

35831-66

ACC NR: AP6015729

0

A figure illustrates the effect of these additions of polyisocyanates into the chloroprene rubber mixture. With an increase in the thickness of the layer of adhesive substance (163, 385, 585 grams/meter²) the adhesion of a chloroprene rubber mixture containing polyisocyanates increases (2.1, 2.4, 4.8 kgf/cm). Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 002

NA
Card 2/2

GARETOVSKIY, Nikolay Viktorovich; POPOV, A.S., red.; ZAYTSEVA,
L.A., tekhn. red.

[How a state farm fund is formed and utilized] Kak obrazu-
etsia i ispol'zuetsia fond sovkhoza. Moskva, Profizdat,
1963. 30 p. (Bibliotekhs sel'skogo profsoiuznogo aktivista,
no.3/15) (MIRA 16:12)

(State farms—Finance)

GAUTSCHI, Goryla

Research work on agriculture and forestry in the Belorussian SSR
Mensk, Narkamzem BSSR, 1929. 40 p.

DA

ACC NR: AP7002882

SOURCE CODE: UR/0201/66/000/004/0076/0081

AUTHOR: Romanowski, S. R.; Garetski, U. P.

ORG: none

TITLE: Investigating the technology of accelerated hardening of reinforced concrete structures in a variable electromagnetic field

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 4, 1966, 76-81

TOPIC TAGS: concrete, reinforced concrete, hardening

ABSTRACT: The authors describe a new electromagnetic method, developed and investigated at the Institute of Heat and Mass Transfer, AN BSSR, for the heat treating concrete and reinforced concrete with the use of commercial-frequency current. The heating of the concrete is carried out by means of internal and external heat sources produced by the induction of ferromagnetic heat-releasing elements without direct contact with the current-carrying parts of the power plant. The steam treatment produces uniform distribution of heat, moisture and pressure in the body of the concrete. The process of hardening involves

Card 1/2

ACC NR: AP7002882

uniform structurization. Formation of calcium hydrate occurs under favorable temperature and moisture conditions, with no anomalous gradients of pressure, that would lead to the breakdown of the structure. It was established that the internal mass and heat exchange chemical reactions, and structurization are affected by an external magnetic field. The design flow chart of an industrial unit with a capacity of 50—75 thousand cubic meters of concrete per year, is described. The unit for accelerated concrete hardening in an electromagnetic field is designed for the application of various conditions of heat treating with wide and smooth temperature control and field intensity and for shaping the necessary parameters in accordance with the ambient medium. The design features of the elements of the unit and some characteristics of the technological process of heat treatment are analyzed. The test data of the pilot plant are given and its technical and efficiency characteristics are presented. Orig. art. has: 2 figures and 1 table. [Based on authors' abstract] [NT]

SUB CODE: 11, 13/SUBM DATE: none/ORIG REF: 004/

Card 2/2

GARETSKIY, R.G.

~~_____~~
Terekty-saya primigenial anticline in the western Mugodzhar Hills.
Biul.MOIP.Otd.geol. 30 no.2:67-82 Mr-Apr '55. (MLRA 8:8)
(Mugodzhar Hills--Geology)

GARETSKIY, B.G.

Clastic dikes. Izv.AN SSSR Ser.geol.21 no.3:81-103 Mr '56.
(MLRA 9:7)

1.Geologicheskii institut AN SSSR, Moskva.
(Dikes (Geology))

YANSHIN, A.; GARETSKIY, R. G.

Celebration in honor of Academician N.S.Shatskii. Izv.AN SSSR.Ser.
geol.21 no.3:129-130 Mr '56. (MLRA 9:7)
(Shatskii, Nikolai Sergeevich, 1895-)

GARETSKIY, R.G.; KUZ'MINA, O.A.

New outcrop of continental Cretaceous deposits in the northern
Aral Sea region. Biol. MOIP Otd.geol. 31 no.15:63-73 S-0 '56.
(MLRA 10:3)
(Aral Sea region--Geology, Stratigraphic)

GARETSKIY, R.G.; NEMKOV, G.I.

New outcrop of nummulitic beds at the northern coast of the Aral Sea.
Dokl. AN SSSR 108 no.6:1141-1143 Je '56. (MLFA 9410)

1. Institut geologicheskikh nauk Akademii nauk SSSR, Moskovskiy
geologo-razvedochnyy institut imeni S.Ordzhonikidze. Predstavleno
akademikom N.S. Shatskim.

(Aral Sea region--Nummulites)

GARETSKIY, R.G.

SUBJECT:

USSR/Geology

5-2-6/35

AUTHORS:

Garetskiy, R.G.; Samodurov, V.I. and Yanshin, A.L.

TITLE:

Pseudotectonic Dislocations of the Karak Mound in the Northern Kyzylkums and Some Other Points near the Aral Sea (Psevdotektonicheskiye dislokatsii bugra Karak v severnykh Kyzylkumakh i nekotorykh drugikh punktov Priaral'ya)

PERIODICAL:

Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel Geologicheskiiy, 1957, # 2, pp 77-103 (USSR)

ABSTRACT:

The Karak mound is located 120 km SSW of the railroad station Dzhuzaly in the northern part of the Kyzylkum desert. It is about 2 km long and 0.5 km wide. Its height is 40 to 50 m above the surrounding plain, and its maximum height reaches 147 m in the NE part.

In the Karak mound is neither a dome-structure nor a graben, as was supposed by the earlier investigators. Dislocations observed in the stratification of the layers belong to exodislocations or pseudotectonic dislocations. They die out in the plastic clays of the Upper Eocene and do not extent deeper than 175 m from the mound's top.

Card 1/2

AVAILABILITY
Card 2/2

AUTHOR:

Garetskiy, R.G.

5-6-3/42

TITLE:

Depth-Geology of the Kokpekty Anticline in the Mugodzhary Region (Glubinnaya geologiya Kokpektinskoy antiklinali v Primugodzhariye)

PERIODICAL:

Byulleten' Moskovskogo Obshchestva Ispytateley Prirody, Otdel Geologicheskii, 1957, # 6, pp 25-55 (USSR)

ABSTRACT:

The "Aktyubnefterazvedka" Trust began the drilling of test holes in the Kokpekty anticline in 1952, and this contributed new material concerning the depth-geology of this anticline.

The author has studied the formation of the covering rocks in the plateau located at the periphery of the Mugodzhary mountains, including those of the Kokpekty anticline.

The Kokpekty anticline is located 80 km south of the station Emba. This anticline is distinguished on the geological map by the outcrops of the Albian deposits. The outcrops extend from the Batpak-kul' lake to the 48° northern latitude. There is a large break west of the anticline which extends along its entire length.

The author gives a detailed description of the Lower-Cretaceous and Jurassic deposits citing the spore-pollen content of individual rocks.

Card 1/3

Depth-Geology of the Kokpekty Anticline in the Mugodzhary Region. 5-6-3/42

The Paleozoic foundation underlying Mesozoic deposits is characterized by a distinct erosive dissection in the region of the Kokpekty anticline. The ancient relief of the surface of Paleozoic strata affected the present Paleozoic surface relief reflecting also Meso- and Cenozoic tectonic movements which occurred later. In order to restore the ancient Paleozoic relief the author uses the method of drawing a map with isopachytes of deposits which filled in and levelled this relief.

An analysis of isopachytes led the author to the conclusion that the influence of the ancient relief of the Paleozoic foundation can be noticed in distribution of thicknesses of Middle-Jurassic and Lower-Cretaceous sediments.

Then the author describes the rocks of the Paleozoic foundation citing in detail paleontological data and fossils discovered by test drilling. Among the other materials, rich indications of petroleum were discovered by drilling in this region.

