

BALANDIN, P.S.; BILSHEV, A.G.; KAGARMANOV, N.F.; POBEDONOSTSEV, V.S.;
KHAMZIN, Sh.Kh.

Core recovery from producing horizons using DKNU "Ufimets" core
assemblies. Burenie no.1:20-24 '64. (MIRA 18:5)

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut.

BALANDIN, P.S.; GORLOV, I.A.; KAGARMANOV, N.F.; POBEDONOSTSEV, V.S.;
TUYEV, D.D.; KHAMZIN, Sh.Kh.

Core recovering from the producing layer D_I in the Tuymazy
field. Neft. khoz. 40 no.5:59-62 My '62. (MIRA 15:9)
(Tuymazy region—Core drilling)

А. ХАМЗИНА, А. Ш.

KHAMZINA, A.Sh.; UMANSKIY, Z.M.

Determining the rate of disintegration of pills. Apt.delo 6 no.3:
13-17 My-Je '57. (MIRA 11:1)

1. Iz kafedry tekhnologii lekarstvennykh form i galenovykh
preparatov (zav. - prof. Z.M.Umanskiy) Tashkentskogo farmatsevti-
cheskogo instituta.
(PILLS)

KHAMZINA, A. Sh., Cand. Pharm. Sci., — (diss), "To the question on
improving the pharmaceutical technology of pills," Tbilisi, 1961, 27 pp (Tbilisi
State Medical Institute) 200 copies (KL-Supp 9-61, 193)

ZAIROV, K.S.; KOBLOVA, N.A.; KHAMZINA, D.I.

Characteristics of the sanitary state of the soil in the ancient cities of Khorezm, Khiva and Urgench. Med. zhur. Uzb. no.6:
35-41 Je'63 (MIRA 17:3)

1. Iz Uzbekskogo nauchno-issledovatel'skogo instituta sanitarii, gigiyeny i professional'nykh zabolevaniy.

KHAMZINA, Ye.A.

Archaeological explorations in Buryatia during the Soviet period.
Kraeved, sbor. no.7:56-68 '62. (MIRA 16:8)
(Buryat A.S.S.R.—Archaeology)

AMURSKIY, B. S., inzh.; KHAN, A. A., inzh.

Banded joint of ventilation pipes. Bezop. truda v prom. 6
no.9:32 S '62. (MIRA 16:4)

(Pipe joints)

KHAN, A.V.

PERFILOV, V.A., inshener; KHAN, A.V., inshener.

How to get the most out of RSA-12 electric shearing machines. Nauka
i pered.op.v sel'khoz. 7 no.7:71-72 JI '57. (MLRA 10:8)
(Sheep shearing)

KHAN, Aleksandr Vasil'yevich, nauchnyy sotr.; KAPLAN, Rafael' Markovich,
nauchnyy sotr.; BUD'KO, V.A., red.; KETOV, G.I., tekhn. red.

[Using electric equipment at consolidated sheep-shearing stations]
Elektromekhanicheskaya strizhka ovets na ukрупnennykh punktakh.
Moskva, Gos. izd-vo sel'khoz. lit-ry, 1960. 46 p. (MIRA 14:8)

1. Kazakhskiy nauchno-issledovatel'skiy institut mekhanizatsii i
elektrifikatsii sel'skogo khozyaystva (for Khan, Kaplan)
(Sheepshearing)

KHAN, Aleksandr Vasil'yevich; ORLOVSKAYA, A., red.

[Consolidated mechanized sheepshearing station] Ukrupnennyi
strigal'nyi punkt. Alma-Ata, Kainar, 1964. 57 p.
(MIRA 18:3)

Khan, B.Kh.

... of the technology of basic open-hearth steelmaking
 ... the hydrogen content in the steel ...
 ... *Chemical Metallurgy* ...
 ... *Referat Khim. Khim. 1954 No. 21331* ...
 ... carried out in a 80-ton basic open-hearth ...
 ... scrap process and fed by a hot ...
 ... was made up of pig-iron and steel scrap ...
 ... A total of 7 mols of C and ...
 ... samples were removed from the ...
 ... time intervals. The samples were ...
 ... poured into open, pencil-type ...
 ... cooling in water, the sample was ...
 ... together with solid CO₂ where it was ...
 ... analysis, not over 20 hrs. Simultaneously ...
 ... samples for N detn. also samples were ...
 ... analysis. The viscosity of slag was ...
 ... with a horizontal channel of 6.4 mm. diam. It was ...
 ... by heating the sample *in vacuo* at 420-60°. The main factor ...
 ... affecting the quantity of H in steel was found to be the ...
 ... fluidity of the slag. Lowering the fluidity of the slag during ...
 ... the final melt favors the lowering of H in steel before de- ...
 ... oxidation. Viscous slag insulates the metal better from the ...
 ... chem. action of the flame. Bauxite added to slag to liquefy ...
 ... it increases the H content in steel by approx. 1.6 cc./100 g. ...
 ... To obtain a dense slag crushed grog, sand, or feldspar can be ...
 ... used. During the treatment of the bath with one there was ...
 ... in all cases a lowering of H content in the metal. The in- ...
 ... tensity of H removal from the bath by CO bubbles exceeds ...
 ... during this period the intensity of H entering the metal from ...
 ... the furnace gases. The change in the av. rate of C burning ...
 ... during the heating and final melt stages does not noticeably ...
 ... affect the H content in the steel. Preliminary deoxidation ...
 ... of the steel in the furnace with blast-furnace ferrosilicon ...
 ... causes an increase in the H content of the metal. Tapping ...
 ... the metal without preliminary deoxidation gives a steel with ...
 ... a lower H content and of better quality. M. Hirsch

673
M
BE

KHAN, B.Kh.

Investigation of the behavior of hydrogen in steel during the melting process in electric arc furnaces. Trudy Inst.chern.met.AN URSR 7:39-45 '53. (MLRA 8:5)
(Steel--Electrometallurgy) (Iron--Hydrogen content)

KHAN, B. Kh.

"Investigating the Smelting Technology of Quality Steel in Basic Martin Furnaces." Cand Tech Sci, Inst of Ferrous Metallurgy, Acad Sci Ukrainian SSR, Dnepropetrovsk, 1954. (RZhKhim, No 21, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55

KHAN, B. Kh.

"Investigation of Technology of Melting Low Alloy Steels in Open Hearth Furnaces"
p. 73, Trudy Instituta Chernoy Metallurgii, Vol. 9, 1955.

KHAN, B. Kh. and POVOLOSKIY, D. Y.

"Effects of Hydrogen on the Qualities of Steel" p. 86, Trudy Instituta Chernoy Metallurgii, Vol. 9, 1955.

Khan, B. Kh.

18(3); 18(5) PHASE I BOOK EXPLOITATION SOV/2452

Akademiya nauk Ukrainskoy SSR. Otdeleniye tekhnicheskikh nauk

Voprosy proizvodstva stali, vyp. 4. (Problems in Steelmaking; Nr. 4) Kiyev, Izd-vo AN Ukrainskoy SSR, 1956. 163 p. 3,000 copies printed.

Resp. Ed.: N. N. Dobrokhotov, Academician, UkrSSR Academy of Sciences; Ed.: B. A. Kazantsev; Tech. Ed.: A. D. Zhukovskiy.

PURPOSE: This book is intended for advanced students and for scientists and personnel in the metallurgical industry.

COVERAGE: The papers in this collection present information on recent Soviet technological developments stated to be of considerable theoretical and practical importance in the production and teeming of steel. A number of articles deal directly with matters of method (alloying, deoxidizing, top and bottom pouring, production of open-hearth and electric steel). Some are concerned with the investigation of phenomena such as change
Card 1/4

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of hydrogen content during the production of steel. Others describe the effect of various factors on the final product (shape of ingot, pouring temperature, addition of aluminum, etc.). There is one book review. References follow some of the papers.

