"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

ISTRINA, Z.F., inzh.; VOLIKOVA, I.G., kand. tekhn. nauk; KRUTIKOV, A.N., kand. tekhn. nauk; FROLIKOVA, Ye.M. , inzh.

Corrosion resistance of metals in the production of citric acid. Khim. i neft. mashinostr. no.2:36-37 Ag '64 (MIRA 18:1).

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

LEVIN, I.A.; VOLIKOVA, I.G.

Methodology of faster testing of single-phase stainless steels for resistance to transcrystallite corrosion. Zav. lab. 30 no.7:816-819 '64. (MIRA 18:3)

1. Nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

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L 48579-65 EWT(m)/EPF(c)/EWA(d)/EPR/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) Pr-4/Ps-4
IJP(c) WJM/JD/WB

ACCESSION NR: AP5009027 UR/0314/65/000/003/0037/0041

40
36B

AUTHOR: Levin, L.A. (Candidate of technical sciences); Volikova, I. G. (Candidate technical sciences)

TITLE: Influence of high-temperature heating on the corrosion resistance of Kh17T and Kh25T steel

SOURCE: Khimicheskoye i neftyanoye mashinostroyeniye, no. 2, 1965, 37-41

TOPIC TAGS: steel corrosion, steel titanium content, steel structure, electron microscopy, high temperature corrosion, steel heat treatment, intercrystalline corrosion, acid corrosion, Kh17T steel, Kh25T steel

ABSTRACT: The article is devoted to a study of the influence of the temperature and duration of heating on the appearance of a tendency toward intercrystalline corrosion in Kh17T and Kh25T steel. The tests were carried out at the boiling point in the following solutions: 110 g/l $CuSO_4 \cdot 5H_2O$ + 55 ml/l H_2SO_4 of 96% concentration, 160 g/l $CuSO_4 \cdot 5H_2O$ + 100 ml/l H_2SO_4 of 96% concentration + copper turnings, and a 65% HNO_3 solution. To determine the tendency toward corrosion as a function of the content of titanium, carbon, and nitrogen, use was made of the ratio $\frac{Ti}{C + 6/7\ N}$. It was found that

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heating at 1100C and above causes a tendency toward intercrystalline corrosion. The minimum temperature of heating which causes this tendency in the steels being studied varies in direct proportion to the above ratio, in inverse proportion to the holding time, and depends on the composition of the medium. Tempering of the steel at 760C even for 5 min. caused the steels to be stable to corrosion, independently of the temperature and duration of the preceding heat treatment. To account for the above relationships, the authors conducted a carbide analysis and metallographic and electron-microscopic investigations of the samples of heat-treated steel. An interpretation of the phenomena observed is given. "The carbide analysis was carried out by workers at the Analiticheskaya laboratoriya NIIKhimmasha (Analytical Laboratory of NIIKhimmash) under the guidance of N.V. Khakhlova; A.M. Shabanova took part in the electron microscopy." Orig. art. has: 2 figures, 6 tables and 2 formulas.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 002 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

SHAPIRO, M.B.; VOLIN VA, I.G.

Relation of titanium to carbon in stainless steel. Metalloved. i term. obr. met. no.10:39-40 O '64.

(MIRA 17:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy i konstruktorskiy institut khimicheskogo mashinostroyeniya.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

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L 23452-66 EWT(m)/EWA(d)/EWP(t) IJP(c) JD/HW

ACC NR: AP6009709 SOURCE CODE: UR/0064/65/000/003/0070/0073

AUTHOR: Poluboyartseva, L. A.; Reyfer, A. A.; Mantorova, T. M.; Volikova, I. G.; Istrina, Z. F.

ORG: [Mantorova] UNIkhim); [Istrina] NIIkhimmash

TITLE: Corrosion resistance of materials for equipment in the production of sodium sulfide

SOURCE: Khimicheskaya promyshlennost', no. 3, 1966, 70-73

TOPIC TAGS: corrosion resistance, corrosion rate, chromium steel, sodium sulfide steel

ABSTRACT: The paper deals with the study and selection of corrosion-resistant materials as well as the determination of applicability limits of carbon steels for use in the manufacture of sodium sulfide. Both plant and laboratory tests were performed on samples of St.3 steel, Sch-28 cast iron, 1Kh18N10T and Kh17N13M2T chromium-nickel steels, Kh25, Kh25N4T, Kh28, Kh28NA, 3Kh13, and Kh17 high-chromium steels, 0Kh21N6M2T, and 1Kh21N5T low-carbon steels, Kh17G9AN4, Kh17N13M2T, and Kh14G14N3T manganese steels, as well as VT-1 technical-grade titanium, zinc, nickel (98% Ni) and pure (99.6 -- 98.6%) chromium. The compositions of the above steels are presented in tabular form. Both welded and unwelded test specimens were used, measuring 80x25x10 mm, and 40x20x3 mm, respectively. The tests conducted at the sodium sulfide

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L 23452-66

ACC NR: AP6009709

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shop of the Shchelkovo Chemical Plant have shown that all the steels were corrosion resistant, meeting GOST 5272-51 specifications, with a corrosion rate of less than 0.1 g/(m^2.hr), and a 0.3 to 0.7 g/(m^2.hr) corrosion rate for the carbon steel. All chromium-nickel and high-chromium steels were shown to have high, medium, and low corrosion resistance depending on the specific usage designation. The steels were tested in sodium sulfide solutions whose concentrations ranged from 5--65% under varying conditions of temperature and test duration, in both stationary and agitational conditions. The results are presented in tabular form. In conclusion, the authors find that high-chromium steels have the highest corrosion resistance in sodium sulfide solutions. Both the decrease of chromium and the increase of nickel or manganese are shown to have an adverse effect on the anti-corrosion properties of steel. The steels are listed in descending order with respect to degree of corrosion resistance as follows: Kh28, Kh28Na, Kh25T, Kh25N4T, OKh21N5T, 1Kh21N5T, OKh21N6M2T, 1Kh18N10T, Kh17N13M2T, Kh17G9AN, Kh14G14N3T, Kh17, Kh13, St. 3. Orig. art. has: 1 figure, 6 tables. [LD]

SUB CODE: 11,13/ SUBM DATE: none/ ORIG REF: 005/ OTH REF: 002

Card 2/2 dda

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLGYESI, Ferenc, dr.

Tests performed by electrodes placed in the animal and human brain. Elorilag 9 no.4: 8-13 Jl/Ag '64.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLKOVA, L. S.

VOLKOVA, L. S. -- "On the Problem of Immunobiological Relationships between Mother and Foetus." Moscow, 1956. (Dissertation for the Degree of Candidate in Medical Sciences).

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

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

USSR/Human and Animal Physiology. Blood. Blood Groups.

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93096.

Author : Volkova, L.S.
Inst :
Title : The Problem of Immunological Relationships of Mother and Fetus in Humans. Communication I. Isoserological Properties of Retroplacental Blood of the parturient and the Umbilical Blood of the Newborn.

Orig Pub: Byul. eksperim. biol. i meditsiny, 1956, 42, No 10, 65-68.