The author points out the coincidence of axes of the ancient Paleozoic structure and the recent Kokpekty anticline, which is an evidence of the inherited character of its development. The Kokpekty anticline was developing during a long period of

Card 2/3

Depth-Geology of the Kokpekty Anticline in the Mugodzhary Region. 5-6-3/42

time, and its structure became ever simpler from the deeper layers to more recent ones.

The article contains 5 maps, 1 columnar section, 5 tables, and 23 Russian references.

AVAILABLE: Library of Congress

Card 3/3

GARETSKIY, R.G.; SHRAYBMAN, V.I.

Southern underground extension of the axial zone in the Ural fold system [with summary in English]. Sov. geol. 1 no.2:99-108 '58. (MIRA 11:4)

1. Moskovskiy neftyanoy institut im. I.M.Gubkina AN SSSR.
(Ural Mountains--Geology, Stratigraphic)

GARZETSKIV, R.G.
GARZETSKIY, R.G.

Geological structure of the southern Mugodzhar depression and its
oil-bearing potential. Geol. nefti 2 no.1:15-21 Ja '58. (MERA 11:1)

1. Geologicheskii institut AN SSSR.
(Mugodzshary region--Petroleum geology)

SOV/5-58-6-7/13

AUTHORS: Garetskiy, R.G., Merklin, R.L. and Yanshin, A.L.

TITLE: The Marine Deposits of the Lower Miocene Period in the Aral Sea Region (Morskiye nizhnemiotsenovyye otlozheniya v Priaral'ye).

PERIODICAL: Byulleten' Moskovskogo obshchestva ispytateley prirody, Otdel geologicheskiiy, 1958, Nr 6, p 99-108 (USSR)

ABSTRACT: The authors describe the sandy, shallow marine deposits on the north-western shores of the Aral Sea. These deposits belong to the Lower Miocene period and contain the fossils of Pelecypoda and shark teeth. These deposits cover the eroded layers of the Aral (Miocene) suite containing Corbula helmersenii Mikhail, and are in their turn covered by a sandy layer containing Rzehakia

Card 1/3

SOV/5-58-6-7/13

The Marine Deposits of the Lower Miocene Period in the
Aral Sea Region

(or *Oncophora*) *socialis* Rzeh. Similar marine deposits are widely spread in the north-western part of the Trans-Unguz Karakum mountains. They represent the shallow water deposits of large bays of the Upper-Maykop (Oligocene-Miocene) sea and are singled out in the local stratographic scale under the name of the Kintykche suite. The following geologists are mentioned by the author: Ye.I. Belyayeva, E.D. Dzhavadov, L.S. Glikman, G.P. Mikhaylovskiy, B.F. Zhizhchenko, V.I. Samodurov, A.G. Eberzin, V.I. Gromova, V.V. Menner, B.Z. Uretskiy, V.P. Miroshnik, V.T. Balakhmatova, I. A. Prusova, A.S.

Card 2/3

SOV/5-58-6-7/13

The Marine Deposits of the Lower Miocene Period in the
Aral Sea Region

Stolyarov, L.Sh. Davitashvili and G.D.
Kharatishvili. There is 1 map, 1 profile,
1 photo and 21 references, 17 of which are
Soviet, 3 German and 1 Czech.

Card 3/3

AUTHORS: Garetskiy, R. G., Samodurov, V. I., 20-119-6-40/56
Yanshin, A. L.

TITLE: The Marine Albian Deposits on the Western Shore of the
Aral Sea
(Morskiye al'bskiye otlozheniya na zapadnom beregu
Aral'skogo morya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6,
pp. 1195-1198 (USSR)

ABSTRACT: As is known, the shores of this sea nearly throughout
consist of Tertiary rocks. Only on places where the
sections of anticlinal structure are intersected by
the coastal steep slopes, in their lower part rocks of
the Cretaceous system occur. 3 of such places exist:
on the northern shore of the Kulandy peninsula, on the
southern shore of the Tokmak-Ata peninsula and on the
eastern shore in the district of Cape Ak-Tumsuk ("White
Nose"). The most ancient sediments in Kulandy are to
be classified with the Middle Albian (Ref. 13). In
Tokmak-Ata Senomanian exposures are known (Refs. 1, 2).

Card 1/3

The Marine Albian Deposits on the Western Shore
of the Aral Sea

20-119-6-40/56

On Cape Ak-Tumsuk Mesozoic layers were classified with Upper Jurassic by an erroneous determination (Ref. 14). A discussion on this subject is summarized: Nobody supposed the occurrence of more ancient rocks than Senomanian on Cape Ak-Tumsuk, even, in this place the occurrence of Senomanian and Turonian was doubted (Refs. 7, 9, 10, 13). The authors succeeded in clearing the cause of such a differing criticism of the occurring Cretaceous sediments; i. e. individual researchers saw and investigated different places. The more ancient layers, however, northwards gradually emerge out of the sea. The authors propose the name "Kassarminskaya Antiklinal" (according to the Kassarma well) for the anticlinal structure of Cape Ak-Tumsuk. It is not connected with the Chushkakul'skaya anticlinal but separated from it by a North-Ust'-Urt depression running in direction of the width. The approximate sequence of the parcels of Albian layers south of the Kassarma well (from top to bottom) is mentioned. The exposed Albian sediments have a minimum thickness of 30 m. The discovery of these

Card 2/3

The Marine Albian Deposits on the Western Shore
of the Aral Sea

20-119-6-40/56

marine layers together with other analogous finds of recent times on the western shore of the Aral Sea can change the hitherto existing conceptions in the way that the Albian sediments not only are of continental character (contrary to Refs. 4, 13). Consequently, the transgressions at certain moments widely advanced eastwards. This happened along that west-eastern downwarping, which, since the Upper Paleozoic separates the fold system of the Ural from the Herzynian formation from folds of the Srednyaya Aziya. There are 1 figure and 14 references, 13 of which are Soviet.

ASSOCIATION: Geologicheskii institut Akademii nauk SSSR
(Geological Institute AS USSR)

PRESENTED: November 13, 1957, by N. S. Shatskiy, Member, Academy
of Sciences, USSR

SUBMITTED: November 11, 1958 (misprint)

Card 3/3

3(5)

SOV/132-59-7-3/17

AUTHORS: ~~Garetskiy, R.G.~~ and Yanshin, A.L.

TITLE: The Kokpekty Buried Ultrabasic Massif to the South of Mugodzhary

PERIODICAL: Razvedka i okhrana nedr, 1959, Nr 7, pp 9-13 (USSR)

ABSTRACT: The author describes a buried ultrabasic massif in the region of the At-Zhaksy River and its tributary the Kokpekty River. The Kokpekty anticline was studied before by A.N. Zamyatin, A.K. Buvalkin and V.I. Samodurov. In 1952, the Trest Aktyubnefterazvedka (Aktyubnefterazvedka Trust) made drillings for structure (N. P. Dubovenko) and A.Sh. Khadzhiyev and V.B. Vasil'yev started core-drilling operations by which serpentine deposits were located under the blanket of Meso-Cenozoic rock formations. Further drillings showed that the serpentine formations were spread over more than 200 sq km. Later, a gravimetric survey by F.Z. Poloyko detected a considerable maximum of gravity embracing the whole Kokpekty anticline. As the serpentine rocks,

Card 1/3

SOV/132-59-7-3/17

The Kokpekty Buried Ultrabasic Massif to the South of Mugodzhary

already found in the dome of this anticline, are characterized by their extreme density, it can be presumed that this maximum of gravity is caused by a huge buried ultrabasic massif. This Kokpekty massif is well outlined on published gravimetric maps of the region. It is situated on the same meridian as the already-known ultrabasic Kempirsay, Khalilovo, and Khabarninsky massifs. These three massifs all contain chromite-bearing deposits and by analogy, the author thinks, the Kokpekty massif will also contain them. By analogy too, he recommends the drilling of prospecting bore holes in places where the maxima of gravity are particularly high: Daul, Sarybay-mola and Kokpekty maxima. As in other ultrabasic massifs, these maxima indicate the places of penetration of ultrabasic magma, associated with the formation of chromite ore deposits. The author thinks also that an erosion crust will be found in the zone of the Daul maximum, and such zones in the Southern Urals are associated with

Card 2/3

The Kokpekty Buried Ultrabasic Massif to the South of Mugodzhary

SOV/132-59-7-3/17

the formation of siliceous nickel deposits. There are
2 maps, 1 diagram and 10 Soviet references.

