"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

S/137/60/000/009/018/029
A006/A001

Investigation of the Physico-Chemical Interactions of Rare-Earth Metals With Iron and Steel

zation. At a S content of < 0.02-0.03%, desulfurization is not observed. The presence of ≤ 0.2% Si in the steel does not reduce the refining effect of Ce. The rare-earth metals introduced into the steel in an amount of 0.9-1.5%, interact with C, forming carbides, and reduce considerably the perlite content in the steel. The addition of 0.1-0.2% rare-earth metals causes higher strength, ductility and a_k of steel. An increase of the rare-earth metal content from 0 to > 3% reduces the mechanical properties of Fe and steel due to the formation of brittle intermetallic compounds of Fe with the rare-earth metals. At a La content of > 0.4-0.5 weight %, a second phase is observed in the Fe-La system. Solubility of La in γ-Fe is greater than in α-Fe. A considerable improvement of physico-mechanical properties of Fe-Al alloys was observed when rare-earth metals were introduced in an amount of up to 5 weight %.

A.R.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

18(6)

SOV/78-4-6-43/44

AUTHORS: Savitskiy, Ye. M., Terekhova, V. F., Tsikalov, V. A.

TITLE: The Phase Diagram of the Alloys Aluminum-Yttrium (Diagramma sostoyaniya splavov alyuminiya s ittriyem)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 6, pp 1461 - 1462 (USSR)

ABSTRACT: The system aluminum-yttrium was investigated for the first time. Alloys up to 60 percentages by weight yttrium were produced and investigated by metallographic, thermal, and X-ray structural analyses and the microhardness was determined. Aluminum of the type AV-000 and metallic yttrium of a purity of 99.6% were used as initial materials. The phase diagram of the alloys aluminum-yttrium (60 percentages by weight yttrium) is a complicated system with occurrence of chemical compounds (Fig 1). Chemical compounds occur as crystals in alloys with 13.5 and 42 percentages by weight yttrium. The microstructure of the alloys aluminum-yttrium with 0.34, 8.78. 42.1 and 57.3 percentages by weight yttrium is given in figure 2. Alloys with 57.3 percentages by weight yttrium

Card 1/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

have a composition which corresponds to the formula Al_5Y_2. The microhardness of this alloy amounts to 600 kg/mm^2. By the X-ray structural analysis it was found that this compound has a complicated crystal structure. Further investigations are necessary for the completion of the phase diagram aluminum-yttrium. There are 2 figures.

SUBMITTED: January 30, 1959

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

PERYSHKIN, A.V.; ROSHOVSKAYA, Kh.D.; SOKOLOVA, Ye.N.; SHAKHMAYEV, N.M. Prinimal uchastiye KRAUKLIS, V.V.; TSIKALOV, V.A., red.; POLUKAROVA, Ye.K., tekhn. red.

[Methodology of teaching physics in eight-year schools] Metodika prepodavaniia fiziki v vos'miletnei shkole; posobie dlia uchitelei i studentov pedvuzov. Moskva, Izd-vo Akad. pedagog. nauk RSFSR, 1963. 317 p. (MIRA 16:10)

1. Chlen-korrespondent Akademii pedagogicheskikh nauk RSFSR (for Peryshkin).

(Physics—Study and teaching)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKALOVSKA G.N.

BELITSER, V.A.; KOTKOVA, K.I.; LOBACHEVSKAYA, O.V.; TSIKALOVSKAYA, G.N.

On the properties and the role played by the disulfide groups in serum albumin. Dokl. AN SSSR 116 no.3:451-454 S '57. (MIRA 11:2)

1.Institut biologii AN USSR. Predstavleno akademikom A.V. Palladinym.
(Sulfides) (Blood proteins)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKALOVSKAYA, G.N.

20-3-28/46

AUTHORS: Belitser, V. A., Kotkova, K. I., Lobachevskaya, O.V. Tsikalovskaya, G. N.

TITLE: On the Properties and the Rôle Played by the Disulphide Groups in Serum Albumin (O svoystvakh i znachenii disul'fidnykh grupp v syvorotochnom al'bumine)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 116, Nr 3, pp. 451-454 (USSR)

ABSTRACT: The subject of this treatise was the study of the reactivity of disulphide compositions in serum albumin and the dependence of several protein properties on the decomposition and recreation of these compositions. Crystalline albumin from horse blood serum was used for this purpose. Besides the native kind of protein, the one denatured by urea was examined too (10 mol. urea per 1 liter of protein solution of 6 mol. potassium thiocyanate). The reaction of decomposition by sodium bisulphide was carried out in presence of acetate buffers. The tests by the authors have shown that the reaction of decomposition of the disulphide groups of serum albumin by bi-suphide proceeds slowly at the beginning for accelerating substantially thereupon. The reaction is accompanied by a general denaturization of the structure. The disuphide groups react only slowly in the initial protein. Due to the decomposition of several disulphide compositions in the molecule, a destabilization of the macro-structure takes place. Further the molecule suffers

Card 1/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

On the Properties and the Rôle Played by the Disulphide Groups 20-3-28/46
In Serum Albumin.

a denaturization-convertion due to which a great number of its disulphide groups are decomposed by bisulphide. In order to verify this explanation the authors previously denaturized the urea and left it untouched during 3o minutes at room temperature. After the addition of bisulphide the reaction set in immediately at full maximum velocity. The number of disulphide groups capable of reaction is not constant in serum albumin. It increases by adding of urea, as well as by the use of newly prepared sodium bisulphide. Under favorable conditions 1oo% of the groups enter the reaction. The said reaction is partly reversible. By removing the bisulphide by dialysis or by separating the protein from the composition of reaction, a considerable portion of the disulphide groups is newly formed. 2o to 3o % of the sulphydryl-groups, however, are conserved. The reaction with bisulphide remains irreversible for them. The are incapable of a reaction with their partners, viz. the zystein-sulphon groups. This unequal behavior of the disulphide groups is known for the keratin of the wool. It should be explained by the steric factors. After having used NaCN instead of KCNS as denaturized matter, the authors obtained analogous results. The variation of the macro-structure, however remained irreversible. The egg-albumin exceeds serum albumin clearly by the solidity of the macro-structure , inspite of the

Card 2/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

On the Properties and the Rôle Played by the Disulphide Groups in Serum Albumin. 20-3-28/46

presence of only 1 disulphide-composition compared with 17 in serum albumin. Unexpected results were obtained by a verification of the chemically immune specifity of serum albumin which after decomposition of the disulphide compositions was dialysed. The ring-precipitation-reaction ("reaktsiya kol'tsepretsipitatsii") between this protein and serum of rabbit was positive and is not inferior to that with native protein in respect to intensity.The irreversible conversion did not act on those sections of the macro-structure which determine the antigen properties of serum albumin. Concluding, several statements made by Gorbacheva, Bresler and Frenkel',in a paper which was published short time prior to the impression, of this paper are commented in negative sense. There are 1 figures, 1 table, and 1o references, 5 of which are Slavic.