Abstract: In 69.6% of the cases of fetus and parturient the blood belonged to one group, and in 30.4% to different groups. The pregnancy proceeded normally with group incompatibilities (I). The titer of the isoantibody (Is) in the serum of the parturient woman

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

USSR/ Human and Animal Physiology. Blood. Blood Groups. T

Abs Jour: Ref Zhur-Biol., N 20, 1958, 93096.

depended on group compatibility (C): with serological C of 61 specimens of sera which contained α-agglutinins, the latter appeared in a high titer (1:128 - 1:512) in 30.3% of the cases; of 102 specimens which contained β-agglutinins, the latter were observed in a high titer in 64.7% of the cases. With serological I, Is was encountered less often in high titers: α - in 10%, β - in 27.2%; more often in lower titers: α - in 25%, β - in 54.5% of the cases. Is was detected in 60.9% of bloods of the newborn; in most of the cases the titer was 1:4, 1:8, and only in individual cases it was 1:64, 1:128, 1:256. With serological C α-substances were isolated in 73.5%, β - in 71.5% of the cases, and with I α - in 6.2%, and β - in 25%.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

USSR/Human and Animal Physiology. Blood. Blood Groups.

Abs Jour: Ref Zhur-Biol., No 20, 1958, 93096.

A lowering of the Is titer in the blood of the mother with different group pregnancies proved to be only those which could be connected with hemagglutinins in the blood and tissues of the fetus. Thus, with the mother's blood group 0α β and the child's AB, the titer of α-agglutinins in the mother's blood decreased, and there was a high titer of β-agglutinins in this case. The titer of Is in the blood of the newborn also depended on the group relation of the blood of the mother and child: the highest - with one blood group, the lowest - with different groups. -- E.R. Paley.

Card : 3/3

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLKOVA, L.S.

Problem of immunobiological correlations between mother and fetus in humans. Report no.2: Determination of group antigenic properties in the amniotic fluid. Biul.eksp.biol. i med. 42 no.11:58-61 N '56. (MLRA 10:1)

1. Iz laboratorii biologii antigenov (zav. - prof. P.N.Kosyakov) Instituta eksperimental'noy biologii AMN SSSR (dir. - prof.I.N. Maysky) Predstavleno deystvitel'nym chlenom AMN SSSR N.N.Zhukovym-Verezhnikovym.

(AMNIOTIC FLUID,
blood group antibodies, determ. (Rus))
(BLOOD GROUPS,
antibodies in amniotic fluid (Rus))

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLKOVA, L.S.

Problem of the immunological relationships of mother and child. Report. no.3. Determination of group antigenic substances in fetal membranes. Biul.eksp.biol. i med. 42 no.12:54-57 D '56. (MLRA 10:2)

1. Iz laboratorii biologii antigenov (zav. - prof. P.N.Kosyakov) Instituta eksperimental'noy biologii AMN SSSR (dir. - prof. I.N. Mayskiy)
(FETAL MEMBRANES, immunology,
blood group antigenic substances (Rus))
(BLOOD GROUPS,
antigens in fetal membranes (Rus))
(ANTIGENS,
blood goups antigens in fetal membranes (Rus))

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VYAZOV, O.Ye., kand.med.nauk, VOLKOVA, L.S., kand.med.nauk

Some questions in the immunology of embryogenesis. Vest.AMN SSSR 13 no.11:30-41 '58 (MIRA 11:12)

(IMMUNOLOGY,
immunol. of embryogenesis, review (Rus))
(EMBRYO,
same (Rus))

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VYAZOV, O.Ye.; VOLKOVA, L.S.

Secondary immunological reactivity in invertebrates. Biul. eksp. biol i med. 50 no.12:62-65 D '60. (MIRA 14:1)

1. Iz laboratorii immunologii embriogeneza (zav. - starshiy nauchnyy sotrudnik O.Ye. Vyazov) Instituta eksperimental'noy biologii (dir. - prof. I.N.Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N.G. Khlopinym.
(IMMUNITY) (INVERTEBRATES)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLKOVA, L.S.

Immunohematology and obstetrical practice. Probl. gemat.i perel. krovi 6 no.1:6-10 '61. (MIRA 14:2)
(ERYTHROBLASTOSIS FETALIS) (PREGNANCY, COMPLICATIONS OF)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VYAZOV, O.Ye.; MOL'KOVA, A.I.; KONYUKHOV, B.V.; LISHTVAN, L.L.; TITOVA, I.I.; VOLKOVA, L.S.

Conducting immunobiological research on invertebrates at the White Sea Biological Station. Trudy Belomor.biol.sta.MGU 1:262-280 '62. (MIRA 16:1)

1. Laboratoriya immunologii embriogeneza Instituta eksperimental'-noy biologii AMN SSSR.
(White Sea--Invertebrates) (Immunology)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VYAZOV, O.Ye.; VOLKOVA, L.S.; TITOVA, I.I.; MURASHOVA, A.I.

Humoral relations between the bodies of the mother and the fetus in their clinical and experimental aspects. Vest.AMN SSSR 17 no.11:23-31 '62. (MIRA 16:1)

1. Institut eksperimental'noy biologii AMN SSSR i Institut akusherstva i ginekologii Ministerstva zdravookhraneniya RSFSR.
(FETUS) (PREGNANCY) (NEUROCHEMISTRY)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

BARKOV, N.N., kand. ekon. nauk; Prinimali uchastiye: PONOMAREV, S.A., inzh.; YELISEYEVA, T.V., inzh.; MOLYARCHUK, G.V., kand. ekon. nauk; IVANOV, L.N., inzh.; KASHCHEYEVA, I.N., inzh.; LEGORNEVA, V.I., inzh.; KUZ'MINA, T.T., inzh; INOZEMTSEVA, K.N., inzh.; YANDOLOVSKIY, N.A., inzh.; PAVLOVA, Ye.A., starshiy tekhnik; VOLKOVA, L.S., starshiy inzh.; GAZAR'YAN, G.S., tekhnik; VOROB'YEVA, L.V., tekhn. red.

[Seasonal and weekday variations in railroad freight transportation]. Sezonnaia i vnutrinedel'naia neravnomernost' gruzovykh perevozok na zheleznykh dorogakh. Moskva, Transzheldorizdat, 1963. 95 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut zheleznodorozhnogo transporta. Trudy, no. 249).

(MIRA 16:4)

(Railroads—Freight)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLKOVA, L. S.

"Issledovanie izoserologicheskikh vzaimootnosheniy ploda i materinskogo organizma."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences, Moscow, 3-10 Aug 64.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

BEREZOVSKIY, V.M.; TUL'CHINSKAYA, L.S.; VOLIKOVA, N.G.

New synthesis of 5,6-dimethylbenzimidazole. Zhur.ob.khim. 30 no.10:3434-3437 O '61. (MIRA 14:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
(Benzimidazole)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOV, P., professor, doktor tekhnicheskikh nauk. ZHIYANOV, I., assistent inzhener-mekhanik.

Veterinarians must have a knowledge of technology. Veterinariia 33 no.9:16-20 S '56. (MLRA 9:10)

1. Moskovskaya veterinarnaya akademiya.
(Veterinary medicine) (Farm mechanization)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOV, P.L.; PRIBYTKOV, P.F.

