Special Features of Distribution of Admixture Elements in the Compound Magnetite Ores of Certain Contact-Metasomatic Deposits

favorable isomorphic conditions of the high-temperature surroundings which prevailed during the formation of earlier minerals. The author further advises how to mine and process different ores with an admixture of one of the above mentioned elements. There are 2 graphs, 1 diagram and 14 Soviet references.

ASSOCIATION: Institut mineral'nykh resursov AN USSR (Institute of Mineral Resources of the AS of the Ukrainskaya SSR)

KARASIK, M.A.

Some features of the Magnitogorsk ore-bearing province and prospects for its expansion. Trudy Gor.-geol. inst. UFAN SSSR no.40:41-66 '59. (MIRA 13:11)

(Magnitogorsk region--Ore deposits)

3(5)

AUTHOR: Karasik, M. A. SOV/20-125-6-40/61

TITLE: On the Relation Between the Size of Ore Deposits and Their Main Geochemical Features (O svyazi mezhdu razmerami rudnykh poley i glavneyshimi ikh geokhimicheskimi osobennostyami)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 6, pp 1315-1318 (USSR)

ABSTRACT: The author subdivides the ore deposits of the contact-metasomatic iron- and copper ore deposits of the Ural and the Turgayskiy downwarping in the Zaural'ye (Trans-Ural region) into 6 groups according to the appearance of three stages of endogenic mineralization: I) preskarn-, II) skarn-, and III) postskarn stage. Each of these stages is characterized by the more or less exploitable concentrations of iron or by the specific paragenesis of minerals and accompanying elements (Refs 1-3). F i r s t g r o u p. Ore deposits with primary mineralization in the first stage, a considerable appearance in the second, and a secondary in the third stage (type I > II > III). The Kacharskoye ore deposit in the Turgayskiy downwarping is typical of that, the Sokolovskoye and Sarbayskoye ore deposits are similar.
S e c o n d g r o u p. Type 1 < 2 ≷ 3. The largest ore deposits

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in the Central Ural, Tagil'skoye and Kushvinskoye, belong to this group. The "polar" ore types: preskarn type: vanadium-titanium-iron ores and postskarn sulphurous copper ores are located in the peripheral zones of the ore deposits. The composition of the main mass of iron ores changes between them from manganese-containing to sulphurous and cobalt-containing as well as copper-containing ones. Table 1 shows the ore types compared to the main minerals and mineralization stages. T h i r d g r o u p. Type II>III: (1) Techenskoye deposit (South Ural), (2) Severnoye, (3) Severnoye, Pokrovskoye and Maslovskoye (North Ural) as well as Magnitogorskoye within its previous boundaries (Ref 8). The Dashkesanskoye ore deposits (Zakavkaz'ye = Transcaucasia) belongs as well to this group (Refs 9,10). F o u r t h g r o u p. Type II≃III: Auerbakh-Tur'inskoye deposits (Refs 4,5). F i f t h g r o u p with predominating magnetite mineralization in the postskarn stage (type II<III m): first Severnoye (North Ural) and Kunakayskoye as well as Maskayskoye (South Ural). S i x t h g r o u p. Predominating sulphide mineralization. Type II<III s. The Gumeshevskoye ore deposits which belong to it have approximately

fifteen known chalcopyrite-pyrites-ore bodies (Ref 6). The above-mentioned data show that the degree of variety of the mineralization is directly related to its variability within the region of the ore deposits of the discussed genetic type and dimensions. It is amazing how precisely the groups (types) of the ore deposits agree, according to the degree of appearance of the mineralization, with the groups according to the amount of the ore resources. The deposits with the best developed preskarn stage (scapolite stage) of mineralization have the largest ore resources compared with other types (from some hundred million to a billion tons). The uniformity of the genetic relation of the deposits of individual ore types is confirmed by the peculiarities of their mutual stratification and the position with respect to the main elements of the geological structure. The contact-near zones of granitoid intrusive rocks with which these deposits are associated are concerned here. The elements which accompany iron (S, Co, Ni, Cu, Zn, Au, Ag, Se, Te, as well as As and Pb) are related to the third mineralization stage. Mn, more rarely than P and rare earths, Co, Zn, gallium, and separations of boron silicate

are often related to the second stage. The third stage is accompanied by Mg, Ti, Va, P, rare earths, Cl, and F. Finally, the relations between the intrusive rocks and the tectonic faults are discussed. The Magnitogorskoye ore deposits, which do not belong to the above-mentioned scheme according to their size are an exception. There are 1 table and 13 Soviet references.

ASSOCIATION: Institut mineral'nykh resursov Akademii nauk USSR (Institute of Mineral Resources of the Academy of Sciences of the UkrSSR)

PRESENTED: December 19, 1958, by D. S. Korzhinskiy, Academician

SUBMITTED: October 25, 1958

KARASIK, M.A. [Karasyk, M.A.]; VASILEVSKAYA, A.Ye. [Vasylevs'ka, A.IE.]; PETROV, V.Ya.; RATEKHIN, Ye.A. [Ratiekhin, IE.A.]

Distribution of mercury in the fossil coal of the TSentral'nyy and Donets-Makeyevka regions of the Donets Basin. Geol.zhur. 22 no.2:53-61 '62. (MIRA 15:4)

1. Institut mineral'nykh resursov AN USSR.
(Donets Basin--Mercury)

KARASIK, M.A.; BULKIN, G.A.; BOL'SHAKOV, A.P.

Some relationships between mineralogical-geochemical and geological-structural characteristics of ore fields of the antimony-mercury complex. Dokl. AN SSSR 142 no.2:425-428 Ja '62. (MIRA 15:2)

1. Institut mineral'nykh resursov AN USSR. Predstavleno akademikom D.I.Shcherbakovym.
(Antimony ores)
(Mercury ores)

KARASIK, M.A.

Importance of the pseudomorphism of minerals for studying genetic features of their deposits. Min.sbor. no.14:171-183 '60. (MIRA 15:2)

1. Institut mineral'nykh resursov AN USSR, Simferopol'.
(Pseudomorphs)

KARASIK, M.A.

Methods of natural classification of postmagmatic ore deposits.
Mat.z min.Ukr. no.2:12-36 '61. (MIRA 15:8)
(Ore deposits--Classification)

KARASIK, M.A.

(19)

Baku, 18-23 Sept 1962

Regularities in the Formation and Distribution of Endogenous Mineral Resource Deposits,
The Third All-Union Conference on...

S/011/63/000/001/002/002
A006/A101

Group 2 included reports on--
endogenous deposits in other synclinal regions, such as mercury formations in Siberia and the Far East (V. A. Kuznetsov), pyrite deposits in the Ural (S. N. Ivanov), Kimeridgian and Alpine metallogeny in Uzbekistan (I. Kh. Khamrabayev); ore region types in the Pacific area (Ye. A. Radkevich); metallogeny in Tadzhikistan (K. I. Litvinenko); hydrothermally transformed rocks in the Trans-Carpathian region (M. Yu. Fishkin) peculiarities in magmatism and metallogeny of the Mountaneous Crimea (V. I. Lebedinskiy), antimony-mercury fields (M. A. Karasik) and others. Group 3 included reports on the classification of metallogenous zones and provinces of the Earth crust (D. I. Gorzhevskiy); classification of metallogenous zone types of the Earth crust (V. N. Kozorenko); classification of magmatogenous non-metallic mineral resources as a basis of prognoses and prospecting (V. P. Petrov); types of metallogenous provinces in synclinal regions of the USSR (A. I. Semenov); principles of geological zoning on the example of Central Asia (K. L. Babayev); comparative characteristics of metallogeny in Malyy Caucasus and the Kamchatka-Koryak zone (I. G. Magak'yan), some particularities of metallogeny in the Mediterranean geosynclinal region (G. A. Tvalchrelidze); rootless plutons and some peculiarities in the magmatism of moving zones (A. P. Lebedev); paragenetic ore complexes (P. S. Saakyan) the part of deep-lying breaks in metallogeny of syncline regions on the example of the Caucasus (E. Sh. Shikhalibeyli). The closing report was read by A. V. Sidorenko, Minister of Geology and Preservation of Mineral Resources of the USSR.

Izvestiya Ak nauk SSSR, Seriya Geologicheskaya, No. 1, 1963, pp 126-128

S/169/63/000/002/064/127
D263/D307

AUTHOR: Karasik, M. A.

TITLE: Geochemical profiling as a prospecting method for mercury and polymetallic deposits

PERIODICAL: Referativnyy zhurnal, Geofizika, no. 2, 1963, 8, abstract 2D51 (Byul. nauchno-tekhn. inform. M-vo geol. i okhrany nedr. SSSR, 1962, no. 1 (35), 60-64)

TEXT: Regional and large scale geochemical profiling was carried out in the industrial territory of Donbass in order to find the most promising areas for detailed prospecting for ore deposits. During regional geochemical profiling and supporting geological section were studied the geochemical characteristics of all known deposits, ore outcrops, ore-surrounding hydrothermal metamorphism, and dispersion aureoles of separate elements in the enclosing rocks. The profiles were made at distances of 25-60 km from each other, and extended over up to 120 km. Samples of enclosing rocks, coals, gypsum and other useful minerals were taken from all strati-

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graphic horizons. Part of the samples was analyzed by spectroscopic or chemical methods, and another part was kept for petrographic examination. Regional profiling was paralleled by large scale profiling, with sampling intervals of 20 - 100 m. The large scale profiles are made both along and across the regional profiles, and their main object is to contour and study the characteristics of primary and secondary aureoles around known and supposed mercury and polymetallic ore deposits. Particular attention is paid to the sampling of coals during profiling. It was found that the increased Hg contents in coals ($\geq$ 1 g/t) are associated with known parts of the tectonic structures, and are spatially related to the ore fields of mercury and polymetallic deposits. From individual large scale geochemical profiles were found wide dispersion aureoles of mercury within the soil over the polymetallic deposits of the Nagol'nyy Ridge. Under the Donbass conditions, geochemical profiling is effective not only as a method but also economically. [Abstracter's note: Complete translation.]

YURK, Yu.Yu., doktor geol.-miner. nauk, prof., otv. red.; GOROSHNIKOV, B.I.[Horoshnykov, B.I.], kand. geol.-miner. nauk, red.; KARASIK, M.A.[Karasyk, M.A.], kand. geol.-miner. nauk, red.; KORNILOV, M.O.[Kornylov, M.O.], kand. geol.-miner. nauk, red.; LEBEDINSKIY, V.I. [Lebedyns'kyi, V.I.], kand. geol.-miner. nauk, red.; SHTUL'MAN, I.F., red.; DAKHNO, Yu.B., tekhn. red.

[Mineralogy and geochemistry of the southeastern part of the Ukrainian S.S.R.] Mineralogiia i geokhimiia pivdenno-skhidnoi chastyny URSR. Kyiv, Vyd-vo AN Ukr.RSR, 1963. 148 p. (MIRA 17:1)

1. Akademiya nauk URSR, Kiev.

KARASIK, M.A.; GONCHAROV, Yu.I.