TABLE OF CONTENTS:

<u>Khan, B. Kh.</u> , and E. V. Verkhovtsev. Quality of Chrome Steel Deoxidized and Alloyed in the Ladle With Solid Ferroalloys	3
<u>Khan, B. Kh.</u> The Dissolving of Ferroalloys in Liquid Steel During Deoxidation and Alloying	14
<u>Khan, B. Kh.</u> Technology of Producing 1Kh18N9T Stainless Steel in Electric Furnaces With the Application of Oxygen	24
Prokhorenko, K. K. Change of Hydrogen Content in Open-hearth Steel During the Production Process	34
Prokhorenko, K. K. Effect of the Production Method on the Qua- Card 2/4	

SOV/137-57-6-9745

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 62 (USSR)

AUTHORS: Khan, B.Kh., Verkhovtsev, E.V.

TITLE: The Quality of Chromium Steel Deoxidized and Alloyed in the Ladle by Solid Ferroalloys (Kachestvo khromistoy stali, raskislennoy i legirovannoy v kovshe tverdymi ferrosplavami)

PERIODICAL: V sb.: Vopr. proiz-va stali. Nr 4. Kiyev, AN UkrSSR, 1956, pp 3-13

ABSTRACT: Nr 40Kh chromium steel is smelted in solid-metal heats in 40-t open-hearth furnaces with chemically-bonded magnesite chrome roof. All the ferroalloys are introduced into the metal via the runner during the tapping of the heat. Nr 4 or Nr 6 Fe-Cr is used for alloying in amounts of 1.2-1.3% of the weight of the heat; the amount of Fe-Mn is 0.7-0.8% and that of 45% Fe-Si is 0.4-0.6%. Introduction of all the ferroalloys into the metal ends when the ladle is half full. Prior to teeming, the metal is held in the ladle for 7-10 min. After the Fe-Cr, 200-250 g Al is added per t steel. The temperature of the metal fluctuates in the 1620-1650°C range, and the metal is bottom poured into 3-t ingots. Chemical analysis of samples

Card 1/2

SOV/137-57-6-9745

The Quality of Chromium Steel (cont.)

taken during pouring showed that in the first sample the Cr, Mn, Si, and C contents show practically no difference from the contents of these elements in subsequent samples. Distribution of Cr in the ingots is also uniform. Study of the macrostructure revealed a more compact structure in the experimental ingots. The number of templets without scattered-spot segregation is 43% in the test heats as against 22% in ordinary heats. Fractures are identical. The mechanical properties completely satisfy the Technical Specifications. The quantity of non-metallic inclusions is identical in test heats with that in standard heats. In the test metal, [H] was 6.0-6.2 cc/600 g as against 7.0 in standard heats. No rolling flakes or seams were observed; neither is slow cooling noted. The hardenability of the test metal satisfies the specifications for Nr 40Kh steel. The surface quality of ingots is virtually identical in the experimental and regular heats. Rejects due to lamination come to 7.5% as against 30% in standard heats. Rejects due to cracks and internal fissures are identical. Ferroalloy savings in test heats due to reduction in burnt steel cut the cost per t of 40Kh steel by 13 rubles. The absence of a deoxidation and alloying period in the furnace cut the time required for the test heats by 15-20 min.

V.G.

Card 2/2

KHAN, B, Kh.

Effect of crystallization on the deformability of Kh23N18 steel in forging and rolling. Vop.proizv.stali no.3:90-105 '56. (MLRA 9:11)
(Chromium-nickel steel) (Crystallization)

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KHAN, B.Kh.

Solution of addition elements in molten steel in decoxidation and alloying. Vop. proizv. stall no.4:14-23 '56. (MLRA 10:4)
(Smelting) (Solutions, Solid)

KHAN, B.Kh.

Technology of smelting 1Kh18N9T stainless steel in electric furnaces
with use of oxygen. Vop. proizv. stali no.4:24-33 '56.
(Chromium-nickel-tungsten steel--Electrometallurgy) (MLRA 10:4)

15. 15. 56
DOBROKHOTOV, N.N.; KHAN, B.Kh.

"Deoxidation of open hearth steel" by A.N. Morozov, A.I. Stroganov
Reviewed by N.N. Dobrokhotov, B.Kh. Khan. Vop. proizvod. stali no.4:
156-163 '56. (MLRA 10:4)
(Steel--Metallurgy) (Morozov, A.N.) (Stroganov, A.I.)

DOBROKHOTOV, N.N., akademik; KHAN, B.Kh., kandidat tekhnicheskikh nauk.

"Deoxidation of open-hearth steel." A.N.Morozov, A.I.Stroganov.
Reviewed by N.N.Dobrokhotov. Stal' 16 no.8:764-766 Ag '56.

(MLRA 9:10)

1.Akademiya nauk USSR.

(Open-hearth process)

BHAN, B. Kh.

VERHOVTSEV, N.V.; KHAN, B.Kh.; GUS'KOV, K.M.; GUSHCHIN, Ye.P.; MOROZENSKIY,
A.I.

Deoxidation and alloying of steel by solid ferroalloys in laddles.
Hul. tekhn.-ekon. inform. no.1:12-16 '57. (MIRA 11:4)
(Steel--Metallurgy)

Khair, B. Kh

18(5) **THESE I BOOK EXPLORATION** 307/1907

Akademiya nauk Ukrainy SSR, Kiyev Otdeleniye tekhnicheskikh nauk
Voprosy proizvodstva stali vyp.6 (Problems of Steel Production, No. 6)
Kiyev, Izd-vo AN Ukrainy SSR, 1958. 137 p. Errata slip included. 2,000 copies printed.

Resp. Ed. I. M. Babichov, Academician, Ukr. SSR Academy of Sciences; Ed. of Publishing House: M. M. Labinova; Tech. Ed.: V. I. Yurchishin.

PURPOSE: This book is intended for engineers and scientific personnel in the field of steel production.

COVERAGE: This is a collection of articles dealing with various aspects of the production of steel, including the designing of open-hearth furnaces, thermal processes in the furnaces, thermodynamics of steel-making processes, technical aspects of producing high-grade steel, and changes in the size and shape of ingots. Other topics discussed are the properties of chrome-manganese steels, improvement of ball-bearing steel, ingot defects in stainless steels, as determined by temperature of teeming and shape of ingot quality, certain aspects of steel rolling. Some of the articles are accompanied by references, both Soviet and non-Soviet.

Dean, B. D., and M. P. Mamonchuk. Investigation of the Properties of Chrome-Manganese Stainless Steels	41
Frokhorenko, K. K., and E. V. Verkhovtsev. Improving the Quality of ShD15 Ball-bearing Steel	49
Verkhovtsev, E. V., and K. K. Frokhorenko. Ingot Defects Caused by Skin Folds Forming During the Teeming of Steel	68
Frokhorenko, K. K., F. K. Timokhov, E. V. Verkhovtsev, and V. A. Prutovskiy. Eutectic Mixture for [Heating] Hot Tops of Steel Castings	77
Yefimov, V. A., M. P. Sabiry, and V. P. Grebenyuk. Effect of the Hydrodynamics of the Inflow of Liquid Steel into the Ingot Mold on Ingot Quality	87
Yefimov, V. A., V. I. Danilin, M. P. Lapshova, V. P. Grebenyuk, and A. A. Kiselev. Effect of Teeming Temperature and Mold Shape on the Quality of Steel Ingots	96
Yefimov, V. A., M. P. Sabiry, and V. P. Osipov. Reduction of Head and Butt Crops in the Rolling of Ingots	110
Yefimov, V. A., V. P. Osipov, and A. M. Melniko. An Investigation of the Conditions for Rolling Sheet Bar With Vary Surfaces	123
Fedorovich, V. G. Experiments in the Conversion of High-phosphorus Pig Iron in a Converter With Side Blast of Oxygen	130

AVAILABLE: Library of Congress

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Card 4/5

SOV/137-59-3-5339

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 59 (USSR)

AUTHOR: Khan, B. Kh.