ASSOCIATION:GIN AN SSSR (GIN of the AS USSR)

Card 3/3

GARETSKIY, R.G.

Jurassic, Jurassic-Triassic, and Paleozoic sediments of the
Chushka-Kul' anticline south of the Mugodzhar Mountains.
Biol. MOIP. Otd. geol. 34 no.5:103-117 S-O '59. (MIRA 14:6)
(Mugodzhar Mountain Region — Sediments (Geology))

GARETSKIY, R.G.; SAMODUROV, V.I.; YANSHIN, A.L., akademik.

Stratigraphy of upper Cretaceous deposits of the Kassarma anticline on the western shores of the Aral Sea. Dokl. AN SSSR 124 no.5:1109-1112 F '59. (MIRA 12:3)

1. Geologicheskii institut AN SSSR.
(Kassarma region--Geology, Stratigraphic)

GARETSKIY, R. G., CAND GEOL-MIN SCI, "INHERITED DIS-
LOCATIONS OF THE PLATFORM MANTLE OF THE MUGODZHAR PERIPHERY."
MOSCOW, 1960. (ACAD SCI USSR, GEOL INST). (KL, 3-61, 207).

GARETSKIY, Radim Gavrilovich; SHRAYBMAN, Vladimir Il'ch; YANSHIN, A.L.,
akademik; otv.red.; YEROFYEVA, I.M., red.izd-va; KUZ'MIN, I.F.,
tekhn.red.; GUS'KOVA, O.M. tekhn.red.

[Depth and structure of the folded basement in the northern
Turan platform (western Kazakhstan)] Glubina zaleganiia i
stroenie skladchatogo fundamenta severnoi chasti Turanskoi
plity (Zapadnyi Kazakhstan). Moskva, Izd-vo Akad. nauk SSSR,
1960. 89 p. (Akademiia nauk SSSR. Geologicheskii institut.
Trudy, no.44) (MIRA 14:3)
(Kazakhstan—Folds (Geology))

YANSHIN, A.L.; GARETSKIY, R.G.

Tectonic analysis of thicknesses. Metod.izuch.tekt.struk.

no.1:115-~~133~~ '60.

(MIRA 14:8)

(Geology, Structural)

GARETSKIY, R.G.

Upper Devonian and lower Carboniferous deposits of the Kokpekty anticline (Magodzhar region). Dokl.AN SSSR 134 no.2:404-407 S '60. (MIRA 13:9)

1. Geologicheskii institut Akademii nauk SSSR. Predstavleno akad. A.L.Yanshinym.
(Zhamantau region--Geology, Stratigraphic)

GARETSKIY, R.G.; YEGOROV, I.P.; NAUMOVA, S.N.; SHLEZINGER, A. Ye.

Lower Carboniferous and upper Devonian deposits in the Zhanasu region (the South-Emba gravity maximum). Dokl. AN SSSR 136 no.6:1418-1421 F '61. (MIRA 14:3)

1. Geologicheskii institut AN SSSR. Predstavleno akademikom A.L. Yanshinym.
(Emba Valley-- Geology, Stratigraphic)

YANSHIN, A.L.; GARETSKIY, R.G.; MAUMOVA, S.N.; SHLEZINGER, A.Ye.

Position of the border of the Russian Platform east of
the Caspian Sea. *Biul.MOIr. Otd.geol.* 36 no.4:76-96 J1-Ag '61.
(MIRA 14:9)

(Russian Platform)

GARETSKIY, R.G.; SHLEZINGER, A.Ye.; SHRAYBMAN, V.I.; YANSHIN, A.L.

Prospects for finding oil and gas in the southern Emba gravity maximum region. Sov.geol. 4 no.12:117-121 D '61. (MIRA 15:2)

1. Geologicheskii institut AN SSSR i Moskovskiy institut nefte-khimicheskoy i gazovoy promyshlennosti imeni I.M. Gubkina.
(Emba region--Petroleum geology)
(Emba region--Gas, Natural--Geology)

GARETSKIY, R.G.; NAUMOVA, S.N.; SHLEZINGER, A.Ye.

Stratigraphy and formational nature of upper Devonian deposits
in the region of the Southern-Emba gravity maximum. Dokl. AN
SSSR 141 no.4:931-933 D '61. (MIRA 14:11)

1. Geologicheskii institut AN SSSR. Predstavleno akademikom
A.L. Yanshinym.

(Emba Valley—Geology, Stratigraphic)

GARETSKIY, R.G.; KNIPPER, A.L.; SAMODUROV, V.I.

History of the development and spatial relationship of Paleozoic structures in the Kara-Tau and Ulu-Tau. *Biul.MOIP Otd.geol.* 37 no.1:43-56 Ja-F '62. (MIRA 15:2)
(Kara-Tau--Geology, Structural) (Ulu-Tau--Geology, Structural)

GARETSKIY, Radim Gavrilovich; YANSHIN, A.L., akademik, otv.red.;
ZHURAVLEV, V.S., red.Izd-va; GUSEVA, A.P., tekhn.red.

[Inherited dislocations of the platform mantel in the periphery
of the Mugodzhar Hills] Unasledovannye dislokatsii platformennogo
chekhla periferii Mugodzhar. Moskva, Izd-vo Akad.nauk SSSR, 1962
299 p. (Akademia nauk SSSR. Geologicheskii institut. Trudy,
no.60). (MIRA 15:7)

(Mugodzhar Hills—Geology, Structural)

GARETSKIY, R.G.; LEYTES, A.M.

Second All-Union Conference on Tectonics. Izv. AN SSSR. Ser.geol.
27 no.12:128-131 D '62. (MIRA 16:2)
(Geology, Structural)

GARETSKIY, R.G.; LEYTES, A.M.

Discussion of important problems in tectonics. Vest. AN SSSR
32 no.12:102-104 D '62. (MIRA 15:12)
(Geology, Structural—Congresses)

GARETSKIY, R.G.

Structure of recent (Epipaleozoic) platforms and their oil and gas potentials discussed at the Meeting on Tectonics." *Sev.geol.* 6 no. 8:137-140 Ag '63. (MIRA 16:9)

1. Geologicheskii institut AN SSSR.
(Petroleum geology) (Gas, Natural geology)

GARETSKIY, R.G.; DAL'YAN, I.B.; NAUMOVA, S.N.; SHLEZINGER, A.Ye.

Relationship between the lower and upper structural stages of
the platform mantel in the Turan Platform. Izv. AN SSSR.
Ser.geol. 28 no.3:83-92 Mr '63. (MIRA 16:2)

1. Geologicheskii institut AN SSSR, Moskva.
(Turan Lowland—Geology, Structural)

GARETSKIY, R.G., kand. geol.-mineral. nauk; LEYTES, A.M.