Mercury in the Lower Permian of the Donets Basin. Dokl. AN SSSR 150 no.4:898-901 Je '63. (MIRA 16:6)

1. Institut mineral'nykh resursov AN UkrSSR. Predstavleno akademikom D.I. Shcherbakovym.
(Donets Basin—Mercury ores)

KARASIK, Mikhail Abramovich; YURK, Yu.Yu., doktor geol.-miner. nauk, otv. red.; ZERNETSKAYA, N.V., red.; MATVEYCHUK, A.A., tekhn. red.

[Postmagmatic ore zones and their classification] Poslemagnitticheskie rudnye polia i ikh klassifikatsiia. Kiev, Izd-vo AN Ukr.SSR, 1963. 265 p. (MIRA 16:8)
(Ore deposits--Classification)

AYZENBERG, D.Ye.; BELEVTSEV, Ya.N.; BORDUNOV, I.N.; BORISENKO, S.T.; BULKIN, G.A.; GORLITSKIY, B.A.; DOVGAN', M.N.; ZAGORUYKO, L.G.; KAZAKOV, L.K.; KALYAYEV, G.I.; KARASIK, M.A.; KACHAN, V.G.; KISELEV, A.S.; LAGUTIN, P.K.; LAZARENKO, Ye.K.; LAZARENKO, E.A.; LAPITSKIY, E.M.; LAPCHIK, F.Ye.; LAS'KOV, V.A.; LEVINSHTEYN, M.L.; MALAKHOVSKIY, V.F.; MITKEYEV, M.V.; PRUSS, A.K.; SKARZHINSKIY, V.I.; SKURIDIN, S.A.; SOLOV'YEV, F.I.; STRYGIN, A.I.; SUSHCHUK, Ye.G.; TEPLITSKAYA, N.V.; FEDYUSHIN, S.Ye.; FOMENKO, V.Yu.; SHKOLA, T.N.; SHTERNOV, A.G.; YAROSHCHUK, M.A.; ZAVIRYUKHINA, V.N., red.

[Problems of metallogeny in the Ukraine] Problemy metallogenii Ukrainy. Kiev, Naukova dumka, 1964. 254 p. (MIRA 18:1)

1. Akademiya nauk URSR, Kiev. Instytut geologichnykh nauk.

KARASIK, M.A.; BOBROV, V.P.; GONCHAROV, Yu.I.; VANINA, M.V.

Geochemistry of boron in halogen formations. Lit. i pol. iskop. no.6:43-56 N-D '64. (MIRA 18:3)

1. Institut mineral'nykh resursov Gosudarstvennogo geologicheskogo komiteta SSSR, Simferopol'.

KARASIK, M.A. [Karasyk, M.A.]

Some effective methods for studying the change of endogenetic mineral formation. Geol. zhur. 24 no.1:14-27 '64. (MIRA 18:7)

1. Institut mineral'nykh resursov AN UkrSSR.

KARASIK, M.A.; BOL'SHAKOV, A.P.; BULKIN, G.A.; PETROV, V.Ya.

Characteristics of the distribution of mercury, antimony, and arsenic in the Nikitovka ore field. Sov. geol. 7 no.10:66-78 O '64. (MIRA 17:11)

1. Institut mineral'nykh resursov AN UkrSSR.

KARASIK, M.A.; GONCHAROV, Yu.I.; VASILEVSKAYA, A.Ye.

Mercury in the mineralized waters and brines of the Permian halogene formation in the Donets Basin. Geokhimiia no.1:117-121 Ja '65.
(MIRA 18:4)

1. Institut mineral'nykh resursov Gosudarstvennogo geologicheskogo komiteta SSSR.

KARASIK, M.A.; BOL'SHAKOV, A.P.

Mercury vapors in the Nikolovka oil field. Dokl. AN SSSR 161 no.5: 1201-1204 Ap '65. (MIRA 18:5)

1. Institut mineral'nykh resursov, Simferopol'.

KARASIK, M.N. ENGINEER

Building-Estimates

New procedure in composing projects and estimates of residential building construction. Engineer M.N. Karasik. Gor. khoz. 26 No. 6 1952.

Monthly List of Russian Accessions, Library of Congress, September 1952. UNCLASSIFIED.

KARASIK, M.N.

Subject : USSR/Engineering AID P - 532

Card 1/1 Pub. 93 - 7/9

Author : Karasik, M. N., Engineer

Title : About building construction of the State Farms

Periodical : Sbor. mat. o nov. tekh. v stroi., 7, 25-27, 1954

Abstract : Description of large units of pig and cow barns built from stone, concrete and reinforced concrete for the State Farms of the Moscow districts. 2 photos.

Institution : None

Submitted : No date

KARASIK, M.N., inzhener.

Hothouse and hotbed combine of the "Belaia Dacha" state farm. Gor. khoz.Mosk. 29 no.1:34-37 J '55. (MIRA 8:3)
(Moscow Province--Nurseries (Horticulture))

KARASIK, Moisey Naumovich; KRUTOV, Pavel Ivanovich; STRELKOVA, N.A., red.; ATROSHCHENKO, L.Ye., tekhn.red.

[Economical farm buildings] Ekonomichnye sel'skokhoziaistvennye postroiki. Moskva, Izd-vo "Znanie," 1958. 30 p. (Vsesoiuznoe obshchestvo po rasprostraneniiu politicheskikh i nauchnykh znanii. Ser.5, no.32) (MIRA 11:12)

(Farm buildings)

KARASIK, M. N. Cand Tech Sci — (diss) "Investigation of Questions on the Planning-Design and Operating Conditions of Processed Food Plants," Leningrad-Pushkin, 1960, 29 pp, 180 copies (Leningrad Agricultural Institute) (KL, 46/60, 125)

KARASIK, M.N., inzh.

Some problems of the design and operation of feed plants. Sbor. nauch. soob. NIIsel'stroia no.3:36-48 '60. (MIRA 15:6)
(Swine--Feeding and feeding stuffs)

KARASIK, Moisey Naumovich, kand. tekhn. nauk; GUTSALENKO, I.S., inzh., nauchn. red.; BOGINA, S.L., red.

[Economic effectiveness of design decisions for livestock buildings] Ekonomicheskaia effektivnost' proektnykh reshenii zhivotnovodcheskikh ob"ektov. Moskva, Stroiizdat, 1964. 122 p. (MIRA 17:7)

KARASIK, Miron Yefimovich; YEGOROV, Boris Fedorovich; KARAMYSHEV, I.A., redaktor; VERINA, G.P., tekhnicheskiy redaktor

[Work experience of progressive railroad bridge builders] Opyt raboty peredovykh stroitelei zheleznodorozhnykh mostov. Moskva, Gos. transportnoe zhel-dor. izd-vo, 1955. 76 p. (MLRA 8:6)
(Railroads) (Bridge construction)

KARASIK, M.Ye.,

Making precast reinforced concrete slabs in construction yards.
Transp.stroi.5 no.6:7-10 Ag'55. (MLRA 8:12)

1. Nachal'nik Dnepropetrovskoy Normativno-issledovatel'skoy stantsii
(Concrete slabs)

KARASIK, M.Ye., MASLENNIKOV, Ye. F., nachal'nik stroitel'stva.

Installing bridge decking made of large-sized reinforced concrete blocks. Transp. stroi. 5 no. 10:7-9 D '55. (MLRA 9:3)

1. Nachal'nik Dnepropetrovskoy normativno-issledovatel'skoy stantsii Orgtransstroya (for Karasik).
(Bridges, concrete)

KARASIK, M.Ye.; KRONFEL'D, B.D., inzh..

Possibilities for reducing necessary labor and operational costs expended on construction of contact network poles. Transp.stroi. 9 no.2:10-12 F '59. (MIRA 12:5)

1. Nachal'nik Dnepropetrovskoy nauchno-issledovatel'skoy stantsii Orgtransstroya (for Karasik).
(Electric lines--Poles)

KARASIK, M.Ye., inzh.; KRONFEL'D, B.D., inzh.; KONOPLEV, V.G., inzh.; KRYZHANOVSKIY, V.M., inzh.; ABRAGAM, S.R., inzh., red .; BOBROVA, Ye.N., tekhn. red.

[Organization of construction works during the electrification of railroads; experience of the construction organizations of the Ministry of Construction for Transportation] Organizatsiia stroitel'nykh rabot pri elektrifikatsii zheleznykh dorog; opyt stroitel'nykh organizatsii Mintransstroia. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1960. 65 p. (MIRA 14:7)
(Railroads--Electrification) (Railroad engineering)

KARASIK, M.Ye., inzh.

Choosing an efficient technique for manufacturing prestressed girder spans. Bet. i zhel.-bet. 8 no.10:449-453 O '62. (MIRA 15:11)

(Bridges, Concrete) (Beams and girders)

KARASIK, N.S., otvetstvennyy redaktor; DOBRYNINA, A.YA., redaktor; LEDNEVA, N.V. tekhnicheskiy redaktor

[Communication technology: Equipment for an intraregional telephone system; a collection of data] Tekhnika sviazi: Apparatura vnutriraionnoi telefonnoi sviazi; informatsionnyi sbornik. Moskva, Gos. izd-vo lit-ry po voprosam sviazi i radio, 1957. 50 p. (MLRA 10:5)

1. Russia (1923- U.S.S.R.) Ministerstvo svyazi. Tekhnicheskoye upravleniye.
(Telephone--Apparatus and supplies)

KANTOR, L.Ya.; GUMELYA, A.N.; ROZENBERG, Ya.G.; AFANAS'YEV, A.P.; SAMORUKOV, D.A.; GUSEV, S.S.; DOGADIN, V.N.; RAMENSKIY, B.N.; KARASIK, N.S.; PIONTKOVSKIY, B.A.; Prinimal uchastiye MEDOVAYA, A.I.; SVERDLOVA, I.S., red.; ULANOVSKAYA, N.M., red.; MARKOCH, K.G., tekhn. red.

[Electrical communications and wire broadcasting] Elektricheskaia sviaz' i radiofikatsiia. [By] L.IA.Kantor i dr. Izd.2., dop. i ispr. Moskva, Sviaz'izdat, 1963. 672 p. (MIRA 16:8)

(Wire broadcasting) (Telecommunication)

LOGINOV, Anatoliy Georgiyevich. Prinimal uchastiye KARASIK, N.S.; KOKSHARSKIY, N.S. dots., retsenzent; SVERDLOVA, I.S., red.

[Organization, planning, and design of rural telephone systems] Organizatsiia, planirovanie i proektirovanie sel'skoi telefonnoi sviazi. Moskva, Izd-vo "Sviaz'," 1964. 147 p. (MIRA 17:7)

1. Leningradskiy elektrotekhnicheskiy institut svyazi im. M.A.Bonch-Bruyevicha (for Koksharskiy). 2. Starshiy inzhener Glavnogo upravleniya gorodskoy i sel'skoy telefon svyazi i radiofikatsii Ministerstva svyazi SSSR (for Karasik).

KARASIK, N.S., otv. red.; OBRAZTSOVA, Ye.A., red.

[Instructions on the design of rural telephone networks] Ukazaniia po proektirovaniiu sel'skikh telefonnykh setei. Moskva, Izd-vo "Sviaz'," 1964. 187 p. (MIRA 17:6)

1. Russia (1923- U.S.S.R.) Glavnoye upravleniye gorodskoy i sel'skoy telefonnoy svyazi i radiofikatsii.

KARASIK, N. Ts.