TITLE: Testing of Steel Teeming Through an Intermediate Funnel With Four Openings (Ispytaniye razlivki stali cherez promezhutochnuyu voronku s chetyr'mya otverstiyami)

PERIODICAL: V sb.: Vopr. proiz-va stali. Nr 5. Kiyev, AN UkrSSR, 1958, pp 113-118

ABSTRACT: The application of multi-flow teeming (T) through an intermediate funnel with four openings 28 mm in diam afforded a reduction in the time required for filling the body of a 0.7-ton ingot of high-grade steel from 35 - 60 to 20 - 30 sec. The rate of filling of the molds increased from 1 - 1.5 to 2 - 3 m/min. The over-all length of T of the heat was reduced by 50%. In the new T method dishes 50 mm in diam were set in the ladle instead of the formerly used 36-mm ones. Examination of the funnels after T did not expose any appreciable erosion of the refractory lining and of the tumbler. The number of ingots requiring surface cleansing was approximately the same for the multi-flow and the usual mode of T. In the first experimental heats there were

Card 1/2

SOV/137-59-3-5339

Testing of Steel Teeming Through an Intermediate Funnel With Four Openings

underneath the crust flaws and gas blisters caused by excessive coating of the molds which did not have time to burn out during the T. Evaluation of macrostructural defects and the count of the number of ingots with an increased percentage of crop ends carried out in an equal number of heats (16 each) showed that the macrostructural quality improves with multi-flow teeming. The quality of the surface of rolled steel and the labor consumed by the cleansing of the metal did not change.

V. P.

Card 2/2

KHAN, B.Kh.; NAKONECHNYI, N.F.

Investigating the properties of stainless chromium-manganese steels. Vop.
proizv.stali no.6:41-48 '58. (MIRA 12:3)
(Steel, Stainless--Testing)

KOCHO, Valentin Stepanovich; KHAN, Boris Khononovich; KHRENOV, K.K.,
akademik, otv.red.; REMENNIK, T.K., red.izd-va; MAZURIK, T.Ya.,
tekh.red.

Nikolai Nikolaevich Dobrokhotov. Kiev, Izd-vo Akad.nauk USSR,
1959. 29 p. (MIRA 13:2)

1. AN USSR (for Khrenov).
(Dobrokhotov, Nikolai Nikolaevich, 1889-)

KHAN, B.Kh.

Development of processes for smelting open-hearth steel in
the U.S.S.R. during the last 25 years. Nar.zh. tekhn. no.5:
1-14 '59. (MIRA 13:5)

(Open-hearth process)

PHASE I BOOK EXPLOITATION

80V/3630

Khan, Boris Khanovich

Raskisleniye, degazatsiya i legirovaniye stali (Deoxidation, Degassing, and Alloying of Steel) Moscow, Metallurgizdat, 1960. 237 p. Errata slip inserted. 3,500 copies printed.

Ed.: N.N. Dobrokhotov, Academician, Academy of Sciences USSR; Ed. of Publishing House: S.I. Venetskiy; Tech. Ed.: L.V. Dobuzhinskaya.

PURPOSE: This book is intended for technical personnel in metallurgical and machine-building plants and for staff members of scientific research institutes. It may also be used by students of schools of higher technical education.

COVERAGE: The book is an analysis of modern methods and techniques employed in the deoxidation, degassing, and alloying of killed and rimmed steels and the thermodynamic principles of these processes. Among the topics discussed are the effect of alloying elements, hydrogen, nitrogen, and oxygen on the properties of steel and the characteristic features of deoxidizers and deoxidation products. Methods for determination of gas occlusions and nonmetallic inclusions in steel are described. Emphasis is given to the establishment of theoretical bases

Card 1/4

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Deoxidation, Degassing, and Alloying of Steel

80V/3630

and to the description of the steelmaking process without preliminary deoxidation in a furnace with deoxidation and alloying in the ladle by means of solid ferroalloys. The author thanks the following persons for their assistance: the editor, N.N. Dobrokhotov, Academician, Scientific Editor of the Academy of Sciences USSR, and P.G. Ravdel', Engineer, and P.P. Arsent'yev, Candidate of Technical Sciences, reviewers. There are 134 references: 108 Soviet, 22 English, and 4 German.

TABLE OF CONTENTS:

Foreword	4
Ch. I. Deoxidation of Steel	5
Solubility of oxygen in iron	5
Thermodynamics of the deoxidation of steel	8
Oxygen occlusions in steel	22
Oxysulfide inclusions in steel	29
Methods for determining oxygen and nonmetallic inclusions in steel	33
Effect of oxygen and nonmetallic inclusions on the properties and quality of steel	40

Card 2/4

"APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721720016-5

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721720016-5"

Deoxidation, Degassing, and Alloying of Steel

80V/3630

Suggested melting regime for a basic open-hearth furnace	160
Hydrogen and nitrogen in ingots and rolled stock	162
Hydrogen diffusion in steel	167
Ch. III. Alloying of Steel	172
Effect of alloying additions on the properties of steel	172
Commercial types of alloyed steels	178
Thermodynamics of steel alloying	190
Solubility of ferroalloys in molten steel during deoxidation and alloying	197
Alloying of open-hearth steels	210
Alloying of electric steels	220
Bibliography	232

Bibliography

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Card 4/4

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PHASE I BOOK EXPLOITATION

SOV/4799

Khan, B.Kh., Candidate of Technical Sciences

Tekhnichnyy prohres v chorniy metalurhiyi SRSR v 1959-1965 rr. (Technical Progress in Ferrous Metallurgy of the Ukrainian SSR in the Years 1959-1965) Kyiv, 1960. 30 p. (Series: Tovarystvo dlya poshyrennya politychnykh i naukovykh znan' URSR. Ser. 7, no. 3) 16,500 copies printed.

Sponsoring Agency: Tovarystvo dlya poshyrennya politychnykh i naukovykh znan' URSR.

Chief Ed.: S.N. Myka, Candidate of Technical Sciences; Ed. of Editorial and Publishing Section: T.M. Starostenko.

PURPOSE: This booklet is intended for Ukrainian readers interested in ferrous metallurgy in its general aspects.

COVERAGE: The author presents a general outline of developments in ferrous metallurgy. The booklet contains information on pig-iron production, steel-making, rolling and pipe manufacture, and includes a discussion of the automation of these processes. No personalities are mentioned. There are no references.

Card 1/2

Nitriding of Manganese Metal in Ammonia Gas

3/148/60/000/006/002/010

of manganese, depending on the temperature and the NH_3 consumption (Figure 6); changes in the increase of nitrogen of nitrogen weight depending on ammonia consumption at different temperatures (Figure 7); the dependence of the increase in the nitrogen weight on time (Figures 8 and 9); the dependence on the degree of nitriding on the dimensions of Mn particles (Figure 10). The data obtained were used to establish the following optimum conditions for nitriding of manganese, intended for experimental steel melting. Optimum temperature is $700-750^\circ\text{C}$; Mn fraction is 0.5-0.3 mm; ammonia consumption is $25-30 \text{ cm}^3/\text{min}$ per 1 g Mn; the height of the Mn layer must not exceed 10 mm for batches of 150-200 g. To ensure stable results manganese oxidation during nitriding must be prevented by protecting the reaction space against the access of humidity and oxygen. The average increase in the nitrogen weight is about 2% per hour. Nitriding of manganese in a fluidized bed proceeds much faster. Nitriding time is 5 minutes at $750-800^\circ\text{C}$; dimensions of fractions are 0.9-0.5 mm; the nitrogen content in the manganese attains 10-11%; specific ammonia consumption is $100-150 \text{ cm}^3/\text{minute}$; it is determined by the fluidizing of manganese on the reactor grid. There are: 1 diagram, 9 graphs, 1 table and 9 references: 6 Soviet and 3 English.

ASSOCIATION: Kiyevskiy politekhnicheskii institut (Kiyev Polytechnic Institute)
SUBMITTED: August 4, 1959.

Card 2/2

KHAN, B.Kh.

Process of deoxidation and alloying 14KhGs steel. Vop.proizv.stali
no.7:55-62 '60. (MIRA 13:8)
(Steel--Metallurgy)

KHAN, B.Kh., kand.tekhn.nauk

Stone casting. Nauka i zhyttia 10 no. 12:26-27 D '60. (MIRA 14:4)
(Stone, Cast)

KHAN, B.Kh.; TARANOV, Ye.D.; YEMEL'YANENKO, Yu.G.

Improving the technology of converter steel deoxidation. Lit.
proizv. no.11:44-45 N '61. (MIRA 14:10)
(Steel--Metallurgy)

KHAN, B. Kh., kand. tekhn. nauk; TARANOV, Ye. D., inzh.

Improving steel smelting processes for shaped castings.
Mashinostroenie no.5:44-47 S-O '62.