A discussion on the problems of tectonics held at Moscow.
Vest. AN SSSR 33 no.5:109-111 My '63. (MIRA 16:6)

(Geology, Structural)

GARETSKIY, R.G.; KONONOVA, I.B.; SHCHERBOVICH, S.F.

Upper Carboniferous and Lower Permian sediments in the southern periclinal trough of the Urals in the region of the Kokpekty anticline. Biul. MOIP. Otd.geol. 38 no.1:74-93 Ja-F '63, (MIRA 16:5)
(Ural Mountains--Geology, Stratigraphic)

0ARETSKIY, R.G.

Second All-Union Conference on Tectonics. Biul. MOIP. Otd.geol.
38 no.1:158-159 Ja-F '63. (MIRA 16:5)
(Geology, Structural)

GARETSKIY, R.G.; GORSHENIN, S.Ye.

Discovery of outcrops of Upper Cretaceous deposits in the
Zhamanshin area (Irgiz River valley in northern Aral Sea region).
Dokl. AN SSSR 148 no.5:1152-1155 F '63. (MIRA 16:3)

1. Geologicheskii institut AN SSSR, Aktyubinskaya kompleksnaya
geologorazvedochnaya ekspeditsiya. Predstavleno akademikom A.L.
Yanshinym.

(Bol'shoy Irgiz Valley--Geology, Stratigraphic)

BOGOMOLOVA, L.I.; GARETSKIY, R.G.; GRIDASOV, Yu.M.; ZAMARENNOV, A.K.;
SHLEZINGER, A.Ye.

Subsalt sediments on the eastern edge of the Caspian syncline
(Kenkiyak-Mortuk-Zhana-Zhol region). Dokl. AN SSSR 149 no.5:
1147-1149 Ap '63. (MIRA 16:5)

1. Institut geologii nefti AN KazSSR, Geologicheskii institut
AN SSSR i Trest "Aktyubnefterazvedka".
(Caspian Lowland--Sediments (Geology))

GARETSKIY, R.G.; SAMODUROV, V.I.; SHLEZINGER, A.Ye.; YANSHIN, A.L.

Tectonics of the platform mantle of the Turan Plateau. Trudy GIN no.92:
202-257 '63. (MIRA 17:10)

GARETSKIY, R.G.; PLESHCHEYEV, I.S.

Paleogene sediments of Ustyurt. Biul. MOIP. Otd. geol. 39 no.1:
109-124. Ja-F '64. (MIRA 18:4)

VOI'VOVSKIY, I.S.; GARETSKIY, R.G.; SHLEZINGER, A.Ye., SHRAYBMAN, V.I.

Surface structure of the basement of the Turan Plateau. Blul.
MOIP. Otd. geol. 39 no.6:19-29 N-D '64. (MIRA 18:3)

BELOUSOV, V.V., red.; BELYAYEVSKIY, N.A., red.; LOGDANOV, A.A.,
red.; GARETSKIY, R.G., red.; GUBIN, I.Ye., red.; K
KROPOTKIN, P.N., red.; LEYTES, A.M., red.; MAZAROVICH,
O.A., red.; MURATOV, M.V., red.; NIKOLAYEV, N.I., red.;
PAVLOVSKIY, Ye.V., red.; PEYVE, A.V., red.; PETRUSHEVSKIY,
B.A., red.; PUSHCHAROVSKIY, Yu.M., red.; SHEYNMANN, Yu.M.,
red.; SHTREYS, N.A., red.; YANSHIN, A.L., red.

[Problems of the comparative tectonics of ancient platforms;
materials] Voprosy sravnitel'noi tektoniki drevnikh platrofm;
materialy. Moskva, Nauka, 1964. 152 p. (MIRA 17:8)

BELYAYEVSKIY, N.A., otv. red.; LEYTES, A.M., otv. red.; SHEYTMANN, Yu.M., otv. red.; BELOUSOV, V.V., red.; BOGDANOV, A.A., red.; GAGETSKIY, R.G., red.; GUBIN, I.Ye., red.; KROPOTKIN, P.N., red.; SHTREYS, N.A., red.; MAZAROVICH, O.A., red.; MURATOV, M.V., red.; NIKOLAYEV, N.I., red.; PAVLOVSKIY, Ye.V., red.; PEYVE, A.V., red.; PETRUSHEVSKIY, B.A., red.; PUSHCHAROVSKIY, Yu.M., red.; YANSHIN, A.L., red.

[Tectonics, igneous activity and distribution of ore deposits; materials] Tektonika, magmatizm i zakonomernosti razmeshcheniya rudnykh mestorozhdenii; materialy. Moskva, Nauka, 1964. 237 p. (MIRA 17:8)

1. Soveshchaniye po problemam tektoniki, Moscow, 1963.

PEYVE, A.V., otv. red.; BELGUSOV, V.V., red.; GARETSKIY, R.G.,
red.; LEYTES, A.M., red.; PAVLOVSKIY, Ye.V., red.;
YANSHIN, A.L., red.

[Deformation of rocks and tectonics] Deformatsiia porod i
tektonika. Moskva, Nauka, 1964. 274 p. (Doklady sovetskikh
geologov. Problema 4) (MIRA 17:10)

1. Natsional'nyy komitet geologov Sovetskogo Soyuza.

GARETSKIY, R. G.; PANTELEYEV, G. F.; FLORENSKIY, P. V.; SHLEZINGER, A.
Ye.

Rocks of the folded basement in the central Usturt. Izv. AN
SSSR. Ser. geol. 29 no. 1:50-62 Ja '64. (MIRA 17:5)

1. Geologicheskiy institut AN SSSR, Moskva; trest "Soyuzburgaz"
i Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti.

GARETSKIY, R.G.; KOTOVA, I.Z.; SHLEZINGER, A.Ye.

Upper Jurassic continental formations of the Usturt. Dokl. AN
SSSR 154 no.1:98-101 Ja'64. (MIRA 17:2)

1. Geologicheskii institut AN SSSR. Predstavleno akademikom
A.L. Yanshinym.

MURATOV, M.V., *otv. red.*; PUSHCHAROVSKIY, Yu.M., *red.*; KHAIN, V.Ye., *red.*; MAZAROVICH, O.A., *red.*; BELOUSOV, V.V., *red.*; BELYAYEVSKIY, N.A., *red.*; BOGDANOV, A.A., *red.*; GARETSKIY, R.G., *red.*; GUBIN, I.Ye., *red.*; KROPOTKIN, P.N., *red.*; LEYTES, A.M., *red.*; NIKOLAYEV, N.I., *red.*; PAVLOVSKIY, Ye.V., *red.*; PEYVE, A.V., *red.*; PETRUSHEVSKIY, B.A., *red.*; SHEYNMANN, Yu.M., *red.*; SHTREYS, N.A., *red.*; YANSHIN, A.L., *red.*

[Folded areas of Eurasia; materials] Skadchatye oblasti Evrazii; materialy. Moskva, Nauka, 1964. 375 p.

(MIRA 17:11)

1. Soveshchaniye po problemam tektoniki. Moscow, 1963.

GARETSKIY, R.G.; KOLESNIKOV, Ye.M.; MURAV'YEV, V.I.; SHLEZINGER, A.Ye.