Preparation of bitumens from peat. A. P. Kalkonski and N. Ts. Karasik. *Vestsi Akad. Navuk Belarus. S.S.R.* 1954, No. 2, 79-82.—Bitumens, n. 70-10?, extd. from different peats (characterized by 40-?% decompn. of their org. mass) show the following chem. compn.: C 70-2, H 8-10, Org. rax 41-8%, acid no. 35-70, sapon. no. 60-200, I no. 15-80. This chem. compn. resembles that of the bitumens obtained from brown coal. The best extractant for the peat bitumens is a 1:1 alc.-benzene mixt.; the bitumen yield is 21.9-8.1% of the abs. dry substance of peat. Pure benzene, gasoline, and CCl_4 yield only 14.0-15.4, 9.0-10.4, and 10.2%, resp. (Soxhlet app.) of bitumen. The bitumens obtained by the extn. of the same peat with the alc.-benzene mixt. and gasoline differ slightly in their chem. compns. E. Wierbicki

KARASIK, N. T.

3694. PRODUCTION OF BITUMEN FROM PEAT. [illegible] Vestsi Akad. Navuk Belorussk. SSR (Bull. Acad. [illegible]), 1954, (2) [illegible] abstr. in Ref. Zh. Khim. (Ref. J. Chem.) [illegible] 20800). There are in White Russia a number of peat fields of the upland type and highly decomposed, which could form a valuable raw material for bitumens. The bitumen content reaches 20-24%. The greatest yield is obtained by extraction with alcohol-benzene, and bitumen so obtained has a boiling point of 80°C. It is possible to get high boiling point bitumens with a high tar content, bitumen with low boiling point and small tar content, and also bitumens without tar. The bitumens obtained by extracting the peat with organic solvents can be used on saponification as emulsifying agents, and in purification as other types of wax.

PRASOLOV, R.S., inzh.; KARASIK, N.Ya., inzh.

Physicochemical properties of the ash deposits on the water walls in steam boilers operating on pulverized coal. Teploenergetika 8 no.6:64-72 Je '61. (MIRA 14:10)

1. TSentral'nyy kotloturbinnyy institut.
(Boilers)

KARASIK, N. YA.

Category : USSR/Solid State Physics - Systems E 4

Abs Jour : Ref Zhur - Fizika, No 1, 1957, No 1166

Author : Karasik, N.Ya., Gomon, G.O.
Title : X-Ray Diffraction Investigation of $BaTiO_3$-$PbZrO_3$ Solid Solutions

Orig Pub : Zh. tekhn. fiziki, 1955, 25, No 5, 945-946

Abstract : See Ref. Zhur. Khim. 1956, 191

Card : 1/1

SOV/96-58-9-14/21

AUTHORS: Zenkevich, Yu.V. (Candidate of Technical Science) and Karasik, N.Ya. (Engineer)

TITLE: The Chemical and Phase Compositions of Sludge from Boilers Type TP-240 operating at Super-high-pressure (185 at). (Khimicheskiy i fazovyy sostav shlama kotlov TP-240, rabotayushchikh pri sverkhvysokom davlenii (p = 185 at)

PERIODICAL: Teploenergetika, 1958, Nr 9, pp 68 - 70 (USSR)

ABSTRACT: This article gives analyses of deposits taken from boilers and describes the conditions under which they were formed and the places in which they were deposited. A boiler type TP-240 in a Moscow Power Station used chemically de-salted make-up water. Excess phosphate content was maintained in the boilers. During the period of test there were a number of shut-downs for repair; samples of sludge were collected, of the description noted in Tables 3 and 4, and indicate mainly iron oxide, copper or its oxides, and phosphate compounds. The sample taken from the boilor-water sampling line inside the rear drum also contains considerable quantities of silica and sulphates. In general, the quantity of magnesium compounds was small. Sludge from different parts of the

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The Chemical and Phase Compositions of Sludge from Boilers Type TP-240 operating at Super-high-pressure(p=185 at)

boiler differs mainly in the ratio between oxides of iron, phosphates of calcium and copper. It seems that the sludge is carried round the whole boiler by the circulating water and differences in composition probably result from formation at different times. X-ray analysis of sludge by the powder method was made. The roentgenograms can be classed in four typical groups; in group 1 the sludge consists of a mixture of haematitite, magnetite, phosphorite ($Ca_3(PO_4)_2H_2O$) and considerable quantities of copper; in group 2 the analysis is the same but the amounts of haematite and magnetite are roughly equal; in group 3 there is a mixture of haematite, magnetite, copper and phosphorite, and the Fe_3O_4 content is three times that of α-Fe O (unlike group 1); group 4 sludge consists of a mixture of haematite, magnetite, copper, phosphorite and

The Chemical and Phase Compositions of Sludge from Boilers Type TP-240 operating at Super-high-pressure(p=185 at)

anhydrite. In this group the haematite phase predominates. Roentgenograms of all four groups, and of haematite and magnetite, are given in a figure.

There are: 1 figure, 4 tables, 7 literature references (5 English, 2 Soviet)

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut (Central Boiler Turbine Institute)

1. Boilers--Deposits 2. Feed water--Analysis 3. Boilers --Performance

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KARASIK, N.Ya.; SHLEPYANOVA, N.Ye.

Methods for the electrolytic separation of the -phase from the deposited metal. Zav.lab. 25 no.10:1198-1199 '59.
(MIRA 13:1)

1. TSentral'nyy kotloturbinnyy institut im.I.I.Polzunova.
(Metallography)

18(5,4) SOV/125-59-5-6-16

AUTHOR: Karasik, N.Ya., Candidate of Technical Sciences, Shlepyanova, N.Ye., Engineer

TITLE: Physical-Chemical Investigations of Modifications of δ -Phase in Austenite-Ferrite Weld Metal

PERIODICAL: Avtomaticheskaya svarka, 1959, Vol 12, Nr 5 (74) pp 55-61 (USSR)

ABSTRACT: The article presents the results of a chemical and radiographical investigation of the phase composition of weld metal type TsT-15 before and after different heat treatments. The deciphering of radiographs of different forms of δ - phase are shown. A way of electrolytic isolation of δ - phase in a solution of hydrochloric acid at little current density is proposed. Mentioned is A.G. Alten and his investigations in 1954 (Ref. 5). Two samples were investigated, one of pure austenite, the other with about 5% ferrite. Here is mentioned the electrolytic separation of σ -phase, made by T.P. Hoar and K.W.J. Bowen. The investigation showed,

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SOV/125-59-5-6/16

Physical-Chemical Investigations of Modifications of δ -Phase in Austenite-Ferrite Weld Metal

that the development of δ-phase ir the weld-metal is more intensive in the presence of α-phase.(ferrite). In the weld metal there are two modifications of α-phase with a proportion iron to chrome, near to 1 and 2. The regular connection between the quantity of σ -phase, developed during the process of ageing and the impact strength of the weld metal is shown. In the presence of 6-9% σ -phase, seldom is an impact strength of 2 Kgm/cm^2 reached. There are 1 figure, 3 graphs, 4 tables and 9 references,7 of which are Soviet and 2 English

ASSOCIATION: TsKTI imeni I.I. Polzunova (TsKTI imeni I.I.Polzunov).

SUBMITTED: November 1, 1958

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25(1)
AUTHOR: Karasik, N.Ya.

SOV/125-59-1-10/15

TITLE: The Roentgenographic Research of the Phase Composition of Welded Butt Metal with Austenite-Ferrite Structure (Rentgenograficheskoye issledovaniye fazovogo sostava metalla svarnogo shva s austenitno-ferritnoy strukturoy)

PERIODICAL: Avtomaticheskaya svarka, 1959, Nr 1, p 58-61 (USSR)

ABSTRACT: The author reports on roentgenographic research results as to phase composition of the KTI-5-type fused-on metal after welding and after thermal treatment; furnishes the decoding of the δ-phase and metastable δ' -phase roentgenograms; shows the sucession of phase transformation in the austenite-ferrite welded-on metal during long thermal seasoning. The research was performed on KhI9N12M2F-type welding metal of three structural compositions. The chemical composition of the metal is shown in Figure 1. The table discloses that the metal samples differ from one another in their chromium content. The samples were subjected to tests under the following conditions: after the welding-on process, during stabilization of the fused-on metal at a temperature of 800 degrees C for ten hours,

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The Roentgenographic Research of the Phase Composition of Welded Butt Metal with Austenite-Ferrite Structure

during the austenization of the metal at 1100 degrees C for one hour and during a subsequent stabilization at a temperature of 800 degrees C for ten hours, during seasoning at 650 degrees C for 1000 hours after temporary stabilization at 800 degrees C and a ten-hour tempering at the same temperature, during austenization at 1100 degrees C for one hour and a subsequent stabilization at 800 degrees C for ten hours, and during seasoning at 650 degrees C for 1000 hours. The samples were tested also as to electrolytic segregations. Test pieces measuring 10 to 12 mm in diameter and 50 to 60 mm in height were used. No interfering lines were discovered in the single-phase, austenite welded-on metal after the welding process. After stabilization at 800 degrees C for a 10-hour period, lines showed up, that corresponded to $Me_{23}C_6$-type compound chromium carbide with crystal-lattice parameters 10.60 kKh. During the treatment of the fused-on metal according to the austenization method and subsequent stabilization, there lines were also noticed that

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The Roentgenographic Research of the Phase Composition of Welded Butt Metal With Austenite-Ferrite Structure

corresponded to the $Me_{23}C_6$-type carbide phase. Structural δ' phase lines additionally appeared only at 1100 degrees C, during technological annealing at 800 degrees C for ten hours, and during seasoning at 650 degrees C for 1000 hours. Figure 2 gives a roentgenogram calculation on the electrolytically-segregated sediments after thermal treatment. Figure 4 contains data on phase transformations in diversely composed welded-on metal, caused by thermal treatment. Changes of phase composition essentially affect the mechanical properties of tested metals. Plastic properties and toughness will be satisfactory only if the butt metal contains $Me_{23}C_6$-type carbide phase with or without a quantity of δ phase. A combined formation of the δ' phase and δ phase suddenly decreases the toughness of the metal. The tests were performed under the direction of Ye. Ye. Levin, Candidate of Technical Sciences. The segregation of sediments was done by engineer N. Ye. Shlepyanova at the Khimicheskaya laboratoriya TsKTI im. Polzunova (TsKTI

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The Roentgenographic Research of the Phase Composition of Welded Butt Metal With Austenite-Ferrite Structure

SOV/125-59-1-10/15

Chemical Laboratory imeni Polzunov). There are four tables, two photos, and two references, one of which is Soviet and one American.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut im. I.I. Polzunova (Central Boiler-Turbine Institute imeni I.I. Polzunov)

SUBMITTED: April 18, 1958.