ASSOCIATION: Institute for Biology of AN Ukrainian SSR (Institut biologii AN USSR)

PRESENTED: June 17, 1957, by A. V. Palladin, Academician

SUBMITTED: June 1, 1957

AVAILABLE: Library of Congress

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

PAVLOVSKIY, V.B.; VINOKUR, D.Ya.; TSIKALOVSKAYA-BEREZHNYAK, A.P.

Improving the assortment of linen fabrics. Tekst.prom.15 no.4: 15-16 Ap '55. (MLRA 8:5)

(Linen)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKANOVSKIY, I.Ya.

Operation of a moisture meter for the paper web. Bum. prom. 33 no. 7:27 Jl '58. (MIRA 11:7)

1. Nachal'nik laboratorii kontrol'no-izmeritel'nykh priborov Uglegorskogo tsellyulozno-bumazhnogo kombinata.
(Paper industry--Equipment and supplies)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKANOVSKIY, I.Ya.

Apparatus for recording the duration of breaks of the paper web. Bum.prom. 34 no.6:25 Je '59. (MIRA 12:10)

1. Nachal'nik laboratorii kontrol'no-izmeritel'nykh priborov Uglegorskogo tsellyulozno-bumazhnogo kombinata.
(Papermaking machinery)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKANOVSKIY, I.Ya.

Redesigned apparatus for measuring the SO^2 concentration sulfite liquor. Bum. prom. 31 no.11:23 N '56. (MLRA 10:2)

1. Nachal'nik laboratorii kontrol'no-izmeritel'nykh proborov Uglegorskogo tsellyulozno-bumazhnogo kombinata.
(Sulfite liquor--Analysis) (Sulfur dioxide)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKAREV, D.A., referent

Process of coking solid carbonaceous materials. Koks i khim. no.3: 58-59 '60. (MIRA 13:6)
(United States--Coal--Carbonization)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKAREV, D.

Unloading of coke from the horizontal coke oven chambers. Koks i khim. no.2:61-62 '64. (MIRA 17:4)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKAREV, D.

Ramming of the charge in coking in the Polish People's Republic. Koks i khim. no.7:60 Jl '61. (MIRA 14:9)
(Poland—Coke industry)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

SPERANSKAYA, G.V.; TSIKAREV, D.A.

Investigating the process of preparing shaped metallurgical coke from Donets Basin gas coal. Trudy IGI 10:60-65 '59. (MIRA 12:12)

(Coke) (Donets Basin--Coal)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKAREV, D.A.

Method of dry coke quenching. Koks i khim. no.2:61 :62.
(MIRA 15:3)

(Germany, West—Coke industry)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

SPERANSKAYA, G.V.; TSIKAREV, D.A.

Investigating the molding under pressure of a plastic coal mass. Trudy IGI 20:92-97 '63. (MIRA 17:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

SEIKAREV, D.S.

Changes in coal volume during its compaction in the plastic state. Trudy IGI 20:134-139 '63. (MIRA 17:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

KAZAKEVICH, N.P.; SHCHUKIN, P.A.; TSIKAREV, D.A.

Effect of cooling coal briquets on the physicomechanical properties of coke. Trudy IGI 20:140-144 '63. (MIRA 17:8)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKAREV, D.A.

Determination of optimum conditions for obtaining molded coke from Donets Basin gas coals. Trudy IGI 12:77-81 '61. (MIRA 14:3)
(Coal—Carbonization)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TIMOFEYEV, A.; TSIKAREV, M.

Using street lighting of a new type in the Urals. Zhil.-kom. khoz. 8 no.12:24 '58. (MIRA 13:1)
(Ural Mountain region--Street lighting)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

KLEYN, A.L.; DANILOV, A.M.; Prinimali uchastiye: KOLYASNIKOV, M.P.; MISBAKHOV, A.K.; ANTROPOVA, N.G.; NESMEYANOV, Ye.V.; KHARITONOV, Yu.A.; TIMONINA, V.M.; LOPTEV, A.A.; TSIKAREV, V.G.

Accelerating the assimilation of lime during slag formation in basic open-hearth furnaces. Stal' 24 no.1:32-34 Ja '64. (MIRA 17:2)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov i Zlatoustovskiy metallurgicheskiy zavod (for Kleyn, Danilov).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

KLEYN, A.L.; TSIKAREV, V.G.

Determining the fusion point of hearth bottom fritting and ramming materials in basic open-hearth furnaces. Ogneupory 28 no.11:525-527 '63. (MIRA 16:12)

1. Ural'skiy nauchno-issledovatel'skiy institut chernykh metallov.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

FEL', V.Ya.; TSIKARISHVILI, T.N.; SHVEMBERGER, I.N.; OLENOV, Yu.M.

Heteroantigens of the hepatocellular tumors in rats. TS tologiia 7 no.4:582-584 Jl-Ag '65. (MIRA 18:9)

1. Laboratoriya genetiki opukhlevykh kletok Instituta tsitologii AN SSSR, Leningrad.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

FEL', V.Ya.; TSIKARISHVILI, T.N.

Characteristics of tumors of connective tissue and muscular origin caused by the intramuscular introduction of 20-methy cholanthrene. Report No.3: Further study of the antigenic properties of rat tumors of muscular origin. Sbor. rab. Inst. tsit. no.7:69-75 '63. (MIRA 17:6)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

FEL', V.Ya.; TSIKARISHVILI, T.N.; SHVEMBERGER, I.N.

Antigenic characteristics of hepatomas produced in rats with N-nitrosodiethylamine. Vop. onk. 10 no.9:66-69 '64. (MIRA 18:4)

1. Iz laboratorii tsitologii zlokachestvennogo rosta (zav. - prof. Yu.M.Olenov) Instituta tsitologii AN SSSR (dir. - chlen-korrespondent AN SSSR A.S.Troshin). Adres avtorov: Leningrad, F-121, prospekt Maklina, 32, Institut tsitologii AN SSSR.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKE, ~~[illegible]~~

HUNGARY/Analytical Chemistry - Analysis of Inorganic Substances E-2

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, No 7637

Author : Tsike, Fodor-Czan'
Inst : Not Given
Title : The Determination of Deuterium Oxide in Water by Freezing Point Measurements

Orig Pub : Magyar Ken. folyoirat, 1957, 63, No 2-3, 95-96

Abstract : The possibility of determining simply and rapidly 2.5-82% of D_2O in water by measuring the freezing point is demonstrated. An ordinary device for the freezing point measurement was used. The volume of the analyzed liquid is 8-10 ml. The accuracy of the temperature measurement is $\pm 0.005^{\circ}$. The purification of the water was done according to the previously described method (Ref. Zh. Khim. 1956, 77494) The mixture D_2O-H_2O behaves like an ideal mixture, the freezing point of which is a linear function of concentration so that repeated work for a standard curve is not required. The results of the determination do not depend on the degree of supercooling

Card : 1/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

HUNGARY/Analytical Chemistry - Analysis of Inorganic Substances E-2

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, No 7637

within 0.8-2.9° limits. The determination errror of D_2O is ±0.13% absolute. The method is especially suitable at high concentrations of D_2O (>10%).