Possibility of the determination of the absolute age of folding based on authigenous minerals in sedimentary rocks as revealed by a study of fold basement made in the southern Ural Mountain region. Dokl. AN SSSR 154 no.4:829-832 F '64.
(MIRA 17:3)

1. Geologicheskiy institut AN SSSR. Predstavleno akademikom A.L. Yanshinym.

KROPOTKIN, P.N., otv. red.; BELOUSOV, V.V., red.; BELYAYEVSKIY,
N.A., red.; BOGDANOV, A.A., red.; GARETSKIY, R.G., red.;
GUBIN, I.Ye., red.; LEYTES, A.M., red.; MAZAROVICH, O.A.,
red.; MURATOV, M.V., red.; NIKOLAYEV, N.I., red.;
PAVLOVSKIY, Ye.V., red.; PEYVE, A.V., red.; PETRUSHEVSKIY,
B.A., red.; PUSHCHAROVSKIY, Yu.M., red.; SHEYNMANN, Yu.M.,
red.; SHTREYS, N.A., red.; YANSHIN, A.L., red.

[Structure and the development of the earth's crust;
materials] Stroenie i razvitie zemnoi kory; materialy. Mo-
skva, Nauka, 1964. 199 p. (MIRA 18:2)

1. Vsesoyuznoye soveshchaniye po problemam tektoniki. 2d,
Moscow, 1963.

GARSTENY, R.G.; YUREVICH, A.V.

Origin of the Repetek and Bayramali zones of salt anticlines in southeastern Turkmenia. Dokl. AN SSSR 158 no.3 598-601 S 161.

(MIRA 17:10)

1. Geologicheskii institut AN SSSR, Predstavleno akademikom A.M. Yan-shinym.

GARETSKIY, B.G., otv. red.; YANSHIN, A.L. akademik, otv. red.;
BELOUSOV, V.V., red.; BELYAYEVSKIY, N.A., red.; BOGDANOV,
A.A., red.; GUBIN, I.Ye., red.; KHOPOTKIN, P.N., red.;
LEYTES, A.M., red.; MAZAROVICH, O.A., red.; MURATOV, M.V.,
red.; NIKOLAYEV, N.I., red.; PAVLOVSKIY, Ye.V., red.; PEYVE,
A.V., red.; PETRUSHEVSKIY, B. red.; PUSHCHAROVSKIY, Yu.M.,
red.; SHEINMANN, Yu.M., red.; SHTREYS N.A., red.

[Young platforms, their tectonics, and prospects for find-
ing oil and gas; materials] Molodye platformy, ikh tektonika
i perspektivy neftegazonosnosti; materialy. Moskva, Nauka,
1965. 223 p. (MIRA 18:3)

1. Soveshchaniye po problemam tektoniki, Moscow, 1963.

GARETSKIY, R.G.; SHLEZINGER, A.Ye.; YANSHIN, A.L.

Types of the structures of young platforms in Eurasia.
Geotektonika no.1:38-50 Ja-F '65. (MIRA 18:5)

1. Geologicheskii institut AN SSSR.

AVROV, P.Ya.; BULEKBAYEV, Z.Ye.; CARETSKIY, R.G.; DAL'YAN, I.B.;
ZHURAVLEV, V.S.; MULDAKULOV, G.G.; FOMENKO, K.Ye.; SHLEZINGER, A.Ye.

Basic characteristics of the structure of the eastern and southeastern
margins of the Caspian Lowland based on subsalt sediments. Geotektonika
no.1:118-125 Ja-F '65. (MIRA 18:5)

1. Institut geologicheskikh nauk imeni Satpayeva AN Kazakhskoy
SSR i Geologicheskiiy institut AN SSSR.

AMURSKIY, G.I.; VASIL'YEV, V.G.; VOL'VOVSKIY, I.S.; GARETSKIY, R.G.;
GABRIELYANTS, G.A.

Basic tectonic elements in the western part of Central Asia.
Neftegaz. geol. i geofiz. no.4:7-10 '65. (MIRA 18:7)

1. Upravleniye geologii i okhrany neдр pri Sovete Ministrov
Turkmenkoy SSR; Vsesoyuznyy nauchno-issledovatel'skiy institut
prirodnogo gaza; IG AN SSSR i Nauchno-issledovatel'skaya
Sredno-Aziatskaya geofizicheskaya ekspeditsiya, kontora
Spetsgeofizika.

GARETSKIY, R.G.; KIRYUKHIN, L.G.; PLESHCHEYEV, I.S.

Tectonics, and oil and gas potentials of the northern Ustyurt.
Neftegaz. geol. i geofiz. no.4:10-15 '65. (MIRA 18:7)

1. Vsesoyuznyy aerogeologicheskiy trust Ministerstva geologii
i okhrany nedr SSSR.

GARETSKIY, R.G.; KOTOVA, I.Z.; SHLESINGER, A.Ye.

Various types of Neocomian cross sections in the western part
of the Turan Plateau. Izv. AN SSSR. Ser geol. 30 no.2:102-111
F '65. (MIRA 18:4)

1. Geologicheskii institut AN SSSR, Moskva.

GAPETSKIY, R.G.; KOLMSNIKOV, Ye.M.; MRAV'YEV, V.I.; SHLEZINGER, A.Ye.

Absolute age of the folding of the basement in the central Ustyurt.
Dokl. AN SSSR 160 no.3:665-668 Ja '65.

(MIRA 18:3)

1. Geologicheskii institut AN SSSR. Submitted September 15, 1964.

AVROV, P.Ya.; BILEKBAYEV, M.Ye.; GABDULLIN, R.G.; KALMYAN, I.N.; KORBENOV,
V.M.; TSAREV, V.A.; SHLEZINGER, A.Ye.; YANSHIN, A.I., akademik

New gas-bearing region in the Ural Mountain region. Dokl. AN
SSSR 162 no.2:393-396 My '65. (MIRA 18:5)

1. Institut geologicheskikh nauk AN Kazan; Trost "Akt'yubnefteprom-
ka"; Geologicheskiy institut AN SSSR i Aktyubinskaya geofizicheskaya
ekspeditsiya.

MIKHAYLOV, Oleg Aleksandrovich; GARETSKIY, S.P., red.; BRUSHTEYN, A.I.,
red. izd-va; EVENSON, I.M., tekhn. red. [deceased]

[Mathematical statistics and linear programming in ferrous metal-
lurgy] Matematicheskaya statistika i lineinoe programmirovaniye v
chernoj metallurgii. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po
chernoj i tsvetnoj metallurgii, 1961. 159 p. (MIRA 14:6)
(Steel—Metallurgy) (Linear programming)

VVEDENS'KIY, P.I.[Vvedens'kiy, P.I.], prof.; GAREV, L.P.[Garev, L.P.],
kand. ekonom. nauk; ALENINA, M.T.; AKHTIRCHENKO, G.M.
[Akhtyrchenko, H.M.]

Study of the use of coke gas as a raw material for different
branches of the chemical industry. Kompl. vyk. pal.-energ.
res. Ukr. no.1:243-256 '59. (MIRA 16:7)

1. Khar'kovskiy inzhenerno-ekonomicheskii institut.
(Coke-oven gas)

ROBINZON, Ye.A.; D'YAGKOVA, Ye.A.; KOMISSAROVA, N.I.; GAREVSKAYA, G.S.;
SANIN, P.I.

Use of the oxidation method for determining the structure
of aromatic hydrocarbons from petroleum fractions. *Nefte-*
khimii 3 no.4:598-608 J1-Ag '63. (MIRA 16:11)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni A.V.
Topchiyeva.

GAREVSKI, A.

"The Dosnica hydroelectric power station." p. 64. (Elektoprivreda, Vol. 6, no. 2, Mar./Apr. 1953, Beograd.)

East European Vol. 2, No. 9

SO: Monthly List of ~~Accessions~~ Accessions, Library of Congress, September 1953, Uncl.

GAREVSKI, A.; KUJUNDZIC, B.; RADOSAVLJEVIC, Z.