(MIRA 16:1)

1. Institut liteynogo proizvodstva AN UkrSSR.

(Steel castings)

KHAN, B.K.; BYKOV, I.I.

Letter to the editors. Lit. proizv. no.8:46 Ag '62. (MIRA 15:11)
(Stone, Cast)

BORISOV, G.P.; KORABLIN, V.P.; KHAN, B.Kh.

Continuous casting equipment for the manufacture of nodular
cast iron balls for ball mills. Nauch. trudy Inst. lit. proizv.
AN URSR 11:91-94 '62. (MIRA 15:9)

(Cast iron)

(Continuous casting—Equipment and supplies)

OVCHARENKO, F.D., akademik, doktor khim.nauk, orv.red.; GORSHKOV, A.A., red.;
USENKO, I.S., doktor geol.-min. nauk, red.; DAVYDOV,
G.M., kand. ekon. nauk, red.; KHAN, B.Kh., kand. tekhn.nauk, red.;
KORABLIN, V.P., inzh., red.; SHTUL'MAN, I.F., red.; DAKHNO, Yu.B., tekhn.
red.
[Stone casting] Problemy kamennogo lit'ia. Kiev, Izd-vo
AN USSR, 1963. 226 p. (MIRA 17:2)

1. Akademiya nauk URSR, Kiev. Rada po vyvchenniu produktyvnykh syl URSR.
2. Akademiya nauk Ukr.SSR (for Ovcharenko).
3. Chlen-korrespondent AN Ukr.SSR (for Gorshkov).
4. Sovet po izucheniyu proizvoditel'nykh sil Ukr.SSR (for Davydov).

DOROFEYEV, V.A., inzh.; LIPOVSKIY, I.Ye., inzh.; KORABLIN, V.P.,
inzh.; KHAN, B.Kh., kand. tekhn. nauk

Obtaining stone castings of amphibolites. Mashinostroenie
no.1:38-41 Ja-F '63. (MIRA 16:7)

1. Donetskyy kamnoliteyny zavod (for Dorofeyev, Lipovskiy).
2. Institut liteynogo proizvodstva AN UkrSSR (for Korablin, Khan).

(Amphibolite)

LADOKHIN, S.V., inzh.; KHAN, B.Kh., kand. tekhn. nauk

Furnaces for obtaining molten stone for casting. Mashinostroenie
no.3:59-64 My-Je '63. (MIRA 16:7)

(Stone, Cast) (Furnaces)

KOSINSKAYA, A.V., [Kosyn'ka, A.V.]; BESPAL'KO, N.A.; KORABLIN, V.P.;
KHAN, B.Kh.

Andesite-basalts in Transcarpathian of the Ukrainian S.S.R.
as raw materials for obtaining cast stones. Geol. zhur. 23
no.5:62-72 '63. (MIRA 16:12)

KHAN, B.Kh., kand.tekhn.nauk; BYKOV, I.I., inzh.

Obtaining shaped stone castings in heat-insulated molds. Mashino-
stroenie no.4:60-62 JI-Ag '63. (MIRA 17:2)

KHAN, B.Kh.; BYKOV, I.I.

Mold casting from silicate melts. Dop. AN URSR no.12:1613-1616 '63.
(MIRA 17:9)

1. Institut liteynogo proizvodstva AN UkrSSR. Predstavleno akademikom
AN UkrSSR N.B. Dobroshotovya [Dobroshotov, M.M.] (deceased).

DOBROKHOTOV, N.N., akademik [deceased]; GREBEN', K.A.; KONYUKH,
V.Ya.; POKOTILO, Ye.P.; KOBEZA, I.I.; GOL'DENBERG, I.B.;
PROKHORENKO, K.K.; ISECHUK, N.Ya.; KILAN, B.Kh.;

[Steel production in open-hearth furnaces] Martenovskoe pro-
izvodstvo stali. Moskva, Izd-vo "Metallurgiya," 1964. 239 p.
(MIRA 17:6)

1. Akademiya nauk Ukr.SSR (for DobrokhotoV).

KHAN, B.Kh.; TARANOV, Ye.D.; Primali uchastiye: ALEKSANDROVICH, L.B.;
GITARTS, G.M.; KLIBUS, Yu.V.; NOSOVA, Ye.M.; REZENELAT, I.M.;
KHACHT, A.I.

Deoxidation and alloying of acid electric steels in the ladle.
Izv. vys. ucheb. zav.; chern. met. 6 no.4:50-55 '63. (MIRA 16:5)

(Steel—Electrometallurgy)

KHAN, B.Kh., kand.tekhn.nauk; LADOKHIN, S.V., inzh.

Improvin the quality of melt for stone casting. Mashinostroenie
no. 2:3'-39 Mr-Ap '64. (MIRA 17:5)

LADOKHIN, S.V.; KHAN, B.Kh.

Some causes for rejects in stone casting. Lit. proizv. no.6:
12-13 Je '64. (MIRA 18:5)

~~KHAN, Boris Khonorovich, kand. tekhn. nauk; ISHCHUK, Nikolay
Iakovlevich, kand. tekhn. nauk; DOBROKHOTOV, N.N.,
akademik, red.~~

[Deoxidation, degassing and alloying of steel] Raskislenie,
degazatsiia legirovaniia stali. Izd.2., dop. i perer. Mo-
skva, Metallurgiya, 1965. 253 p. (MIRA 18:4)

1. Akademiya nauk Ukr.SSR (for Dobrokhotov).

BYKOV, I.I.; KHAN, B.Kh.

Effect of heat exchange on the structure of castings of
silicate melts. Dop. AN URSSR no.8:1070-1072 '65. (MIRA 18:8)

1. Institut problem lit'ya AN UkrSSR.

LADOKHIN, S.V., inzh.; KHAN, B.Kh., kand.tekhn.nauk; UL'YANOV, V.L., kand.
tekhn.nauk

Causes of the chemical heterogeneity of melts for stone casting.
Stek. i ker. 22 no.3:7-9 Mr '65. (MTRA 18:10)

1. Institut problem lit'ya AN UkrSSR.

YEFIMOV, V.A., doktor tekhn. nauk; LUZAN, P.P., kand. tekhn. nauk;
KHAN, B.Kh., kand. tekhn. nauk; KUGTYHKO, O.S., kand. tekhn.
nauk

Scientific and technical conference on the theory and practice
of founding processes. Lit. proizv. no.12:33-34 D '65.
(MIRA 18:12)

KHAN, B.N., kand.tekhn.nauk; BYKOV, I.I., kand.tekhn.nauk

Technological characteristics for obtaining high-quality
stone castings. Mashinostroenie no.6:64-66 N-D '65.

(MIRA 18:12)

KHAN, D. V.
CA

15

The effect of reaction of the medium on the decomposition of the organic matter in soils with various relative contents of carbon and nitrogen. D. Khan. *Trans. Dokuchaev Soil Inst.* (U. S. S. R.), 23, 139-45(1944); *Khim. Referat. Zhur.* 4, No. 7-8, 58(1944). -- The reaction of the medium in each combination was kept at pH 4.5, 6.0 and 7.5 by adding base or acid to the wash water. The amt. of cellulose decompt. during the vegetation was 60% at C/N = 25 and at pH 4.5 and 80% at pH 7.5. The amt. of lignin decompt. was 41% at C/N = 60 and pH 4.5 and 37% at pH 7.5. The total fixation of N depended on the reaction of the medium and on the properties of the decomp. org. matter; with lignin N is fixed in an acid medium and with cellulose in a basic medium; the intensive decompt. of lignin in an acid medium is one of the reasons for the small accumulation of the org. matter in the soils of the podzol zone under forests. W. R. Hunt

