

L 21418-66 EWT(1)/EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/EWP(k) IJP(c) JD/HM
ACC NR: AP6008811 SOURCE CODE: UR/0135/66/000/003/0002/0006

AUTHOR: Nikiforov, G. D. (Doctor of technical sciences); Boldyrev, A.M.
(Engineer); Bukurov, V. I. (Engineer)

ORG: MATI

TITLE: The mechanism of porosity formation and the effect of some
welding conditions on the porosity in AMg6 alloy welds

SOURCE: Svarochnoye proizvodstvo, no. 3, 1966, 2-6

TOPIC TAGS: aluminum alloy, magnesium containing alloy, alloy welding,
TIG welding, MIG welding, alloy weld, weld porosity, porosity formation

ABSTRACT: A series of experiments has been conducted with TIG and MIG
welding of AMg6 aluminum alloy sheets and plates 2—10 mm thick in order
to determine the effect of some variables of the welding process on weld
porosity. It was found that in welding sections up to 4—5 mm thick,
most of the hydrogen originates from the surface of the base metal. In
welding heavier sections, the surface of the filler material becomes the
main source of hydrogen. Alkaline pickling followed by mechanical
cleaning (with a scraper or wire brush) shortly before welding ensure
satisfactory cleanliness of the base-metal surface. The filler (elec-
trode) wire is best cleaned by electrolytic polishing, after which the

Card 1/2

UDC: 621.791.753.93.019:669.715

L 21418-66

ACC NR: AP6008811

wire can be stored for a long time. Alkaline pickling is satisfactory only if the wire is used immediately after pickling. Otherwise, the wire rapidly absorbs moisture. Vacuum annealing after alkaline pickling brings about only slight improvement. It appears that hydrogen absorbed (as moisture) on the surface of electropolished wire first dissolves in molten metal and evolves in the form of small bubbles during cooling. In the case of wire pickled in alkali, molecular hydrogen does not dissolve, but forms bubbles immediately. Decreasing the specific heat input (by increasing welding speed) reduces the total volume of pores by delaying the evolution of dissolved hydrogen and the coagulation of the small bubbles into big ones. In multilayer welds, however, the bubbles coagulate during the deposition of the next layers, which would cause the tear and microcrack formation. Orig. art. has: 10 figures and 5 tables. [DV]

SUB CODE: 11, 13/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 001
ATD PRESS: 4221

Card 2/2 *OK*

BOLDYREV, A.N.

Psychotherapy in epilepsy. Vop. psikh. no.4:170-177 '60.

(EPILEPSY)

(PSYCHOTHERAPY)

(MIRA 15:2)

LEVSHENKO, V.F., inzh.; BOLDYREV, A.N., inzh.

Assembly and installation of the hydraulic machinery units. Energ.-
stroj. no.23:78-85 '61. (MIRA 15:1)

1. Zamestitel' glavnogo inzhenera stroitel'stva Kremenchugskoy
gidroelektrostantsii (for Levchenko). 2. Nachal'nik uchastka
tresta "Spetsgidroenergomontazh" (for Boldyrev).
(Kremenchug Hydroelectric Power Station--Hydraulic machinery)

PROCESSES AND PROPERTIES INDEX

18

Complex production of aluminum oxide, of soda and of portland cement from nephelite. A. S. Baldyrev. *Tsment* 1938, No. 3, 19-23; *Khim. Zhizn. ZEM. T.* No. 11-12, 115-16(1938).—The nephelite concentrate is mixed with finely ground limestone, and then roasted. The mass obtained is ground and extd. with a hot soln. of Na_2CO_3 . The soln. contg. the aluminates of Na and Ca is freed from Si; after carbonization it yields Al_2O_3 hydrates and solns. contg. Na_2CO_3 and K_2CO_3 . The filtered hydrate of Al_2O_3 is heated, yielding Al_2O_3 . The soda soln. is causticized to NaOH . When limestone is added to the nephelite residue (from the production of Al_2O_3 and soda) a basic raw material for the production of portland cement is obtained. Nephelite cement is mechanically superior to limestone-slag cement and pozzolanic cement. W. R. Henn

ASA-SEA METALLURGICAL LITERATURE CLASSIFICATION

SIGN: 11V-2311A

BOLDYREV, A.S.

Scientific-research work in the service of industry. Leg.prom. 7 no.11:26
N 147. (MLRA 6:11)
(Research, Industrial)

BOLDYREV, A.S.; GASHIMOV, M.A.

Introduce cementless structural elements into large-panel construction. Stroi. mat. 7 no.10:18-23 0 '61. (MIRA 14:10)

1. Zamestitel' predsedatelya Gosstroya RSFSR (for Boldyrev).
2. Glavnyy spetsialist Gosstroya RSFSR (for Gashimov).
(Lightweight concrete)

BUDNIKOV, P.P.; ALEKPEROV, M.S.; BAKLANOV, G.M.; BOLDYREV, A.S.;
BOS'KO, K.D.; VOLZHENSKIY, A.V.; GROKHOTOV, N.V.; ZHUKOV, A.V.;
ZABAR, L.B.; KITAYEV, Ye.N.; KOSHKIN, V.G.; KRUPIN, A.A.;
MUROMSKIY, P.G.; POPOV, A.N.; SUKHOTSKIY, S.F.; USPENSKIY, V.V.;
KHINT, I.A.; SHVAGIREV, M.P.; YUSHKEVICH, M.O.

Conference on increasing the durability of corrugated roofing
sheets. Stroi.mat. 8 no.1:p.3 of cover Ja '62. (MIRA 15:5)
(Roofing)

BOLDYREV, A.S.

Main task for 1965 is the expansion of production, increasing the variety of materials, improving quality, and strengthening the economy. Stroi. mat. 11 no.2:1-3 F '65. (MIRA 18*3)

1. Pervyy zamestitel' predsedatelya Gosudarstvennogo komiteta po promyshlennosti stroitel'nykh materialov.

BOLDYREV, B.

Foreign exchange reform in Afghanistan; a note. Den. 1
kred. 21 no.11:84-87 N '63. (MIRA 17:2)

BOLDYREV, B., inzh. (Novosibirsk)

Measures for improving the operation of automatic coupling
mechanisms. Zhel.dor.transp. 36 no.6:80-81 Je '55.
(MIRA 12:4)

(Car couplings)

BOLDYREV, B.; SKACHKO, A.

"Money, credit and finances of the European people's democracies"
by V.P.Komissarov, A.N.Popov. Reviewed by B. Boldyrev, A.Skachko.
Den.i kred. 19 no.10:86-90 0 '61. (MIRA 14:10)
(Europe, Eastern--Finance) (Komissarov, V.P.)
(Popov, A.N.)

BOLDYREV, B.B.

Radioisotope devices used in painting in an electrostatic field.
Mashinostroitel' no.6:39 Je '65.

(MIRA 18:7)

CA

17

Significance of structure and polarity of sulfanilamides in their bacteriostatic activity. V. Connection between structure and bacteriostatic activity of sulfanilamide compounds. B. G. Bolyayev and I. Ya. Postovskii (Ural. Politekh. Inst. im. S. M. Kirova). *Zhur. Obshchei Khim.* (J. Gen. Chem.) 20, 636-43 (1950); cf. *C.A.* 41, 3009e. — The sulfanilamide activity is detd. not only by the specific polarity of the compd., represented largely by the *p*-quinoid resonant structures, but also by the mol. dimensions and shape in comparison with the vitamin with which antagonism exists. Naphthalene analogs of common sulfanilamides were prepd.; these were inactive *in vivo* or *in vitro*, thus substantiating the contention above. Their thermodynamic consts. were detd., including: heats of combustion, heats of formation from gaseous elements, and energies of *p*-links (from comparative data on the sulfanilamides, their deaminated analogs, and naphthalenesulfonamide). The summary of data follows. Compounds of type 1-(*R'*NHSO₂)(NH*R''*)C₆H₄: *R'* = H, *R''* = Ac, m. 247-8°; *R'* = H, *R''* = H, m. 212-13°, heat of combustion 1300.6 kcal./mole, heat of formation 77.8 kcal./mole, energy of formation 2139.3 kcal./mole, *p*-link energy 2.3 kcal./mole; *R'* = 2-pyridyl, *R''* = Ac, m. 275-6°; *R'* = 2-pyridyl, *R''* = H, m. 231-3°, 182.9, 50.3, 2976.8, 13.8; *R'* = 2-thiazolyl, *R''* = Ac, m. 273-4°; *R'* = 2-thiazolyl, *R''* = H, m. 250-2°, —, —, —, —; *R'* = 1-(4-sulfonamido)naphthyl, *R''* = Ac, m. 252-3°; *R'* = 1-(4-sulfonamido)naphthyl, *R''* = H, m. 211°, 2492.4, 161.0, 4045.9, 28.6. Comps. of type 1-RNH-*i*: C₁₀H₇: *R* = H, m. 149-50°, 1270.8, 73.4, 1998.5, —; *R* = 2-pyridyl, m. 214-15°, 1884.0, 34.6, 2823.6, —; *R* = 1-(4-sulfonamido)naphthyl, m. 220-30°, 2486.8, 131.2, 3878.8, —. Comparison of energy of *p*-links in sulfanilamides and their naphthyl analogs gives, resp., the following values in kcal./mole: sulfanilamide 3.2, naphthyl analog 2.8, sulfapyridine 15.2, its naphthyl analog 13.8.