The drainage tunnel at the Vrutok Hydroelectric Plant. Pt.2.p. 365.
(Tehnika., Vol. 12, no. 3, 1957, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) 13, Vol. 6, no. 7, July 1957, Uncl.

GAREVSKI, Risto

Relics of a beaver in the Makarovac II cave near Titov Veles.
Fragmenta Balk Skopje 5 no.10:55-60 '64.

1. Museum of Natural Sciences, Skopje.

GAREVSKIKH, I. A.

18.3200

77453
507/333-60-1-14/30

AUTHORS: Shul'te, Yu. A. (Doctor of Technical Sciences, Professor),
Tregubenko, A. P., ~~Smolizkov, V. P.~~, Maksimenko, V. D.,
Frantsev, V. P., Leytzenon, S. A., Gagarinskikh, I. A.

TITLE: Elektrometallurgiya. Elektroslag Remelting of Ball
Bearing and Structural Chromium-Nickel-Tungsten Steels

PERIODICAL: Stal', 1969, Nr 1, pp 45-50 (USSR)

ABSTRACT: This is a description of a study of technology of electro-
slag remelting of ShKh15, ShKh15SD, and 18KhNVA steels.
The chemical composition of these steels (%) is as follows:
ShKh15, C, 0.95-1.10; Mn \leq 0.4; Si \leq 0.35; Cr, 1.30-1.60;
S \leq 0.020; P \leq 0.027; Ni \leq 0.3; Cu \leq 0.25; ShKh15SD, C,
0.90-1.10; Mn, 0.20-0.40; Si, 0.15-0.3; Cr, 1.30-1.65;
S \leq 0.020; P \leq 0.027; Ni \leq 0.3; Cu \leq 0.25; and
18KhNVA, C, 0.14-0.21; Mn, 0.25-0.55; Si, 0.17-0.37; S \leq
0.03; P \leq 0.035; Cr, 1.35-1.65; Ni, 4.00-4.50; W,
0.8-1.20. Yu. V. Lataah and B. I. Makalimovich of the

Card 1/8

ASSOCIATION: Zaporozh'ye Machine Building Institute and
"Dneprospestal" Plant (Zaporozhskiy mashin-
ostroitel'nyy institut i zavod "Dneprospestal")

Card 8/8

SHUL'TE, Yu.A.; GAREVSKIKH, I.A.; MAKSIMENKO, V.D.; LEYBENZON, S.A.;
FRANTSOV, V.P.; SMOLYAKOV, V.F.; STETSENKO, N.A.

Scale for the evaluation of nonmetallic inclusions in electrorefined
slag steel. Zav. lab. 27 no. 4:422-424 '61. (MIRA 14:4)

1. Zaporozhskiy mashinostroitel'nyy institut i zavod "Dneprospetsstal!"
(Steel—Testing)

SHUL'TE, Yu.A., doktor tekhn.nauk, prof.; GAREVSKIKH, I.A., inzh.;
LEYBENZON, S.A., inzh.; MAKSIMENKO, V.D., inzh.; TREGUBENKO, A.F.,
inzh.; SPERANSKIY, B.S., inzh.; FRANTSOV, V.P., inzh.;
SMOLYAKOV, V.F., inzh.

Defects in steel ingots made by the electric slag process. Stal'
21 no. 4:322-326 Ap '61. (MIRA 14:4)
(Steel ingots—Defects)
(Steel—Electrometallurgy)

22315

S/133/61/000/004/004/015
A054/A127

183200

AUTHORS: Shul'te, Yu. A., Doctor of Technical Sciences, Professor;
Garevskiy, I. A., Engineer; Leybenzon, S. A., Engineer;
Maksimenko, V. D., Engineer; Tregubenko, A. F., Engineer;
Speranskiy, B. S., Engineer; Frantsov, V. P., Engineer, and
Smolyakov, V. F., Engineer

TITLE: Nature of flaws in steel ingots produced by the electro-slag
method

PERIODICAL: Stal', no. 4, 1961, 322 - 326

TEXT: The technology of electro-slag remelting was established by
the Institut elektrosvariki im. Ye. O. Patona (Institute of Electrowelding
im. Ye. O. Paton). A three-phase electroslag furnace (2250 kW) which can
smelt ingots 750 kg in weight and 300 mm in diameter simultaneously in 3
crystallizers has now been in operation for more than 2 years. In order to
improve the process, the nature of the flaws occurring in electroslag-re-
melted steel was studied and tests were carried out on ingots produced on
an industrial scale, whereas an A-550 (A-550) laboratory plant, designed by

Card 1/8-5

22315

Nature of flaws in steel ingots produced by... S/133/61/000/004/004/015
A054/A127

the same institute was used for the purpose of reproducing the defects. The crystallizer of this equipment was 100 mm in diameter, 600 mm in length, the ingots weighed 30 kg, remelting took about 35 minutes (at 40 v and 1.2 ka). In this process the ingot surface is not in contact with the atmosphere. The slag bath is rising at the same rate at which the ingot is smelting, while a thin slag layer forms on the crystallizer wall, the relief of which is closely reproduced by the ingot surface. Three zones can be distinguished in the smelting process. A non-uniform structure, having a serrated surface develops in the bottom zone during heating of the ingot. The metal contains slag inclusions and flux, at the place of inoculation. This zone could be reduced by applying a thermitic mix (20% saltpeter, 20% aluminum and magnesium powder, 60% AH-φ-6 /AN-F-6/ flux) at the exact centre of the electrode. The slag bath develops more rapidly in the heating period when maximum power is applied. By controlling the feed of the electrodes manually, any fluctuations in current intensity could be eliminated. At about 1800°C a homogeneous slag bath is formed, while at the same time the smelting of the second zone of the ingot also starts; the thickness of the slag lining on the crystallizer wall decreases to 1.0 - 1.5 mm. In this phase

✓

Card 2/8 5

22315

S/133/61/000/004/004/015

A054/A127

Nature of flaws in steel ingots produced by...

the electric system of the crystallizer is switched to automatic operation. The electrode is fed into the slag bath at a rate corresponding with the optimum current intensity. Under these stabilized conditions the slag bath is regularly rising, leaving a smooth lining behind. The third, liquid-slag zone is the actual smelting zone, both in respect of electric power and physico-chemical effects. Here takes place the smelting of the electrode and the refining of the metal flow. The height and volume of this zone are the most important factors of the entire process. The slag content for all three zones was established. The greater the crystallizer-diameter, the less slag was found in the lining (Table 1). The ingot surface in the second zone is flawless, smooth and does not require any finishing. This is one of the greatest advantages of this method, which, however, can be obtained only by a stable electric system, faultless operation of the automatic furnace control as the slightest disturbance in any of these factors results in surface defects. These appear in the macrostructure and are similar to the impurities usually found in electrosteel. In 1959 data were compiled for ball bearing steel, showing the relation between the crystallizer height, diameter and amount of defects (Table 2). Thus, the greater the diameter of the crystallizer, the more flaws could be observed in

Card 3/8 s -

22315

S/133/61/000/004/004/015
A054/A127

Nature of flaws in steel ingots produced by...

the ingot. As regards the smelting time, it was found that the first and the last periods produced the greatest number of defects. Metallographic study of faulty rods revealed sickle and spider-shaped cracks, lenticular inclusions, differing in colour from the flawless parts of the metal, in some templates occupying more than 50% of the total surface. In microhardness tests it was observed that in the impurified zones the hardness coefficients displayed a wide range of values. It could also be observed that the flaws penetrate fairly deeply, indicating that the factors impurifying the casting are active a long time (Fig. 5). Petrographic tests proved that the inclusions are similar to those forming in free crystallization and contain mainly calciumfluoride globules, needle-shaped corundum crystals, aluminum-calcium compounds. Among the impurities slag-inclusions, 1 - 2 mm in size, were found in irregular arrangement. Inclusions were present in the low-temperature zones of the metal, promoting the mixing of slag particles in the liquid metal. The lower the crystallization temperature, the more flaws were found. The viscosity of the metal increases due to intensive cooling and this promotes the capturing of slag particles. Based on the tests with the A-550 equipment the permissible minimum length of the

Card 4/8 -

22315

Nature of flaws in steel ingots produced by...