AGRICULTURE - MEDICINAL LITERATURE CLASSIFICATION

CA

15

Methods of isolation of the insoluble (humic) fraction in soils. D. Khan, *Proc. Lenin Acad. Agr. Sci. (U.S.S.R.) 1945, No. 7, 8, 32 (in Russian)*. In 2 soils (I contg. C 2.93, N 0.17, and II contg. C 3.17, N 0.22%) the contents of semisol. vegetable residue hydrolyzable by 1.0 N H₂SO₄, hydrolyzable by 80% H₂SO₄, and nonhydrolyzable were, resp.: I, 33, 13, 54; II, 17, 7, 76%. The predominating nonhydrolyzable part, corresponding to huminized lignin, partly sol. in alkali, giving a pink color reaction with phloroglucinol, contained C and OMe: I 59.0, 3.25; II 61.1, 3.90%; with respect to the total C content of the soil, the three fractions constitute: I 2.99, 1.24, 5.31; II 1.64, 0.70, 7.01%; the sum of the sol. vegetable residue constitutes: I 9.54; II 9.35% of the total C. The humic acid (isolated with alkali) of I contained C 57.00, N 5.00, H 4.40, and O 32.70%; that of II was similar. After elimination of the semisol. vegetable residue of the humic acid, and of the alc.-benzene-sol. substance the insol. fraction was heated in 7% H₂SO₄ at 40° for 10 min., dialyzed until all H₂SO₄ was removed, dried, and stirred with 0.1 N NaOH and Na₂SO₄ to ppt. clay fractions; the sedimented brown soln. was filtered, the ext. pptd. with N H₂SO₄, the ppt. washed and dried at 85°, and the treatment repeated 15 times, the concn. of H₂SO₄ being increased to 25% but the NaOH kept at 0.1 N. This resulted in isolating about 88% of the insol. fraction; the compn. of the substance, pptd. by H₂SO₄ (sample, C 53.2, N 4.0, H 5.92, O 37.0) was very nearly the same for the different preps., and rather close to that of humic acid. The ratio Al:Fe was approx. 7:1.

N. Thon

ASB SLA METALLURGICAL LITERATURE CLASSIFICATION

CH

15

/ The absorption of organic substances by soil minerals
D. V. Khan, *Doklady Akad. Nauk SSSR* (1950, 67, 80). Humic acid was prepd. by extg. soil with 2% NH₄OH, pptg. with H₂SO₄, dialyzing until free of SO₄, and dissolving with NH₄OH to pH 6.8. This soln. was mixed with montmorillonite and assocd. minerals, kaolinite, orthoclase, and muscovite in the ratio of 1:5. The montmorillonitic group adsorbed 1.2-0.000 g. C per 100 g. of the mineral; kaolinite 0.20 g.; orthoclase 0.25 g.; and muscovite 0.44 g. When the minerals were ground to less than 0.2 μ, the kaolinite, orthoclase, and muscovite increased their adsorption capacity, but not the montmorillonite. The minerals were satd. with H, Ca, Fe, and Al and tested for sorptions of humic acid. The Fe- and Al-satd. minerals sorbed most.
I. S. Ioffe

KHAN, D. V.

Humus

Methods for studying the composition of watersoluble organic substances in plant residues.
Trudy Poch. inst. no. 38, 1951.

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

CA

10

The connection of organic matter with the minerals of the soil. D. V. Khan. *Doklady Akad. Nauk S.S.S.R.* 81, 461-4 (1951). Minerals that are satd. with Fe and Al cations absorb large amounts of humic acids in comparison with the same minerals that are satd. with H or Ca ions. In descending order of absorption the minerals are: ascanite, bentonite, gumbrin, and kaolin. Much of the absorbed humic acid cannot be reextrd. with 0.1 N NaOH; the largest amt. of extractable humic acid is found in minerals satd. with Fe and Al ions, although kaolin can lose some 60% of absorbed humic acid regardless of the nature of ionic satn. The technique used was treatment of powd. minerals with

0.02 N HCl followed by 0.5 N soln. of chloride of the desired cation, then drying at 40°, followed by treatment with the NH₄ salt of humic acid in aq. medium at pH 6.8. If the latter treatment is done at pH 5.2 the picture is generally the same but the amt. of alkali-nonextractable humic acid is much greater than that found at pH 6.8 (except for kaolin, as above). Thus in all cases the connection or linkage of the humic acids occurs in 2 ways, one leading to a weak and the other to strong bonding. The former occurs through absorption at the surface through the absorbed cations, while the latter takes place through the functional groups of humic acid with Fe or Al that exist in the crystal lattice of the mineral structure proper. It is shown that in montmorillonite-type minerals most of insol. humus derivs. are the tightly bound humic acids. Cf. C. I. 45, 1957.
G. M. Kozlovskii

Country : USSR
 Category : Soil Science. Physical and Chemical Properties of Soil. J
 Abs. Jour. : 53363
 Author : Khan, D.V.
 Institut. : --
 Title : The Effect of Humus Substances. Mineral Composition and Exchangeable Cations on the Formation of Waterstable Aggregates in Chernozem Soil.
 Orig. Pub. : Pochvovedeniye, 1957, No.4, 63-70
 Abstract : Soil aggregates with varying degrees of water stability were selected from chernozem samples collected in different regions of the USSR by means of the modified Savinov method. Dry aggregates of 1-3 mm were subjected to water treatment. Through the action of the water, part of the aggregates crumbled to fractions of 1 - 0.5, 0.5 - 25 mm and smaller. The total content of humus substances in these fractions was determined. A direct relation between the size of the soil

Card: 1/3

Country :
 Category : J
 Abs. Jour. : 53363
 Author :
 Institut. :
 Title :
 Orig. Pub. :
 Abstract : aggregates and their humus substance content is noted. The humus content in the aggregate drops regularly, conforming to the degree of size reduction. Differences in the mineral composition of aggregates having diverse waterstabilities were also found. Waterstable aggregates (3-1 mm) contain more clayey minerals of the montmorillonite group type and less of quartz. The opposite is observed in fractions smaller than 0.25 mm. In exchangeable calcium it reaches the greatest volume

Card: 2/3

KHAN, D.V.

Composition of humic substances bound to the mineral part
of the soil [with summary in English]. Pochvovedenie no.1:
10-18 Ja '59. (MIRA 12:2)

1. Pochvennyy institut imeni V.V. Dokuchayeva, AN SSSR.
(Humus) (Minerals in soil)

KHAN, D.V.; RUDNEVA, T.A.

Nature of the organic matter of some soils of the Kura-Aras
Lowland of the Azerbaijan S.S.R. Izv.AN Azerb.SSR.Ser.biol.i med.
nauk no.3:85-92 '62. (MIRA 15:9)

(KURA-ARAS LOWLAND--HUMUS)

KHAN, D.V.

Significance of the adsorption of cations in the formation
of soil aggregates. Pochvovedenie no.10:98-106 0 '65.

(MIRA 18:11)

1. Pochvennyy institut imeni Dokuchayeva.

ca
9

Experiment on scorodite flotation. S. M. Yassinevich and G. A. Khan. *Tsvetnaya Metall.* 1934 No 7, 26-37. Novotroitsk (Ural) eflinites contg. As were used in a series of expts. on flotation. Compa. of ore: 2.72 As, 0.10 Sb, 0.17 PbO, 0.91 ZnO, 0.15 CuO, 0.02 FeO, 0.01 Bi, 7.85 Al₂O₃, 1.60 CaO, 0.03 MgO, 69.49 SiO₂ and 0.57% S, also 4.3 g. per ton Au and 12.0 g. per ton Ag. Flotation of the eflinites gave 64% sand contg. 3.4 g. ton Au and 1.8% As, and 33% sludge contg. 60 g./ton Au and 5.71% As. The Au and As were mainly in the form of scorodite and represented 60 and 63.6%, resp., of the original content in the ore. The scorodite was concd. from the sludge, without grinding, by means of Na oleate, 5 kg./ton + 1 kg./ton starch in NaOH soln. + 1 kg./ton Na silicate + a small amt. of pine tar. S. L. Madorsky