Card : 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.

TSIKERMAN, L., kand.tekhn.nauk.

Insulating the inside of water pipes. Zhil.-kom.khoz. 8 no.1:32-33 '58. (MIRA 11:1)

(Water pipes) (Corrosion and anticorrosives)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKARISHVILI, T.N.; KIBARDIN, S.A.

Nutrient medium for human amnion cell culture on an amino-peptide-2 base. Vop. virus. 8 no.3:365-366 My.-Je'63. (MIRA 16:10)

1. Institut mikrobiologii i epidemiologii imeni Pastera, Leningrad.

(TISSUE CULTURE)

*

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Tsikerman, L. Ya. "A new method for remote-control gaging of liquid consumption," (A consumption meter for water supply plant. Nauch. trudy (Akad. kommunal. khoz-va im. Pamfilova), Issue 1, 1949, p.17-27

SO: U-4934, 29 October 1953, (Letopis 'Zhurnal 'nykh Statey, No. 16, 1949)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. YA.

35435. Avtomaticheskaya Zashchita Napornykh Trubobrovodov. Nauch. Trudy (Akad. Kommunal. Khoz-va IM. Pamfilova), Vyp. 4-5, 1949, s. 38-62.

Letopis' Zhurnal'nykh Statey, Vol. 48, Moskva, 1949.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.A.

"Zashchita Magpornykh Truboprovodov"

M - L Min-vo Kommun Khozyaystva
RSFSR 1950 216 pp.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. YA.

Technology

Bor'ba s korroziei podzemnykh metallicheskikh truboprovodov (Controlling corrosion of subsurface metallic pipelines). Moskva, Gos. i dvo lit-ry po stroitel'stvu i architekture, 1951.p156. 1951.

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

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. Ya.

TSIKERMAN, L.Ya., laureat Stalinskoy premii; YEFREMOV, Ye.A., laureat Stalinskoy premii; BARDIN, Yu.A., laureat Stalinskoy premii, redaktor; NOVOCHADOV, A.G., redaktor.

[Water level measurement for water supply systems] Izmerenie urovnei v sistemakh vodosnabzheniia. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR. 1954. 98 p. (MLRA 7:7)
(Water supply engineering) (Water meters)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.YA.

ZHUKOV, V.I., inzhener; KHRAMIKHIN, F.G., kandidat tekhnicheskikh nauk; TSIKERMAN, L.Ya., kandidat tekhnicheskikh nauk, nauchnyy redaktor; ~~GOLUBENKOVA, L.A.~~, redaktor; PERSON, M.N., tekhnicheskiy redaktor

[Bituminous insulation of underground pipelines] Bitumnaia izoliatsiia podzemnykh truboprovodov. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1954. 119 p. (MLRA 7:9)

(Pipe) (Corrosion and anticorrosives)
(Bitumen)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, Leonid Yakovlevich, kandidat tekhnicheskikh nauk, laureat Stalinskoy premii; POLOZKOV, V.T., redaktor; NOVOCHADOV, A.G., redaktor; PETROVSKAYA, Ye., tekhnicheskiy redaktor.

[Protecting delivery conduits] Zashchita napornykh truboprovodov. Izd. 2-e, dop. i perer. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR, 1954. 213 p.
(Water pipes) (MLRA 8:4)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.

TSIKERMAN, L.; YEFREMOV, Ye.

Instrument for telemetric measurement of water flow. Zhil.-kom.khoz. 4 no.5:26-28 '54. (MLRA 7:9)

1. Nauchnyye sotrudniki Akademii kommunal'nogo khozyaystva im. K.D.Pamfilova.
(Flow meters)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. YA.

BELOUSOV, V.

"Protection of pressure pipelines". L. IA. TSikerman. Reviewed by V. Belousov. Zhil.-kom.khoz. 5 no. 5:30 '55. (MLRA 8:11)
(Pipelines) (TSikerman, L. YA.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.

New method of connecting control terminals to underground metal pipelines. Zhil.-kom.khoz. 5 no.6:30-31 '55. (MIRA 9:1)
(Pipelines)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. YA.

Protection of water pipes subjected to high pressure

TD491.T8 1956

1. Pipe. 2. Water--pipes.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKMRMAN, Leonid Yakovlevich, kandidat tekhnicheskikh nauk; RUBINCHIK, A.M., redaktor; SOKOL'SKIY, I.F., redaktor izdatel'stva; FONBERG, P.I., tekhnicheskiy redaktor

[Calculating supports and anchors for pressure conduits] Raschet uporov i iakorei napornykh truboprovodov. Moskva, Izd-vo Ministerstva kommunal'nogo khoziaistva RSFSR, 1956. 103 p. (MLRA 9:9)
(Water supply engineering)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.; YEFREMOV, Ye.

The TU-1-AKKh water level meter. Zhil.-kom.khoz. 6 no.7: 26 '56. (MLRA 10:2)

(Water meters)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, LA. YA.

AUTHOR: Tsikerman, La. Ya. 93-4-13/20

TITLE: Comparative Evaluation of Gate Valve Drives Used in Automatic Pumping and Compressor Stations (Sravnitel'naya otsenka privodov zadvizhek, primenyayemykh dlya avtomatizatsii nasosnykh i kompressornykh stantsiy)

PERIODICAL: Neftyanoye Khozyaystvo, Nr.4, 1957, pp. 51-55 (USSR)

ABSTRACT: The author discusses the relative merits of gate valves with mechanical drive for automatic pumping and compressor stations. In Table 1 he lists four types of drives opening and closing gate valves, namely - an electric drive, a hydraulic type operating an oil, a hydraulic type operating on water, and a pneumatic (compressed air) drive. These power drives are compared to each other with respect to 16 properties (parameters). The author comments that certain data have not been confirmed by long experience and that for that reason some of them are still of an "orientative" nature. The author states, however, that, in spite of that in general the comparison illustrates the technical and economic

Card 1/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

peculiarities of the electric and hydraulic drives. The hydraulic drive using oil and the pneumatic type are considered to be the best. The electric type is too expensive. Of special importance is the problem whether the dynamic qualities of gate valves are suited to the hydrodynamic characteristics of the unit they serve (pipelines, for example). In order to eliminate hydraulic shock when gate valves are closed or opened, the r.p.m. or the travel speed of their drives should be variable. They should be equipped with reducing gears, chokes or dampers. Subsequently the author develops a formula for the determination of the speed with which gate valves are opened and closed. W = 9.81 ton, where t = time in seconds, c = nondimensional parameters, n = constant of closing and opening the gate valve. Figure 1 shows a graph representing the change of the coefficient n_1 and n_2 depending on the magnitude of the allowable excess over the normal pressure in the pipeline at the time of hydraulic shock. In Figure 2, t is plotted against the velocity of the product's flow in a pipeline and in Figure 3 C is plotted against the inside diameters