G. M. Koslanoff

CA

17

The significance of the structure and polarity of sulfanilamides for their bacteriostatic activity. V. The relation between the structure and the bacteriostatic activity of sulfanilamide compounds. B. G. Boldyrev and I. Ya. Postovskii. *J. Gen. Chem. U.S.S.R.* 20: 975-81(1950) (Engl. translation).—*Seq. C.A.* 44, 9631f. R. M. S

Some sulfonamides of the naphthalene series. B. G. Baidyev (S. M. Kirov Ural Polytech. Inst., Sverdlovsk), *Sbornik Statek (Otschet Khim., Akad. Nauk S.S.S.R. 1, 516-25 (1953))*.—It was shown by expt. that there is no correlation between the characteristic physiological activity of the sulfonamides and the nonadditivity of their energies of formation (cf. Pushkareva and Kokoshko, *C.A. 41, 3969e*). Condensation of the appropriate sulfonyl chlorides with naphthylamide or sulfanilamide in pyridine, followed by deacetylation in 2:1 aq. EtOH-HCl, gave: 1,1-AcNH-C₁₀H₇-SO₂NH-C₁₀H₇-SO₂NH-p, m. 216-7°; 1,1-H₂N-C₁₀H₇-SO₂NH-C₁₀H₇-SO₂NH₂ (I), m. 218°; p-AcNH-C₁₀H₇-SO₂NH-C₁₀H₇-SO₂NH₂-1,1, m. 250-2°; p-H₂N analog (II), m. 215-18°. The deviation of exptl. heat of formation from the calcd. value for this group was 7.4 kcal./mole for the 1st, and 3.5 kcal./mole for the 2nd sulfonamide; none were physiol. active. Similarly all the following derivs. of naphthalene were physiol. inactive although considerable "excess" of heat of formation is found in this series (up to 68 kcal./mole). Amidation of 1-acetamidonaphthalene-5-sulfonyl chloride followed by hydrolysis with HCl (d. 1.03) gave, resp., 1-acetamidonaphthalene-5-sulfonamide, m. 268-9° [cf. Ekholm, *Ber. 23, 1118 (1900)*], and the 1-amino analog,

m. 265-9°. Similarly were obtained the following 1,5-RNH₂-C₁₀H₇-SO₂NHR' (R and R' shown): Ac, 2-pyridyl, m. 252-3°; H, 2-pyridyl (III), m. 213-14°; Ac, 2-thiazolyl, m. 253-4°; H, 2-thiazolyl, m. 201-3°. Also were prepd. 1,4-Ph^{SO}₂NH-C₁₀H₇-SO₂NH₂ (IV), m. 220-1°, and 1-C₁₀H₇-SO₂NH-C₁₀H₇-SO₂NH₂-p (V), m. 248-9°. 2,6-RNH-C₁₀H₇-SO₂NH₂ (R and R' shown): Ac, H, m. 240°; H, H (VI), m. 235°; Ac, 2-pyridyl, m. 244-5°; H, 2-pyridyl, m. 233°. Exptl. heats of combustion (cal./g.): V, 5534; I, 5379; IV, 5519; II, 5375; 1-C₁₀H₇-SO₂NH₂, 6053; 1,5-H₂NC₁₀H₇-SO₂NH₂, 5668; 1-C₁₀H₇-SO₂NH-C₁₀H₇-N-2, 6572; III, 6120; 2-C₁₀H₇-SO₂NH₂, 6011; and VI, 5719. G. M. Kosolapoff.

BOLDYREV, B. G.

On Some Sulfamides of the Naphthalene Series. page 616. ^{statey} Sbornik/po obshechey
khimi (Collection of Papers on General Chemistry), Vol 1, Moscow-Leningrad,
1953, pages 762-766.

Laboratory of Organic Chemistry, Ural Polytechnic Inst imeni S. M. Kirov

✓ Synthesis and some properties of analogs of pseudo-
allisine. B. G. Boldyrev and A. T. Zakharchuk (Poly-
tech. Inst., Lvov). *Doklady Akad. Nauk S.S.S.R.* 94,
877-9 (1954).—Condensation of $\text{CH}_2\text{CHCH}_2\text{SO}_2\text{SK}$ with
RBr in aq. Me_2CO at room temp. gave a 70% yield with
allyl bromide only; other alkyl bromides gave only 5-6%
yields and the products were identified only by S analysis.
The products were yellow liquids with a strong garlic or
onion odor and could not be distd. even at 1-2 mm. Treat-
ment of MeSO_2Cl with KSH gave MeSO_2SK , m. $201-2^\circ$,
which was then treated with RBr yielding the following
esters: MeSO_2SEt , $b_p: 95-6^\circ$, $d_4^{20} 1.2531$, $n_D^{20} 1.5039$,
53.8%; Pr analog , $b_p: 106-7^\circ$, $d_4^{20} 1.1945$, $n_D^{20} 1.4988$,
58.8%; iso-Pr analog , $b_p: 91-2^\circ$, $d_4^{20} 1.1867$, $n_D^{20} 1.5038$,
18%. CH_2CHCH_2 analog, $b_p: 107-8^\circ$, $d_4^{20} 1.2417$, n_D^{20}
1.5216, 61%; Bu analog , $b_p: 116-17^\circ$, $d_4^{20} 1.1510$, n_D^{20}
1.4955, 37.5%; iso-Bu analog , $b_p: 101-5^\circ$, $d_4^{20} 1.1492$, n_D^{20}
1.4985, 18.7% yield. These products were colorless with a
garlic or onion odor and are quite stable in storage at room
temp.
G. M. Kosolapoff

1
62

Ch Synthesis of 2,8-dichloroadenine. H. G. Boldyrev and R. G. Blakitra (Polytech. Inst., Leningrad). *Zh. Priklad. Khim.* 28, 422-7 (1955); *J. Appl. Chem. U.S.S.R.* 28, 399-404 (1955) (Engl. translation).—The best yield of 2,6-dichloro-8-hydroxypurine (I) from di-K urate and POCl₃ is obtained at 165° in 8 hrs. with 1:3 molar ratio, resp., of the reactants. Yields of 51-53% are obtained under these conditions. I with POCl₃ in sealed tube yields 2,6,8-trichloropurine (II), the best results (87% yield) being attained with 100-fold molar proportion of POCl₃ at 165°; the excess POCl₃ must be completely distd. before treatment with H₂O to prevent partial hydrolysis of the product. Pure II m. 180-1°. II with 10-fold excess of 25% NH₄OH in sealed tube 6 hrs. at 100° gave 95% crude 2,8-dichloroadenine; 90% pure product is obtained after treatment with C and crystn. from EtOH.
G. M. Kosolapoff

① *Handwritten initials*

Lab. of Technol. of Organic Synthesis

BOLDYREV, B.G.

The priority of Russian scientists in syntheses with
metalorganic compounds of the RM₂I type. Nauch. zap. LPI
no.29:3-6 '55.

(MLBA 9:10)

(Organometallic compounds--History)

BOLDYREV, B.G.; IVAKINA, M.A.

Some analogues of pseudoallicin ($C_6H_{10}O_2S_2$). Nauch. zap.
LPI no.29:109-120 '55. (MLRA 9:10)

(Allicin) (Antibiotics)

5
Fungicide, bactericide, and growth stimulant for agricultural crops. B. G. Beldyrev, E. E. Altszman, K. I. Bel'tyukova, S. I. Zhepukha, and V. G. Drobov'ko. U.S.S.R. 103,382, Aug. 25, 1953. Esters of thiosulfonic acids of the general formula R-SO₂-S-R' are claimed.
M. Hersh

Chem Syntheses and properties of some alkyl esters of ethane-¹
thiosulfonic acid. B. G. Boldyrev and A. K. Litkovets. ²
Proc. Acad. Sci. U.S.S.R., Ser. Chem. 107, 185-7 (1956)
(Engl. translation).—See *C.A.* 50, 14597d. B. M. R.

M

DURDITHEV, D. C.

Thiosulfonic acids. I. Syntheses and antibacterial properties of some alkyl esters of propanethiosulfonic acid and butanethiosulfonic acid. B. G. Boldyrev, A. K. Litkovets, and T. A. Trofimova (POIYESTH. INM., Lvov). *Zhur. Obshch. Khim.* 26, 3300-5 (1950); cf. *C.A.* 50, 14507d. — Treatment of RSO_2Cl with an equimolar amt. of aq. KSH with cooling, heating 0.5 hr., treating with C and evap. to dryness gave after the extrn. of the residue with BuOH , the following salts: PrSO_2SK , m. 135-6°; BuSO_2SK , m. 145° (from dry EtOH). The latter was quite hygroscopic. The salts heated with alkyl halides 4-20 hrs. for normal radicals or 120-60 hrs. for branched radicals, in aq. Me_2CO gave PrSO_2SR (R , b.p., d_4^{20} , n_D^{20} , and % yield given): Et , b.p., 100-2°, d_4^{20} 1.1557, n_D^{20} 1.4955, 57; Pr , b.p., 112-14°, 1.1287, 1.4935, 49.7; *iso-Pr*, b.p., 97-2°, 1.1189, 1.4904, 50; CH_3CH_2 , b.p., 100-8°, 1.1359, 1.5021, 71.4; Bu , b.p., 117°, 1.0380, 1.4824, 55; *iso-Bu*, b.p., 114-15°, 1.0049, 1.4896, 41.7. BuSO_2SR : Et , b.p., 112-3°, 1.1088, 1.4877, 70; Pr , b.p., 128-9°, 1.0914, 1.4889, 48; *iso-Pr*, b.p., 121-2°, 1.0931, 1.4900, 38.2; CH_3CH_2 , b.p., 127°, 1.0923, 1.4889, 83; Bu , b.p., 134-5°, 1.0613, 1.4822, 65; *iso-Bu*, b.p., 128°, 1.0709, 1.4887, 40. The products show antibacterial action against the same bacteria as do the esters of the Me and Et compds. (cf. Cavallito, *ibid.*, *C.A.* 44, 1011k), with the *iso-Pr* and the *iso-Bu* esters being somewhat more active than other members.