A50-51A METALLURGICAL LITERATURE CLASSIFICATION
 500-117 8224
 140,380

PROCESSES AND PROPERTIES

9

ch

Gold flotation. S. M. Yessvukevich and G. A. Khan. *Soviet. Zolotoprom.* 1935, No. 2, 21-27. An experimental investigation was made of the problem of flotation of Au-ore with the object of ascertaining the phys. chemistry of flotation, choice of flotation reagents, size and shape of ore particles, choice of flotation machines, etc. Pure Au was used in the expts. Coating the Au particles with CuS, preliminary to flotation, by first depositing electrolytically, or by means of a Zn-Cu pair, a Cu coat, and then solidifying the Cu coat with Na₂S, proved successful chemically, but too expensive. An attempt to coat the Au with Au₂S₃ by placing the Au in a soln. of AuCl₃ and introducing H₂S, gave negative results. Pine oil in amts. of 40-100 g. per cu. m. H₂O, gave good results as a foam reagent, and xanthate, 10-100 g. per cu. m. and aerofloat So. 25, 40-100 g. per cu. m. are recommended as collector reagents in the flotation of free Au. Of inorg. salts, Na₂CO₃ gave the best results as flotation reagent for free Au. Contrary to expectation, CuSO₄ gave neg. results as flotation reagent. The same was true of KCN, Na₂S and CaO. The upper economical limit for particle size of the Au is 160 mesh. Scale shaped particles float better than spherically shaped particles. The best results were obtained in a basic pulp medium of 7.2-9.0 pH. S. L. Madorsky

ASME-ISA METALLURGICAL LITERATURE CLASSIFICATION

KHAN4G8A8

600

1. KHAN, G. A., DAL'NOV, S.M.

2. USSR (60C)

Docent, Engineer. "The First Results Obtained After Completing Installation of the Balkhash Concentration Plants" Tsvet. Met. 14, No 10-11, Oct.-Nov. 1939.

9. Report U-1506, 4 Oct. 1951.

117 AND 2ND SERIES 180 AND 4TH SERIES

PROCESSES AND PROPERTIES INDEX

CA

Testing an improved laboratory flotation cell. G. A. Khan. *Transys Metal* 20, No. 2, 27-8(1947).--A lab. flotation cell was built from U.S. Bureau of Mines plans of transparent material (Plexiglass). Difficulties were experienced when a mix. of galena and quartz or cassiterite and quartz was floated, since the heavier mineral settled out and clogged the air-intake tube. Supplying the air through a hollow impeller shaft or a tube entering through a sidewall of the cell with the mouth under the impeller removed this difficulty. The highest exin. was obtained when the air entered through a hollow shaft, but the quality of the concentrate was better by the other method.
M. Hoesch

438-11A METALLURGICAL LITERATURE CLASSIFICATION

FROM STUDY SHEET FROM STUDY SHEET

100000 #2 100000 #17 00V 001 00110101 001101 001 00V 101

NO LA MAY NO LI L P Q R S T U V W X Y Z AA AB AC AD AE AF AG AH AI AJ AK AL AM AN AO AP AQ AR AS AT AU AV AW AX AY AZ BA BB BC BD BE BF BG BH BI BJ BK BL BM BN BO BP BQ BR BS BT BU BV BW BX BY BZ CA CB CC CD CE CF CG CH CI CJ CK CL CM CN CO CP CQ CR CS CT CU CV CW CX CY CZ DA DB DC DD DE DF DG DH DI DJ DK DL DM DN DO DP DQ DR DS DT DU DV DW DX DY DZ EA EB EC ED EE EF EG EH EI EJ EK EL EM EN EO EP EQ ER ES ET EU EV EW EX EY EZ FA FB FC FD FE FF FG FH FI FJ FK FL FM FN FO FP FQ FR FS FT FU FV FW FX FY FZ GA GB GC GD GE GF GG GH GI GJ GK GL GM GN GO GP GQ GR GS GT GU GV GW GX GY GZ HA HB HC HD HE HF HG HH HI HJ HK HL HM HN HO HP HQ HR HS HT HU HV HW HX HY HZ IA IB IC ID IE IF IG IH II IJ IK IL IM IN IO IP IQ IR IS IT IU IV IW IX IY IZ JA JB JC JD JE JF JG JH JI JJ JK JL JM JN JO JP JQ JR JS JT JU JV JW JX JY JZ KA KB KC KD KE KF KG KH KI KJ KL KM KN KO KP KQ KR KS KT KU KV KW KX KY KZ LA LB LC LD LE LF LG LH LI LJ LK LL LM LN LO LP LQ LR LS LT LU LV LW LX LY LZ MA MB MC MD ME MF MG MH MI MJ MK ML MN MO MP MQ MR MS MT MU MV MW MX MY MZ NA NB NC ND NE NF NG NH NI NJ NK NL NM NO NP NQ NR NS NT NU NV NW NX NY NZ OA OB OC OD OE OF OG OH OI OJ OK OL OM ON OO OP OQ OR OS OT OU OV OW OX OY OZ PA PB PC PD PE PF PG PH PI PJ PK PL PM PN PO PP PQ PR PS PT PU PV PW PX PY PZ QA QB QC QD QE QF QG QH QI QJ QK QL QM QN QO QQ QR QS QT QU QV QW QX QY QZ RA RB RC RD RE RF RG RH RI RJ RK RL RM RN RO RP RQ RR RS RT RU RV RW RX RY RZ SA SB SC SD SE SF SG SH SI SJ SK SL SM SN SO SP SQ SR SS ST SU SV SW SX SY SZ TA TB TC TD TE TF TG TH TI TJ TK TL TM TN TO TP TQ TR TS TT TU TV TW TX TY TZ UA UB UC UD UE UF UG UH UI UJ UK UL UM UN UO UQ UR US UT UU UV UW UX UY UZ VA VB VC VD VE VF VG VH VI VJ VK VL VM VN VO VP VQ VR VS VT VU VW VX VY VZ WA WB WC WD WE WF WG WH WI WJ WK WL WM WN WO WP WQ WR WS WT WU WV WW WX WY WZ XA XB XC XD XE XF XG XH XI XJ XK XL XM XN XO XP XQ XR XS XT XU XV XW XX XY XZ YA YB YC YD YE YF YG YH YI YJ YK YL YM YN YO YQ YR YS YT YU YV YW YX YY YZ ZA ZB ZC ZD ZE ZF ZG ZH ZI ZJ ZK ZL ZM ZN ZO ZQ ZR ZS ZT ZU ZV ZW ZX ZY ZZ

PROCESSES AND PROPERTIES INDEX

7

Ca

Adsorption of air on minerals. *L. A. Kaban. Gornyi Zhur. 122, No. 9, 34-7(1948).* - The conditions necessary for an air bubble to form on the surface of a mineral particle is $W = 2\sigma_0(2R^2 - \rho^2)$ where W is the energy spent to form the bubble, σ_0 is the surface tension at the liquid-gas interface, R is the radius of the bubble, and ρ is the radius of curvature of the contour of bubble adhesion. Air bubbles will not adhere to mineral particles when $\sigma_{sl} + \sigma_{lg} - \sigma_{sg} < 0$ where σ is the surface energy at the solid-liquid, liquid-gas, and solid-gas interfaces, resp. Such condition exists when a particle is surrounded by a hydrated or solvated layer. Sulfide minerals prep'd. by dry method or prep'd. by wet method and subsequently dried adhered strongly to air bubbles. The same minerals left wet after prep'n. did not adhere to air bubbles unless a surface-active substance (collector) was added. Before a bubble is formed on the mineral surface it is necessary that air be adsorbed on this surface. Solvated envelopes of polar compds. lower the surface energy on the mineral-H₂O interphase and thereby prevent the air from being adsorbed on the solid surface. The purpose of a collector is to form nonhydrated envelopes on mineral particles. This results in an increase of surface tension at the solid-liquid interface, thus the adsorption of an air layer on the particle is facilitated. M. Hosh

ASB-32A METALLURGICAL LITERATURE CLASSIFICATION

CA

Grindability of minerals. G. A. Khan, G. A. Mdiva,
and L. A. Kurakina. *Gornyi Zhur.* 124, No. 8, 83-8
(1960).--The grindability of a number of minerals was
studied in a lab. rod mill. The grindability index is ex-
pressed as the ratio of the yield of material -200 mesh
in the product to the yield of -200-mesh quartz similarly
ground. The indexes for the tested minerals were quartz
1, apatite 1.9, magnetite 3.4, bauxite 3.5, and calcite
5.08.
M. Hosh

KHAN, G.A.; ANFIMOVA, Ye.A.

[Testing raw materials and industrial manufactures] Oprobovanie syr'ia
i produktov promyshlennosti. Moskva, Gos. nauchno-tekhn. izd-vo khim.
lit-ry, 1953. 211 p. (MLBA 7:1)

(Materials--Testing)

KHAN, G.A.