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18 (7) 05726

AUTHORS: Karasik, N. Ya., Shlepyanova, N. Ye. SOV/32-25-10-15/63

TITLE: Methods of Electrolytic Separation of the σ-Phase From a Built-up Metal

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 10, pp 1198 - 1199 (USSR)

ABSTRACT: The present paper reports on experiments carried out at the TsKTI (see Association) under the direction of V. N. Zemzin concerning the welding of heat-resistant steels. It was found that the methods indicated in publications (Ref 2) for the electrolytic separation of the σ-phase and the solid α-γ-solution in hydrochloric acid are not applicable to built-up metals. A built-up metal of two compositions of type 19-10-1 Nb was investigated. One of the alloys was purely austenitic, the other one contained about 5% ferrite. The built-up metal was investigated after various thermal preliminary treatments. For separating the σ-phase, the following conditions proved to be most convenient: anodic dissolution of the built-up metal at a current density of 0.02 a/cm^2, 20% hydrochloric acid as an electrolyte, repeated ice-cooling for 1-1.5 hours in the course

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of 2-3 days. An oxalate salt is added to the electrolyte as a complex former. Chemical analysis of the precipitation loosened by ultrasonics showed that the σ-phase of the built-up metal contains chromium, iron, and small amounts of nickel (Table 1). X-ray pictures of precipitations obtained after various thermal preliminary treatments showed that σ-phases are formed which exhibit a diffraction picture different with respect to intensity and position of interference lines (Tables 2,3). There are 3 tables and 1 Soviet reference.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut im. I. I. Polzunova (Central Institute of Boilers and Turbines imeni I. I. Polzunov)

25(1)

S/125/60/000/03/006/018
D042/D001

AUTHORS: Karasik, N.Ya. and Shlepyanova, N.Ye.

TITLE: The Influence of the Ferrite Constituent on the Formation of the -Phase in Weld Metal

PERIODICAL: Avtomaticheskaya svarka, 1960, Nr 3, pp 46-50

ABSTRACT: Many authors have stated previously [Ref. 1-5] that the sigma phase can form in solid alpha and gamma solutions. Works have been consecrated to the study of the effect of alloy elements on the sigma formation, and on the effect of the sigma phase itself on the solid solution [Ref. 6-9]. In the present work, the formation of the sigma phase is studied in weld metals 1Kh19N12M2F (electrodes KTI-5), 1 Kh19N9B (electrodes TsT-15) and 2Kh19N9MB (electrodes KTI-12) in relation with different quantities of the alpha phase in the solid solution, different alloying, and different heat treatment [Ref. 10]. The work includes part of the research work which is being conducted at the TsKTI under the guidance of Candidates of Technical Sciences V.N. Zemzin and Ye.Ye. Levin on the heat resistance of austenito-ferrite

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D042/D001

The Influence of the Ferrite Constituent on the Formation of the -Phase in Weld Metal

weld metal. The study showed that the sigma phase in metal alloyed with molybdenum and vanadium (1Kh19N12M2F) forms, when passing through the intermediate phases -- cubic $Me_{23}C_6$ and G. With the increase of the initial quantity of ferrite in this metal, the zone of existence of intermediate phase narrows, and with 8% of ferrite this applies to all heat conditions except the initial; the sigma phase predominates, and in ageing at 650° C its quantity reaches 16%. In metal alloyed with niobium (1Kh19N9B) the intermediate phases are absent. In the process of ageing at 650° C and after stabilization (metal with 5% ferrite) the formation of the sigma phase takes place. Austenitization slows down the formation of the sigma phase in 1Kh19N9B metal much more than in 1Kh19N9M2F steel. In the first case, the quantity of the sigma phase decreases approximately to 3%, in the second, it remains rather high - 13% of the weight of

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S/125/60/000/03/006/018
D042/D001

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the metal (heat treatment of: 1000°C, 1 hour +800°, 10 hours +650°, 1000 hours). In weld metal with increased carbon content (2Kh19N9MB), alloyed with molybdenum and niobium, stable carbide phases $Me_{23}C_6$ and NbC are formed in the ageing process under 750° C. Metal of this type is the most stable in comparison with the two above compositions - the formation of the sigma phase in it takes place only in the process of long-time ageing at 750° C, and its quantity does not exceed 3 to 4% of the weight of the metal. Reference is made to another article by Zemzin, V.N., Pivnik, Ye.M., and Yeroshkin, N.A. which is also published in this issue. There are 3 tables, 3 graphs, and 11 Soviet references.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut im. Polzunova (Central Boiler-Turbine Institute imeni Polzunov).
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S/125/60/000/03/006/018
D042/D001

The Influence of the Ferrite Constituent on the Formation of the -Phase in Weld Metal

SUBMITTED: September 7, 1959

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18.7500

S/129/61/000/002/006/014
E193/E483

AUTHORS: Karasik, N.Ya., Engineer and Shlepyanova, N.Ye.

TITLE: The Effect of Alloying Elements on the Constitution of Cast Austenitic Steels

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1961, No.2, pp.28-30

TEXT: The object of the present investigation was to study the effect of molybdenum and tungsten, added singly or together, on the constitution of niobium-stabilized Cr-Ni steels. The composition of the steels studied А, Б, В, Г (A, B, V, G) is given (Table 1). The constitution of steels subjected to various heat treatments (normalizing at 1180°C, followed by ageing at 550 to 800°C for 24 to 6000 h) was determined by X-ray and chemical analysis of residues obtained by anodic dissolution of the appropriate experimental specimens. This was carried out in an electrolyte, consisting of a 20% solution of HCl, with an addition of 4 g of oxalic acid per 1 litre of the solution, at anodic current density of 40 mA/cm^2. The following conclusions were reached. (1) In the presence of either tungsten or molybdenum, a carbide of a composition, described by the general formula

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S/129/61/000/002/006/014
E193/E483

The Effect of Alloying Elements on the Constitution of Cast Austenitic Steels

IX

$Me_{23}C_6$, with the lattice parameter of 10.54 - 10.61 kX, is formed. (In the formula given above, Me = Fe + Cr + Ni + Mo or, in the case of steel containing tungsten but no molybdenum, Me = Fe + Cr + Ni + W). (2) When both tungsten and molybdenum are added to steel in the 3:1 ratio, in addition to the $Me_{23}C_6$ phase (in this case Me = Fe + Cr + Ni + Mo + W), the $Fe_2(Mo,W)$ phase is formed after prolonged ageing at 750 or 800°C. (3) When molybdenum and tungsten are added in the 1:1 ratio, the $Fe_2(Mo,W)$ phase is formed already after 100 h at 650°C. In addition, an unidentified phase with a face-centered cubic lattice and lattice parameter of 4.28 kX appears in this type of steel. (4) In all the 4 steels studied, niobium is present mainly as carbide NbC. There are 3 figures, 5 tables and 5 references: 2 Soviet and 3 non-Soviet.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut imeni Polzunova (Central Boiler and Turbine Institute imeni Polzunov)

Card 2/3

34457
S/125/62/000/003/002/008
D040/D113

18.1130

AUTHORS: Karasik, N. Ya. and Shlepyanova, N.Ye.

TITLE: X-ray study of phase transformations in austenite-ferritic 1Kh25N13 weld metal

PERIODICAL: Avtomaticheskaya svarka, no. 3, 1962, 13-18

TEXT: The described X-ray study is a part of current investigations on the heat resistance of austenite-ferritic weld metal, conducted at the Tsentral'nyy kotloturbinnyy institut im. I.I. Polzunova (Central Boiler and Turbine Institute im. I.I. Polzunov), under the supersivion of V.N.Zemzin, Candidate of Technical Sciences. The results are given of an investigation of the relationship between sigma phase formation, ferrite content and the system used in heat treating 1Х25Н13 (1Kh25N13) weld metal. The chemical composition of the weld metal was: 0.10-0.12% C, 0.35-0.41% Si, 2.90 - 3.20% Mn, 22.8-26.7% Cr, 12.51-15.59% Ni, 0.010-0.015% S and 0.025-0.035% P. The ferrite content, which ranged from 0-16%, was varied by adding metal-

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X-ray study ...

lic chrome and nickel in different proportions. Metal was studied in the initial state and after stabilization at 800°C for 10 hours with subsequent aging for 35 to 1000 hours at 700°C. The ferrite content was determined metallographically. Specimens of deposited metal were dissolved by electrolysis, and the sediments studied roentgenographically. The following conclusions were drawn: (1) Complex $Me_{23}C_6$ type carbide is the predominating phase in 1Kh25N13 weld metal containing 2-4% or no ferrite. The σ-phase appears in small quantities only after longer than 500 hrs aging at 700°C; (2) an increase in ferrite content to 5-7% causes more intensive σ formation after holding for 35 hrs at 700°C, but the quantity of $M_{23}C_6$ carbide still predominates up to 1000 hrs; (3) at 11-13% ferrite content, σ forms in about the same quantities as carbide or predominates after 200 hrs aging; prolonged aging results in coagulation of σ particles; (4) at 14-16% ferrite content, σ forms after 35 hrs aging and predominates during all subsequent aging at 700°C; (5) the mechanical properties, particularly the impact strength of 1Kh25N13 weld metal with different ferrite content change during aging. When only $Me_{23}C_6$ carbide forms, the impact strength changes

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during heat treatment by 20-10 kG-m/cm^2. The formation of the σ-phase even on a small scale (compared to carbide) reduces the impact strength during aging from 12 to 5 kG-m/cm^2. When σ forms in quantities comparable with $Me_{23}C_6$ carbide, or when it predominates, the impact strength drops abruptly to 1 kG-m/cm^2, i.e. it is too low for long-term service of weld metal at 700°C; (6) the investigations show that the hardness of the intermetallic σ - phase considerably exceeds the hardness of the base solid solution and amounts to 500 kg/mm^2. Ye.M. Pivnik, Candidate of Technical Sciences, conducted the metallographic investigations. There are 7 figures and 6 references: 4 Soviet and 2 non-Soviet bloc. The two English-language references are: L.K. Poole, Sigma - An Unwanted Constituent in Stainless Weld Metal, "Metal Progress", no. 6, 1954; O.H. Henry, M.A. Cordovi and G.J. Fischer, Sigma Phase in Austenitic Stainless Steel Weldments, "Welding Journal", no. 2, 1955.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut im. I.I. Polzunova (Central Boiler and Turbine Institute im. I.I. Polzunov)

SUBMITTED: April 17, 1961

SHLEPYANOVA, N.Ye.; KARASIK, N.Ya.

Comparative investigation of electrolytes used in the phase analysis of nickel alloys. Zav.lab. 28 no.5:529-533 '62. (MIRA 15:6)

1. TSentral'nyy kotloturbinnyy institut imeni I.I.Polzunova. (Nickel alloys) (Electrolytes)

KARASIK, N.Ya.; SHLEPYANOVA, N.Ye.

X-ray investigation of phase transformations in austenite-ferrite 1Kh25N13-type deposition metal. Avtom. svar. 15 no.3:13-18 Mr '62. (MIRA 15:2)

1. TSentral'nyy kotroturbinnyy institut imeni I.I. Polzunova.
(Steel alloys--Welding)
(Phase rule and equilibrium)

L 23362-65 EWT(m)/EWP(w)/EWA(d)/EPR/T/EWP(t)/EWP(b) Pad/Ps-4 IJP(c) MJW/JD/HW

ACCESSION NR: AR5000591 S/0137/64/000/008/I019/I020

SOURCE: Ref. zh. Metallurgiya. Sv. t., Abs. 8I118

AUTHOR: Levin, Ye. Ye., Pivnik, E. M.; Karasik, N. Ya.