G. M. Kosolapoff

BOLDYREV, B.G.; LITKOVETS, A.K.

Syntheses and properties of certain alkyl ethers of ethane thiosulphonic acid. Dokl.AN SSSR 107 no.5:697-699 Ap '56. (MLRA 9:8)

1. L'vovskiy politekhnicheskoy institut. Predstavleno akademikom I.N. Nazarovym.

(Sulfonic acids)

tr: 4E4j/4E3d/4E2c(j)

7
 thiosulfonic acids. II. Some alkyl esters of 2-propane-
 thiosulfonic acid and 2-methyl-1-propaneithiosulfonic acid.
 B. G. Baidyev and T. A. Tikhonova (Polytech. Inst.
 Irkutsk; *Zhur. Obshchei Khim.* 27, 1900-11(1957); *cf. C.A.*
 51, 9473c. Reaction of RSO₂Cl with aq. KSH followed by
 evapn. and extrn. with BuOH gave 50% iso-PrSO₂SK, plates,
 and 62% iso-BuSO₂SK, plates. These were heated 10-20
 hrs. with s-alkyl halides, or 70-120 hrs. for isodrivs. in aq.
 Me₂CO to yield the following esters (R given): iso-Pr-
 SO₂SR 58.5%, Et, b_p: 100-1°, d₄: 1.1597, n_D: 1.5215;
 54% Pr, b_p: 108-9°, 1.1272, 1.4954; 34% iso-Pr, b_p:
 90-7°, 1.1193, 1.4942; 62.3% CH₃CH:CH₂, b_p: 102-3°,
 1.1550, 1.5030; 61.3% Bu, b_p: 112-13°, 1.0888, 1.4853;
 31.8% iso-Bu, b_p: 104-5°, 1.0978, 1.4920. For iso-
 BuSO₂SR: Et, 70%, b_p: 108-9°, 1.1183, 1.4908; 62.5%
 Pr, b_p: 115-6°, 1.0834, 1.4879; 39.1% iso-Pr, b_p: 104-
 5°, 1.0954, 1.4889; 72.3% CH₃CH:CH₂, b_p: 110-11°,
 1.1187, 1.5039; 54.6% Bu, b_p: 123-4°, 1.0589, 1.4821;
 30.2% iso-Bu, b_p: 115-20°, 1.0669, 1.4858. The esters
 were active against *Staphylococcus aureus*, *Escherichia coli*,
Mycobacterium B₁, and species of *Penicillium*, *Aspergillus*,
Fusarium, *Rhizopus*, and *Mucor* in dilns. of generally
 1:10,000 to 1:25,000. Most active (in 0.1 of the above
 range of concns.) were iso-PrSO₂SCHMe₃ and iso-PrSO₂S-
 CH₂CHMe₃. G. M. Keselapoff

4
 2 may
 3
 //

em

20-5-27/60

AUTHOR BOLDYREV , B.G.,GINZBURG,T.S.,DRABKINA,R.O.

TITLE On the Antituberculous Activity of Thiosulfonic Acid Ethers.
(O protivotuberkuleznoy aktivnosti efirov tiosul'fokislot-Russian)

PERIODICAL Doklady Akademii Nauk SSSR, 1957, Vol 114, Nr 5, pp 1014-1016(U.S.S.R.)

ABSTRACT This activity of I thiosulfonic acid ethers has hitherto not been investigated at all. Only in one instance did the bacteriostatic action of II ethanethiosulfonic acid on *Mycobacterium tuberculosis* became known. In view of the fact that the structure of the IV-compounds is expressed by their anti-tuberculous properties, the authors hoped to detect substances with such properties among the ethers of I thiosulfonic acids. Alkyl ethers of alkane thiosulfonic acids. Closed to the allicin-analogues according to their structure are the alkyl-ethers of V alkane thiosulfonic acids, which were already earlier synthesized by an author. These substances have a broad antibacterial action spectrum and exhibit in vitro a bacteriostatic influence on gram-positive, gram-negative and acid-resistant bacteria, on various fungi, protozoa, etc. Tests in vitro. All of the ethers tested showed a tuberculostatic effect. All ethers of methane thiosulfonic acid and propane thiosulfonic acid-2 fully retain their activity even in the presence of serum, in contrast to the alkylethers V of the other alkane thiosulfonic acids. Tests in vivo. The preparations found to be most active in vitro were tested on white mice for their toxicity and their deadly action determined in various doses. The least toxic substances among them were tested for clari-

Card 1/3

20-5-27/60

On the Antituberculous Activity of Thiosulfonic Acid Ethers.

fication of their therapeutical effect on experimental tuberculosis. All ethers examined, also those with a maximum activity in vitro, were ineffective on that occasion. In some instances this may be explained by their ability to inactivate themselves abruptly in animal organisms, in other instances it may be explained by their elevated toxicity which prohibits its application in large doses.

Alkyl ethers of benzene thiosulfonic acid and their derivatives. The VI ethers have the same effect on the same types of bacteria as those mentioned above. Their activity, however, is weaker than that of the V-compounds. Tests in vitro. The introduction of substituents in a p-position, also little changes the activity; chlorine, and the methoxy-group slightly raise it. The nitro group has no noticeable effect, the acetylamine group slightly reduces it; the deacylation of the alkyl ethers of acetylthiosulfonic acid increases the activity of these compounds. The mutual position of the substituents in the benzene nucleus apparently is insignificant for the tubercle-killing properties. Here, too, an inactivation by serum takes place. However, no established connection between structure and inactivation could be found. Tests in vivo. Three VI alkyl ethers with an activity of ca. 1 mg, which cannot be inactivated by serum, were tested. No Therapeutical effect was noticed. Thus the tested substances have a tubercle -static activity in vivo, but are ineffective in the curing

Card 2/3

20-5-27/60

On the Antituberculous Activity of Thiosulfonic Acid
Ethers.

of tuberculosis on living animals.
(4 Slavic references)

ASSOCIATION L'vov Polytechnical Institute and Ukrainian Scientific Research
Institute for Tuberculosis.
PRESENTED BY HAZAROV I.N., Member of the Academy.
SUBMITTED 25.2.1957
AVAILABLE Library of Congress.
Card 3/3

NOI TY I E R
AUTHORS: Bel'tyukova, K. I., and Boldyrev, B. G.

20-3-40/52

TITLE: Ethers of Thiosulfoacids as New Means of Combating Bacterial Plant Diseases (Efiry tiosul'fokislot - novyye sredstva dlya bor'by s bakterial'nymi boleznyami rasteniy).

PERIODICAL: Doklady AN SSSR, 1957, Vol. 117, Nr 3, pp. 500-503 (USSR)

ABSTRACT: The second author undertook an extensive synthetical work for the research of new bactericidal action based on the efficiency of two others: "Pseudoallizin" and ethane-thiosulphonic acid-ethyl ether against bacteria (reference 4). According to their structure the alkyl ethers (VII, VIII) of the alkan- and aren-thiosulphonic acids are closest to the allizin. The second author has synthesized 80 such alkyl ethers (reference 4). Their antibacterial properties proved to be versatile: They have a bacteriostatic effect (as required fungistatic and protistozid) upon gram-positive and -negative as well as acid proof bacteria, various fungi, protozoae and others. Their antibacterial properties vary within relatively narrow limits according to their structure. Most active are the isopropyl- and isobutyl ethers of the cited acids. Present work was carried out in order to find out about the effect of the ethers

Card 1/4

Ethers of Thiosulfoacids as New Means of Combating
Bacterial Plant Diseases

20-3-40/52

VII and VIII upon various kinds of bacteria. 40 different strains of 22 phytopathogene bacteria (Tab. 1) were examined. It was established that all ethers VII and VIII act bacteriostatic upon all strains, and only rarely show no bacteria-killing effect. Alkyl ethers VII of the cited acids are most effective against the bactericidal action of plant diseases of the species Xanthomonas. A certain tendency of an increase of the resistance against these substances showed the phylobacteria of the species Corynebacterium, and more resistant are the kinds of the species Pseudomonas and Erwinia (Fig. 1). Some ethers, nevertheless, were effective against most resistant bacteria also in dilutions of 1 : 200 000 - 1 : 500 000. Alkyl ethers (VIII) of the benzene-thiosulphonic acid are as much active against Xanthomonas, as the ethers VII, but lacks behind as regards the effect upon Corynebacterium and even more so as regards Pseudomonas and Erwinia. Some alkyl ethers VIII of the same thiosulphonic acid were highly active against Xanthomonas and were effective even in a dilution of 1 : 1000 000, so that they exceeded all other ethers. The introduction of

Card 2/4

Ethers of Thiosulfoacids as New Means of Combating
Bacterial Plant Diseases

20-3-40/52

X-substituents into the p-position to the thio-ether-group of the benzene-thiosulphonic acid lessens the activity; to a small extent this holds for the groups: -OCH₃, -Cl and NH₂, to a larger extent for the groups: -NO₂ and NHCOOCH₃.

The discussed preparations are harmless under certain conditions and at adequate application for the tissues of seeds of more-years old leguminous green fodder, of kinds of vegetables and corn. On the contrary, they improved the germinating capacity, raised the weight and the size of the germs, and reduced the number of infected germs. The results of the experiments on fields with the treatment of seeds of various agriculturally useful plants (cabbage, lucern, tomatos) are summarized in the tables 3 - 5. There are 8 figures, 5 tables, and 7 references, 6 of which are Slavic.

ASSOCIATION: Institute for Microbiology of the AN of the Ukrainian SSR.
L'vov Polytechnical Institute (Institut mikrobiologii
Akademii nauk USSR, L'vovskiy politekhnicheskij institut).