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Comparative Evaluation of Gate Valve Drives Used in Automatic Pumping and Compressor Stations. (Cnntd) 93-4-13/20

of pipelines given in mm. Figure 4 shows a wiring diagram of a gate valve with an electric drive and Figure 5 a diagram of a valve with a hydraulic or pneumatic drive. Table 2 shows the fields of application of gate valves with various types of drives. In conclusion the author states that the selection of the drive for mechanized gate valves should be based on economic and technical data as well as on the requirements of the specific conditions under which the gate valves are to operate. Gate valves with electric drives should be used on long trunk pipelines and should be located in special shafts located along the pipelines. They can be operated by remote control from a dispatcher point (by cable or radio). Likewise electric drives should be employed for many units located at large distances from each other and having the same type of gate valves. The most economical drives for groups of gate valves located close to each other are hydraulic drives operating on oil, and pneumatic drives.

Card 3/3

AVAILABLE: Library of Congress.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, I.Ya.; RYABTSEV, N.I.

Semimetal pipes for underground gas pipelines. Gaz.prom.no.8:22-23 Ag '57. (MIRA [illegible])

(Gas pipes)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

YABLONSKIY, V.S.; BOBROVSKIY, S.A.; TSIKERMAN, L.Ya.

Emergency signaling on main pipelines. Neft. khoz. 35 no.7:55-59 Jl '57. (MLRA 10:8)

(Pipelines--Safety appliances)
(Signals and signaling)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

ACCESSION NR: AR3010287 S/0081/63/000/012/0413/0413

AUTHOR: [illegible]

[illegible] corrosion [illegible] steel pipelines

TOPIC TAGS: corrosion, electrocorrosion, steel corrosion, pipeline corrosion, steel pipeline [illegible] electrolysis

TRANSLATION: The danger [illegible] of insulated [illegible]

[illegible] also increases. During an evaluation of the danger of corrosion, [illegible]

[illegible] regulated by the continuously

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

ACCESSION NR: AR3010287

increasing resistance of the corrosion cavity. This increase in resistance of the cavity is determined by [illegible]

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

ACCESSION NR: AP5[illegible] S/[illegible]/0016

AUTHOR: Tsikerman, L, Ya.; Zinevich, A. M.

TITLE: Kinetics of aging of insulation coatings on underground pipelines

SOURCE: Stroitel'stvo truboprovodov, no. 1[illegible], 1964, 12-16

TOPIC TAGS: insulating material, synthetic material, pipe, corrosion protection

ABSTRACT: The aging process of insulation coatings on buried metallic pipes can be characterized by the change in time of its [illegible] resistance, which includes the resistance between the [illegible] three stages: 1) a period of little [illegible] in the resistance immediately [illegible] to [illegible] days; 2) a period of [illegible] time of any insulation can vary over a broad range, depending on the medium surrounding it. General equations are given for computing lifetimes for various

Card 1/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

L 17522-65

ACCESSION NR: AP5002654

anticorrosion coatings. Experimental data were obtained by testing the insulations in an electrolyte. Tests were also made on bituminous coating in various soils. An initial sudden change in resistance is due to deformation of the coating by the soil, natural aging, and imbedding of soil particles in the coating; the larger the particles [illegible] [illegible] equations.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MM, MT

NO REF SOV: 000 OTHER: 000 JPRS

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, Leonid Yakovlevich; YEFREMOV, Yevgeniy Agafonovich; ISEYEVA, R.Kh., red.

[Measuring the levels of fluids and free-flowing materials in municipal services] Izmerenie urovnei zhidkostei i sypuchikh materialov v kommunal'nom khoziaistve. Moskva, Stroiizdat, 1964. 265 p. (MIRA 18:1)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ya.; KERIMOV, A.M.

Experimental check of the engineering method for long-range predictions of corrosion danger to pipelines. Gaz. delo no.9: 28-32 '64. (MIRA 17:11)

1. Moskovskiy avtomobil'no-dorozhnyy institut (for TSikerman).
2. Institut nefti i khimii im. Azizbekova, Baku (for Kerimov).

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ya.; KERIMOV, A.M.

Quantitative evaluation of the factors accelerating and slowing down the electrochemical corrosion of underground pipelines. Gaz. delo no.11:22-26 '64. (MIRA 18:2)

1. Moskovskiy avtomobil'no-dorozhnyy institut i Azerbaydzhanskiy institut nefti i khimii im. Azizbekova.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

L 14066-66 EWT(d)/EWT(1)/EWP(v)/EWP(k)/EWP(h)/EWP(1)/EWA(h) TG

ACC NR: AP6002407 (A) SOURCE CODE: UR/0103/65/026/012/2281/2285

62
B

AUTHOR: Slavin, M. B. (Moscow); Tsikerman, L. Ya. (Moscow)

ORG: None

TITLE: Some unique features of the method of evaluating automatic control system reliability 25

14

SOURCE: Avtomatika i telemekhanika, v. 26, no. 12, 1965, 2281-2285

TOPIC TAGS: automatic control system, system reliability, circuit reliability

ABSTRACT: The authors examine a method of evaluating automatic control system reliability which takes into account the properties of the controlled object. An expression is derived for the determination of error probability in the control of the more common cases of exponential and normal time distribution of the appearance of hidden defects in a system, as well as for a Weibull distribution case. It is assumed that the time of the elimination of the defects as well as of the reasons causing intolerable deviation of the controlled parameters is extremely small compared to the operational period investigated. Oirg. art. has: 5 figures and 12 formulas.

SUB CODE: 09/ SUBM DATE: 24Mar65/ ORIG REF: 011/ OTH REF: 003

Card 1/1 UDC: 62-501.7:621.3.019.3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ya.; ZINEVICH, A.M.

Kinetics of the aging of the protective coatings of underground pipelines. Stroi. truboprov. 9 no.10:12-16 O '64. (MIRA 18:7)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ya., doktor tekhn.nauk; SLAVIN, M.B., kand.tekhn.nauk; MAKSIMOV, M.P., inzh.

Electronic-acoustical methods for finding the locations of water leakages from underground pipelines. Vod. i san. tekh. no.11:1-3 N '64. (MIRA 18:2)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ya.

Methods and instruments for measuring the thickness of anti-corrosion coatings. Zashch. trub. ot kor. no.5:17-26 '62. (MIRA 17:7)

1. Akademiya kommunal'nogo khozyaystva im. K.D. Pamfilova.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ya.; KESEL'MAN, G.S.