TITLE: Effect of degree of alloying on the phase transitions, structure, and properties of nickel base alloys

CITED SOURCE: Sb. Legirovaniye staley. Kiyev, Gostekhizdat USSR, 1963, 104-115

TOPIC TAGS: nickel base alloy, alloying, metal phase transition, metal structure, metal property, metal aging, metal homogenizing/alloy EI617, alloy EI607A

TRANSLATION: Two modifications (A and B) of alloy EI617 were investigated: A is distinguished from EI617 by a high content of aluminum while in B part of the nickel is replaced by cobalt. The cheapest alloy of Nimonic type EI607A was taken for purposes of comparison. A study was made of the structure of the alloys after homogenizing and after various aging conditions; an X-ray structural analysis was made of the residues separated out electrolytically and

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I 23362-65
ACCESSION NR: AR5000591

the change in the mechanical properties of the alloys in the aging process was compared. As opposed to alloy EI607A, the gamma' phase in an amount of 22 and 31% was already present in A and B in the state after homogenizing. In A and B, an unknown X-phase and double carbides appear during the aging process: in A, $Ni_3(W,Mo)_3C$ with a face-centered cubic lattice, in B, $(Ni,Co)_3(W,Mo)_3C$, and also in B there appears a Co_7W_6 intermetallic phase with a rhombohedral lattice. With a change in temperature and duration of aging, the relation between the amount of carbides and the Co_7W_6 in the structure of the X-phase changes. After homogenizing, A has a value of $sigma_b$ equal to 104 kg/mm^2. On aging alloy A for 500 hrs at 750°, the strength increases, and contrary to the case of EI607A, ductility and a_k decrease sharply. In alloy B, strength changes very little during the process of aging at 800° ($sigma_b$ is 130 kg/mm^2). At 900°, there occurs a weakening of the alloy and a sharp drop in ductility and a_k. Contrary to the case of A and EI607A, ductility and a_k in B decrease continuously on prolonged aging, and this appears to be connected with the formation of a Co_7W_6 phase. 3 figures. 8 tables. 8 literature titles. E. Bolin

SUB CODE: MM ENCL: 00

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LEVIN, Ye.Ye.; PIVNIK, Ye.M.; KARASIK, N.Ya.

Development and identification of structure elements in nickel-based heat resistant alloys. Zav. lab. 29 no.9:1085-1088 '63. (MIRA 17:1)

1. TSentral'nyy nauchno-issledovatel'skiy kotloturbinnyy institut imeni I.I. Polzunova.

ACCESSION NR: AP4013080 S/0125/64/000/002/0038/0042

AUTHOR: Karasik, N. Ya.; Shlepyanova, N. Ye.

TITLE: Chemical composition and rate of formation of the σ -phase in the weld-on 1Kh25N13 metal

SOURCE: Avtomaticheskaya svarka, no. 2, 1964, 38-42

TOPIC TAGS: 1Kh25N13 metal, 1Kh25N13 metal chemical composition, 1Kh25N13 metal welding, 1Kh25N13 metal sigma phase

ABSTRACT: On the basis of a chemical analysis of the σ-phase electrolytically isolated from the weld-on metal (composition given in the article), the chemical composition and rate of formation of the σ-phase were determined for various ferrite contents and heat treatments of the weld-on metal. The metal was studied immediately after its welding and also after a stabilization at 800C for 10 hrs with subsequent aging at 700C for 35-1,000 hrs. It was found that with a ferrite content of 0-4%, the amount of secondary phases increases with aging up to 500 hrs; further aging decreases the secondary-phase content. With a ferrite content

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ACCESSION NR: AP4013080

of 5-15%, the amount of secondary phases increases with 700C aging all the way, particularly intensely during the 500-1,000-hr period. It was also found that: (1) When the initial metal contains over 8% ferrite, the σ-phase becomes important and prevails over the $Me_{23}C_6$ carbide; (2) The σ-phase consists of 40-50% Fe and 40-50% Cr; the Fe/Cr atomic ratio is equal to 1 and remains constant during the aging; (3) The σ-phase is formed from both the ferrite and the above carbide which is proven by the fact that the carbide phase decreases in every case where the σ-phase increases. Orig. art. has: 3 figures and 3 tables.

ASSOCIATION: Tsentral'ny*y kotloturbinny*y institut im. I. I. Polzunova (Central Boiler-and-Turbine Institute); Severo-zapadny*y politekhnicheskiy institut (North-Western Polytechnic Institute)

SUBMITTED: 03May63 DATE ACQ: 26Feb64 ENCL: 00

SUB CODE: ML NO REF SOV: 005 OTHER: 000

AVETIKYAN, B.G.; KARASIK, O.A.

Absorption and elimination of foreign antigenic substances by cells in certain tissue cultures. TSitologiia 3 no. 1:40-47 Ja-F '61. (MIRA 14:2)

1. Otdel mikrobiologii Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad.
(ANTIGENS AND ANTIBODIES) (TISSUE CULTURE)

OSIPOVA, P.V.; KARASIK, O.A.

Specific adhesion of erythrocytes to the surface of lymphatic cells in vitro. Biul.eksp.biol.i med. 58 no.10:100-103 O '64. (MIRA 18:12)

1. Otdel mikrobiologii (zav. - chlen-korrespondent AMN SSSR prof. V.I.Ioffe) Instituta eksperimental'noy meditsiny AMN SSSR, Leningrad. Submitted April 18, 1963.

KARASIK, O. M.

USSR/Medicine - Industry and Occupations
Medicine - Disease

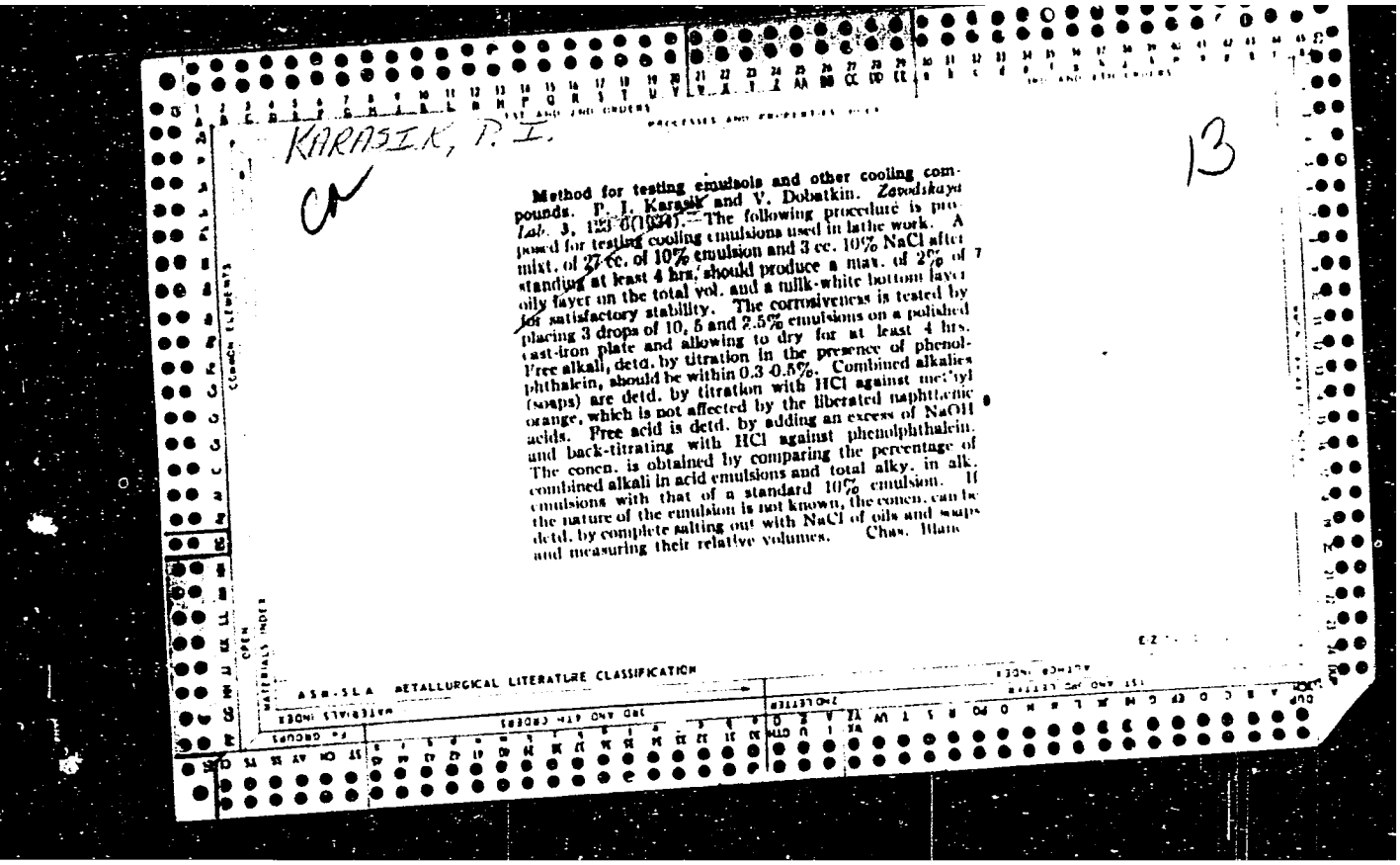
May 1947

"Cases of Widespread Occupational Disease among Weavers," N. D. Rozenbaum, O. M. Karasik

"Gigiyena i Sanitariya" Vol XII, No 5

Gives a detailed statement of working conditions, like the fact that temperature and moisture were kept higher than in adjoining laboritories (temperature 29-30°, relative humidity up to 80%).

PA 16T42



KARASIK, P. I.