Card 3/4

Ethers of Thiosulfoacids as ^{new} New Means of Combating
Bacterial Plant Diseases

20-3-40/52

PRESENTED: January 2, 1957, by S. I. Vol'fkovich, Academician

SUBMITTED: October 27, 1956

AVAILABLE: Library of Congress

Card 4/4

AUTHORS: Boldyrev, B. G., Kofman, Yu. I. 79-28 -3-44/61

TITLE: Investigation Within the Field of Thiosulfo Acid (Issledovan-
iye v oblasti tiusul'fokislot). III. Alkyl Esters of Phenyl-
methanethiosulfo Acid and Its Antiseptic Properties (III.
Alkilefirny fenilmetantiosul'fokisloty i ikh protivobakterial'-
nyye svoystva)

PERIODICAL: Zhurnal Obshchey Khimii, 1958, Vol. 28, Nr 3, pp. 768-769
(USSR)

ABSTRACT: In earlier works the authors observed in the investigation of
alkyl esters (I) of alkanethiosulfo acids that the antiseptic
activity of these compounds does not depend on the size and
the structure of the radical at the oxidized sulfur, and that
the activity practically remains the same for the esters of
thiosulfo acids when they are of normal structure and when the
number of carbon atoms does not exceed four. For this reason
the authors decided to synthesize and investigate more closely
the alkyl esters (II) of phenylmethanethiosulfo acid in order
to check with this example how the change of the char-

Card 1/3

Investigation Within the Field of Thiosulfo Acid. III. 79-28 -3-44/61
Alkyl Esters of Phenylmethanethiosulfo Acid and Its Antiseptic Properties

acter of the radical of thiosulfo acids acts on the anti-septic activity of the esters. The synthesis of the alkyl-phenylmethanethiosulfonates was carried out according to the earlier described method (reference 1); the obtained esters are listed in the table. They are colorless, crystalline compounds with weak but specific smell, and they are easily soluble in alcohol, ether, acetone and other organic solvents but difficultly soluble in water. The investigation of the antiseptic properties of these esters (II) which was carried out by the Institute for Microbiology of the AS USSR showed that the activity of these compounds compared with the Gram positive, Gram negative and acid-proof bacteria, is smaller than with the alkyl esters of the alkanethiosulfo acids with a number of carbon atoms from 1-4; at the same time the activity of the esters increases considerably compared with the various fungi. Thus the present work proved that the antiseptic properties of thiosulfo acid not only depend on the character of the radicals bound with sulfide sulfur but also on the structure of the initial products, the thiosulfo acids. There are 1 table and 4 references, 2 of which are Soviet.

Card 2/3

Investigation Within the Field of Thiosulfo Acid. III. 79-28 3-44/61
Alkyl Esters of Phenylmethanethiosulfo Acid and Its Antiseptic Properties

ASSOCIATION: L'vovskiy politechnicheskiy institut (Polytechnical Institute,
L'vov)

SUBMITTED: February 4, 1957

Card 3/3

AUTHORS: Boldyrev, B. G., Trofimova, T. A. SOV/79-28-7-47/64

TITLE: Investigations in the Field of Thiosulfo Acids (Issledovaniye v oblasti tiosul'fo'kislot) IV. On the Reaction Mechanism of the Formation of Thiosulfonates (IV. O mekhanizme reaktsii obrazovaniya tiosul'fonatov)

PERIODICAL: Zhurnal obshechey khimii, 1958, Vol. 28, Nr 7, pp. 1940 - 1944 (USSR)

ABSTRACT: Alkane- and arene-thiosulfoacids can be obtained in the form of salts RSO_2SMe (I) by the action of the halogen anhydrides of sulfo acids on aqueous solutions of potassium sulfide (Refs 1-4). In this reaction process elementary sulfur separates. It is assumed that (Refs 2,3) the thiosulfonates (Formula I) are formed according to the general schemes (1) and (2):
 $RSO_2Cl + K_2S \longrightarrow RSO_2K + KCl + S$ (1), $RSO_2K + S \longrightarrow RSO_2SK$ (2). It was therefore of interest to the authors to find out whether the earlier mentioned conceptions concerning the formation of thiosulfonates were correct, this the more since just that way, ~~etc.~~ by the reaction of sulfochloride with potassium bisulfide, 20

Card 1/3

Investigations in the Field of Thiosulfo Acids. IV. SOV/79-28-7-47/64
On the Reaction Mechanism of the Formation of Thiosulfonates

salts of various thiosulfo acids had been synthesized already earlier (Refs 5-9). In order to prove the possibility of a binding of thiosulfates according to the reaction (2) the potassium salt of the acetyl thiosulfanilic acid was produced (II). Following the mentioned reaction scheme the authors realized, on the basis of this compound, the synthesis of the thiosulfo salts of halogen anhydrides of the sulfo acids and alkali bisulfides through the intermediata stage of formation of sulfinic acids. Thus it was shown that the synthesis of thiosulfonates from the salts of sulfinic acids and elementary sulfur is possible. There are 12 references, 9 of which are Soviet.

ASSOCIATION: L'vovskiy politekhnicheskij institut (L'vov Polytechnical Institute)

SUBMITTED: June 5, 1957

Card 2/3

Investigations in the Field of Thiosulfo Acids. IV. SOV/79-28-7-47/64
On the Reaction Mechanism of the Formation of Thiosulfonates

1. Thiosulfonates--Synthesis
2. Halogen anhydrides--Chemical reactions
3. Potassium sulfide--Chemical reactions

Card 3/3

SOV/20-121-5-43/50

AUTHORS:

Boldyrev, B. G., Drobot'ko, V. G., Ayzeman, B. Ye.,
Zelepukha, S. I.

TITLE:

On the Antimicrobial Activity of Alkyl Esters of Thiosulfuric Acids (O protivomikrobnoy aktivnosti alkilefirov tio-sul'fokislot)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 5, pp. 924-927 (USSR)

ABSTRACT:

The above mentioned properties of the esters (I) of the thio-sulfuric acids were only recently properly investigated for the first time. According to the authors the synthesis of these esters and the study of their bactericidal properties is promising (Refs 1, 2). This is supposed to be the way to develop new active medicaments. First of all, alkyl esters (V) of alkane-thiosulfuric acids which correspond best to the natural antibioticum "Allizyl" were synthesized by the first author (Ref 3). The antimicrobial activity was studied on Staphylococcus aureus, B. coli, Mycobacterium B₅, and on various species of fungi, also on water infusoria, on the dysentery bacterium, on blight spores, and on others. The activity of the

Card 1/3

SOV/20-121-5-43/50

On the Antimicrobial Activity of Alkyl Esters of Thiosulfuric Acids

alkyl ester (V), treated in this paper, of the alkane-thio-sulfuric acids changes according to their structure within a rather limited range. This applies also for the fungistatic activity: The esters of phenyl-methane-thiosulfuric acid and of the 2-methyl-propane-thiosulfuric acid-1 are the most active of all compounds (V) examined. The accumulation of thio-ester groups does not lead to a positive result. The attachment of a chlorine atom to the p-position with respect to the thio-ester group scarcely modifies the activity, the attachment of the CH_2CONH -group, however, decreases it. The esters of the thiosulfanilic acid exceed most of the alkyl esters (V) in their antibacterial and fungicidal properties. The obtained results prove, that the structure and the size of the molecules of the esters in question are not crucial criteria for the rate of antibacterial activity. Therefore, investigations in this direction are to be carried on. There are 1 table and 4 references, 3 of which are Soviet.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (Polytechnical Institute
L'vov) Institut mikrobiologii im. D. K. Zabolotnogo Akademii
Card 2/3 nauk USSR (Institute of Microbiology imeni D. K. Zabolotniy,

SOV/20-121-5-43/50

On the Antimicrobial Activity of Alkyl Esters of Thiosulfuric Acids

Academy of Sciences, Ukrainian SSR)

PRESENTED: March 20, 1958, by V. N. Shaposhnikov, Member, Academy of Sciences, USSR

SUBMITTED: March 20, 1958

Card 3/3

BOLDYREV, B.G.; TROFIKOVA, T.A.

Thiosulfonic acids. Part 5: Syntheses and antimicrobial properties
of some alkyl esters of benzenethiosulfonic acid and its derivatives.
Zhur. ob. khim. 30 no.12:3993-3998 D '60. (MIRA 13:12)

1. L'vovskiy politekhnicheskii institut.
(Benzenethiosulfonic acid)

S/020/60/132/02/28/067
B011/B002

AUTHORS: Boldyrev, B. G., Gar, K. A., Yevteyeva, N. V.