"Agricultural machines and tools" by S.M. Girger'ev, A.B. Lur'e, S.V. Mel'nikov. Reviewed by P.L. Volikov, P.F. Pribytkov. Mekh. i elek. sots. sel'khoz. 17 no.1:62-63 '59. (MIRA 12:1)
(Agricultural machinery)
(Griger'ev, S.M.) (Lur'e, A.B.)
(Mel'nikov, S.V.)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

1. VOLIKOV, P.L.

2. USSR (600)

4. Wind Power

7. "Wind power as a power base in the electrification of agriculture." I.I. Tazhiyev. Reviewed by P. L. Volikov. Sov.kniga no.9, 1952.

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

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VOLIKOV, P. L.

Agricultural Machinery

New tractor stacker-attachment ST-0, 7. Dost. sel'khoz. no. 7, 1952.

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

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOV, V.

42548. Sokrashcheniye Prostoya parovozov v promyvochnom remonte. Zh-D Transport. 1948, No. 11, S. 83-85.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

MATVEYEV, V.Ye.; FUZYNYA, I.Ye.; VOLIKOV, V.A.; BABKIN, A.P.; CHERNYSHEV, V.I., redaktor; VERINA, G.P., [redacted]kiy redaktor

[Standardization of the consumption of materials and spare parts in railroad transportation] Normirovanie raskhoda materialov i zapasnykh chastei na zheleznodorozhnom transporte. Moskva, Gos. transp. zhel-dor. izd-vo 1953. 326 p. (MLRA 10:2)
(Railroads--Maintenance and repair)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOV, V.A.

Economizing nonferrous metals used in locomotive repair Moskva, Gos. transp. zhel-dor. izd-vo, 1953. 62 p. (Za ekonomiiu i berezhlivost') (55-20653)

TJ675.V6

1. Locomotives - Repairs.
2. Nonferrous metals.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

MATVEYEV, Vasiliy Yevgrafovich; PUZYNYA, Ivan Yevstaf'yevich; VOLIKOV, Viktor Aleksandrovich; BABKIN, Aleksandr Rodionovich; CHERNYSHEV, V.I., redaktor; VERINA, G.P., tekhnicheskiy redaktor

[Standardizing expenditures for materials and spare parts in railroad transportation] Normirovanie raskhoda materialov i zapasnykh chastei na zheleznodorozhnom transporte. Izd. 2-oe, perer. i dop. Moskva, Gos.transp. zhel-dor. izd-vo, 1957. 463 p. (MLRA 10:9)
(Railroads--Finance)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOV, V.A., inzhener; DACHUK, L.Ya, inzhener, redaktor; KANDYKIN, A.Ye., tekhnicheskiy redaktor

[Economizing nonferrous metals used in locomotive repair] Ekonomiia tsvetnykh metallov pri remonte parovozov. Moskva, Gos. transp. zheldor. izd-vo, 1953. 62 p. (MLRA 7:10)

(Locomotives--Repairs)
(Nonferrous metals)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOV, V. A., Cand Tech Sci -- (diss) "Methods of evaluation ~~on the~~ technical ~~basis of the wear~~ of locomotive parts ~~xxixhx~~ working with sliding friction." Mos, 1958. 18 pp with graphs (Min of Railways USSR, Mos Order of Lenin and Order of Labor Red Banner Inst of Engineers of Railroad Transport im I. V. Stalin MIIT), 110 copies (KL, 17-58, 107)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

S/184/61/000/006/003/005
D041/D113

AUTHOR: Krutikov, A.N., Candidate of Technical Sciences, Akshentseva, A.P., Candidate of Technical Sciences, Volikova, I.G., Engineer

TITLE: Some data on the weldability and the corrosion resistance of Kh17T and Kh17N2 steels

PERIODICAL: Khimicheskoye mashinostroyeniye, no. 6, 1961, 33-38

TEXT: The results are given of experimental investigations carried out in order to obtain data on the weldability and corrosion resistance of Х17Н2 (Kh17N2) and Х17Т (Kh17T) steels. The impact toughness of both steels was determined within a temperature range of -40 to +100°C. The threshold of cold shortness of Kh17T steel lies near 0°C; Kh17N2 steel shows no tendency to cold shortness within the above-mentioned temperature range. Some time ago, high-chromium steels with a ferrite structure were manufactured with a low impact toughness; now, the TsNIIChM Institut (Institute) and the "Krasnyy Oktyabr'" Zavod (Plant) manufacture Kh17T steel with a threshold of cold shortness near 0°C and lower. The impact toughness was also investigated during short-term heating of the steel specimens to 300-900°C in a salt vat and subsequent cooling in the air; a sharp decrease in the impact toughness was observed; the longer the heating time, the lower is the normalizing temperature at which this decrease occurs. Annealing at 300-700°C or repeated

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D041/D113

Some data on the weldability ....

heating within the 700-900°C range increases the impact toughness of Kh17N2 steel; no considerable improvements were observed in the case of Kh17T steel. The impact toughness of separate parts of the heat-affected zone of welded joints was also investigated. Part of the specimens were examined immediately after welding, part of them were annealed at 750°C for 0.5 hours. Kh17T steel has an impact toughness of approximately 1 kg/cm^2 in the weakness zone and heat treatment does not increase this toughness. Multilayer-welded Kh17N2 steel has a high impact toughness in the weakness zone; heat treatment slightly increases the impact toughness of the heat-affected zone. The ЦЛ11 (TsL11) electrode is recommended since it ensures the highest corrosion resistance in the weld metal. In order to obtain corrosion resistance data on the above-mentioned steels, laboratory investigations of welded joints were carried out using the following aggressive media: HNO_3, HCOOH, $C_2H_2O_4$, H_3PO_4 and CH_3COOH. At all the investigated temperatures and concentrations of CH_3COOH, the Kh17T and Kh17N2 steels are corrosion resistant, the corrosion resistance of the welded joints being the same as that of the base metal. In HCOOH, the steels have either a reduced resistance or low resistance. The corrosion resistance of the heat-affected zone of the welded joints is the same as that of the base metal. Welds produced by the ВН12-6 (VI12-6) and the ЭНТУ-3 (ENTU-3) electrodes corrode more intensively than the base metal; welds containing niobium and welded with the TsL11 electrodes corrode less. In boiling $C_2H_2O_4$ solutions,

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Some data on the weldability .....

S/184/61/000/006/003/005
D041/D113

only Kh17T steel was tested; it had a corrosion rate of 10-70 mm/year. Under operating conditions of an evaporator producing alkali substances by the electrolytic method(composition of the solution - 320-340 G/l of NaOH, 90 G/l of NaCl, 0.2-0.3 G/l of $NaClO_4$; temperature - 90°C; velocity of the medium -- 0.8-1 m/sec) the Kh17T steel proved to be a corrosion-resistant material. This steel can also be used with an evaporator in which light oils are separated from acid-containing water during the production of acetic acid. There are 9 figures, 5 tables, and 10 Soviet-bloc references.

Card 3/3

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

FEDOROV, Ye.A.; VOLIKOVA, I.G.; ZHDANOVA, A.V.