S/133/61/000/004/004/015
AO 54/A127

bottom part of the ingot was defined. It was also possible to prevent the formation of impurities in the top of the ingot by ensuring stable electric operational conditions until the end of the process. The optimum power was obtained with 55 v instead of 40 and 6 ka. However, even the optimum electric parameters only yield flawless casting provided the power conditions are very stable throughout the entire process. By applying these new electrical parameters the impurities could be decreased from 31.6% to 0.7%. In some tests Ya. I. Spektor took part.

X

Card 5/8 5-

S/032/61/027/004/008/028
B110/B215

AUTHORS: Shul'te, Yu. A., Garevskiy, I. A., Maksimenko, V. D.,
Leybenzon, S. A., Frantsov, V. P., Smolyakov, V. F., and
Stetsenko, N. A.

TITLE: Scale for estimating nonmetallic inclusions in electro-
scoriaceous steel

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 4, 1961, 422-424

TEXT: A high-purity metal is obtained by the electroscoriaceous method
of melting. Inclusions in electroscoriaceous steel differ from those in
ordinary steel in kind and character of their distribution. Traditional
scales, therefore, cannot be used for the correct estimation of
impurities, especially oxidic inclusions. The examination of nonmetallic
inclusions in a large number of melts of electroscoriaceous steel allowed
the development of a new scale (Fig.) in which the total area of dis-
oriented inclusions, their number within the field of vision, and the
admissible dimensions of the individual inclusions are taken into account
(Table 1). Oxidic and sulfidic inclusions are shown in the photographs

Card 1/6

Scale for estimating nonmetallic...

S/032/61/027/004/008/028
B110/B215

of the new scale. Large globular, oxidic inclusions are measured with an eyepiece micrometer. The degree of impurities in the ground face is estimated according to the field of vision with the largest number of impurities. The authors tested the scale and controlled 632 specimens of 200 electroscoriaceous melts of ball-bearing steel types [X15 (ShKh 15) and [X15CT (ShKh15SG). At the same time, the specimen was estimated by the traditional ПOCT 801-47 (GOST 801-47) scale (Table 2). The indices of estimation by both scales differed but slightly, although the estimations of the individual melts differed largely from the control. Examinations of nonmetallic inclusions showed that the scale can also be used for other steels melted out by the electroscoriaceous method and for estimating melts in the vacuum arc containing the same type of inclusions. Ye. I. Boyko's collaboration is mentioned. [Abstracter's note: Complete translation]. There are 1 figure, 2 tables, and 2 Soviet-bloc references.

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut (Zaporozh'ye Machine-building Institute); zavod "Dneprospetsstal'" ("Dneprospetsstal'" Plant)

Card 2/6

S/133/62/000/001/003/010
A054/A127

AUTHORS: Garevskikh, I. A., Shul'te, Yu. A., Maksimenko, V. D., Speranskiy,
B. S.

TITLE: The advantages and problems of improving the electroslag remelting of
steel

PERIODICAL: Stal', no. 1, 1962, 39 - 41

TEXT: Investigations and experience show that a major factor affecting the efficiency of electroslag remelting (the intensity of the heat-transfer and refining) is the formation of liquid drops separating from the ingot, serving in the process as a self-baking electrode, immersed in the overheated (425 - 565°C above normal temperature) slag. The characteristics of the electrode drops were studied on industrial-scale equipment, at 55 V and 6kA. The drops were taken partly from the bottom zone of the slag lining, partly from the slag "cap" on the ingot. Their sizes were between 2.37 and 0.25 mm or even smaller. The drops are characterized by a high purity, visible inclusions can hardly be found. Coarse oxide inclusions disappear almost entirely, spheroidal inclusions decrease considerably. The statistical analysis of 2,140 samples obtained in 526 heats of ball bearing

Card 1/3

S/133/62/000/001/003/010
A054/A127

The advantages and problems of...

steel (in 1960) showed that remelted steel displays a high degree of purity, most probably due to the intensive refining of the liquid steel by synthetic, iron-free slag at increased temperatures. The sulfide inclusions disappear in proportion to the sulfur content of the initial material. When remelting ball bearing steel, the degree of desulfuration attains 25 - 30%. For this kind of steel the electrode-ingot must not contain more than 0.007% sulfur. When remelting ingots with a 0.005% sulfur content, in the A 550 (A 550) equipment, with a 100-mm diameter mold, the sulfur content after remelting, decreased to 0.003% and no sulfide inclusions could be observed on the forged products (40 and 25 mm in diameter). Besides drop-formation, the composition of the fluxing agent also affects the refining process. 2,955 samples from 500 heats of ball bearing steel were remelted, using the AHΦ-6 (ANP-6) fluxing agent containing 14.8 - 32.9% Al_2O_3 . The higher the aluminum oxide content of the flux, the purer was the steel, it was found. This is most probably due to the fact that aluminum oxide in the flux increases the desulfurizing activity of the slag (which consists of lime, fluorite, aluminum oxides). The structure of the slag made fluxible with various kinds of agents, was also studied. Part of the slags (Group A) is light-yellow coloured on the fracture surface, its grains are well-developed, have a red colour and are acicular.

Card 2/3

The advantages and problems of...

S/133/62/000/001/003/010
A054/A127

They contain calcium fluoride in the form of oval grains, which are surrounded by an easily melting component, lighter in colour and with a refractive index of 1,604 - 1,610. Both phases are present in about the same volume. Moreover, there is also some corundum in this structure. Slags with such structural characteristics permit a smooth remelting process with low power consumption to be carried out. In some cases, however, the slag has a less bright colour and a coarse-grained structure, (Group B). The coating which surrounds the calcium fluoride grains is about 5 times less voluminous than in the former group. Large prismatic corundum grains make up about 30% of the total volume. With such a structure, the slag coating becomes coarse, remelting takes longer and more power is consumed, while the amount of sulfide and spheroidal inclusions also increases. The mineralogical composition of the fluxing agent, therefore, has a marked effect on the steel refining process and needs further improvement. There are 7 figures and 10 Soviet-bloc references. ✓

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut (Zaporozh'ye Mechanical Engineering Institute)

Card 3/3

L 9978-63

EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD

ACCESSION NR: AP3001376

S/0148/63/000/005/0076/0080⁶¹

AUTHOR: Shul'te, Yu. A.; Garevskikh, I. A.; Maksimenko, V. D.; Speranskiy, B. S.⁶⁰

TITLE: Problems of crystallization of electroslag-melted ingots

SOURCE: IVUZ. Chernaya metallurgiya, no. 5, 1963, 76-80⁶

TOPIC TAGS: electroslag melting, ball-bearing steel, impurities, nonmetallic inclusions, ingot diameter effect, bath depth effect, solidification rate

ABSTRACT: The Zaporozhskiy Mashinostroitel'nyy Institut (Zaporozh'ye Machine Building Institute) in cooperation with the Dneprospetsstal' Plant has studied the process of ingot crystallization in electroslag melting in an attempt to determine melting conditions that would ensure the best metal quality. Laboratory- and production-scale tests showed that the ratio of ingot diameter D to the depth of liquid metal bath h is the most indicative characteristic of the process, and that $D/h = 2$ is the optimum value for ingots 100--300 mm in diameter. Higher D/h values indicate that the temperature of metal and slag

Card 1/2

L 9978-63
ACCESSION NR: AP3001376

baths is too low, which leads to poor separation of slag from metal and increased amount of slag inclusions. Lower D/h values mean that the metal and slag temperature is too high, which results in extensive segregation, coagulation of nonmetallic inclusions, and an increased amount of impurities. With increasing ingot diameter, the solidification rate decreases, for instance, from 1.25 cm/min for 100 mm diameter to 0.64 for 300 mm (at D/h = 2). This also promotes segregation. Ingots of ShKh15 steel [AISI E52100] 100 mm in diameter had considerably less segregation and smaller inclusions than ingots 300 mm in diameter. Orig. art. has: 3 figures and 2 tables.