Calculating the economic efficiency of anticorrosion methods in gas pipelines. Gaz. delo no.8:35-39 '63. (MIRA 17:3)

1. Akademiya kommunal'nogo khozyaystva im. K.D.Pamfilova i TSentral'nyy nauchno-issledovatel'skiy institut informatsii i tekhniko-ekonomicheskikh issledovaniy po neftyanoy i gazovoy promyshlennosti.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

BARK, S.Ye., red.; VIDGORCHIK, D.Ya., red.; KACHUR, O.Yu., red.; RAVICH, M.B., red.; TSIKERMAN, L.Ya., red.; PANKRATOVA, O.M., ved. red.

[Use of gas in industry] Ispol'zovanie gaza v promyshlennosti. Moskva, 1962. 109 p. (MIRA 16:10)

L. Institut tekhnicheskoy informatsii i ekonomicheskikh issledovaniy po neftyanoy i gazovoy promyshlennosti.
(Gas as fuel)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

ZELICHENOK, Gavriil Grigor'yevich, kand.tekhn.nauk; SHTROM, V.V., inzh., retsenzent; TSIKERMAN, L.Ya., doktor tekhn. nauk, red.; DUBASOV, A.A., red. izd-va; TIKHANOV, A.Ya., tekhn. red.

[Means and layouts for the automation of transportation and storage and technological processes at concrete plants] Sredstva i skhemy avtomatizatsii transportno-skladskikh i tekhnologicheskikh protsessov na betonnykh zavodakh; spravochnoe posobie. Moskva, Mashgiz, 1962. 457 p. (MIRA 15:7)
(Concrete plants) (Automation)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, Leonid Yakovlevich; KRASNOYARSKIY, Vladimir Vasil'yevich; NIKOL'SKIY, K.K., red.; SVYATITSKAYA, K.P., ved. red.; VORONOVA, V.V., tekhn. red.

[Anticorrosive coatings for underground pipelines] Protivokorrozionnye pokrytiia dlia podzemnykh truboprovodov. Moskva, Gospotekhizdat, 1962. 178 p. (MIRA 15:7)
(Pipelines—Corrosion) (Protective coatings)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, Leonid Yakovlevich; NIKOL'SKIY, K.K., nauchnyy red.; SMIRNOVA, A.P., red.izd-va; GOL'BERG, T.M., tekhn.red.

[Corrosion protection of underground metal pipelines] Protivokorrozionnaia izoliatsiia podzemnykh metallicheskikh truboprovodov. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 183 p. (MIRA 14:2)

(Pipelines--Corrosion) (Protective coatings)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

GLAZKOV, Vsevolod Ivanovich, inzh.; DOROSHENKO, Petr Grigor'yevich, inzh.; KOTIK, Viktor Gerasimovich, inzh.; TSIKERMAN, L.Ya., red.; SOLGANIK, G.Ya., vedushchiy red.; MUKHINA, E.A., tekhn. red.

[Protection of main pipelines against underground corrosion] Zashchita magistral'nykh truboprovodov ot podzemnoi korrozii. Moskva, Gos.nauchno-tekhn.izd-vo neft. i gorno-toplivnoi lit-ry, 1960. 244 p. (MIRA 13:7)

(Pipelines--Corrosion)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. Ya., Doc Tech Sci (diss) -- "The theory and practice of protecting underground metal turbo lines with anti-corrosion coverings". Moscow, 1959. 32 pp (Acad Communal Economy im K. D. Pamfilov), 150 copies (KL, No 22, 1959, 113)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

YABLONSKIY, V.S.; TSIKERMAN, L.Ya.; KHIZGILOV, I.Kh.

Extent of the use of pipeline remote control. Neft. khoz. 37 no.1:58-64 Ja '59. (MIRA 12:3)
(Petroleum--Pipelines) (Remote control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ya.; PANOV, Ye.I.; NAUMOV, A.P.; PROFERANSOV, V.P.

Methods and instruments for checking the anticorrosive insulation of underground pipelines. Gaz. prom. no.3:11-15 Mr '57. (MIRA 12:3)

(Pipelines--Equipment and supplies)
(Insulating materials)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

ISIKERMAN L. YA.

18(7);6(7) PHASE I BOOK EXPLOITATION SOV/2246

Zashchita podzemnykh metallicheskikh sooruzheniy ot korrozii; spravochnik. (Protection of Underground Metal Structures From Corrosion; Manual) Moscow, Izd-vo M-va kommunal'nogo khoz. RSFSR, 1959. 743 p. Errata slip inserted. 6,000 copies printed.

Ed.: N.I. Ryabtsev; Ed. of Publishing House: V.G. Akatova: Tech. Ed.: Ye. S. Petrovskaya.

PURPOSE: This collection of articles is intended as a manual on corrosion protection of underground metal structures.

COVERAGE: The book is divided into four parts. The first part gives information on the characteristics of underground metal structures and sources of stray currents. The second part deals with the theory of soil corrosion of metals and the theory of corrosion of metals by stray current. The third part deals with the problem of combating leakage from sources of stray current, methods and devices for investigating corrosion and the fundamentals of planning corrosion prevention. The fourth part explains measures for preventing corrosion of underground metal structures and gives the basic operating principles of equipment involved. No personalities are mentioned. References follow

Card 1/26

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Protection of Underground Metal (Cont.) SOV/2246

I. Classification of commercial pipes (N.I. Ryabtsev, Candidate of Technical Sciences) 10
II. Waterlines (L.Ya. Tsikerman, Candidate of Technical Sciences) 16
III. Heating lines (L. Ya. Tsikerman) 20
IV. Gaslines (N.I. Ryabtsev) 24
1. Main gaslines 24
2. City gaslines 29
V. Joint installation of underground pipelines in one conduit (L. Ya. Tsikerman) 40
VI. Electrical characteristics of metal pipelines (L. Ya. Tsikerman) 41
VII. Underground metal storage tanks (N.I. Ryabtsev) 43
1. Tanks for storage of petroleum products 48
2. Tanks for storing liquid hydrocarbon gases 50

Ch. II. Types and Characteristics of Cables 52
I. Materials used in the manufacture of cable sheaths (A.F. Marchenko) 52

Card 3/26

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Steel electrode 408
Measuring rod with steel electrode 408
Nonpolarizing electrode 409

Bibliography 412

Ch. IX. Design of Protective Measures for Underground Metal Structures 413
1. Sequence of stages in designing anticorrosion protection (L.Ya. Tsikerman, and I.V. Strizhevskiy) 413
2. Order for investigating corrosion (L.Ya. Tsikerman) 416
3. Designing protective measures for cables and pipelines in operation (K.K. Nikol'skiy, and L.D. Razumov) 417
4. Special features of designing protective measures for cables being laid (K.K. Nikol'skiy and L.D. Razumov) 421
Designing protective measures for cables located near d-c electric railways 421
Designing protective measures for cables located near and crossing streetcar tracks 423
5. Designing protective measures against soil corrosion for cable sheathing (A.F. Marchenko) 425