Corrosion resistance of steel materials used in the production of acetic acid. Gidroliz.i lesokhim.prom. 13 no.4:16-19 '60. (MIRA 13:7)

1. Syavskiy lesokhimicheskiy kombinat (for Fedorov). 2. Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya (for Volikova). 3. TSentral'nyy nauchno-issledovatel'skiy lesokhimicheskiy institut (for Zhdanova).
(Steel--Corrosion) (Acetic acid)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

KRUTIKOV, A.N., kand.tekhn.nauk; AKSHENTSEVA, A.P., kand.tekhn.nauk
VOLIKOVA, I.G., inzh.

Some data on weldability and anticorrodibility of Kh17T and Kh17N2 steels. Khim. mash. no.6:33-38 N-D '61. (MIRA 15:2)

(Steel--Corrosion)
(Steel--Welding)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

KAZENNOV, Yu.I., kand.tekhn.nauk; KOLIKOVA, I.G., inzh.; AKSHENTSEVA, A.P., kand.tekhn.nauk

Weldability and corrosion resistance of Kh25T high-chromium steel. Sbor.st. NIIKHIMMASH no.33:50-71 '60. (MIRA 15:5)
(Steel--Corrosion)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOVA, I.G.

S/137/63/000/003/005/016
A006/A101

AUTHORS: Krutikov, A. N., Akshentseva, A. P., Volikova, I. G., Zharov, A. I.

TITLE: Properties of grade X17T (Kh17T) ferrite high-chromium steel weld joints

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1963, 9, abstract 3E49 ("Tr. Vses. n.-i. i konstrukt. in-t khim. mashinostr.", 1962, no.38, 52 - 63)

TEXT: Considering low a_k (1 kgm/cm^2) in the heat-affected zone, ferrite Kh17T steel is recommended to be used for manufacturing equipment that is not subjected to dynamic loads. Heat treatment does not raise a_k of this steel. The heat affected zone of Kh17T steel welds is not prone to intercrystalline corrosion. The basic electrode for welding Kh17T steel is the ЦЛ11/ св-1 Х18Н9Б (TsL11/sv-1Kh18N9B) electrode, securing high corrosion resistance of the weld metal and mechanical properties equalling those of the base metal.

[Abstracter's note: Complete translation] V. Fomenko

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

S/277/63/000/004/005/013
A004/A127

AUTHOR: Volikova, I.G.

TITLE: Corrosion resistance of the steel grades X 17T (Kh17T) and X17 H 2 (Kh17N2) and their welded joints

PERIODICAL: Referativnyy zhurnal. Otdel'nyy vypusk. 48. Mashinostroitel'nyye materialy, konstruktsii i raschet detaley mashin, no. 4, 1963, 18, abstract 4.48.122. (Tr. Vses. n.-i. i konstrukt. i-nt khim. mashinostr., 1961, no. 37, 71 - 82)

TEXT: The author investigated the tendency of the steel grades Kh17T and Kh17N2 to intercrystalline corrosion by accelerated methods and determined their corrosion resistance in various aggressive media (phosphoric, nitric, acetic, oxalic and formic acids and alkali solutions with oxidizing agents) at temperatures of 20 - 90°C. It is pointed out that a short-time heating of grade Kh17T steel does not cause any tendency to intercrystalline corrosion. A short-time heating of grade Kh17N2 steel up to a temperature of 800° C causes a susceptible tendency to intercrystalline corrosion. The Kh17T

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

Corrosion resistance of the steel grades... S/277/63/000/004/005/013
A004/A127

and Kh17N2 steels are resistant to acetic and phosphoric acids with a concentration of up to 55% and at temperatures not exceeding 70°C, both in the as-delivered condition and in the form of welded joints.

[Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

S/032/63/029/002/012/028
B101/B186

AUTHORS: Levin, I. A., and Volikova, I. G.

TITLE: Main principles of choosing solutions for the rapid test for susceptibility to intercrystallite corrosion

PERIODICAL: Zavodskaya laboratoriya, v. 29, no. 2, 1963, 180-184

TEXT: The theory describing electrochemical corrosion is taken as a basis for discussing general principles appliable to the choice of solutions for the rapid testing of intercrystallite corrosion. The anodic curve (1) (Fig. 1) for the grains, which corresponds to the anodic polarization of a steel not susceptible to intercrystallite corrosion, is compared with the curve (2) for the grain boundaries. Between the potentials E_4 and E_6, the grains are in a passive and the boundaries in an active state. After discussing the effect of a depolarizer the following principles are formulated: (a) Composition, concentration, and temperature of the solution must guarantee a potential range in which the grains are in a passive, the boundaries in an active state; (b) the diffusion limiting current of the reduction of the cathodic depolarizer must not be less than the critical

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

current of passivation for a steel susceptible to intercrystallite corrosion. The cathodic curve should cut the anodic curve in the potential range mentioned. These principles were checked on 1Х18Н9 (1Kh18N9) austenitic steel by corrosion with 15% H_2SO_4 in the presence of $Fe_2(SO_4)_3 \cdot 9H_2O$ as cathodic depolarizer. Results: Between -0.2 and +0.89 v, the current density for tempered steel was always higher than for hardened steel, with a maximum between -0.1 and +0.1 v. Hardened steel dissolved uniformly over the whole potential range. The passivation of active steel was reached with 23 g/liter iron sulfate for hardened steel, and with 62 g/liter iron sulfate for tempered steel. Direct tests for corrosion in the presence of 8, 23, 35, and 62 g/liter iron sulfate showed weight losses of 340, 363, 388, and 1.1C·g/m^2·hr for tempered steel, and of 1.70, 2.42, 0.32, and 0.29 for hardened steel. With 8 g/liter iron sulfate, mainly the boundaries dissolved. To accelerate this process the anodic and cathodic curves must intersect between -0.1 and +0.1 v. This can be achieved by adding copper sulfate or copper chips. There are 3 figures.

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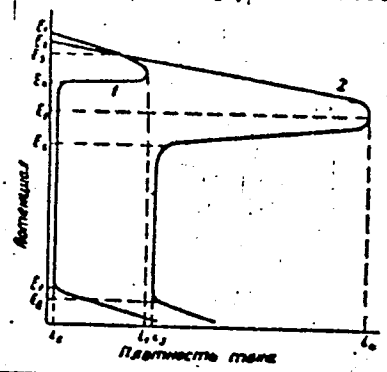
"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

Main principles of choosing ... S/032/63/029/002/012/028
B101/B186

ASSOCIATION: Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya (Scientific Research Institute of Chemical Machinery)

Fig. 1. Anodic curves for grains and grain boundaries.
Legend: abscissa = current density; ordinate = potential.



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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

KAZENNOV, Yu.I., kand.tekhn.nauk; VOLIKOVA, I.G., inzh.; AKSHENTSEVA, A.P., kand.tekhn.nauk

Properties of welded joints in high-chromium steels alloyed with nitrogen and nickel. Sbor.st. NIIKHIMMASH no.33:36-49 '60. (MIRA 15:5)

(Steel--Welding)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOVA, I.G., inzh.