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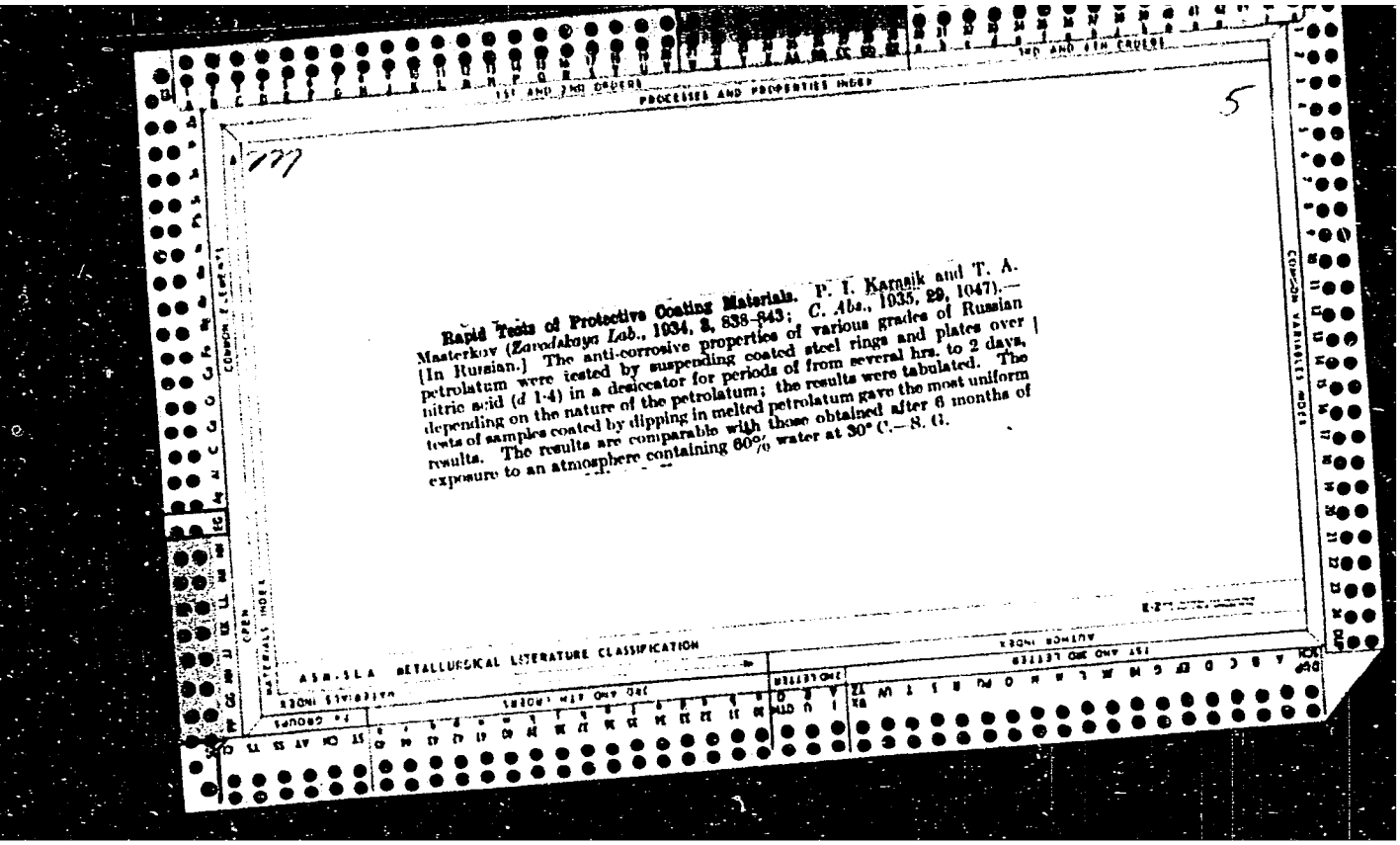
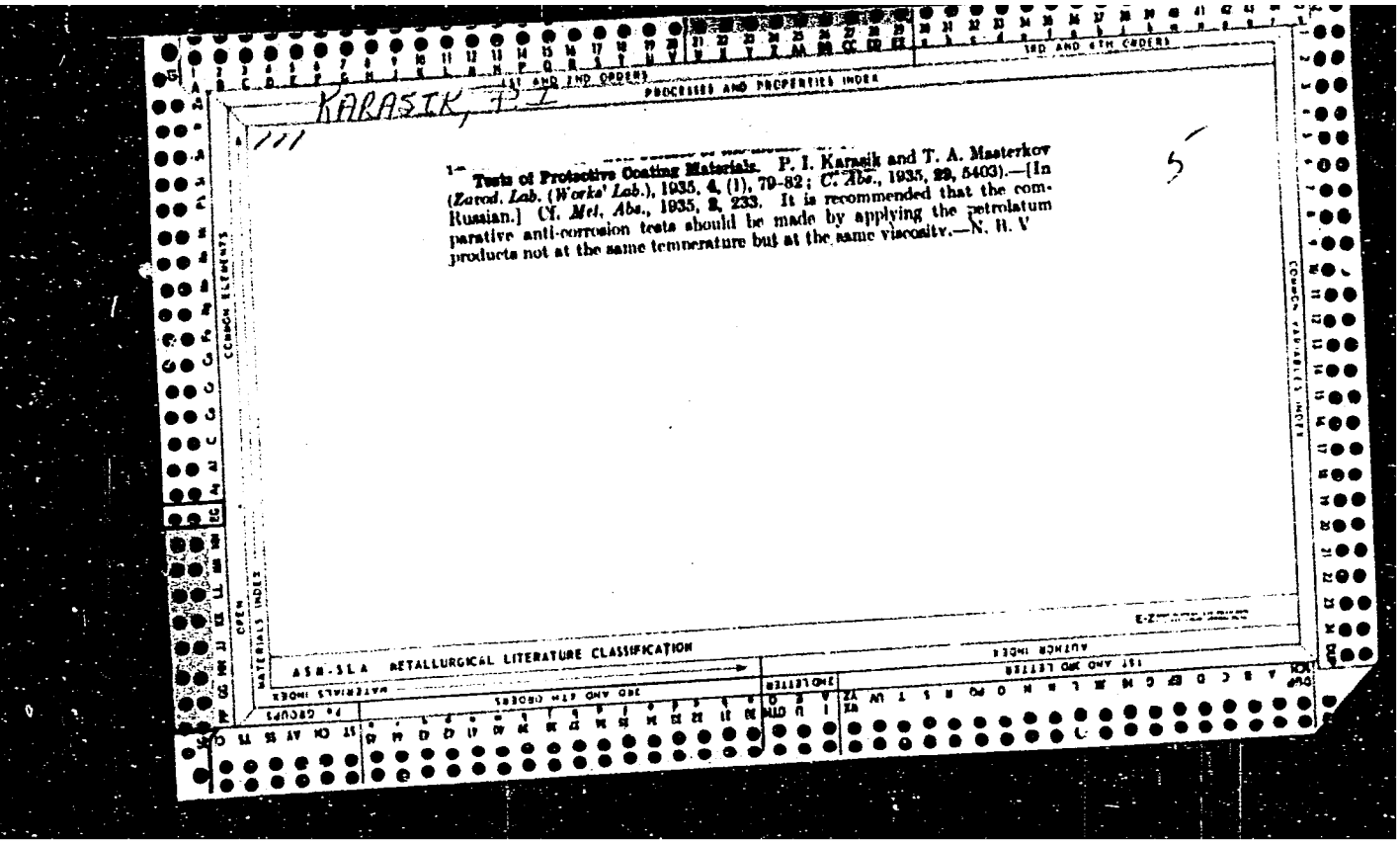
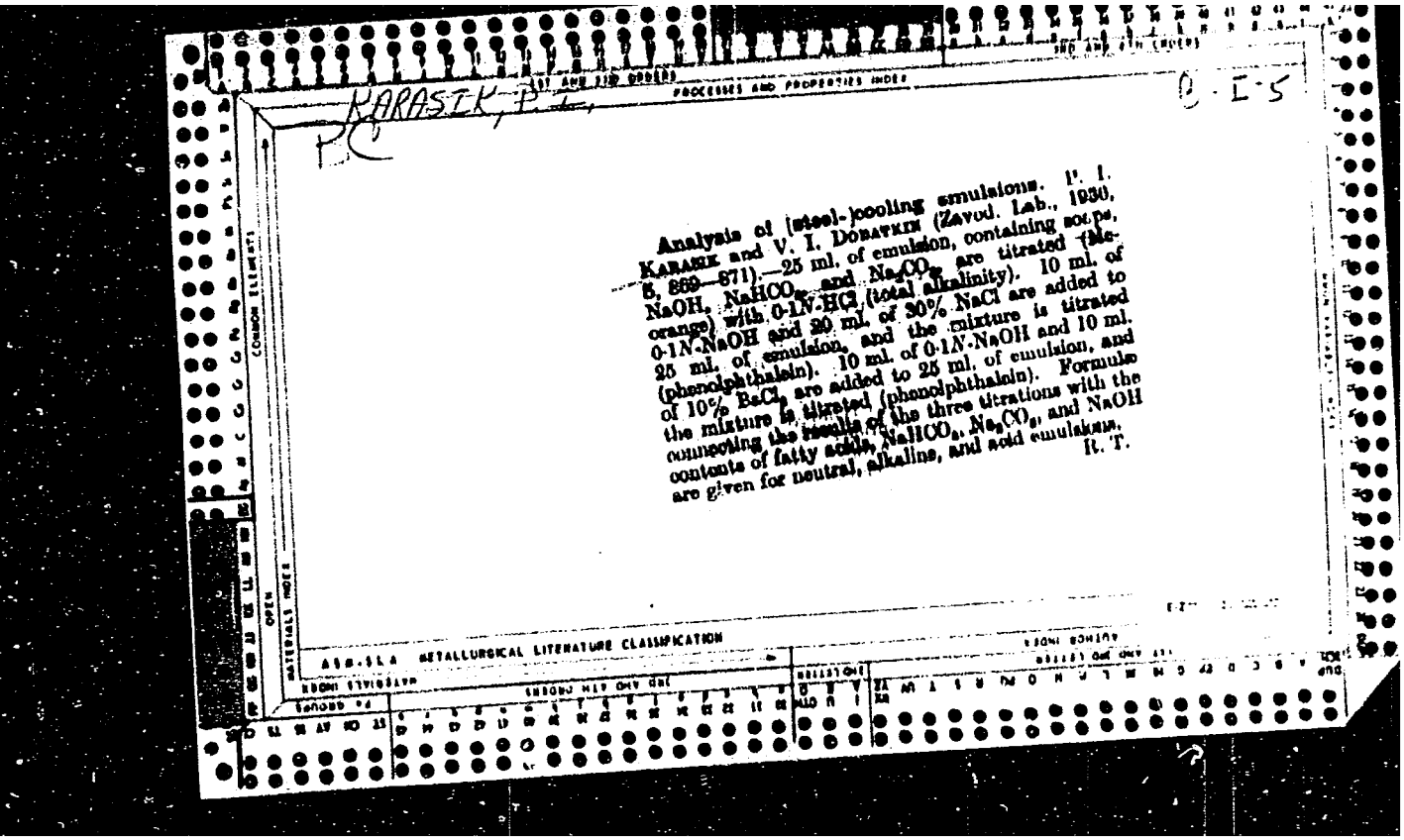
Method for testing emulsols and other cooling compounds. P. I. Karasik and V. Dobatkin. *Zavodskaya Lab.* 3, 122-6(1934).—The following procedure is proposed for testing cooling emulsions used in lathe work. A mixt. of 27 cc. of 10% emulsion and 3 cc. 10% NaCl after standing at least 4 hrs. should produce a max. of 2% of oily layer on the total vol. and a milk-white bottom layer for satisfactory stability. The corrosiveness is tested by placing 3 drops of 10, 5 and 2.5% emulsions on a polished cast-iron plate and allowing to dry for at least 4 hrs. Free alkali, detd. by titration in the presence of phenolphthalein, should be within 0.3-0.5%. Combined alkalies (soaps) are detd. by titration with HCl against methyl orange, which is not affected by the liberated naphthenic acids. Free acid is detd. by adding an excess of NaOH and back-titrating with HCl against phenolphthalein. The concn. is obtained by comparing the percentage of combined alkali in acid emulsions and total alky. in alk. emulsions with that of a standard 10% emulsion. If the nature of the emulsion is not known, the concn. can be detd. by complete salting out with NaCl of oils and soaps and measuring their relative volumes. Chas. Blanc



Rapid Tests of Protective Coating Materials. P. I. Kernsik and T. A. Masterkov (*Zavodskaya Lab.*, 1934, **3**, 838–843; *C. Abs.*, 1935, **29**, 1047).—[In Russian.] The anti-corrosive properties of various grades of Russian petrolatum were tested by suspending coated steel rings and plates over nitric acid (d 1·4) in a desiccator for periods of from several hrs. to 2 days, depending on the nature of the petrolatum; the results were tabulated. The tests of samples coated by dipping in melted petrolatum gave the most uniform results. The results are comparable with those obtained after 6 months of exposure to an atmosphere containing 80% water at 30° C.—S. G.