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

4. Shipping insulating pipes 457
5. Lowering pipes into trenches 458
6. Technical documentation 458
7. Safety engineering 458
III. Bituminous coverings used to protect metal cable sheathing from corrosion (A.F. Marchenko) 460
1. Coverings and their composition 460
2. Preparing cable and material for coating 460
3. Covering cable with bitumen 462
4. Covering cable with hot bitumen 462
5. Taping of cables 462
6. Quality control of the coating 463
IV. Control of the quality of insulation (L. Ya. Tsikerman and Ye. I. Panov) 463
1. T-55-type magnetoelectric thickness meter 464
2. Controlling the continuity of coatings 465
Ovchivnikov defectoscope ("Lengaz") 466
DR-12-type traveling detector 467
"Mosgaz", IPIT-type detector of damaged insulation 468
3. Laboratory for quality control of insulation 471

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

4. Cost of bituminous coatings 471
V. Insulating piping with hydrophobic materials (L.Ya. Tsikerman, and Ye. I. Panov) 476
VI. Insulating piping with cement coverings (L.Ya. Tsikerman) 478
VII. Reinforced concrete insulation (L. Ya. Tsikerman) 483
VIII. Pitch and asphalt-pitch insulation (L. Ya. Tsikerman) 486
IX. Polychlorovinyl and vinyl plastic insulation (L. Ya. Tsikerman) 486
X. Design of anticorrosion insulation for underground metal pipelines (L. Ya. Tsikerman) 488
XI. Methods of determining the resistance of insulating coatings (V.V. Krasnoyarskiy, Engineer) 506

Bibliography 517

Ch. XI. Electrical Methods for Protecting Underground Metal Structures From Corrosion 518
I. Theory of electrochemical protection (V.V. Krasnoyarskiy) 518
II. Electric drainage protection 529
1. General premises (B.G. Lortkipanidze, I.V. Strizhevskiy, and D.K. Tomlyanovich) 529

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Protection of Underground Metal (Cont.) SOV/2246

6. Assembly of protection devices [illegible]
7. Controlling the operation of protection devices [illegible]
8. Design of protection installations [illegible]
   Design of a single protector [illegible]
   Design of protection installations 628
   Examples of designs [illegible]
9. Designing protection devices (V.V. Krasnoyarskiy) 633
10. Special features of protecting cables by means of anodic electrodes (protectors) (A.F. Marchenko) [illegible]
   Some experimental data 641
   Assembling and installation of anodic electrodes 646
V. Electrical subdivision of underground metal structures [illegible]
1. General premises (L.Ya. Tsikerman) 650
2. Electrical subdivision of pipelines (L. Ya. Tsikerman) 653
3. Electrical subdivision of cables (M.I. Mikhaylov, K.K. Nikol'skiy, and L.D. Razumov) 670
   Insulating junction boxes on cables 670
   Design of insulating junction boxes 671
   Assembling insulating junction boxes 674
VI. Protection by additional grounding (I.M. Yershov) 680

Card 24/26

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

VII. Combined protection of underground metal structures (K. K. Nikol'skiy, and L.D. Razumov) 687
VIII. Behavior of insulation under conditions of electrochemical protection (V.V. Krasnoyarskiy) 690
Bibliography 701
Ch. XII. Operation of Protective Installations 703
I. Organizing anticorrosion service (L.Ya. Tsikerman and I.V. Strizhevskiy) 703
II. Operation of protective installations (K.K. Nikol'skiy and L.D. Razumov) 706
1. Operation of electrical drainage installations 706
2. Operation of cathodic installations 709
3. Operation of anodic electrodes 711
4. Operation of combined protective installations of underground metal structures 713
III. Control points in underground metal structures (Ye. A. Yefremov, Engineer) 714

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

81791

S/032/60/026/07/44/055
B015/B054

5.5800(B)

AUTHOR: Tsfasman, S. B.

TITLE: Vector Polarograph

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 7, pp. 888 - 890

TEXT: To increase the accuracy and separating capacity of a-c polarography, G. C. Barker (Ref. 1) suggested to feed the cell with a polarizing potential and an alternating potential of a rectangular form. A polarograph basing on this principle is already being manufactured; it offers a sensitivity of 10^{-7} M/l and high resolution. It is shown in the present article that also with sinusoidal polarography it is possible to attain high sensitivity and resolution. The electrolytic and capacity components of the cell current can be separated by the circumstance that the vector of the capacity current is shifted by $\pi/2$ with respect to the feeding potential, and the vector of the electrolytic current possesses a cophasal component (active component of the current). The diagram representing the vector of the active current

Card 1/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Vector Polarograph

81791
S/032/60/026/07/44/055
B015/B054

component as a function of the polarizing potential is designated vector polarogram, the apparatus is termed vector polarograph. The author and I. Ye. Bryksin worked out a scheme of such a polarograph of the type ЦЛА (TsLA) at the laboratory mentioned in the "Association" (Fig. 1). The cell potential can be changed linearly at different velocities in the range of 0.5 - 10 mv/sec in cathode- or anode polarization. Some polarograms for cadmium are given for illustration (Figs. 2, 3). Sensitivity and resolution of the vector polarograph described are equal to the polarograph constructed according to the Barker principle; the vector polarograph, however, has only 12 tubes and is, therefore, much simpler in construction. There are 3 figures and 4 references: 2 Soviet, 1 American, and 1 Dutch.

ASSOCIATION: Tsentral'naya laboratoriya avtomatiki (Central Laboratory of Automation)

Card 2/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIBRIK, A.N.

Physical and technological properties of zircon and other ore sands and tailings from ore dressing. Lit.proizv. no.2:38 F '60. (MIRA 13:5)

(Sand, Foundry)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIFRINOVICH, A.Z., inzh.

Assembling steel domes and arches. Nov.tekh.mont.i spets. rab.v stroi. 22 no.1:13-18 Ja '60. (MIRA 13:5)

1. Trest Stal'montazh.
(Domes) (Arches)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

SHVARTSMAN, B.Ye., redaktor; TSIKHANOVICH, B.G., redaktor; ZABRODINA, A.A., tekhnicheskiy redaktor

[Progressive methods of winding in the construction of electric machinery; from practices of the Kirov "Elektrosila" Plant] Peredovye priemy obmotochnykh rabot v proizvodstve elektricheskikh mashin; iz opyta zavoda "Elektrosila" imeni S.M.Kirova. Moskva, Gos. energet. izd-vo 1954. 60 p. (MLRA 8:3)

(Electric machinery--Design and construction)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L.Ye.; NIKOL'SKIY, K.K.

