolled steel 18KhNVA of a cross-section 250 x 250 from 4.5 t ingots remain unwelded during rolling in spite of a considerable

 degree of reduction (in steel 12Kh2N4A they are welded

The Influence of the Weight of Ingots on the Quality of Structural Steels

on both profiles 140 x 140 mm and 250 x 250 mm (from ingots of all weights). 3. The axial porosity and v-shaped cracks in ingots of steels 40KhNMA and 30KhGSA are welded during rolling. 4. The degree of development of segregation outside the central zone of ingots depends on the chemical composition of steel and increases with increasing weight of ingots, but does not exceed the degree permitted by MAP-MChM 1951. From the steels investigated the highest development of the segregation was observed in ingots of steel 30KhGSA. 5. The weight of ingot has no influence on the mechanical properties of steels. 6. The indices of mechanical properties of steels investigated were high with the exception of the top part of 4.5 ton ingot of steel 30KhGSA, where strength and plasticity indices were lower than is required by standards. It is concluded that: 1. Increasing the weight of ingots of 18KhNVA steel from 1.18 to 2.65 ton to 4.5 t is not advantageous, as this deteriorates the macrostructure of metal due to developing axial intercrystallite cracks which are not welded during rolling. 2. Steels 12Kh2N4A

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The Influence of the Weight of Ingots on the Quality of Structural Steels

and 40KhNMA can be cast into 4.5 ton ingots as their structure and mechanical properties remain satisfactory.
3. The problem of casting steel 30KhGSA into 4.5 t ingots requires further investigation.
There are 4 figures.

ASSOCIATION: Chelyabinskiy metallurgicheskiy zavod
(Chelyabinsk Metallurgical Works)

KAPEL'NITSKIY, V.G.; SHVED, F.I.; KARTSEV, M.A.; TULIN, N.A.; POZDEYEV, N.P.; SERGEYEV, A.B.; MERENISHCHEVA, I.I.; KALININA, Z.M.; POZDNYAKOV, M.V. Prinimali uchastiye: KUZOVATOV, V.N.; MAKSUTOV, R.F.; MYSINA, G.Ye.; SHELGAYEVA, A.V.; ZHIVICHKIN, L.A.; GAYDUK, Yu.A.; GALYAN, V.S.; SOSKOV, D.A.; KHMELEV, I.I.; PARABINA, G.I.

Making steel and alloys in vacuum furnaces. Stal' 23 no.4:325-328 Ap '63. (MIRA 16:4)
(Vacuum metallurgy) (Electric furnaces)

KEYS, N.V., inzh.; KOMISSAROV, A.I., inzh.; MYSINA, G.Ye., inzh.; DONETS, R.N., inzh.

Studying the hardenability of bearing steel produced by the Chelyabinsk Metallurgical Plant. Stal' 23 no.4:360-362 Ap '63. (MIRA 16:4)

1. Chelyabinskiy metallurgicheskiy zavod.
(Bearing metals—Hardening)

LUBENETS, I.A.; ZHUKOV, D.G.; VOINOV, S.G.; SHALIMOV, A.G.; KOSOY, L.F.; KALINNIKOV, Ye.S.; CHERNYAKOV, V.A.; YAPTSEV, M.A.; GOLIKOV, Ye.S.; MYSINA, G.Ye.; Prinimali uchastiye: KEYS, N.V.; PEGOV, V.G.; MEN'SHENIN, Ye.B.; BARNOVALOV, M.A.; SHIPER, G.B.; SHATALOV, M.I.; MOLCHANOVA, A.A.; ANISIMOVA, M.Ye.

Refining steel with synthetic slag from large-capacity arc furnaces. Stal' 25 no.3:232-235 Mr '65. (MIRA 18:4)

L 42972-65 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) JD
ACCESSION NR: AP5008709 S/0133/65/000/003/0232/0235

AUTHOR: Lubenets, I. A.; Zhukov, D. G.; Voinov, S. G.; Shalimov, A. G.; Kosoy, L. F.; Kalinnikov, Ye. S.; Chernyakov, V. A.; Yarteev, M. A.; Golikov, Ye. S.; Mysina, G. Ye