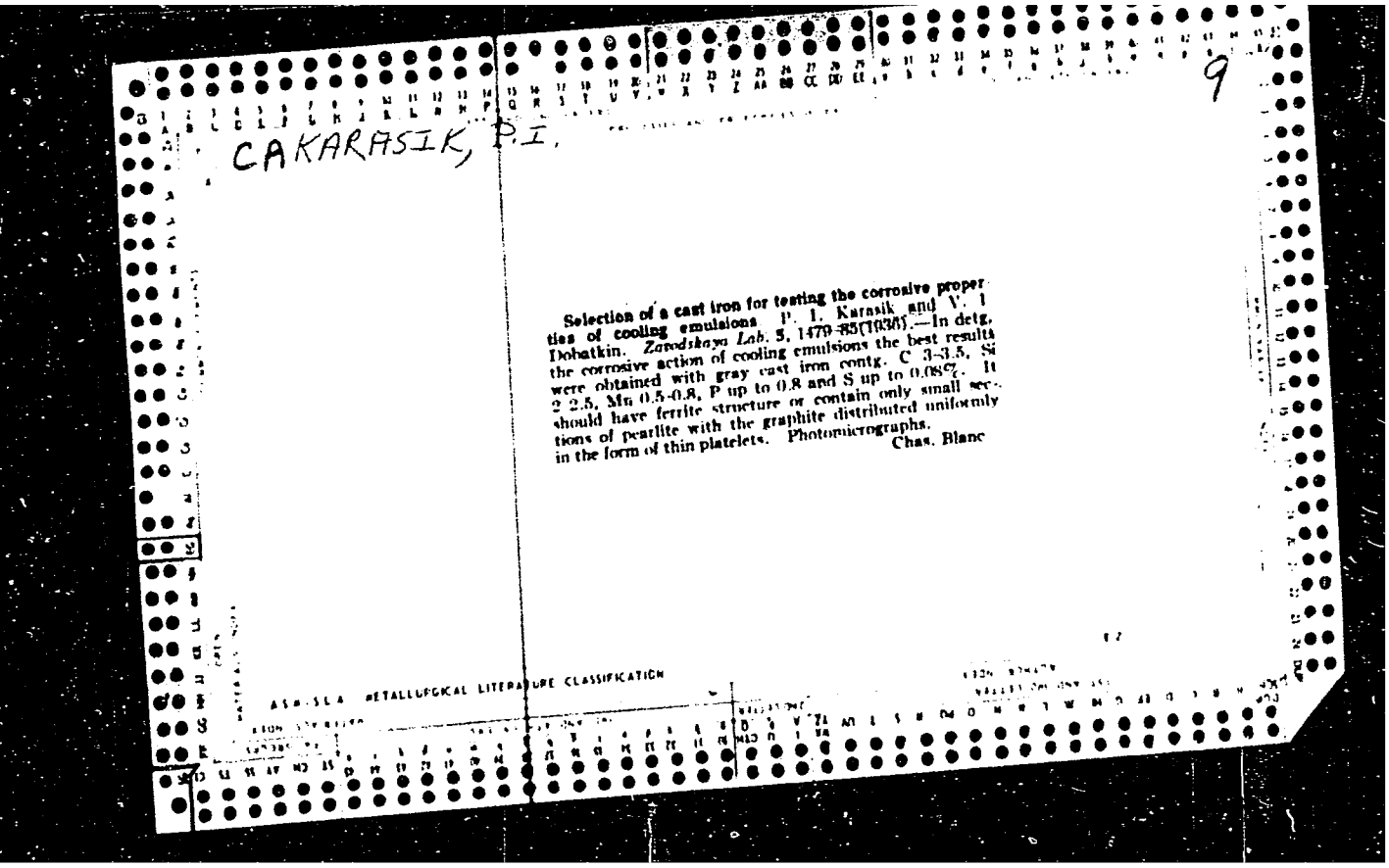




KARASIK, P. I.

Analysis of [steel-]cooling emulsions. P. I. KARASIK and V. I. DONATKIN (Zavod. Lab., 1930, 5, 869—871).—25 ml. of emulsion, containing soap, NaOH, $NaHCO_3$, and Na_2CO_3, are titrated (Me-orange) with 0·1*N*-HCl (total alkalinity). 10 ml. of 0·1*N*-NaOH and 20 ml. of 30% NaCl are added to 25 ml. of emulsion, and the mixture is titrated (phenolphthalein). 10 ml. of 0·1*N*-NaOH and 10 ml. of 10% $BaCl_2$ are added to 25 ml. of emulsion, and the mixture is titrated (phenolphthalein). Formulæ connecting the results of the three titrations with the contents of fatty acids, $NaHCO_3$, Na_2CO_3, and NaOH are given for neutral, alkaline, and acid emulsions.

R. T.



CAKARASIK, P. I.

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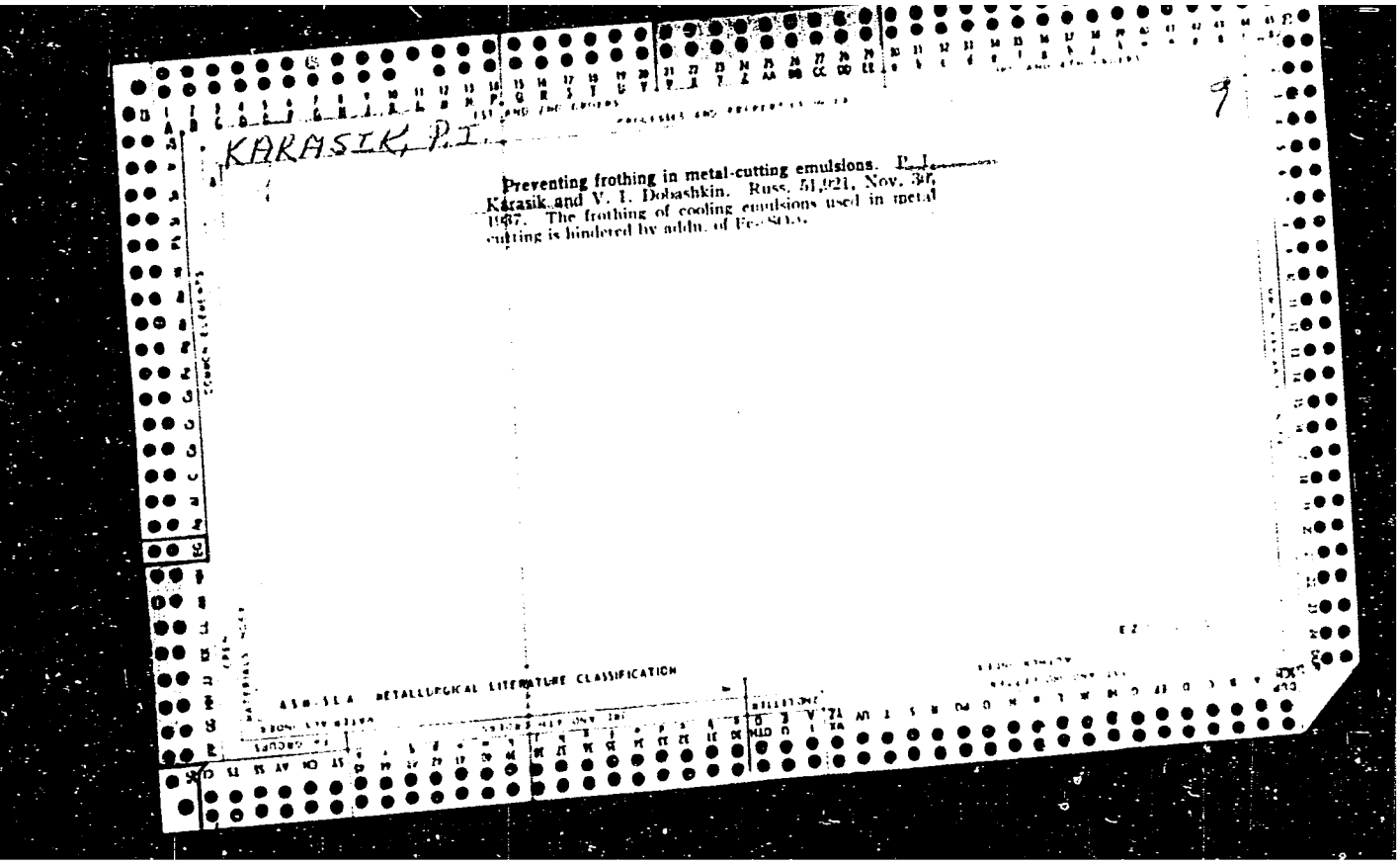
Selection of a cast iron for testing the corrosive properties of cooling emulsions. P. I. Karasik and V. I. Dobatkin. *Zavodskaya Lab.* 5, 1479–85(1936).—In detg. the corrosive action of cooling emulsions the best results were obtained with gray cast iron contg. C 3–3.5, Si 2–2.5, Mn 0.5–0.8, P up to 0.8 and S up to 0.08%. It should have ferrite structure or contain only small sections of pearlite with the graphite distributed uniformly in the form of thin platelets. Photomicrographs.

Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



KARASIK, P.I.

Preventing frothing in metal-cutting emulsions. P. I. Karasik and V. I. Dobashkin. Russ. 51,021, Nov. 30, 1937. The frothing of cooling emulsions used in metal cutting is hindered by addn. of Fe2(SO4)3.

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

SOV/123-59-16-64704

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 16, p 146 (USSR)

AUTHORS: Karasik, P.I., Kabanov, M.F.

TITLE: The Development of Methods of Protecting Metallic Precision Articles of the Bearing Manufacturing Industry From Corrosion

PERIODICAL: Tekhnol. podshipnikostroyeniya, 1958, Nr 17, 146 - 150

ABSTRACT: Methods of protecting manufactured articles from corrosion, when they are stored and conserved in between operations are described. These methods were originally employed at the 1st State Bearing Manufacturing Plant (GPZ). Measures which were carried out to improve protection are stated. At present the following conservation method is employed: Washing in a solution of emulsion salt (100 - 200 grams/liter) at a temperature of 70 - 85°C, exposure to air, washing in mineral oil at a temperature of 90 - 95°C, washing in vaseline or "pushsmazka" (most probably "flaky grease") at a temperature of 110 - 120°C, immersion into molten protection grease; conservation for tropical climates is effected in the following way: wrapping of the machine part to be con-

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The Development of Methods of Protecting Metallic Precision Articles of the Bearing Manufacturing Industry From Corrosion

served into paraffin paper and subsequent twofold immersion into a molten mixture of paraffin and ceresin; the brief protection for storing in between operations consists in washing in a solution of emulsion salt (100 - 200 gr/liter), exposure to air. A longer protection is obtained in a solution of triethanolamine or, in a closed room, with silica gel.