ANDRMYEV, S. Ye.; BOKIY, B. V.; GORODETSKIY, P. I.; OBEYTER, N. S.; SHCHUKIN, A. A.
GMRONT'YEV, V. I.; SKOCHINSKIY, A. A.; TERFIGOREV, A. M.; SHEVYAKOV, L. D.;
SPIVAKOVSKIY, A. A.; VERKHOVSKIY, I. M.; VORONIKOV, I. M.; YELANCHIK, G. M.;
KASHIN, N. V.; SLOBODKIN, M. I.; GUZYNKOV, P. G.; ZEMSKOV, V. D.; NOVIKOV, F. S.
OSETSKIY, V. M.; SOSUNOV, G. I.; YASYUKOVICH, S. M.; KHAN, G. A.; POPOV, V. M.

In memory of Professor Levenson. Gor.zhur. no. 9:60 S 155.

(Levenson, Lev Borisovich, 1878-1955) (MIRA 8:8)

~~KHAN, Grigoriy Anisimovich; LOKONOV, M.F., kand. tekhn. nauk, retsenzent;
ZAPRODSKIY, N.N., red.; YEZDOKOVA, M.L., red. izd-va; ATTOPOVICH,
M.K., tekhn. red.~~

[Assaying, checking, and automatic control in ore dressing] Oprobovanie, kontrol' i avtomatizatsia protsessov obogashchenia. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po chernoi i tsvetnoi metallurgii, 1958. 379 p. (MIRA 11:8)
(Ore dressing) (Automatic control)

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 11, p 4 (USSR) SOV/137-58-11-21872

AUTHORS: Khan, G. A., Shrader, E. A.

TITLE: Collector Adsorption Studied by Electrokinetic Measurements (Izucheniye adsorbtsii flotoreagentov metodom elektrokineticheskikh izmereniy)

PERIODICAL: Izv. vyssh. uchebn. zavedeniy. Tsvetn. metallurgiya, 1958, Nr 1, pp 41-47

ABSTRACT: Electrokinetic measurements describing the electrical properties of the surfaces of mineral granules upon the adsorption of reactants are made by electroosmosis. The adsorption of oleic acid and oxidized petrolatum on quartz, ferrimolybdate, and limonite are investigated. The mechanism whereby the electrokinetic potential of these minerals arises is investigated, as is the change therein in accordance with the concentration of reactants added. It is found that collectors such as the fatty acids, which do not normally undergo adsorption on quartz, do undergo adsorption after activation by the ions of the heavy metals and that this is the reason for the floatability of quartz. Minerals that undergo flotation with difficulty - limonite and ferrimolybdate - require total saturation of the surface by ions of the fatty

Card 1/2

Moscow Inst. Non-Ferrous Metals & Gold

SOV/137,58-11-21872

Collector Adsorption Studied by Electrokinetic Measurements

acids, which apparently form a chemical combination with the Fe ions in these minerals. This method makes it possible to determine the structure of the inter-phase layer and is valuable for the study of the flotation process. Bibliography: 8 references.

B. L.

Card 2/2

POL'KIN, S.I.; KHAN, G.A.; KALMAKOV, A.A.; ZLOTINA, S.R.

Introducing automatic control of continuously operating
laboratory ore dressing plants. Izv.vys.ucheb.zav.; tsvet.
met. 2 no.6:35-46 '59. (MIRA 13:4)

1. Moskovskiy institut tsvetnykh metallov i solota. Kafedra
obogashcheniya poleznykh iskopayemykh.
(Ore dressing) (Automatic control)

APPROVED FOR RELEASE: 09/17/2001

CIA-RDP86-00513R000721720016-5"

KHAN, G.A.; KUZ'KIN, A.S.

Study of electrochemical transducers for the control of residual
cyanide concentrations in the pulp. Izv.vys.ucheb.zav.; tsvet.
met. 3 no.2:43-49 '60. (MIRA 15:4)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra obogashcheniya
poleznykh iskopayemykh.
(Flotation—Equipment and supplies)
(Potentiometric analysis) (Cyanide)

LOKONOV, Mikhail Fedorovich, kand. tekhn.nauk; KHAN, G.A., otv. red.;
GARBER, T.N., red. izd-va; IL'INSKAYA, G.M., tekhn. red.

[Assaying in ore dressing plants] Oprobovanie na cbogatitel'nykh
fabrikakh. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po gornomu
delu, 1961. 274 p. (MIRA 15:2)
(Ore dressing) (Assaying)

GURAN, M.; POL'KIN, S.L.; KHAN, G.A.

Studying the composition of films formed by the interaction of
sulfates with the electrode. Izv. vys. ucheb. zav.; tsvet.
met. 4 no. 1:33-41 '61. (MIRA 14:2)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra obogashcheniya
polsznykh iskopayemykh. (Flotation--Equipment and supplies)

KHAN, G.A.; SMIRNOV, V.V.

Investigating the system of automatic control of a single-stage
crushing cycle. TSvet. met. 34 no.6:1-9 Je '61.

(MIRA 14:6)

(Crushing machinery)
(Automatic control)

KHAN, G.A.; GURAN, M.; BAULOV, V.I.; SMIRNOV, V.V.

Testing automatic photometric equipment for the continuous
measurement of residual xanthate ion concentrations in flotation
pulp. TSvet.met. 35 no.8:79-81 Ag '62. (MIRA 15:8)
(Flotation--Equipment and supplies)
(Photometers--Testing)

SMIRNOV, V.V.; KHAN, G.A.

Industrial testing of radioactive level indicators of the clarified
layer in thickeners. TSvet. met. 35 no.9:15-20 S '62.

(MIRA 16:1)

(Level indicators—Testing)
(Radioisotopes—Industrial applications)

KHAN, G.A.; SHPINEVA, A.G.; FED'KOVSKIY, I.A.

Studying the adsorption of xanthate by molybdenite and other sulfides. Izv. vys. ucheb. zav.; tsvet. met. 5 no.6:29-34 '62. (MIRA 16:6)

1. Moskovskiy institut stali i splavov, kafedra obogashcheniya poleznykh iskopayemykh. (Sulfides—Metallurgy) (Flotation)

KHAN, G.A.; SMIRNOV, V.V.; ZAZNOBIN, M.G.

Method of automatically controlling the turbidity of a thickener
overflow. Obog. rud 7 no.2:39-42 '62. (MIRA 16:4)
(Ore dressing) (Automatic control)

KHAN, G.A.; FED'KOVSKIY, I.A.; SMIRNOV, V.V.

Oxidizability of molybdenite during flotation. Izv. vys. ucheb.
zav.; tsvet. met. 5 no.4:54-59 '62. (MIRA 16:5)

1. Moskovskiy institut stali, kafedra obogashcheniya rud redkikh
i radioaktivnykh metallov.
(Flotation) (Molybdenite)

KALMAKOV, A.A. (eng), GOLKIN, S.I. (Prof, Dr.Eng.), KHAN, G.A. (eng student), SMIRNOV, V.V.

"The use of radioisotopes for the determination of the contents of certain metals in the products of ore dressing."

report submitted for 6th Intl Mineral Processing Cong, Cannes, 26 May-2 Jun 63.

Kalinin Inst Non-Ferrous Metals & Gold, Moscow.

S/149/63/000/001/001/008
A006/A101

AUTHORS: Khan, G. A., Panteleyeva, N. F., Agranat, B. A., Belochkina, Ye. D.,
Yakubovich, I. A. Kirillov, O. D.

TITLE: Experiments of using ultrasonic waves in selection of collective
concentrates

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya,
no. 1, 1963, 25 - 31

TEXT: The experimental investigation was carried out for the purpose of
finding new effective means of selecting collective copper-molybdenum concen-
trates. Among others, the method of eliminating reagent coatings from surfaces
of mineral particles in ultrasonic process, were studied. The effect of ultra-
sonic waves upon selective separation of molybdenite, chalcopyrite, pyrite and
quartz was investigated with pure minerals and artificial mineral mixtures. It
was found that the breakdown of reagent coatings from the surface of mineral
particles was performed in an ultrasonic field above the threshold of cavitation
of the liquid phase. The density of the processed pulp has a substantial effect

Card 1/2

Experiments of using ultrasonic waves in...