TITLE: Esters of Thiosulfonic Acids as New Fungicides ⁶

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 2, pp. 346-348

TEXT: Esters (I) of thiosulfonic acids are effective against microorganisms within a wide range. They also stimulate the development of plants thus increasing harvest. The authors investigated the fungicidal properties of methyl esters of alkanethiosulfonic acids (III), and the trichloromethyl esters (IV) of these acids. The authors do not agree with the American investigators (Ref. 3) as regards the assumption that the fungicidal effects of trichloromethyl esters of different thiosulfonic acids are the same, regardless of the nature of the radical (Formula IV). This was disproved by the authors (see below). They also tested some aryl esters (V) and (VI) of alkane- and arene-thiosulfonic acids. The fungicidal action of all these esters was tested in the toksikologicheskaya laboratoriya (Toxicological Laboratory) of the Institute imeni Ya. V. Samoylov (see Association) in the following species of fungi: *Diplodia zeae*, *Alternaria radicina*, *Verticillium dahliae*, *Fusarium vasinfectum* and *Fusarium*

Card 1/3

Esters of Thiosulfonic Acids as New Fungicides

S/020/60/132/02/28/067
B011/B002

oxysporum. Certain concentrations of these preparations dissolved in acetone, were introduced into agar nutritive media, into which the fungi then were sown. The action of the esters was determined after 5 days. Similar experiments with equal concentrations of Figon, Kaptan, and Tsineb were conducted for comparison. Table 1 shows that trichloromethyl esters of alkanethiosulfonic acids are the most effective among all substances examined (I). During experiments in vitro they had a much better effect than similar esters of arenethiosulfonic acids. This action, however, is not due to the trichloromethyl group; the substitution of chlorine atoms by hydrogen atoms influences the activity of the compounds under consideration. The special effect of the nature of the acid radical R becomes evident during transition into the aryl esters of thiosulfonic acids (V) and (VI). While the aryl esters of methane- and ethanethiosulfonic acids (Table 1, No. 10-13) are still strongly fungicidal and even surpass the trichloromethyl esters of arenethiosulfonic acids (No. 7-9) in their action, aryl esters (VI) are considerably less active than other esters (I). Some of them, however, are not inferior to fungicides as active as Kaptan. The esters discussed here, particularly those of alkanethiosulfonic acids are thus highly active fungicides and are worth further investigation. The action of the fungicides was investigated in the Institut mikrobiologii AN USSR (Institute of

Card 2/3

Esters of Thiosulfonic Acids as New Fungicides

S/020/60/132/02/28/067
B011/B002

Microbiology of the Academy of Sciences, UkrSSR). There are 1 table and 2 Soviet references.

ASSOCIATION: L'vovskiy politekhnicheskij institut (L'vov Polytechnical Institute).
Nauchnyy institut po udobreniyam i insektofungitsidam im. Ya. V. Samoylova (Scientific Institute of Fertilizers and Insecto-fungicides imeni Ya. V. Samoylov)

PRESENTED: January 13, 1960, by S. I. Vol'fkovich, Academician

SUBMITTED: January 3, 1960

Card 3/3

BOLDYREV, B.G.; GORELOVA, S.A.; DVORKO, A.T.

Thiosulfonic acids. Part 6: Syntheses and antimicrobial properties
of trichloromethyl and methyl esters of some thiosulfonic acids.
Zhur.ob.khim. 31 no.7:2402-2406 J1 '61. (MIRA 14:7)

1. L'vovskiy politekhnicheskii institut.
(Sulfonic acids)

BOLDYREV, B.G.; KHOVALKO, L.M.

Thiosulfonic acids. Part 7: Aryl esters of benzenethiosulfonic acid
and its derivatives. Zhur. ob. khim. 31 no. 11:3729-3734 N '61.
(MIRA 14:11)

1. L'vovskiy politekhnicheskii institut.
(Benzenesulfonic acid)

BOLDYREV, B.G.; YUSHKEVICH, L.N.

Thiosulfonic acids. Part 8: Alkyl esters of thiosulfonic acids, derivatives of naphthalene and phenanthrene. Zhur.ob.khim. 33 no.3:969-973 ~~Mr~~ '63. (MIRA 16:3)

1. L'vovskiy politekhnicheskoy institut.
(Naphthalenesulfonic acid) (Phenanthrenesulfonic acid)

BOLDYREV, B.G.; KOLMAKOVA, L.Ye.; BILOZOR, T.K.

Thiosulfonic acids. Part 9; Diesters of thiosulfonic acids.
Zhur.ob.khim. 33 no.6:1980-1983 Je '63. (MIRA 16:7)

1. L'vovskiy politekhnicheskii institut.
(Sulfonic acids)

BOLDYREV, B.G.; KOVBUZ, M.A.; TROFIMOVA, T.A.

Thiosulfonic acids. Part 10: Reduction of thiosulfonic acid esters on a mercury dropping electrode. Zhur. ob. khim. 35 no.1:22-27 Ja '65. (MIRA 18:2)

1. L'vovskiy politekhnicheskii institut.

BOLDYREV, B.G.; KOLESNIKOVA, S.A.

Reactions of thiosulfonic acid esters with amines. Zhur. ob.
khim. 35 no.1:198-199 Ja '65. (MIRA 18:2)

1. L'vovskiy politekhnicheskii institut.

SOSEDOV, I.S.; BOLDYREV, B.M.

Map of the annual average runoff of eastern Kazakhstan rivers.
Trudy Otd. geog. AN Kazakh. SSR no.8:162-173 '61. (MIRA 14:8)
(Kazakhstan--Runoff)

BOLDYREV, B., glavnyy metodist pavil'ona; DVORNICHENKO, I., red.

[**"Medical equipment industry"** pavilion] Pavil'on **"Meditsinskaya
promyshlennost'"**; putevoditel'. Moskva, Medgiz, 1957. 31 p.
(MIRA 11:3)

1. Moscow. Vsesoyuznaya promyshlennaya vystavka, 1956-
(MOSCOW--MEDICAL SUPPLIES--EXHIBITIONS)

BOLDYREV, B.V.

Brief news. Med.prom. 11 no.8:63-65 Ag '57.
(MEDICAL SUPPLIES)

(MIRA 10:11)

BOLDYREV, B.V.

New medical apparatus at an exhibition at the All-Union Research
Institute of Medical Instruments and Apparatus. Med.prom. 12
no.4:63-64 Ap '58. (MIRA 11:5)
(MEDICAL INSTRUMENTS AND APPARATUS)

FEDURKIN, V.V.; NESTERENKO, A.T.; KOVSHAROVA, L.A.; RAZUMOVSKAYA, Ye.I.;
OSIPOVA, Ye.V.; VASIL'YEVA, G.S.; PEKARSKIY, M.D., otv.red.;
ZVORONO, B.P., zamestitel' otv.red.; BOLDYREV, B.V., red.; VOLODIN,
Ye.A., red.; DANIL'CHENKO, Ye.P., red.; ORSKIY, I.N., red.; MISHIN,
L.N., red.; FREYDIN, G.S., red.; TSEPELEV, Yu.A., red.

[Technological instruction material; aluminum and aluminum alloys
for medical articles] Rukovodiashchie tekhnicheskie materialy;
aliuminii i aliuminievye splavy dlia meditsinskikh izdelii. Moskva,
M-vo zdравookhraneniia, 1959. 70 p. (MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskogo
instrumentariya i obrudovaniya.

(MEDICAL INSTRUMENTS AND APPARATUS)

(ALUMINUM)

BOLDYREV, B.V.

Spirograph; information. Lab. delo 5 no.1:61 Ja-F '59. (MIRA 12:1)
(SPIROSCOPE AND SPIROSCOPY)

BOLDYREV, B.V.

Exhibition of new productions at the All-Union Research Institute
for Medical Instruments and Equipment. Med. prom. 13 no.5:63-64 My '59.
(MEDICAL INSTRUMENTS AND APPARATUS) (MIRA 12:7)

BOLDYREV, B.V.

New medical products at the exhibit of the All-Union Scientific
Research Institute for Medical Instruments and Apparatus. Med.
prom. 14 no.6:63-3 of cover Je '60. (MIRA 13:6)
(MEDICAL INSTRUMENTS AND APPARATUS)

BOLDYREV, B.V.

The national enterprise, "Prema." Med. prom. 14 no.7:59-61 Je '60.
(MIRA 13:8)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut meditsinskikh
instrumentov i oborudovaniya.

(CZECHOSLOVAKIA--MEDICAL INSTRUMENTS AND APPARATUS)

BOLDYREV, B. V.

Exhibit of new developments of the All Union Scientific Research
Institute of Medical Instruments and Equipment. Nov. med. tekhn.
no.2:88-91 '61. (MIRA 14:12)

(MEDICAL INSTRUMENTS AND APPARATUS)

BOLDYREV, B.V.

Exhibition of new equipment at the All-Union Research
Institute of Medical Instruments and Equipment. Med. prom.
15 no.6:60-61 Je '61. (MIRA 15:3)
(MEDICAL INSTRUMENTS AND APPARATUS)

SMIRNOV, I.P., kand. tekhn.nauk, otv. red.; PEKARSKIY, M.D.,
kand. tekhn. nauk, zam. otv. red.; BOLLYREV, B.V.,
red.; VOLODIN, Ye.A., red.; GAYSINSKIY, B.Ye., red.;
DANIL'CHENKO, Ye.P., red.; KABATOV, Yu.F., red.;
KALANTAROV, K.D., red.; MISHIN, L.N., red.; ORSKIY, I.N.,
red.; FEDURKIN, V.V., red.; TSEPELEV, Yu.A., red.

[Materials of the scientific session devoted to the 25th
anniversary of the All-Union Scientific Research Insti-
tute for Medical Instruments and Equipment] Materialy
nauchnoi sessii, posviashchennoi 25-letiiu VNIIMIO. Mo-
skva, 1962. 65 p. (MIRA 17:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut
meditsinskogo instrumentariya i oborudovaniya. 2. Zame-
stitel' direktora Vsesoyuznogo nauchno-issledovatel'skogo
instituta meditsinskogo instrumentariya i oborudovaniya
(for Pekarskiy). 2. Direktor Vsesoyuznogo nauchno-
issledovatel'skogo instituta meditsinskogo instrumentariya
i oborudovaniya (for Smirnov).

BOLDYREV, D. [Boldyrau, D.]

You grow young again if you work with children. Rab. i sial
36 no. 7:20 J1 '60. (MIRA 13:10)
(Mogilev--Physical education for children)

BOLDYREV, D.V.

More on the determination of drilling speeds. Neft. khoz. 36 no.1:
29-30 Ja '58.

(Oil well drilling)

(MIRA 11:2)

BOLDYREV, D.V.

Seasonal periods in test drilling. Neft. khoz. 40 no.10:
6-8 0 '62. (MIRA 16:7)

(Oil well drilling)

BOLDYREV, G.