S.V.M.

GONCHAROV, K.F.; DOBROBORSKIY, S.A.; SIDOROV, P.N.; KOROSTASHEVSKIY, R.V.; KABANETS, Ya.P.; GROMYKO, Ye.M.; KARASIK, P.I.; GAZAROV, L.A.; YAKHIN, B.A.; GORIN, N.V., red.; POLYANSKAYA, Z.P., tekhn. red.

[Ball and roller bearings; catalog and handbook] Sharikovye i rolikovye podshipniki; katalog-spravochnik. Izd.2., ispr. i dop. Moskva, 1963. 379 p. (MIRA 17:3)

1. Moscow. TSentral'nyy institut nauchno-tekhnicheskoy informatsii po avtomatizatsii i mashinostroyeniyu. 2. Nauchnyye sotrudniki Vsesoyuznogo nauchno-issledovatel'skogo konstruktorsko-tekhnologicheskogo instituta podshipnikovoy promyshlennosti (for all except Gorin, Polyanskaya).

BABUSHKINA, M.D.; BABAYEV, Ye.V.; KIR'YAKOV, M.F.; KARASIK, S.S.; SHARAPOVA, Z.I.

Using unburnt crushed limestone to produce sulfite by the bubble column method. Bum.prom. 34 no.9:13-17 S '59. (MIRA 13:2)

1. Moskovskiy filial TSentral'nogo nauchno-issledovatel'skogo instituta tsellyuloznoy i bumazhnoy promyshlennosti (for Babushkina, Babayev). 2. Sokol'skiy tsellyulozno-bumazhnyy kombinat (for Kir'yakov, Karasik, Sharapova).
(Woodpulp) (Sulfur dioxide)

KARASIK, Sh. Ya. (G. Khorog, Tadzhikskaya ASSR.)

Furacilin therapy in pulpitis. Stomatologiia no.3:62 My-Je '54. (MLRA 7:6)

(FURAN DERIVATIVES, therapeutic use,
*nitrofurazone in pulpitis)
(DENTAL PULP, diseases,
*inflamm., ther., nitrofurazone)

KARASIK, T.G.; GEYRO, S.S.

Results of combined studies of bitumens in the cross section of the Ust'-Usa key well. Neftegaz.geol. i geofiz. no.8:35-38 '65. (MIRA 18:8)

1. TSentral'naya nauchno-issledovatel'skaya laboratoriya Ukhtinskogo territorial'no-geologicheskogo upravleniya.

KARASIK, T. G.

3(5) PHASE I BOOK EXPLOITATION SOV/2302

Akademiya nauk Ukrainskoy SSR. Institut geologii poleznykh iskopayemykh

Problema migratsii nefti i formirovaniya neftyanykh i gazovykh skopleniy; materialy L'vovskoy diskussii 8-12 maya 1957 g. (Problem of Oil Migration and the Formation of Oil and Gas Accumulations; Materials of the Discussion Held in L'vov, May 8-12, 1957) Moscow, Gostoptekhizdat, 1959. 422 p. 1,100 copies printed.

Eds.: V. B. Porfir'yev, Academician of the Ukrainian SSR Academy of Sciences, and I. O. Brod, Professor; Exec. Ed.: P. R. Yershov; Tech. Ed.: A.S. Polosina; Editorial Board: I.O. Brod, Professor, N.R. Ladyzhenskiy, and V.B. Porfir'yev, Academician of the Ukrainian Academy of Sciences.

PURPOSE: This collection of articles is intended for a wide range of geologists and research workers interested in oil problems.

COVERAGE: Articles contained in this book deal with the problems of migration and accumulation of oil and gas. These problems were discussed in May 1957 at L'vov State University im. I. Franko at a meeting organized jointly by the Institute of Geology and Mineral Resources, Academy of Sciences of the USSR, the Department of Geology and Oil Exploration of the L'vov Polytechnic Institute, and the L'vov Geological Society. Theories on the origin of petroleum deposits and the conditions surrounding their occurrence are treated. There are 327 references: 232 Soviet, 86 English, 5 French, and 4 German.

TABLE OF CONTENTS:

KARASIK, T.G.; GEYRO, S.S.

Bitumen occurrences in Pre-Jivet sediments. Trudy VNIGRI no.133:347-352 '59. (MIRA 13:1)
(Timan Ridge--Bitumen)
(Pechora Valley--Bitumen)

KARASIK, V.

Give more attention to the training of personnel. Den. i kred. 19 no.3:31-33 Mr '61. (MIRA 14:3)

1. Nachal'nik otdela kadrov Permskoy kontory Gosbanka.
(Perm Province--Bank employees--Education and training)

KARASIK, Vl. (Leningrad); SUZDAL'SKAYA, I. (Leningrad)

"Local reaction of protoplasm and irradiating excitation" by D.N.Nasonov. Reviewed by V.Karasik, I.Suzdal'skaia. Fiziol. zhur. 46 no.3:368-370 Mr '60. (MIRA 14:7)
(PHYSIOLOGY) (NASONOV, D.N.)

AUTHOR: Karasik, V. A. (Blast-furnace plant designer).

TITLE: Repair of a big bell. (Remont bol'shogo konusa). 130-5-4/22

PERIODICAL: "Metallurg" (Metallurgist) 1957, No.5, pp.8-9 (USSR).

ABSTRACT: At the Cherepovetskiy works the blast furnaces operate at a top pressure of 1 - 1.15 atm. gauge. Seven months after blowing in No.2 furnace, gas leakage past the big bell was observed, due, it was found, to the break up of the hard-facing and the incipient disruption of the body of the bell. After stopping the furnace was charged with granulated slag to the top of the throat armouring. The big bell was lowered, the gas-offtake man-holes were opened and the fitters, wearing breathing apparatus, climbed by rope ladders into the furnace. Planks were laid on the granulated slag for convenience. After repairing all flaws on the body of the bell, the fitters proceeded to carry out the hard facing in two layers: firstly with mark Э-42 electrodes followed by cleaning and deposition of the second layer by chrome electrodes type T-540. After polishing the hard-faced layers the fit was tested. Gaps up to 1.5 mm in size were found and these were reduced to 0.7 by a second polishing with the big bell lowered. The hard facing,

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Repair of a big bell.(Cont.) 130-5-4/22

polishing and checking took 20 hours, while replacement of the big bell would have taken not less than 60 hours. The repaired big bell has now worked satisfactorily for 4 months.

There are 2 figures.

ASSOCIATION: Cherepovets Metallurgical Works (Cherepovetsiy Metallurgicheskii zavod).

AVAILABLE:

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KARASIK, V.A.

130-8-5/20

AUTHOR: Karasik, V.A., Engineer.

TITLE: Deficiencies in the Design of Belt Feeding of Sinter into Blast Furnace Bunkers (Nedostatki proyekta transporternoy podachi aglomerata v bunkery domennykh pechey)

PERIODICAL: Metallurg, 1957, No.8, pp. 12 - 14 (USSR)

ABSTRACT: The author describes the arrangement at the Cherepovets Works for belt charging all materials, including sinter, into the blast furnace bunkers. The system used was designed by the Leningrad branch of the Gipromez organisation, the sinter plant having been designed by the Mekhanobr Institute (Institut "Mekhanobr"), and the author considers the numerous defects in the designs which have come to light including insufficient cooler capacity, multiplicity of transfers (leading to break-up of lumps, discharge of dust into the working space and equipment wear) and lack of adequate safety precautions. To improve the system he recommends the installation of sprung bearings at points where the sinter is charged on to the conveyor, and of rotary brush cleaners, and the use of manganese steel at points of greatest wear, as well as reduction in the number of transfers. He urges that the deficiencies of existing designs should not prevent the wide adoption of belt charging of blast furnace bunkers. There is 1 figure.

Cardl/2

130-8-5/20

Deficiencies in the Design of Belt Feeding of Sinter into Blast Furnace Bunkers.

ASSOCIATION: Cherepovets Metallurgical Works (Cherepovetskiy Metallurgicheskiy zavod)

AVAILABLE: Library of Congress.

Card 2/2

SOV/21-59-8-10/26

AUTHOR: Karasyk, V. M. (Karasik, V.M.)

TITLE: Determination of the Critical Velocity on Hydrotransportation of Soils Along Pipelines

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 8, pp 858 - 862 (USSR)

ABSTRACT: The article covers an attempt of the author to find a suitable formula for determining the critical velocity during hydrotransportation of soils in force-feed pipelines of any diameter. This attempt is based on extensive experimental data and on consideration of the energy required for the suspension of solid particles by a turbulent stream. The final reduced formula for determining the critical velocity is:

$$V_{kr} = 21 \sqrt[3]{D w} \sqrt[6]{C_p} \qquad (11)$$

Card 1/2 whereby V_{kr} means critical velocity. D - diameter of the

Determination of the Critical Velocity on Hydrotransportation of Soils Along Pipelines

pipeline, w - hydraulic magnitude of solid particles and S_p - consistence of the water and soil mixture. The above formula permits the determination of V_{kr} at an accuracy of 5 - 10 per cent and may be recommended for practical calculations.
There are 2 diagrams and 7 references, 5 of which are Soviet, 1 French and 1 Polish

ASSOCIATION: Institut gidrologii i gidrotekhniki AN USSR (Institute of Hydrology and Hydraulic Engineering of the AS of UkrSSR)
(G.I. Sukhomel),

PRESENTED: By H. Y. Sukhomel / Member of the AS of UkrSSR

SUBMITTED: February 18, 1959

KARASIK, V.M. [Karasyk, V.M.]

Experimental investigation of hydraulic resistances in D-24 ⁻⁻ angle pipes during hydraulic transportation. Visti Inst. gidrol. i gidr. AN URSR 17:119-125 '60. (MIRA 14:8)
(Pipe—Hydrodynamics)

STOVBUN, I.I.; KARASIK, V.M. [Karasyk, V.M.]

Investigation of Venturi meters in hydraulic transportation.
Visti Inst. gidrol. i gidr. AN URSR 17:126-129 '60.
(MIRA 14:8)

(Venturi tubes)

KARASIK, V.M., inzh.

Experimental studies of partial hydraulic resistances in hydraulic conveying. Gidr. stroi. 31 no.9:44-46 S '61. (MIRA 14:12)

(Hydraulic conveying)

SILIN, Nikolay Aleksandrovich; KOBERNIK, Semen Grigor'yevich. Prinimal uchastiye KARASIK, V.M.; PISHCHENKO, I.A , kand. tekhn. nauk, otv. red.; LABINOVA, N.M., red.; DAKHNO, Yu.B., tekhn. red.

[Operating conditions of large dredgers and pipelines]Rezhimy raboty krupnykh zemlenosnykh snariadov i truboprovodov. Kiev, Izd-vo AN USSR, 1962. 214 p. (MIRA 16:3)
(Hydraulic conveying) (Dredging machinery)