Intercrystalline corrosion of Kh25T steel. Trudy NIIKHIMMASH no.27:75-87 '59. (MIRA 14:8)
(Chrome steel--Corrosion)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOVA, I.G., ~~inzh.~~; KAZENNOV, Yu.I., kand. tekhn. nauk; AKSHENTSEVA, A.P., kand. tekhn. nauk

Some data on the weldability and resistance of Kh25T and Kh28NA steels to corrosion. Khim. mash. 3 no.3:33-39 My-Je '59. (MIRA 12:12)

(Steel--Testing)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

LEVIN, I.A.; VOLIKOVA, I.G.

Basic principles of selecting solutions for accelerated tests of the tendency to intercrystalline corrosion. Zav.lab. 29 no.2:180-184 '63. (MIRA 16:5)

1. Nauchno-issledovatel'skiy institut khimicheskogo mashinostroyeniya.
(Steel, Stainless—Corrosion)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOVA, L. (Odessa)

Assembling a collar without basting. Shvein. prom. no.1:23 Ja-F '63. (MIRA 16:4)

(Tailoring)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIKOVA, T. V. Cand Ped Sci -- (diss)"The ~~Upbringing~~ Nonlife of the Young Schoolchild ~~at Home~~ as a Means of Communist Education." Mos , 1957. ~~XXXX~~ 13 pp 20 cm. (Mos State Pedagogical Inst im V. I. Lenin), 140 copies (KL, 17-57, 100)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
General and Physical Chemistry

(3)

Separation of mixtures of $POCl_3$ and PCl_3. T. I. Sokolova, V. V. Illarionov, and S. I. Vol'fkovich. *J. Appl. Chem. U.S.S.R.* 25, 1727-31(1952)(Engl. translation).—See *C.A.* 47, 9127g. H. L. H.

Chem

9-2-54

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

ROYTER, V.A.; STUKANOVSKAYA, N.A.; KORNEYCHUK, G.P.; VOLIKOVSKAYA, N.S.; GOLODETS, G.I.

Study of the oxidation kinetics of sulfur dioxide on a platinum catalyst when equilibrium has been reached. Kin. i kat. 1 no. 3:408-417 S-O '60. (MIRA 13:11)

1. Institut fizichiskoy khimii imeni L.V. Pisarzhevskogo AN USSR.
(Sulfur dioxide) (Oxidation) (Platinum)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

ROYTER, V.A.; STUKANOVSKAYA, N.A. [Stukanovs'ka, N.O.]; KORNEYCHUK, G.P. [Korniichuk, H.P.]; VOLIKOVSKAYA, N.S. [Volikovs'ka, N.S.]; GOLODETS, G.I. [Holodets', H.I.]

Study of the kinetics of oxidation of sulfur anhydride on a platinum catalyst under conditions of stable chemical equilibrium. Dop.AN URSR no.9:1241-1244 '60. (MIRA 13:10)

1. Institut fizicheskoy khimii im. L.V.Pisarzhevskogo AN USSR.
2. Chlen-korrespondent AN USSR (for Royter).
(Oxidation) (Sulfur oxides)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

ROYTER, V.A.; STUKANOV, N.A.; VOLIKOVSKAYA, N.S.

Role of oxygen in vanadium oxide catalysts during oxidizing catalysis. Ukr. khim. zhur. 24 no.1:37-45 '58. (MIRA 11:4)

1.Institut fizicheskoy khimii im. L.V. Pisarzhevskogo AN USSR.
(Vanadium oxide) (Oxidation) (Catalysis)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIMOVA, F. G.

USSR/Chemistry - Organophosphorus Compounds Sep 52

"The Action of Triarylbromomethanes on Alkylpyrocatechol Esters of Phosphorous Acid," A. Ye. Arbuzov, F. G. Valimova, Kazan' Chem-Tech Inst

"Zhur Obshch Khim" Vol 22, No 9, pp 1479-1483

232T14

By treating the ethylpyrocatechol ester of phosphorous acid with triphenylbromomethane, diphenylbiphenylbromomethane, phenyldibiphenylbromomethane, phenylxanthylbromomethane, and diphenylnaphthylbromomethane, the corresponding

232T14

pyrocatechol esters of triarylmethylphosphonic acids were obtained. Saponification of the pyrocatechol esters of triarylmethylphosphonic acids leads to the formation of the corresponding triarylmethylphosphonic acids. The above pyrocatechol esters of triarylmethylphosphonic acids are identical in physicochem properties with those obtained from Boyd's acid chloride.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A., kand. tekhn. nauk; KROMER, F., inzh.; GOLUBEV, V., inzh.

A new dust collector. Okhr. truda i sots. strakh. no.4:77-78
Okhr. truda i sots. strakh. no.4:77-78 Ap '59.
(MIRA 12:8)

1.Chelyabinskiy nauchno-issledovatel'skiy institut gornogo dela, Kopeysk.
(Dust collectors)

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A. A.

N/5
106.12
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N/5
106.12
v91

VOLIN, A A

Die erzieherische Rolle des sowjetischen Gerichts. Berlin, Deutscher Zentralverlag, 1955.
52 p. (Deutsches Institut fur Rechtswissenschaft: Schriftenreihe Staats-und Rechtstheorie Heft 2)
Translation from the Russian: "Vospitatel'naya Rol'sovetskogo suda, moskow, 1951.
Bibiographical footnotes.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.I.

Cutting and graphitization of the edges of sealing glands. Trakt. i sel'khozmash. 32 no.2:42-43 F '62. (MIRA 15:2)

1. Moskovskiy zavod gidroagregatov im. S.M. Budennogo.
(Agricultural machinery industry)
(Tractors)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.; LAPIDUS, V.Ya.; URAL'TSEVA, I.B.

Seismic prospecting in the deep geological mapping of the [illegible] region. Uzb. geol. zhur. 9 no.4:10-16 '65. (MIRA 18:9)

1. Geofizicheskiy trest Gosudarstvennogo geologicheskogo komiteta.

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.; RUDAKOV, A.G.

Use of transverse waves in seismic prospecting. Prikl.geofiz. no.15:53-82 '56. (MLRA 10:1)
(Seismic waves) (Prospecting--Geophysical methods)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.; ZHADIN, V.V.; LIMBAKH, Yu.I.

Determining the elastic constants of soils under field conditions. Vop.din.teor.raspr.seism.voln. no.2:202-209 '59. (MIRA 13:5)

(Elasticity) (Sand) (Clay)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.

Recording of reflected transverse waves. Vop.din.teor.raspr. seism.voln. no.2:210-216 '59. (MIRA 13:5)
(Seismometry)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.; GOL'TSMAN, F.M.

Practical directions for the use of the analyticographical method in the frequency analysis of seismic waves. Vop.din.teor. raspr.seism.voln. no.2:95-105 '59. (MIRA 13:5)
(Seismometry)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

OZEROV, D.K.; VOLIN, A.P.

Theoretical and experimental investigation of Love waves. Part 2: Experiment. Vop.din.teor.raspr.seism.voln. no.2: 79-94 '59. (MIRA 13:5)

(Seismic waves)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.