Achievements of the chauffeur and innovator Sitnikov. Avt.transp. 32
no.9:23 S '54. (MLRA 7:11)

1. Glavnyy inzhener Zimovnikovskoy avtoroty "Soyuzzagottrans."
(Sitnikov, I.A.M.)

BOLDYREV,G.

Improve the quality of trailers manufactured at the Irbit
Plant. Avt. transp. 33 no.4:37 Ap '55. (MIRA 8:7)
(Irbit--Automobiles--Trailers)

BOLDYREV, G.

Experience of operations of the Zimovniki automotive unit. Avt. transp.
35 no.5:13 My '57. (MIRA 10:6)

1. Glavnyy inzhener Zimovnikovskoy avtomobil'noy roty Bostovskogo
oblavtotresta.
(Zimovniki--Transportation, Automotive)

ALEKSEYEV, A.Ye.; BAYKO, V.F., kand.tekhn.nauk; BOLDYREV, G.I., inzh.
NORNEVSKIY, B.I., kand.tekhn.nauk, dots.; ~~HOSIN, Ye.I., inzh.~~

Comparing the static and dynamic characteristics of two and three-
stage longitudinal field rotary amplifiers. Elektrichestvo no.12:
24-26 D '57. (MIRA 10:12)

1.Leningradskiy elektrotekhnicheskiy institut im. Ul'yanova
(Lenina). 2.Chlen-korrespondent AN SSSR (for Alekseyev).
(Electric generators)

ALEKSEYEV, A.Ye., prof.; BAYKO, V.F., kand.tekhn.nauk; BOLDYREV, G.L., inzh.;
NORNEVSKIY, B.I., kand.tekhn.nauk, dots.; ROSIN, Ye.I., inzh.;
CHUPYATOV, I.N., kand.tekhn.nauk, dots.

Internal feedbacks in multistage amplifiers with various numbers
of terminal pairs. Sbor.LIIZHT no.159:232-235 '58.
(MIRA 12:2)

1. Chlen-korrespondent AN SSSR (for Alekseyev).
(Rotating amplifiers)

S/196/62/000/004/022/023
E194/E155

AUTHOR: Boldyrev, G.L.

TITLE: Some methods of improving amplidyne characteristics when used in electrical transmission circuits of diesel locomotives

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.4, 1962, 7, abstract 4 L27. (Sb. tr. Leningr. in-t inzh. zh.-d. transp., no.175, 1961, 42-52).

TEXT: Automatic control systems for diesel-electric locomotives require further improvement, particularly in the power circuit where an important part is played by amplidynes which are used to excite the main generator of the locomotive. In 1957, the Khar'kovskiy zavod teplovoznogo elektricheskogo oborudovaniya (Khar'kov Diesel Electric Locomotive Equipment Works) together with LIIZhT, installed two prototype three-stage amplidynes on a diesel-electric locomotive type T33-028 (TE3-028); they gave generally satisfactory test results though they had certain defects. Since 1958 LIIZhT has been working on Card 1/4

Some methods of improving amplidyne... S/196/62/000/004/022/023
E194/E155

improvement of the amplidyne and investigated the following problems: selection of best number of amplification cascades in the amplidyne; frame construction; location of field windings; and selection of winding parameters. In order to select the optimum number of amplification cascades, tests were made on a particular 45 kW machine connected both as a two- and as a three-stage amplifier. It was found that the power amplification factor of a three-stage amplifier is four times greater than that of a two-stage. The maximum rate of voltage increase on the terminals of a three-stage amplifier is five times, and the average rate is three times greater than on a two-stage. Moreover, the circuit of a three-stage amplifier is considerably simpler. The tests showed that the use of a solid frame in a three-stage amplifier almost halved its speed as compared with a laminated frame so that the solid frame is disadvantageous even though it is somewhat smaller. Two variants of amplidyne field winding arrangement were examined and it was found that the second variant, in which the amplifier and self-excitation windings are mounted only on two poles, is better than the first

Card 2/ 4

Some methods of improving amplidyne.. S/196/62/000/004/022/023
E194/E155

variant in which they are located on all four main poles, because this gives a smaller machine and the inter-turn connections are much simpler. However, when the amplifying windings are located only on two poles, the magnetic flux under the interpoles is distorted (the output voltage on the amplidyne terminals is reduced by 8-10% compared with the first variant) and this must be allowed for in designing the windings. In determining the optimum field winding parameters, the main requirements are high amplification factor and maximum speed for a given control power. Investigations to this end were based on the position of the static and transient conditions of a three-stage amplidyne with constant input signal applied to the control winding. Moreover, tests were made with variable control signals and constant amplifier output voltage. The dynamic properties of the amplifier cascades were assessed from oscillograms of voltage increase, both separately from the second cascade and using the complete amplidyne circuit. As a result it was found that the speed of the second cascade is much reduced on introducing premagnetising windings, and this naturally reduces the output

Card 3/4

Some methods of improving amplidyne... S/196/62/000/004/022/023
E194/E155

speed of the amplifier. Consequently, it is inadvisable to use premagnetisation in the second cascade of a three-stage amplidyne. A series of oscillograms was worked out to determine the relationship between the maximum rate of voltage increase on the amplifier output and the variable parameters of the amplifier winding, and from these it was possible to determine the best parameters (number of turns) of the amplifier winding of this amplidyne. All these results were used in designing a new amplidyne which will be used to excite the main generator of a diesel electric locomotive. The circuit, dimensions, load characteristics and voltage oscillograms are given for the amplidyne with two variants of winding arrangement. Relationships are expressed for the maximum rate of voltage increase of the second cascade and the number of turns of the premagnetising winding and also for the maximum rate of voltage rise on the amplidyne output and the number of turns in the amplifier winding.

7 figures, 1 literature reference.

Card 4/4 [Abstractor's note: Complete translation.]

BOLDYREV, G.P.

Technological study and estimation of iron ore deposits in prospecting. Razved. i okh. nedr 29 no.9:10-17 S '63.

(MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut mekhanicheskoy obrabotki poleznykh iskopayemykh.

BOLDYREV, G.

POSPELOV, G.L., starshiy nauchnyy sotrudnik; LAPIN, S.S.; BELOUS, N.Kh.;
KLYAROVSKIY, V.M.; KINE, O.G.; VAKHRUSHEV, V.A.; SHAPIRO, I.S.,
starshiy nauchnyy sotrudnik; KALUGIN, A.S.; MUKHIN, A.S.; GARNETS,
N.A.; SPEYT, Yu.A.; SELIVESTROVA, M.I.; RUTKEVICH, V.G.; BYKOV, G.P.;
NIKONOV, N.I.; SAKOVICH, K.G.; MEDVEDKOV, V.I.; ALADYSHKIN, A.S.;
PAN, P.Ya.; RUSANOV, M.G.; YAZBUTIS, E.A.; ROZHDESTVENSKIY, Yu.V.;
SAVITSKIY, G.Ye.; PRODANCHUK, A.D.; LYSENKO, P.A.; LEBEDEV, T.I.;
KAMENSKAYA, T.Ya.; MASLENNIKOV, A.I.; PIPAR, R.; DODIN, A.L.;
MITROPOL'SKIY, A.S.; LUKIN, V.A.; ZIMIN, S.S.; KOREL', V.G.;
DERBIKOV, I.V.; BARDIN, I.P., akademik, nauchnyy red.; GORBACHEV,
T.F., nauchnyy red.; YEROF'EYEV, N.A., nauchnyy red.; NEKRASOV, N.N.,
nauchnyy red.; SKOBNIKOV, M.L., nauchnyy red.; SMIRNOV-VERIN, S.S.,
nauchnyy red. [deceased]; STRUMILIN, S.G., akademik, nauchnyy red.;
KHELEBNIKOV, V.B., nauchnyy red.; CHINAKAL, N.A., nauchnyy red.;
SLEDZYUK, P.Ye., red.toms; SOKOLOV, G.A., red.toms; BOLDYREV, G.P.,
red.; VOGMAN, D.A., red.; KASATKIN, P.F., red.; KUDASHEVA, I.G.,
red.izd-va; KUZ'MIN, I.F., tekhn.red.

[Iron-ore deposits of the Altai-Sayan region] Zhelezorudnye mesto-
rozhdeniia Altae-Saianskoi gornoj oblasti. Vol.1. Book 1. [Geology]
(Continued on next card)

POSPELOV, G.L.---(Continued) Card 2.