ASSOCIATION: Zaporozhskiy mashinostroitel'nyy institut (Zaporozh'ye Machine Building Institute)

SUBMITTED: 14Aug62 DATE ACQ: 01Jul63 ENCL: 00
SUB CODE: 00 NO REF SOV: 006 OTHER: 000

ph/44
Card 2/2

SPERANSKIY, B.S.; SHUL'TE, Yu.A.; GAREVSKIKH, I.A.

Temperature conditions in the electric slag process.
Avtom. svar. 16 no.1:9-14 Ja '63. (MIRA 16:2)

1. Zaporozhskiy mashinostroitel'nyy institut imeni
V.Ya. Chubarya.

(Electric welding)
(Thermocouples)

SMOLYAKOV, V.F.; SHUL'TE, Yu.A.; MEDOVAR, B.I.; GAREVSKIKH, I.A.;
LATASH, Yu.V.; TSIVIRKO, E.I.; ZABALUYEV, Yu.I.; TOPCHYI, S.F.

Nonmetallic inclusions in electric slag refined 12Kh2N4A
structural steel. Met. i gornorud. prom. no.4:35-37 J1-Ag '64.
(MIFA 18:7)

ACCESSION NR: AP4041869

S/0133/64/000/007/0640/0642

AUTHOR: Gabuyev, G. Kh.; Yel'tsov, K. S.; Shul'te, Yu. A.; Mikhaylov, P. A.; Garevskikh, I. A.; Leybenzon, S. A.; Tsivirko, E. I.; Medovar, B. I.; Latash, Yu. V.; Frantsov, V. P.; Pakhomov, A. I.; Kaganovskiy, G. P.; Voinov, S. G.; Shalimov, A. G.; Kalinnikov, Ye. S.; Smolyakov, V. P.; Kosoy, L. F.

TITLE: Improvement of the quality of electroslag-melted ball-bearing steel

SOURCE: Stal', no. 7, 1964, 640-642

TOPIC TAGS: ball bearing steel, electroslag melted steel, high purity steel, steel electroslag melting

ABSTRACT: Several variants of electroslag melting have been tested in an attempt to improve the quality of ball-bearing steel. The analysis of electroslag-melted steel showed that nitrides and carbonitrides constitute the greatest part (up to 75%) of the nonmetallic inclusions present in the steel. These nitrides derive from the initial material. The electroslag process eliminates large nitrides over 20 μ in diameter, but does not eliminate the smaller ones.

Card 1/1

ACCESSION NR: AP4041869

Therefore, the nitrogen and titanium contents of the initial metal must be reduced to a minimum. This can be done, for example, by refining the metal in the ladle with synthetic slag. Electroslag melting of open-hearth steel refined with synthetic slag eliminated all the inclusions larger than 10μ and reduced the number of smaller inclusions by more than 50% and the nitrogen and oxygen contents to 0.0053 and 0.0020%, respectively. To produce ultra-high purity ball-bearing steel, the double electroslag melting was applied with a combination of various fluxes. The use of ANF-6-ANF-6 fluxes in double electroslag melting or of AN-29-ANF-6 fluxes produced best results. Ultra-high purity steel, fully satisfying requirements for critical ball bearings, was obtained. Orig. art. has: 2 figures.

ASSOCIATION: Dneprospetsstal' (Dneprospetsstal' plant); Zaporozhskiy mashinostroitel'nyy institut (Zaporozh Machine-Building Institute); Institut elektrosvarki im Ye. O. Patona (Electric Welding Institute); TsNIICHM

Card 2/3

VALEYEV, Kh.S., kand.tekhn.nauk (Moskva); GAREVSKIY, V.N., inzh. (Moskva);
KOSTYUKOV, N.S., kand.tekhn.nauk (Moskva)

Change in the electrical strength of high-voltage porcelain
subject to the action of high-voltage d.c. with long duration.
Elektrichestvo no.1:59-61 Ja '63. (MIRA 16:2)
(Electric insulators and insulation)
(Porcelain--Electric properties)

L 8468-65 ASD(m)-3

ACCESSION NR: AP4048687

S/0139/64/000/004/0076/0079

AUTHOR: Drozdov, N. G.; Carevskiy, V. N.; Kostyukov, N. S. B

TITLE: How diffusion processes affect the breakdown voltage of "aged" porcelain

SOURCE: IVUZ. Fizika, no. 4, 1964, 76-79

TOPIC TAGS: porcelain, breakdown voltage, electromotive force

ABSTRACT: A study is made of the influence of diffusion processes on the value of the breakdown voltage in "aged" porcelain. A calculation is made of the value of the diffusion emf which reduces the value of the breakdown voltage when the latter coincides with the field of "aging" of the porcelain and increases the breakdown voltage when these fields do not coincide. It is shown that the physical picture corresponds qualitatively with that observed experimentally during breakdown of "aged" porcelain.

Card 1/2

L 8468-65

ACCESSION NR: AP4048687

ASSOCIATION: Moskovskiy ordena Lenina energeticheskiy institut (Moscow Power Engineering Institute)

SUBMITTED: 28Jan63

ENCL: 00

SUB CODE: MT, EM

NO REF SOV: 004

OTHER: 000

JPRS

Card 2/2

GAREYEV, E.Z.

Selection of parent forms for apple breeding. Izv. Bot. sada
AN Kir. SSR no.1:5-11 '64.

Apricot breeding in the Botanical Garden. Ibid., 13-17
(MIRA 18:6)

GAREYEV, E.Z.

22388-Gareyev, E.Z. Botanicheskiy Sad Kirgizskogo Filiala Akademii Nauk
SSSR. Byulleten' Glav. Botan. Sada, Vyp. 2, 1949, S. 59-61

SO: Letopis' No. 30 1949

GAREYEV, E. Z.

20891. Gareyev, E. Z. Michurinskiye sorta yabloni v kirgizii. Sad i ogorod, 1949,
No. 6, s. 27-29.

SO: LETOPIS ZHURNAL STATEY - Vol. 28, Moskva, 1949.

GARREYEV, E.Z.

Preliminary results of apple breeding in Kirghizia. Trudy Biol.inst.
KirFAN SSSR no.3:37-52 '50. (MLRA 8:5)
(KIRGHIZISTAN--APPLE)

GARBYEV, E.Z.

Formation of apple blossom buds as related to the presence of
leaves and the growth processes. Trudy Biol.inst.KirFAN SSSR no.3:
53-60 '50. (MLFA 8:5)
(APPLES)

^Y
GARBY, E. Z.

Michurian variety of fruit bearing plants in Kirghizia
Moskva, Izd-vo Akademii nauk SSSR, 1951. 101 p. (52-39615)

SB354.6.R9G3