Parametric measurings of seismic velocities in the permafrost zone. Razved. i prom. geofiz. no.38:83-87 '60. (MIRA 14:3)
(Salekhard region—Seismic prospecting)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.

A qualitative method for the interpretation of refracted waves in the seismic prospecting for ores. Vop.din.teor.raspr.seism.voln no.7:234-248 '64. (MIRA 17:12)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.P.; LAPIDUS, V.Ya.

Some characteristics of the propagation of elastic waves in crystalline rocks. Vop.din.teor.raspr.seism.voln no.7:215-233 '64. (MIRA 17:12)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

L 52533-65 EWT(1)/EWA(h) Peb GM

ACCESSION NR: AT5012715 UR/2585/64/000/007/0215/0233

AUTHOR: Volin, A.P.; Lapidus, V. Ya.

TITLE: Some peculiarities of elastic wave propagation in crystalline rocks

SOURCE: Voprosy dinamicheskoy teorii rasprostraneniya seysmicheskikh voln, no. 7, 1964, 215-233

TOPIC TAGS: crystalline rock wave propagation, inhomogeneous seismic medium, surface velocity gradient, seismic wave velocity, crystalline rock velocity anisotropy, elastic wave propagation

ABSTRACT: The elastic wave propagation velocity within the upper crystalline rocks comprising the outer most layer of the earth's crust is still relatively unknown. Field position seismic observations and subsequent analyses of wave fields registered on seismograms show that such media cannot be approximated by the usual model of a laminar-isotropic medium but must be treated as continuously-inhomogeneous media characterized by a dominantly vertical velocity gradient (A.P. Volin, Voprosy razvedochnoy geofizik., vol. 2, L. Gostoptekhizdat, 1962). Seismic investigations carried out in the Almalykskiy coal region of Uzbekistan already permit the establishment of certain

Card 1/3

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regularities concerning the velocity characteristics of upper rocks. The present article describes parametric studies in the above-mentioned region with the hope that they will arouse the interest of seismologists in the peculiarities which may be observed in crystalline rocks under these and other geological conditions. A short discussion of the geological-petrographic characteristics of the Northern slopes of the Kuraminskiy range of Tien Shan is followed by a description of the methods for the study of the velocity characteristics of rocks, a list of various interconnections between the data obtained by various methods of investigation, the velocity-depth relationship results, and a description of the influence of the petrographic composition of rocks and the characteristics of secondary changes on the elastic wave velocities. The article also presents the velocity characteristics of geological contacts, the velocity anisotropy in crystalline rocks, the connection between the density and magnetic properties of rocks with their velocity characteristics, and summarizes, finally, the regularities found from the analysis of the experimental results. A considerable velocity gradient within a definite portion of a near-surface layer of the earth's crust has also been found during seismic investigations in other geographic regions of the Soviet Union (see D.K. Ozerov, N.I. Yermilova, I.V. Litvinenko, Voprosy dinamicheskoy teorii rasprostraneniya seysmicheskikh voln, no. 4, 1962; Metodicheskoye rukovodstvo po opredeleniyu fizicheskikh

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

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ACCESSION NR: AT5012715

svoystv gornykh porod i poleznykh iskopayemykh, M., Gosgeoltekhizdat, 1962; B. Ya. Gel'chinskiy, T.M. Tsymbal, D.K. Ozerov, G. V. Golikova, Voprosy dinamicheskoy teorii rasprostraneniya seysmicheskikh voln, no. 4, 1962, Izd. LGU; T.I. Oblogina, V. B. Piyp, S. Kochpay, Izv. AN SSSR, no. 9, 1962). Orig. art. has: 10 figures and 2 tables.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: ES

NO REF SOV: 010 OTHER: 002

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

15-57-5-6810

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 5, pp 156-157 (USSR)

AUTHORS: Volin, A. P., Rudakov, A. G.

TITLE: Seismic Prospecting With Transverse Waves (O seysmorazvedochnykh rabotakh na poperechnykh volnakh)

PERIODICAL: Prikl. geofizika, Nr 15, 1956, pp 53-82.

ABSTRACT: The authors describe experimental work in using transverse waves and they consider the possibility of using the method. For the experiments, made near Leningrad, the transverse waves were produced by a mechanical striking device (pile driver), ammonite powder, pyroxylin powder, and powder "gun" (drilling pipe closed at one end; maximum weight on the order of 1.2 kg). In contrast to the generally used pattern of seismic prospecting, this procedure employs horizontal activity (at a direction transverse to the profile) and horizontal reception. The seismograms thus obtained contain

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15-57-5-6810

Seismic Prospecting With Transverse Waves (Cont.)

only the record of transverse waves. These records are comparatively simple and have characteristic forms that are good for correlation. A satisfactory parallelism in the phases of the leading waves on the odograph is observed for purposes of correlation. The interpretation of the field data showed eight refracting horizons at depths (in meters) of 2, 12, 14, 27, 50, 96, 135, and 360 (the last corresponds to the surface of the crystalline basement). The velocity of the transverse waves ranges up to 120 m/sec for the upper clay layers and up to 3200 m/sec for the basement rocks. A combination of the method of transverse and longitudinal waves permitted the determination of not one but two wave velocities, and this advantage made it possible to describe the section more completely. At present the method of transverse waves may be used for the study of zones with low velocities when prospecting for ore deposits and also is satisfactory for various types of engineering geological investigations. In principle this method may be used to solve the problem of depth, but in practice such a calculation can be done only after the procedure is properly set up to secure strongly directed activity (wave propagation).

Ye. P. V.

Card 2/2

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

S/270/63/000/001/019/024
A001/A101

AUTHOR: Volin, A. V.

TITLE: The role of diagonal fractures in middle latitudes of the northern hemisphere

PERIODICAL: Referativnyy zhurnal, Geodeziya, no. 1, 1963, 39, abstract 1.52.257 ("Geogr. sb.", 1962, v. 15, 71 - 94)

TEXT: N. S. Shatskiy distinguished two systems in tectonic fractures: the diagonal one containing series of fractures of north-western and north-eastern directions and the orthogonal one containing series of almost latitudinal and almost longitudinal fractures. As a result of decoding extensive aerial photo-survey data, strikes of fractures in granitoid massifs of Ulu-tau and Betpak-Dala in Central Kazakhstan were determined. Altogether 6,250 measurements of fracture strikes were made over the area of ~ 300 km^2 with total extension of over 500 km. It turned out that fractures of the diagonal system were prevailing; the weighted mean values of directions were north-west 315° and north-east 45°. The fractures of north-western direction are more regular and longer than the

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A001/A101

The role of diagonal fractures in...

latter but occur more seldom. Meridional and latitudinal directions are of secondary importance in the total amount of fractures. The data obtained were compared with those on directions of tectonic fractures in other territories (the Eastern Sayan, the Trans-Baykal region, Mongolia, the Eastern-Siberian platform, the Russian platform, Western Europe, North America). The conclusion has been drawn that the diagonal fracture system is predominant everywhere. In Eurasia the dominant occurrence of north-western fractures can be traced up to the Baykal, further eastward this direction is replaced by the north-eastern one. The regular orientation of fractures and fissures is related to Earth's deformations due to changes in the rate of its rotation.