TITLE: Synthetic slag refining of steel from large-capacity arc ovens

SOURCE: Stal', no. 3, 1965, 232-235

TOPIC TAGS: steel refining, synthetic slag, ball bearing steel, chromium steel, low impurity steel, arc oven steel

ABSTRACT: During the second half of 1963, one of the electrical steel-smelting enterprises started introducing the refining of steel by means of synthetic lime-alumina slag into industrial use. The present article reports on the preliminary findings concerning the efficiency of this new process. Tests were carried out with a slag-melting OKB-284 oven having an interior diameter of 5350 mm and a 4500 kVA transformer. The wall and cover were made of chromomagnesite while the tank was lined with carbon blocks; the smelting chamber had a diameter of 3000 mm and was 600 mm deep. All pertinent construction and operational data are given

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L 42972-65
ACCESSION NR: AP5008709

in considerable detail. Specifically, 1) the oven produced 2.5 metric tons/hr. of slag; 2) during production of ball-bearing and construction chromium steel, the slag consumption amounted to 2.8-5.0% of the mass of processed metal; 3) the oven consumed about 1420 kWh per metric ton of slag produced; 4) the shortened refining operation decreased the consumption of electrical energy by 30-40 kWh per metric ton of metal, which compensated fully for the energy requirements for the production of slag; and 5) the productivity of the large-capacity electrical ovens was increased by 10-15%. The new method markedly reduced (as shown in several tables presenting the results of impurity determinations) the amount of nonmetallic impurities and improved the plastic properties of the finished product. The technological procedures described should be able, in the future, to improve the quality of the above-mentioned special steels even more and reduce the impurity content even further. "In this work, carried out in conjunction with TsNIIChM, N. V. Keys, V. G. Pegov, Ye. B. Men'shenin, M. A. Barnovalov, G. B. Shirer, M. I. Shatalov, A. A. Molchanova, M. Ye. Anisimova, and others also took part." Orig. art. has: 5 tables.

ASSOCIATION: None

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 001 OTHER: 000

Card 2/2

FILIPPOVA, V.N.; MYSINA, L.A.

Use of the Barger method for determining the osmotic suction of soil solutions. Pochvovedenie no.7:107-109 Jl '64.
(MIRA 17:8)

1. Pochvennyy institut imeni Dokuchayeva.

IVANOV, V.S., gornyy inzh.; MYSINA, L.G., inzh.-geofizik

Seismoacoustic activities of coal seams serving as indices of gas and coal outburst danger. Ugol' Ukr. 6 no.8:14-15 Ag '62. (MIRA 15:11)

(Mine gases)
(Seismometry—Observations)

KONSTANTINOVA, A.G.; MYSINA, L.G.

Relative changes of the energy of seismo-accoustic processes during the sudden outburst of coal and gas. Izv. AN SSSR. Ser.geofiz. no.2:301-308 F '63. (MIRA 16:3)

1. Institut gornogo dela im. A.A.Skochinskogo.
(Mine cases) (Seismology)

KONSTANTINOVA, A.G.; MYSINA, L.G.; IVANOV, V.S.

Characteristics of the seismoacoustic processes accompanying sudden ejections of coal and gas during well boring. Izv. AN SSSR. Ser. geofiz. no.11:1676-1683 N '63. (MIRA 16:12)

1. Institut gornogo dela im. A.A.Skochinskogo.

KONSTANTINOVA, A.G.; MYSINA, L.G.; IVANOV, V.S.

Analysis of seismoacoustic processes accompanying strong sudden ejections of coal and gas. Izv. AN SSSR. Fiz. zem. no.11:85-89 '65. (MIRA 18:12)

1. Institut gornogo dela imeni A.A. Skochinskogo. Submitted June 26, 1964.

MYSINA, L.M.

Geological structure of the Biryulinskiy coal-bearing region in the Kuznetsk Basin. Trudy Lab.geol.ugl. no.6:537-545 '56. (MLRA 10:2)

1. Zapadnosibirskoye geologicheskoye upravleniye.
(Kuznetsk Basin--Coal geology)

MYSINSKY, O.

Thread brakes; according to the Sulzer Brothers Ltd. patent of a Swiss invention.

P. 15, (Sbirka Vynàezu) Vol. 6, no. 1, Jan. 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Acessions (EEAI) Vol. 6, No. 11 November 1957

MYSINSKY, C.