Determining the amount of contact resistance between steel pipelines and the ground. Gaz. prom. 4 no.3:40-43 Mr '59. (MIRA 12:5)

(Electrolytic corrosion) (Pipelines)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

15(6) PHASE I BOOK EXPLOITATION SOV/2136

Tsikerman, Leonid Yakovlevich

Raschet protivokorrozionnykh izoliruyushchikh obolochek podzemnykh metallicheskikh truboprovodov (Design of Anticorrosive Insulating Coatings of Underground Metal Pipelines) Moscow, Izd-vo M-va kommun. khoz. RSFSR, 1958. 126 p. 2,600 copies printed.

Ed.: V.V. Krasnoyarskiy; Ed. of Publishing House: V.G. Akatova; Tech. Ed.: S.V. Volkov.

PURPOSE: This book is intended for engineering personnel, designers and pipeline workers.

COVERAGE: The book covers problems of protecting pipelines from external corrosion. It also discusses the methods of protecting water lines, gas lines and heating systems. It presents data on working conditions for the insulating layers, underground ducts and other corrosion protection. Adhesion of insulating material

Card 1/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

to pipe is investigated. No personalities are mentioned. There are 37 references, 32 Soviet, 2 German, 2 English and 1 French.

TABLE OF CONTENTS:

Foreword 3

Ch. I. Classification of Methods for Anticorrosive Insulation of Underground Metal Pipelines 5
1. Anticorrosive coatings 7
2. Extra-heavy dielectric insulation 9
3. Ducts 9
4. Special methods for laying pipelines 11
5. Electronic filters 13

Ch. II. Experience in Anticorrosive Insulation of Underground Pipelines 14

Ch. III. Evaluation of the Adhesion of Insulation to Metal Pipes 26

Ch. IV. Contact Resistance of Insulated Pipelines 43

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Design of Anticorrosive Insulating Coatings (Cont.) SOV/2136

Ch. V. Coefficients of Attenuation of Insulated Pipelines 70

Ch. VI. Effect of Electroösmosis on Pipeline Insulation 75

Ch. VII. Insulation Rupture Caused by Hydrogen 81

Ch. VIII. Coefficient of Attenuation as Factor in Selecting Maximum Permissible Protective Potentials 87

Ch. IX. Effect of Electrical Sectioning on the Anticorrosive Coating 91

Ch. X. Experimental Investigation of Insulating Coatings 97

Ch. XI. Mechanical Loads on Insulating Coatings 108

Ch. XII. Calculation Procedure for Anticorrosive Insulation of Underground Metal Pipes 121

Card 3/4

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

Design of Anticorrosive Insulating Coatings (Cont.) SOV/2136

Appendix 126

Bibliography 126

AVAILABLE: Library of Congress

Card 4/4

GO/bg
8-20-59

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

BELODVORSKIY, Yu.; TSIKERMAN, L., starshiy nauchnyy sotrudnik

Classification of anticorrosive pipeline coatings. Zhil.-kom.khoz. 7 no.12:8-9 '57. (MIRA 11:12)

1. Upravlyayushchiy trestom "Mosgaz"(for Belodvorskiy). 2. Akademiya kommunal'nogo khozyaystva imeni K.D. Pamfilova (for TSikerman)
(Corrosion and anticorrosives)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

14(5) PHASE I BOOK EXPLOITATION SOV/1882

Tsikerman, L. Ya.

Vsesoyuznoye soveshchaniye po korrozii i zashchite metallov. 6th, Moscow, 1956

Teoriya i praktika protivokorrozionnoy zashchity podzemnykh sooruzheniy; trudy soveshchaniya (Theory and Application of Anti-corrosion Measures of Subterranean Installations; Transactions of the 6th All-Union Conference on Corrosion and Protection of Metals) Moscow, 1958. 273 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut fizicheskoy khimii. Komissiya po bor'be s korroziyey metallov.

Editorial Board: I.M. Yershov, Candidate of Technical Sciences; A.P. Lunev, Candidate of Chemical Sciences; Yu.N. Mikhaylovskiy, Candidate of Chemical Sciences, I.V. Strizhevskiy, Candidate of Technical Sciences; N.D. Tomashov, Professor, Doctor of Chemical Sciences; and P.V. Shchigolev, Candidate of Chemical

Card 1/7

Sciences; Resp. Ed.: N.D. Tomashov, Professor, Doctor of Chemical Sciences; Ed. of Publishing House: A.L. Bankvitser; Tech Ed.: F.S. Kashina.

PURPOSE: The book is intended for chemists, engineers, and metallurgists concerned with the problem of metal corrosion in underground installations.

COVERAGE: The book contains the papers read at the All-Union Conference of the Committee on the Control of Corrosion of the Academy of Sciences, USSR, held in May, 1956. The following scientific and technical problems discussed at the conference received particular attention: 1) theory of metal corrosion underground (N.D. Tomashov and S.I. Kuznetsov); 2) theory, calculation, and practical application of cathodic and anodic protection of underground installations (A.P. Lunev, I.M. Yershov, V.G. Kotik, V.V. Krasnoyarskiy, and A.N. Tsekun); 3) study of the anticorrosive properties and the improved technology in manufacturing and applying protective coatings to subterranean metallic installations (L. Ya. Tsikerman, V.I. Zhukov, M.D. Dzhafarov, and V.S. Artamonov); 4) prevention of stray current corrosion (I.V. Strizhevskiy, S.K. Tomlyanovich, F.G. Doroshenko, and

Card 2/7

A.I. Gordyukhin; 5) development of methods for determining the corrosion activity of soils (Yu. N. Mikhaylovskiy, N.D. Tomashov, M.S. Trifel', and V.V. Krasnoyarskiy); 6) concrete examples of corrosion and protection of underground installations (S.G. Vedenkin and V.S. Artamonov, V.A. Pritula, and S.S. Popov). There are 161 references, 128 of which are Soviet, 30 English, and 3 German.

TABLE OF CONTENTS:

Tsikerman, L. Ya. Theoretical Principles and Calculations for Anticorrosive Coatings of Underground Metallic Pipelines 91

Zhukov, V.I. Methods of Improving the Insulation of Pipelines 110

Dzhafarov, M.D. Coatings for the Protection of Pipelines Against Corrosion Through Soil Action 119

Artamonov, V.S. Protective Coatings for Underground Railroad Installations

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

8(3)

AUTHORS: Tsikerman, L. Ya., Candidate of Technical Sciences, Nikol'skiy, K. K., Engineer (Moscow)

SOV/105-59-7-12/30

TITLE: A New Method of Measuring Contact Resistances of Insulated Pipelines and Cables (Novyy metod izmereniya perekhodnykh soprotivleniy izolirovannykh truboprovodov i kabeley)

PERIODICAL: Elektrichestvo, 1959, Nr 7, pp 48 - 51 (USSR)