S/149/63/000/001/001/008
A006/A101

upon subsequent flotation behavior of the mineral; the selection of the collective concentrate is improved during the ultrasonic processing of more diluted pulps with not over 10% content of solids; in denser pulps the possibility of breakdown of the reagent coatings from the surface of mineral particles is impaired. The time of ultrasonic processing of the pulp affects the results of breakdown of the reagent coatings from the mineral surfaces; 8 - 10 min is the most efficient time for processing. The breakdown of a fixed collector from the surfaces of pyrite and chalcopyrite in ultrasonic processing proceeds more fully; as a result the extraction of these minerals into a concentrate is reduced. Multi-stage processing of mineral mixtures by ultrasonic waves is not expedient, the process becomes more complex without increase in efficiency. A breakdown of xantogenate coatings without ultrasonic treatment, using merely filtration, was not observed. Filtration after ultrasonic treatment is not always necessary. There are 4 figures.

ASSOCIATION: Moskovskiy institut stali i splavov (Moscow Institute of Steels and Alloys) Kafedra obogashcheniya rud redkikh metallov i kafedra fiziki (Department of Concentration of Rare Metal Ores and the Department of Physics)

SUBMITTED: April 18, 1962
Card 2/2

S/271/63/000/003/007/049
A060/A126

AUTHORS: Khan, G.A., Smirnov, V.V., Zaznabin, M.G.

TITLE: Method for the automatic turbidity control of decantation from coagulator (For discussion)

PERIODICAL: Referativnyy zhurnal, Avtomatika, telemekhanika i vychislitel'naya tekhnika, no. 3, 1963, 29, abstract 3A162 (Obogashcheniye rud, 1962, no. 2 (38), 39 - 42)

TEXT: The article cites dependence curves for the capacitance of the transducer as a function of the turbidity of quartz of various sizes, of the turbidity of a suspension of various minerals, of the particle size at constant concentration, of the turbidity of decantation from coagulator under varying size of the solid phase (of a scheelite concentrate), and of the concentration of various reagents. A diagram and description is given of an electronic metering unit, as well as results of experiments, according to which the turbidity meter with capacitance transducer may be utilized in a system for automatic feeding of coagulating agents supplied to a coagulator, and for the control of the

Card 1/2

Method for the automatic turbidity control of

S/271/63/000/003/007/049
A060/A126

height of the irradiated layer of the coagulator. There are 6 figures and 5 references.

A. V.

[Abstracter's note: Complete translation]

Card 2/2

KROL', O.F.; CHERNOV, V.I.; SHIPOVALOV, Yu.V.; KHAN, G.A.

"Saryarkit," a new mineral. Zap. Vses.min.ob-va 93 no. 2:
147-155 '64. (MIRA 17:6)

KHAN, G.A.; ABDULIN, S.F.

Effect of the composition of beneficiation products on results of an analysis for molybdenum by the K- absorption edge.

Izv. vys. ucheb. zav.; tsvet. met. 8 no.4:39-44 '65.

(MIRA 18:9)

1. Kafedra obogashcheniya rud redkikh i radioaktivnykh metallov Moskovskogo instituta stali i splavov.

PARSHENKOV, S.A.; KUZ'KIN, S.F.; KHAN, G.A.; PANTELEYZOVA, N.P.

Electron microscopy of the state of aggregation of limonite
and ferromolybdate suspensions in connection with their
floatability. *Izv. vys. ucheb. zav.; tsvet. met.* 7 no. 4:
30-31 '64 (MIR 1961)

I. Moskovskiy institut stali i splavov, kafedra obogacheniya
rud redkikh i radioaktivnykh metallov.

Electric Transformers

"New welding transformers-regulators." L. S. Blyuzberg, L. Ye. Alekin. Reviewed by Eng. G. I. Khan. Prom. energy. 9 No. 8, 1952.

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

AUTHOR: Khan, G.I., Engineer

SOV/110-59-5-6/25

TITLE: Packaged Transformer Sub-Stations for Multiple Distribution Systems (Komplektnyye transformatornyye podstantsii dlya gorodskikh raspredelitel'nykh setey)

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 5, pp 23-25 (USSR)

ABSTRACT: In 1958, the Chirchiksk Electrical Engineering Works developed and made packaged transformer sub-stations type GKTP-180/320 kVA for voltages of 6 to 10 kV for urban distribution networks. Until recently, the works produced transformer sub-stations (kiosks) type IKTP-180 kVA for 6 kV for temporary electricity supply to construction sites complete with power transformer type TM-180 or 320 kVA for voltages of 6 to 10 kV. Because of extensive demands for equipment of this type the works has developed a series of transformer kiosks which is offered for consideration in this article. The series of packaged transformer sub-stations has been developed in three variants. The same low-voltage side and transformer chamber were used unchanged for outputs of 180 and 320 kVA and also for voltages of 6 and 10 kV; the high-voltage side is made up of standard units.

Card 1/2

Packaged Transformer Sub-Stations for Rural Use
SOV/110-59-5-6/25

Variant 1 is drawn in Fig 1. It provides four sub-circuits on the low-voltage side, each with its own switch-fuse. There are three single-phase watt-hour meters and three current transformers. In the second variant depicted in Fig 2, the low-voltage side and transformer chamber are the same as before but the high-voltage side is simplified. Both these variants are arranged for supply through cables; a third, more convenient for rural use, is designed for supply from an overhead line. Lightning arresters are provided. Several dimensions, weights and brief constructional details are given for each variant. It is estimated that the cost of the equipment will be 50 to 60% of the cost of a typical brick transformer sub-station of this output and the erection time will only be 8 to 10 hours instead of 30 to 40 days. There are 3 figures.

SUBMITTED: 12th January 1959

Card 2/2

Translation from: Referativnyy zhurnal, Geografiya, 1957, Nr 6, 14-57-6-13010D
p 169 (USSR)

AUTHOR: Khan, I. V.

TITLE: The Ush-Tobe Valley (Its Nature, Population and Agriculture) [Ushtobinskaya dolina. (Priroda, naseleniye i khozyaystvo)]

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Geographical Sciences, presented to the In-t geografii AN SSSR (Geographical Institute of the AS USSR) Moscow, 1953

ASSOCIATION: In-t geografii AN SSSR (Geographical Institute of the AS USSR)

Card 1/1

KHAN, KH.

CSSR (600)

Factories - Location

Choice of sites for the construction of factories. Mcl. prom. 13, no. 6. 1952.

9. Monthly List of Russian Accessions, Library of Congress, September 1973, Uncl.
2

PROCESSES AND PROPERTIES INDEX

1940 AND 6TH CODES

12

KHAN KH

CH

A new method for the determination of the quality of homogenized milk. Kh. Khalilov, *Molokno-Mastodol'naya Prom.* No. 4, 3 (1958); *Chem. Zentr.* 1959, 1, 1082. A 40-cc. sample of the milk is kept at a temp. of 60° (on the water bath) for 5 min., then centrifuged for 10 min. and the 2 layers are separated. The fat content of each layer is detd. The ratio of the percentage fat content in the lower layer to that in the upper layer gives the "coefficient of homogenization," A. In a well homogenized product the value of A is about 1. The method is suitable for practical use. Increase in pressure from 80 to 100 atms. during the homogenizing of the milk increases the value of A, further increase in pressure has slight effect on A until a pressure of 120 atms. is reached, when the value of A begins to decrease somewhat with increase of pressure. Temp. variations in the water bath from 55 to 65° and variations in the period of centrifuging within the limits of 5-9 min. produce only insignificant changes in the value of A.

W. A. Moore

ASB-51.4 METALLURGICAL LITERATURE CLASSIFICATION

22000 5170000

KHAN, KH. i KHMELEV, A.

20054 KHAN, KH. i KHMELEV, A. Tipovoy protekt priyemno-sbytovoy bazy s kholodil'nikom i ego privyazka. Moloch. prom-st', 1949, No. 6, s. 22-26.

SO: LETOPIS ZHURNAL STATEY, Vol. 27, Moskva, 1949.

1. KHAN, KH., Eng.
2. USSR (600)
4. Milk Plants
7. Powdered milk plants. Moloch prom No 1 1953.

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