A knitting machine for fragile materials; the Czechoslovak patent no. 85,600. p.125. (Sbirka, Vynalezu, Vol. 6, No. 6, June 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

COUNTRY : CZECHOSLOVAKIA
CATEGORY : Chemical Technology. Chemical Products and Their Application. Pesticides. H
ABS. JOUR. : RZhKhim., No 17, 1959, No. 62001

AUTHOR : Ettel, V.; Myska, J.
INSTITUTE : -
TITLE : Organic Herbicides. I. Substituted 4-Phenylazophenoxyacetic Acid.
ORIG. PUB. : Collect. czechosl. chem. commun., 1958, 23, No 7, 1341-1345

ABSTRACT : See Ref. Zhur.-Khimiya, 1958, No 12, 40793

Card: 1/1

MYSKA, J

CZECHOSLOVAKIA

MYSKA, J; STANEK, J; ETTEL, V; MARCHALINOVA, M.

Institute of Organic Technology of the Technical Higher School of Chemistry (Institut für organische Technologie, Technische Hochschule für Chemie), Prague and Spolana, Neratovice

Prague, Collection of Czechoslovak Chemical Communications, No 11, 1963, pp 3154-3158

"On Some New Derivatives of Trichloracrylic Acid."

(4)

MYSKA, Jiri, inz.

Vertical mixture in multilayer filters. Vodohosp cas 12 no.3:336-347 '64.

1. Institute of Hydrodynamics, Czechoslovak Academy of Sciences, Prague.

MYSKA, Jiri, inz.

Effect of flow speed on the porosity of a fluidized bed.
Vod hosp 13 no.11: 412-414 '63.

1. Ustav pro hydrodynamiku, Ceskoslovenska akademie ved, Praha.

MYSKA, Jiri, Ing.

Porousness of the filter bed. Vodni hosp 12 no.2:47-[illegible]

1. Institute of Hydrodynamics, Czechoslovak Academy of Sciences, Prague.

MYSKA, L.

"Photovacuum methods for the production of fine scales."

JEMNA MECHANIKA A OPTIKA, Praha, Czechoslovakia, vol. 4, No. 3, March 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

MYSKA, L.

Methods of mirror production. p. 217.

JEMNA MECHANIKA A OPTIKA. (Ministerstvo vseobecniho strojirenstvi) Praha, Czechoslovakia.
Vol. 4, no. 7, July 1959.

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 11, Nov. 1959
Uncl.

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Z/030/60/000/009/002/004
A121/A026

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AUTHOR: Myška, L , Engineer

TITLE: Photographic Images in Glass

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TEXT: The author deals with the preparation of images, scales, etc, in glass. In addition to known methods (Refs. 1,2,3,4,5) the method of Hall and Hayes (Refs. 6,7) and its three main technologic phases are described in detail The image on the glass surface is formed by photoetching (Refs. 8,9) or by applying the photovacuum method (Refs. 1, 0). The transmission of the invisible image to the inner glass is effected by electric potential or by chemical influence of sulphur trioxide at increased temperature. A detailed description of the electrophoresis method including the required temperature and reaction time, of reduction process causing a visible image by the application of hydrogen atmosphere and of required properties of glass is given Figure 1 shows a sample of a scale transmitted to a BaF type glass of 1.3 mm thickness, 16 times enlarged; Figure 2 a scale on a nontransparent red ground plate and Figure 3 the scale (Fig. 1) 80 times enlarged. These samples have been prepared according to the author (Ref. 7). In his evaluation the author states that only scales visible with the

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naked eye, not precise and optically not clear, may be produced applying this expensive method. The photo sensitive glass method (Refs. 3,4,11) is briefly described; carriers of sensitiveness are ions of Cu, Ag, Au and Pd, available in the glass and causing dissimilar coloration of image. CeO_2 serves as sensitizer, the image transmission takes place optically applying heat. The photoceramic method (Ref. 5) makes possible the production of extremely fine images, its principle is explained Although the chemical and mechanical power of resistance of the image does not reach the degree of the two methods described above, it corresponds to the requirements for optical and precision mechanical devices. Finally a precise comparison of the methods mentioned is given. There are 3 figures and 11 references: 4 German, 2 US, 1 British, 1 Soviet, 1 Australian, 1 Austrian, 1 Czech.

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