ABSTRACT: The theoretical bases and practical advice for using the new measuring method worked out by the authors, which do not have the disadvantages of the present methods, are given. For reasons of simplification, pipelines are dealt with here, although all conclusions drawn apply likewise to cables. First, a pipeline laid in the ground is investigated. By basing on the assumption that leakance currents are the same at all points of the pipeline, the contact resistance r of the corrosion-protecting coating is determined at an arbitrarily chosen point. For this purpose, formula (17) is deduced for r. Next, the formula (24) is deduced for the contact resistance R_c in a pipeline with a continuous leakage loss and a continuous corrosion-protection insulation. For the purpose of measuring the contact resistance by the method given

Card 1/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

here, a circuit, which is shown by figure 2, is constructed. The contact resistance is determined according to formula (24). Measurement of the contact resistance of pipelines of infinite length is governed by the same rules as the measurement of contact resistances in pipelines of finite length. For this case formula (27) is deduced for R_c. Formulas (24) and (27) contain the leakage coefficient. The method described is applicable both in the case of the building and the operation of subterranean metal installations, and by means of it the contact resistance between the subterranean installation and the ground can be estimated, and the state of insulation of this installation can be judged according to the leakage coefficient. The method is applicable for the measurement of contact resistances both in the case of the lacking and in that of the existence of vagrant currents. It was shown by experimentally carried out checking that the measuring results obtained by the method described are in the middle between those obtained by calculation and those obtained by other means. This proves the correctness of the theory developed in this paper. There are 3 figures and 3 Soviet references.

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

A New Method of Measuring Contact Resistances of Insulated Pipelines and Cables SOV/105-59-7-12/30

SUBMITTED: March 10, 1959

Card 3/3

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

YEFREMOV, Ye.A., nauchnyy sotrudnik; TSIKERMAN, L.Ya., nauchnyy sotrudnik; TUMANOV, P.A.

Automatic and remote control of underground installations in municipal sewers. Gor. khoz. Mosk. 32 no.9:27-31 S '58. (MIRA 11:9)

1.Akademiya kommunal'nogo khozyaystva imeni K.D. Panfilova (for Yefremov, TSikerman). 2.Glavnyy inzhener Kontory ekspluatatsii vodostokov i kollektorov (for Tumanov).
(Sewers, Concrete) (Remote control) (Automatic control)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

BELODVORSKIY, Yu. M.; PROFERANSOV, V.P.; KORIGODSKAYA, B.P.; TSIKERMAN, L.Ya.

Methods for calculating corrosion resistance of insulated pipelines being under the effect of stray currents. Gor. khoz. Mosk. 32 no.10: 28-31 O '58. (MIRA 11:11)

1. Upravlyayushchiy trestom "Mosgaz" (for Belodvorskiy). 2. Trest "Orggas" Moskovskogo kommunal'nogo khozyaystva RSFSR (for Proferansov). 3. Otdel podzemnykh sooruzheniy Arkhitekturno-planirovochnogo upravleniya g. Moskvy (for Korigodskaya). 4. Akademiya kommunal'nogo khozyaystva imeni K.D. Pamfilova (for Tsikerman).
(Electric current, Leakage) (Pipelines)
(Corrosion and anticorrosives)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, Leonid Yakovlevich,; KRASNOYARSKIY, V.V., red.; AKATOVA, V.G., red. izd-va,; VOLKOV, S.V., tekhn. red.

[Calculations for anticorrosive insulating coatings of underground metal pipelines] Raschet protivokorrozionnykh izoliruiushchikh obolochek podzemnykh metallicheskikh truboprovodov. Moskva, Izd-vo M-va kommun. khoz. RSFSR, 1958. 126 p. (MIRA 11:11)

(Pipelines--General)
(Protective coatings)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, Leonid Yakovlevich,; NIKOL'SKIY, Konstantin Konstantinovich,; RAZUMOV, Leonid Davydovich,; MIKHAYLOV, M.I., prof. doktor tekhn. nauk, nauchnyy red.; SMIRNOVA, A.P., red. izd-va,; EL'KINA, E.M., tekhn. red.

[Calculating cathodic protection for pipelines] Raschet katodnoi zashchity truboprovodov. Moskva, Gos. izd-vo lit-ry po stroit., arkhit., i stroit. materialam, 1958. 140 p. (MIRA 11:8)
(Electrolytic corrosion)
(Pipelines--Equipment and supplies)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. Ya.

RYABTSEV, N., kand.tekhn.nauk; TSIKERMAN, L., kand.tekhn.nauk.

Valuable textbook ("City gas systems" by A.I. Gordiukhin. Reviewed by N.Riabtsev, L. TSikerman). Zhil.-kom. khoz. 8 no.2:29 '58. (MIRA 11:2)

(Gas distribution)
(Gordiukhin, A.I.)

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

93-57-7-16/22

TSIKERMAN, L. YA.

AUTHORS: Yablonskiy, V.S.; Bobrovskiy, S.A.; Tsikerman, L. Ya.

TITLE: Warning Signals on Trunk Pipelines (Avariynaya signalizatsiya na magistral'nykh truboprovodakh)

PERIODICAL: Neftyanoye khozyaystvo, 1957, Nr 7, pp 55-59 (USSR)

ABSTRACT: Trunk pipelines in the Soviet Union are currently being fitted with automatic and telemechanical signal devices. In this connection the authors undertook to examine the effectiveness of conventional warning signal systems used on these pipelines. A warning signal system is based on either the pressure or flow principle using flowmeters to record the flow. At centrifugal pump stations, flowmeters are set up at the head of the pipeline to show an increase in the flow in case the pipeline becomes damaged or

Card 1/2

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

leaky. The authors examined the pressure distribution in a leaky pipeline (Fig. 1) and the flow variations in the pipeline sectors between which the leak occured (Fig. 2). This was for pipelines operated either by centrifugal or piston pumps. They arrived at the conclusion that: 1) arbitrary distribution of flowmeters along a pipeline cannot give the desired effect 2) in case of a leak the flow at the end of the pipeline changes more abruptly than at the beginning of the pipeline 3) the steepness of the curve characterizing the pump station substantially affects the rate of change in flow at the end of the pipeline as compared with the beginning of the pipeline 4) flowmeters for the warning signal system will operate more effectively when installed at the end and not at the beginning of a pipeline. There are 2 figures and 1 Soviet reference.

AVAILABLE: Library of Congress

Card 2/2 1. Flowmeters-Application 2. Warning systems

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"

"APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9

TSIKERMAN, L. Ya.

CHESNOKOV, V. F., Inzh. i, VELKIN, Ya. G., Inzh., TSIKERMAN, L. Ya., Laureat Stalinskoi Premii Kandidaty Tekhn. Nauk, MIKAYLOV, V. A., Laureat Stalinskoi Premii Kandidaty Tekhn. Nauk., DIK, V. M., Inzh.

Akademiya Kommunal'nogo Khozyaystva IM. K. D. Pamfilova.

Razrabotka i eksperimental'noye issledovaniye tipovykh ustroystv dlya zashchity napornykh truboprovodov Page 56

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

APPROVED FOR RELEASE: 03/14/2001 CIA-RDP86-00513R001757020019-9"