Geologia. Otvetstvennyi red. I.P. Bardin. Moskva. 1958. 330 p.
(MIRA 12:2)

1. Akademiya nauk SSSR. Mezhdovedomstvennaya poqtoyannaya komissiya po zhelezu.
2. Postoyannaya mezhdovedomstvennaya komissiya po zhelezu Akademii nauk SSSR (for Pospelov, Shapiro, Sokolov).
3. Zapadno-Sibirskiy filial Akademii nauk SSSR (for Vakhrushev, Pospelov.)
4. Zapadno-Sibirskoye geologicheskoye upravleniye (for Sakovich).
5. Krasnoyarskoye geologicheskoye upravleniye (for Pan).
6. Zapadno-Sibirskiy geologo-razvedochnyy trest Chernetrazvedka (for Prodanchuk).
7. Sibirskiy geofizicheskiy trest (for Pipar).
8. Vsesoyuznyy geologicheskiy nauchno-issledovatel'skiy institut (for Dodin).
9. Gornaya ekspeditsiya (for Mitropol'skiy).
10. Gornoye upravleniye Kuznetskogo metallurg.kombinata (for Lukin).
11. Tomskiy politekhnicheskiy institut (for Zimin).
12. Sibirskiy metallurg.institut (for Korel').
13. Trest Sibneftegeofizika (for Derbikov). (Altai Mountains--Iron ores) (Sayan Mountains--Iron ores)

BOLDYREV, G.P.; VOGMAN, D.A.; NOVOKHATSKIY, I.P.; VERK, D.L.; DYUGAYEV, I.V.; KAVUN, V.M.; KURENKO, A.A.; UZBEKOV, M.R.; ARSEN'YEV, S.Ya.; YEGORKIN, A.N.; KORSAKOV, P.F.; KUZ'MIN, V.N.; STRELETS, B.A.; PATKOVSKIY, A.B.; BOLESLAVSKAYA, B.M.; INDENBOM, D.B.; FINKEL'SHTEYN, A.S.; SHAPIRO, I.S.; LAPIN, L.Yu.. Primali uchastiye: NEVSKAYA, G.I.; FEDOSEYEV, V.A.; KASPILOVSKIY, Ya.B., ZERNOVA, K.V.. BARDIN, I.P., akademik, otv.red.; SATPAYEV, K.I., akademik, nauchnyy red.; STRUMILIN, akademik, nauchnyy red.; ANTIPOV, M.I., nauchnyy red.; BELYANCHIKOV, K.P., nauchnyy red.; YEROFEYEV, B.N., nauchnyy red.; KALGANOV, M.I., nauchnyy red.; SAMARIN, A.M., nauchnyy red.; SLEDZYUK, P.Ye., nauchnyy red.; KHLEBNIKOV, V.B., nauchnyy red.; STREYS, N.A., nauchnyy red.; BANKVITSER, A.L., red.izd-va; POLYAKOVA, T.V., tekhn.red.

[Iron ore deposits in central Kazakhstan and ways for their utilization] Zhelezorudnye mestorozhdeniia Tsentral'nogo Kazakhstana i puti ikh ispol'zovaniia. Otvetstvennyi red. I.P.Bardin. Moskva, 1960. 556 p. (MIRA 13:4)

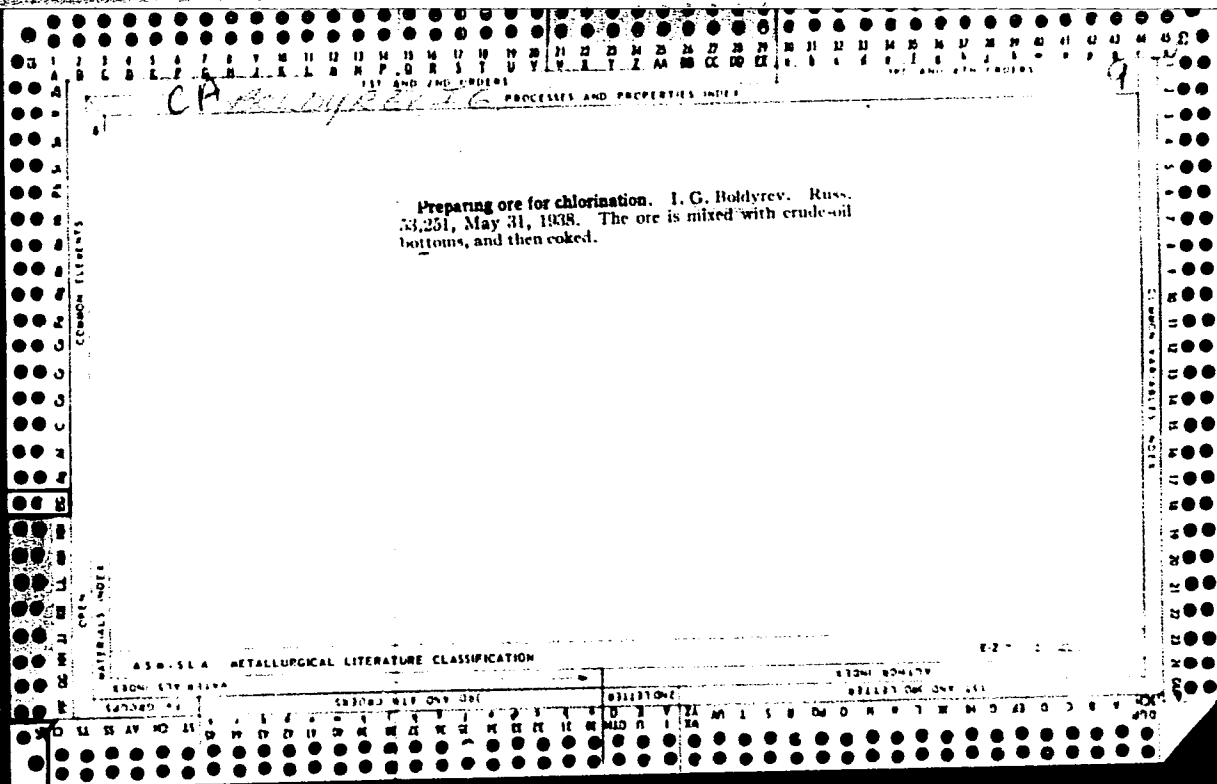
1. Akademiya nauk SSSR. Mezhduevdomstvennaya postoyannaya komissiya po zhelezu. 2. Gosudarstvennyy institut po proyektirovaniyu gornykh predpriyatiy zhelezorudnoy i margantsevoy promyshlennosti i promyshlennosti nemetallicheskiikh iskopayemykh (Giproruda) (for Boldyrev, Vogman, Arsen'yev, Yegorkin, Korsakov, Kuz'min, Strelets. (Continued on next card)

BOLDYREV, G.P.--(continued). Card 2.

3. Institut geologicheskikh nauk AN Kazakhskoy SSR (for Novokhatskiy).
 4. Tsentral'no-Kazakhstanskoye geologicheskoye upravleniye Ministerstva geologii i okhrany nedr SSSR (for Verk, Dyugayev, Kavun, Kurenko, Uzbekov).
 5. Nauchno-issledovatel'skiy institut mekhanicheskoy obrabotki poleznykh iskopayemykh (Mikhanobr) (for Patkovskiy).
 6. Gosudarstvennyy institut proyektirovaniya metallurg.zavodov (Gipromsz) (for Boleslavskaya, Indenbom, Finkel'shteyn, Nevskaya, Fedoseyev, Karpilovskiy).
 7. Mezhdunarodnaya postoyannaya komissiya po zhelezu AN SSSR (for Shapiro, Zernova, Kalganov).
 8. Gosplan SSSR (for Lapin).
- (Kazakhstan--Iron ores)

POLIKARPOV, V., kand.ekon.nauk; BOLDYREV, I., kand.ekon.nauk

Planning villages in Talovaya District. Sel'.stroi. 14 no.5:
4-6 My '59. (MIRA 12:8)
(Talovaya District--City planning)



SOV/68-58-11-9/25

AUTHORS: Boldyrev I.K., Gutman L.M. and Khurin S.M.

TITLE: Experience in Replacing Gas-Air Valves and Increasing the Travel of the Reversing Equipment (Opyt zameny gazovozdushnykh klapanov i udlineniya khoda kantovki)

PERIODICAL: Koks i Khimiya, 1958, Nr 11, pp 24-26 (USSR)

ABSTRACT: The method adopted for exchanging gas and air valves of an old design for new ones of a standard design and increasing the pitch of reversing equipment is described and illustrated.
There are 4 figures.

ASSOCIATION: Stalinskiy Koksokhimicheskiy zavod (Stalino Coke By-Product Plant)

Card 1/1

SEID-ZADE, G.D. (Baku); BOLDYREV, I.T. (Baku)

Gas pipeline at the bottom of the sea. Stroi.truboprov. 9 no.2:
21 F '64. (MIRA 17:3)

LYSENKOV, N.V.; BOLDYREV, I.V.; KRYUCHEKOVA, V.G.

Aliphatic - aromatic esters of carbonic acid. Ukr. khim. zhur.
30 no.12:1330-1332 '64 (MIRA 18:2)

1. Institut organicheskoy khimii AN UkrSSR.

BOLDYREV, Konstantin Matveevich.

BOLDYREV, Konstantin Matveevich. Navigation fishing vessels; approved as a text-book for higher technical schools of the fishing industry. Moskva, Pishchepromizdat, 1946. 255 p. (50-26897) VK555. B72

STEFANOV, V.Ye.; ~~BOLDYREV, L.I.~~

Improving the fittings of large section and rail rolling mills.
Metallurg no.8:26-28 Ag '56. (MLRA 9:10)

1. Kalibrovshchik krupnosortnogo teekha zavoda "Azovstal'" (for Stefanov). 2. Starshiy master stana zavoda "Azovstal'" (for Boldyrev).
(Rolling mills)

AUTHORS: Boldyrev, L.I. (Senior foreman of the large section shop) and Gudovshikov, K.S. (Research Engineer, Central Works Laboratory).

TITLE: Organization of roll changing on a 650-mill. ^{130-3-16/22} (Organizatsiya perevalok na stane 650.)

PERIODICAL: "Metallurg" (Metallurgist), 1957, No.3, pp.31-33. (U.S.S.R.).

ABSTRACT: The finishing line of the 650-mill at the Azovstal' Works consists of two three-high stands and one two-high stand arranged in one line, the maximal diameter of the working rolls being 680 mm. The mill rolls two types of rail, I-section girders, channels, squares, large angles and other sections. The senior mill foreman, P.D. Krishtofovich has organized his roll-changing team so effectively that the roll-changing time has been reduced by 7 minutes. Details of the organization are given in this article. Krishtofovich pays great attention to the preliminary preparation of stands and rolls, the correct positioning of roll-men and mill operators, the rational utilization of cranes, and maintenance of the sequence of operations. It is considered that the adoption by other teams of these organizational methods would enable mill productivity to be increased by 2 - 3%. There are two diagrams and one photograph.

Card 1/1

ASSOCIATION: "Azovstal'" Works (Zavod "Azovstal'").