Yu. Meshcheryakov

[Abstracter's note: Complete translation]

Card 2/2

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN A.V.

BOOK EXPLOITATION SOV/2-8

Akademiya nauk SSSR. Laboratoriya aerometodov

Trudy, tom 8: Materialy VII Vsesoyuznogo mezhvedomstvennogo soveshchaniya po aerosyemke 25 noyabrya - 1 dekabrya 1956 g. (Materials of the 7th All-Union Interdepartmental Conference on Aerial Surveying, 25 November-1 December 1956) Moscow, Gosgeoltekhizdat, 1959. 300 p. 5,000 copies printed.

Ed. of Publishing House: V. G. Filatov; Tech. Ed.: O. A. Gurova; Editorial Commission: N. G. Kall', Corresponding Member, Academy of Sciences USSR; A. A. Logachev, V. P. Miroshnichenko (Resp. Ed.), and N. N. Sokolov.

PURPOSE: This publication is intended for photogrammetrists, geologists, geographers, and other scientific and technical personnel concerned with aerial photography.

COVERAGE: This issue of the Transactions of the Laboratory of Aerial Survey Methods contains the second part of materials presented at the 7th All-Union Interdepartmental Conference on Aerial Surveying which took place in Leningrad, November 25 through December 1, 1956. Articles treat problems dealing with the execution and application of aerial survey methods in geological, geomorphological, and geophysical investigations. Special attention is directed to aerial survey methods in geological and geomorphological mapping and geophysical work under different conditions. The techniques of joint airborne magnetic prospecting and aerial photography are described. References accompany individual articles.

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Svyatlovskiy, A. Ye. [Laboratoriya vulkanologii AN SSSR - Laboratory of Volcanology, Academy of Sciences USSR]. The Role of Aerial-Survey Methods in Studying Volcanic Regions 171

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"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.V.

Gravitational tectogenesis and flowage tectonics; review of foreign literature. Sov. geol. 2 no.8:46-60 Ag '59.
(MIRA 13:2)

1. Laboratoriya aerometodov AN SSSR.
(Geology, Structural)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

Volin, A.V.

Muyun-Kum of the Sary-Su Valley in Central Kazakhstan. Trudy Lab. aeromet. 6:85-99 '58. (MIRA 12:1)
(Muyun-Kum)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

YANSHIN, A.L.; PETRUSHEVSKIY, B.A.; ALEKSANDROVA, M.I.; BORSUK, B.I.; VOLIN, A.V.; ZUBKOVSKAYA, I.M.; YAKOVLEV, D.I.; BER, A.G.; BORONIKOV, L.I.; BOYTSOVA, Ye.P.; OVECHKIN, N.K.; BESPALOV, V.F.; SHLYGIN, Ye.D.; SPERANSKIY, B.F.; KHAKHLOV, V.A.; RAGOZIN, L.A.; DITMAR, V.G.; GORSKIY, I.I., red.; KASSIN, N.G., red.; FOMICHEV, V.D., red.; DZEVANOVSKIY, Yu.K., red.; CHIKHACHEV, P.K., red.; KOMISHAN, I.S., red.; DASHKOVA, A.D., red.; VODOLAGINA, S., tekhn. red.; VDOVINA, M.P., tekhn. red.

[Geological map of the U.S.S.R., scale 1:1,000,000] Geologicheskaia karta SSSR, masshtab 1:1,000,000. [Explanatory notes to accompany sheet] Ob"iasnitel'naia zapiska k listu. _____ L-40 [Emba] (Emba). 1949. 56 p. _____ L-41 [Kzyl-Orda] (Kzyl-Orda). 1946. 20 p. _____ L-42 [Karsakpay] (Karsakpai). 1949. 42 p. _____ M-41 [Turgay] (Turgai). 1948. 28 p. _____ M-43 [Karaganda] (Karaganda). 1947. 37 p. _____ N-42 [Petropavlovsk] (Petropavlovsk) 1947. 27 p. _____ N-44 [Novosibirsk] (Novosibirsk) 1948. 33 p. _____ O-45 [Tomsk] (Tomsk). 1949. 26 p. _____ O-49 [Kirensk] (Kirensk). 1947. 40 p. Moskva, Gos. izd-vo geol. lit-ry. (MIRA 11:8)

1. Russia (1923- U.S.S.R.) Ministerstvo geologii. (Geology--Maps)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.V.

Role of plastic rocks in the structure of the Cheleken Peninsula in the Caspian Sea. Izv.AN Turk.SSR no.2:39-49 '57.

(MLRA 10:5)

1. Institut geologii AN Turkmenskoy SSR.
(Cheleken Peninsula--Rocks) (Cheleken Peninsula--Geology, Structural)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

15-1957-12-17056

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12, p 51 (USSR)

AUTHOR: Volin, A. V.

TITLE: Influence of Plastic Formations on the Structure of the Cheleken Peninsula on the Caspian Sea (Rol' plasticheskikh porod v strukture Chelekenskogo poluostrova na Kaspii)

PERIODICAL: Izv. AN TurkmSSR, 1957, Nr 2, pp 39-49.

ABSTRACT: According to the author, the shortening of strata during the process of folding is not necessarily caused by the action of external tangential forces; it can be explained, partly at least, by sliding of blanket deposits down the slope of elevated structures under the action of gravity. But in the structures younger than the Precambrian the flow of rocks takes place over the coarse of hard bedrock. This leads to a tearing of the upper folded levels from their foundations. Rocks of various mechanical properties were developed in Cheleken, including the

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Influence of Plastic Formations on the Structure of the Cheleken Peninsula on the Caspian Sea 15-1957-12-17056

unconsolidated deposits and the strata made plastic by the presence of petroleum and water, which underwent intense plastic deformations. Cheleken, in its peripheral part, is composed of marine Upper Pliocene and early Quaternary deposits, which form a narrow brachyanticline. Its core is made up of continental Miocene-Pliocene red rocks forming a monocline which slopes gently toward the northwest. This simple structure is highly complicated by folds and fractures. In the periclinal parts and along the southern contact of the red stratum the plastic deformations are very intense. Squeezing and creeping of layers accompanied by the formation of floating blocks, filling of open cracks by clastic material (neptunic dikes of diverse composition), formation of various breccias etc. are observed here.

Card 2/2

N. Ye. Galdin

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VOLIN A. V.

3(4) PHASE I BOOK EXPLOITATION SOV/1835

Akademiya nauk SSSR. Laboratoriya aerometodov

Trudy, t. 6 (Transactions of the Laboratory of Aerial Methods, USSR Academy of Sciences, Vol 6) Moscow, Izd-vo AN SSSR, 1958. 280 p. Errata slip inserted. 1,500 copies printed.

Resp. Ed.: V.P. Miroshnichenko, Candidate of Geological and Mineralogical Sciences; Ed. of publishing House: D.M. Kudritskiy; Tech. Ed.: E.Yu. Bleykh.

PURPOSE: This volume is intended for geologists, photo interpreters, or other personnel engaged in the study of landscape formations, especially from the standpoint of aerial photography.