AVAILABLE:

PROTASOV, N.F.; KHLEBNIKOV, V.P.; SIKORSKIY, A.I.; GONCHAR, V.V.; BOLDYREV, L.I.;
STEFANOV, V.Ye.

Developing shapes for mine supports. Metallurg 3 no.12:27-29 D '58.
(MIRA 11:12)

1.Zavod "Azovstal'."
(Rolling (Metalwork))

AUTHORS: Turchenkova, Ye.K., Sikorskiy, A.I., Yegnus, R.M.,
SOV/133-58-8-29/30
Boldyrev, L.I., Raznotina, Ye.T., Engineers, Bol'shakov,
L.A., Candidate of Technical Sciences, and Gavrikov, V.Z.,
Engineer

TITLE: Performance of the Coupling Sleeves Made From Nodular Iron
at the Mill 650 (Rabota soyedinitel'nykh muft iz chuguna
s sharovidnym grafitom na stane 650)

PERIODICAL: Stal', 1958, Nr 8, pp 763 - 766 (USSR)

ABSTRACT: As the durability of the coupling sleeves of the mill 650
made from grey iron decreased with increased degree of
reduction per pass introduced in the rolling practice, the
use of sleeves made from nodular iron was investigated.
Four series of experimental smelting of magnesium-inoculated
iron were carried out. Sleeves from the first series
were tested as cast and of the remaining series after
various heat treatments. The chemical composition,
mechanical, and conditions of thermal treatment are given
in Table 1. The microstructure of heat-treated metal
- Figures 1-3, the mould for casting of sleeves - Figure 4,
the results of service life of sleeves made from nodular
iron, grey iron and steel - Table 2. On the basis of the
results obtained, it is concluded that the service life

Card1/2

SOV/133-56-8-29/30

Performance of the Coupling Sleeves Made from nodular Iron at the Mill 650

of sleeves from nodular iron is 4-6 times higher than that of sleeves made from grey iron. The optimum heat treatment is normalisation with subsequent annealing at 580 °C. Sleeves should be cast with the consumption of metal for shrinkage head not less than 20% of the weight of casting. When coupling sleeves are not heat-treated, then the sum of C + Si in nodular iron should be maintained in a range of 5.5-6.0%. There are 5 figures and 2 tables.

ASSOCIATIONS: Zhdanovskiy metallurgicheskiy institut (Zhdanov Metallurgical Institute) and Zavod "Azovstal'" ("Azovstal'" Works)

Card 2/2

1. Couplings--Materials
2. Couplings--Test results
3. Iron--Applications
4. Steel--Applications

SOV/130-58-10-9/18

AUTHORS: Protasov, N.F., Khlebnikov, V.P., Sikorskiy, A.I.,
Gonchar, V.V., Stefanov, V.Ye and Boldyrev, L.I.

TITLE: Improving Accessories on the Reducing Mill of a Heavy-
Section Mill (Uovershenstvovaniye armatury obzhimnogo
stana krupnosortnogo tsekha).

PERIODICAL: Metallurg, 1958, Nr.10, pp.25-29 (USSR)

ABSTRACT: It was found that when rolling low-number girders, especially Nr.20 in the reducing stand of a rail-structural mill the metal often displaced the guides, leading to stoppages. The authors give details of guide construction and attachment (Fig.1) and also of special devices provided before each pass (Fig.2) to support the beam from below. This is advantageous for rolling large girders (Nr.30-55) but unreliable for smaller (Nr.18-16) sizes. For rolling these latter when the closed passes are in the bottom roll two variants of guide arrangements have been proposed. In the first special movable vertical supports are provided for the guides, fixed on trapezoidal projections. In the

Card 1/2

SOV/130-58-10-9/18

Improving Accessories on the Reducing Mill of a Heavy-Section Mill.

second a trapezoidal-section bar is fixed to the housing (similar to the guide bars on the finishing line) (Fig.4) which supports one end of the specially shaped guide, the other being held in the pass with the aid of a load. The authors favour the second variant and mention its applicabilities. Its adoption has enabled the load on the finishing line to be reduced by 20-25%. The new roll-pass designs used since March 1957 have led to better roll life, higher productivity and other improvements. The new accessories are especially useful for thin-walled sections, and during the year for which they have been in use no cases of guide displacement have occurred. There are 4 figures.

ASSOCIATION: Zavod "Azovstal'" ("Azovstal'" works).

Card 2/2

SOV/130-58-12-12/21

AUTHORS: Protasov, N.F., Khlebnikov, V.P., Sikorskiy, A.I.,
Gonchar, V.V., Boldyrev, L.I. and Stefanov, V.Ye.

TITLE: Experience of the Adoption of Profiles for Mine Supports
(Opyt osvoyeniya profiley dlya ~~shakhtnogo~~ krepeleniya)

PERIODICAL: Metallurg, 1958, Nr 12, pp 27 - 29 (USSR)

ABSTRACT: The "Azovstal'" works is one of the main suppliers of the more important sections for mine construction and operation. The authors illustrate (Fig 1) sections for props types 18A-18B and 28A-28B and show how the first two fit each other (Fig 2). These sections are rolled from 230 x 285 and 245 x 280 mm blooms in four stands arranged in two lines and the authors outline the pass design and deformations at the various stages. They deal with the production of inclined props to GOST-5157-53. The authors

Card 1/2

SOV/130-58-12-12/21

Experience of the Adoption of Profiles for Mine Supports

state that the pass designs for pit props developed at the works have improved quality as well as increasing production.

There are 4 figures

ASSOCIATION: "Azovstal'" works

Card 2/2

AUTHORS: Boldyrev, L.V., Krasnosel'skiy, M.V., Rudnev, M.F. 131-3-2/16

TITLE: The Increase of the Efficiency of Shaft Furnaces With Gas Heating
(Povysheniye proizvoditel'nosti shakhtnykh pechey na gazovom
otoplenii)

PERIODICAL: Ogneupory, 1958, Vol 23, Nr 3, pp 101-105 (USSR)

ABSTRACT: At the Semilukl Plant for Refractories it was possible, by improving the construction of furnaces and of the burning process, to increase the daily output from 25-40 t to 65-70 t. I.A. Savkevich assisted in this work. The authors further describe the construction of the furnaces as well as the working process in detail. The revolving grate is shown in the illustration and its useful cross section is given by table 1. At present the burning process takes place as follows: 1.) The preparation of clay for burning. The clay is crushed by means of a machine and is formed into briquettes of 1 kg weight and shaped like flattened balls (ϕ 120 and 90 mm). The quality of the clay and of the briquettes is continually controlled. 2.) Charging and discharging of the furnace. Every furnace is discharged in the course of each working shift according to the temperature of burning, of the material with which the furnace is filled, and the moisture content of the briquettes.

Card 1/2

The Increase of the Efficiency of Shaft Furnaces
With Gas Heating

131-3-2/16

In accordance with the work to be performed the control apparatus КЭП-3 are adjusted, by means of which the charging drums are controlled (table 2). They are blocked by means of an electron millivolt meter which continuously controls the exhaust gases and which switches the control apparatus on or out according to necessity. Discharging of the furnace takes place in dependence of charging the furnace in order that a constant level of material be maintained. 3.) Gas- and air supply is determined according to consumption per hour, regulation being carried out according to burners. 4.) Control of furnace work. In the shaft furnaces of the Semiluksk works the following measurements are continuously carried out: Gas consumption, temperature of exhaust gases, temperature of the material in the furnace, furnace pressure and the level of material in the furnace. Besides, the temperature of the discharging fireclay bricks and their quality is continuously controlled. Table 3 contains the working data of shaft furnaces for the years 1950-1957. There are 3 tables, 1 figure, and 4 Soviet references

ASSOCIATION: Semiluki Plant for Refractories (Semilukskiy огнеупорный завод)

1. Gas burning furnaces-Operation
2. Furnaces-USSR
3. Refractory materials-Processing
4. Refractory materials-Production

Card 2/2

L 63031-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AP5013269

UR/0114/65/000/005/0018/0021
621.436.001.6

AUTHOR: Robinson, L. S. (Candidate of technical sciences); Boldyrev, I. V. ¹⁸
(Engineer) ^B

TITLE: Improving the indicator parameters of low-excess-air jet-fuel-mixing
diesels by swirling the working fluid

SOURCE: Energomashinostroyeniye, no. 5, 1965, 18-21

TOPIC TAGS: diesel engine, diesel fuel ||

ABSTRACT: Improving the operation of high-speed diesel engines having an air-
fuel ratio of 1.1-1.2 was felt to be important as many such engines with a
Hesselman's combustion chamber were in operation. The "awirling gas
compressor" developed by V. V. Pischchenko (Trans. of the Odessa Marine-
Engr. Institute, 1955) which takes off a part of the working mixture during the
compression stroke in the diesel engine, and later returns it to the cylinder is

Card 1/2

I 63031-65

ACCESSION NR: AP5013269

described. A transparent model geometrically similar to the combustion chamber and working with carbon-dioxide (jet) and nitrogen (filler) was used for investigating the swirling process. These experiments permitted selecting the design and control parameters of the swirler. The effect of gas swirling was studied on a few (three?) high-speed swirler-equipped engines under various cylinder-heat-release conditions. Also, the exhaust-gas turbidity was measured. It was found that, under low air-fuel-ratio conditions, the gas swirling results in a considerable increase (3-8%) in the engine indicated power and in a lesser turbidity of the exhaust gas. In all cases, the effect of swirling essentially increased with the load (i. e., with the decreasing air-fuel ratio). [Abstracter's note: The Russian original is not clear as to whether the Pischanenko or some other type of swirler was used in the diesel-engine tests.] Orig. art. has: 7 figures and 1 table.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: PR

NO REF SOV: 003

OTHER: 000

dm
Card 2/2