COVERAGE: This collection of studies and brief articles treats problems in aerial photography and photo interpretation in relation to geological phenomena. The geographical area of study, with minor exceptions, is the Caspian plains and western shore. Most of the studies are well illustrated with aerial photographs. Aside from the numerous articles on geological phenomena of the

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Caspian basin, the following are also covered: portions of the Russian platform, the Muyunkumy sands of Central Kazakhstan, photo interpretation of clayey flats, desert vegetation and tree cover, the effective lens speed of photographic objectives, photogrammetric determination of profiles on hydro technical models, and others. No personalities are mentioned. References follow each main article.

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APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A. V.

"Solid Run-off and Speed of Erosion," Iz Akad Nauk SSSR, Seriya Geograf i Geofiz, No 5, 1946 (483-497).
(Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A. V.

BERG, E. V. and VOLIN, A. V., "Solid Flow and Speed of Erosion," No 2, pp 95-96. (Meteorologiya i Gidrologiya, No 6 Nov/Dec 1947)

SO: U-3218, 3 Apr 1953

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.V.

Role of diagonal faults in the mean latitudes of the northern hemisphere. Geog.sbor. no.15:71-94 '62. (MIRA 15:12)
(Faults(Geology))

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.V., kand.tekhn.nauk

Power-driven units for dry and wet dedusting. Sbor. rab. po silik. no. 3:59-63 '61. (MIRA 15:10)

1. Chelyabinskiy nauchno-issledovatel'skiy institut gornogo dela.
(Dust collectors)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, A.V.

Gravity characteristics of fan-shaped structures. Sov.geol. 6 no.2:34-44 F '63. (MIRA 16:4)

(Folds (Geology)) (Gravity)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

1. VOLIN, B.M.

2. USSR (600)

4. Social Sciences

7. Statistics and politics. 3-e. izd. Moskva, Gosstatizdat, 1952

9. Monthly List of Russian Accessions, Library of Congress, March,1953.Unclassifid.

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

"APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7

VOLIN, B.P. (Moskva); TROSHIN, Ya.K. (Moskva); FILATOV, G.I. (Moskva); SHCHELKIN, K.I. (Moskva)

Reactive and kinetic nature of nonuniformities in a shock wave front and their role in the propagation of a gas detonation. PMTF no.2:78-89 Jl-Ag 60. (MIRA 14:6)

1. Institut khimicheskoy fiziki AN SSSR.
(Shock waves) (Chemical reaction, Rate of) (Explosions)

APPROVED FOR RELEASE: 08/09/2001 CIA-RDP86-00513R001860510012-7"

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28348 S/124/61/000/007/010/044
A052/A101

1.1210
11.8200

AUTHORS: Volin, B. P., Troshin, Ya. K., Filatov, G. I., Shchelkin, K. I.

TITLE: On the reacton-kinetic nature of heterogeneities in the shock front and the part played by them in the process of propagation of gas detonation

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 7, 1961, 7, abstract 7B47 ("Zh. prikl. mekhan. i tekhn. fiz." no. 2, 1960, 78-89)

TEXT: The process of origination of heterogeneities in the forward front of a flat detonation layer is considered theoretically. The disturbance develops in the ignition front and propagates over the front with the velocity of sound in the shock-compressed gas a_1. In the direction of propagation of detonation the disturbance is drifted by the flow behind the forward shock front and overtakes the front at the moment

$$t = \frac{\lambda}{a_1 - (D - \omega)}$$

where λ - the width of detonation zone, D - the velocity of detonation, ω - the

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A052/A101

On the reacton-kinetic nature ...

velocity of shock-compressed gas in the laboratory system of coordinates. By this moment t the disturbance over the ignition front will have the diameter

$$\Delta y \sim \tau D \frac{2(\gamma - 1)/(\gamma + 1)}{1 - 1/\sqrt{2\gamma/(\gamma - 1)}} \gamma D \beta \qquad (1)$$

where τ - the period of the induction of ignition, $\gamma = c_p/c_v$ - the ratio of specific heats, $\beta = 0.5 \div 0.4$ at $\gamma = 1.4 \div 1.3$. The identification of Δy with the experimentally observed dimension of heterogeneities enables one to consider equation (1) as the dependence of the mean dimension of such heterogeneities on reaction-kinetic and gas-dynamic factors. The results of experiments on obtaining the track imprints of detonation wave on faceplates covered prior to the experiment with a thin layer of carbon black are described. Another proof has been found of the existence of heterogeneities, not only near the wall of the detonation tube, but over the whole surface of the detonation front in the tubes as well. It is shown that such heterogeneities exist also in the spherical detonation wave. It is found out that the total number of heterogeneities over the whole detonation front increases with the surface of the front. The authors arrive at a conclusion that spherical detonation, like the gas detonation in tubes, is pulsating one, that heterogeneities in its front emerge spontaneously, and that these heterogeneities are not connected with the presence

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A052/A101

On the reacton-kinetic nature ...

of walls of the detonation container. To bring the fact of multiplication of pulsations with the increase of the surface of detonation front in agreement with the periodical mechanism of detonation, the authors consider it necessary to complement the conception of the mechanism of detonation combustion, given in another study (Denisov, Yu. N., Troshin, Ya. K. Zh. prikl. mekhan. i tekhn. fiz. no. 1, 1960, 21-35), by introducing into the detonation cycle one more link of instability being the source of emergence of breaks in the shock front. A criterion of the limit of existence of the spin and pulsating detonations is also given. There are 23 references.

Yu. Denisov

[Abstracter's note: Complete translation]

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34327
S/032/62/028/003/015/017
B104/B102

IP. P200 (2408)

AUTHORS. Mironov, O. S., and Volin, E. M.

TITLE: Measurement of real stresses in the stretching of aluminum and zinc at elevated temperatures

PERIODICAL: Zavodskaya laboratoriya, v. 28, no. 3, 1962, 359

TEXT: The semifinished products made of commercially pure aluminum, were annealed for 1 hr at 350°C; the hot-rolled zinc rods were not annealed. The thickness of the test pieces was 5 and 10 mm. The hot junctions of thermocouples were attached to the lengths of the specimens to be tested with asbestos cord. All the test pieces were kept at the required temperature for 15-20 minutes before stretching. The 5 mm aluminum test pieces were stretched at a rate of 30 mm/min, and the 10 mm aluminum test pieces and the 5 mm zinc test pieces at a rate of 6 mm/min. In the determination of real stress the first test piece was stretched to breaking point, the others not quite so far. Thus, two or three values were determined for the real stress in the contracted part of the test piece. The curves for the real stresses were plotted according to the nomogram

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method by N. N. Davidenkov and N. I. Spiridonova (Zavodskaya laboratoriya, XI, 6 (1945)). This establishes that the rates of extension have an appreciable effect on the tensile strength. Compared with the 10 mm test pieces, the rate of deformation of the 5 mm test pieces is greater than the rate of application of load. At temperatures above 300°C (for Al) and above 100°C (for Zn), the real stress curves show that the stress decreases as the degree of deformation increases. It is possible that the heat released in necking reduces the strain in the material. There are 3 figures and 1 Soviet reference.

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