

L 39733-66 EWT(1)/EEG(k)-2/EPF(n)-2/ETC(f)/EWG(m)/EWA(d)/T-2/FSS-2 IJP(e)

ACC NR: AN6006679
AT/DS/WRT/GD-2

(A,N)

SOURCE CODE: UR/9008/65/000/274/0004/0004

AUTHOR: Venikov, V. (Lenin prize winner, Doctor of technical sciences); Astakhov, Yu. (Candidate of technical sciences); Zuyev, E. (Engineer)

ORG: none

25
B

TITLE: Power engineering--world of phantasy and reality [Projected developments in Soviet electric power production]

SOURCE: Krasnaya zvezda, no. 274, 1965, 4, col. 1-5

TOPIC TAGS: MHD generator, thermoelectric generator, fuel cell, CTR, *electric power plant*

ABSTRACT: Fuel cells, ^{2/}MHD generators, ^{2/}thermoelectric generators, and CTR are discussed in terms of their potential as future electric power sources. Increases in efficiency and cost reduction, possible through the utilization of such sources, are indicated.

SUB CODE: 10/

SUBM DATE: 00/

ORIG REF: 000/

OTH REF: 000

Card 1/1 *HS*

ZUYEV, E.N.

Papers of a seminar on the operating modes and automation in
electrical systems. Izv. vys. ucheb. zav.; energ. 6 no.9:123
S '63. (MIRA 16:12)

ASTAKHOV, Yu.N. (Moskva); ZUYEV, E.N. (Moskva)

Determination of similitude criteria using a digital computer.
Izv. AN SSSR. Energ. i transp. no.4:505-507 J1-Ag '63.

(MIRA 16:11)

L 27908-66

ACC NR: AP6017785

SOURCE CODE: UR/0281/65/000/006/0059/0066

AUTHOR: Astakhov, Yu. N. (Moscow); Venikov, V. A. (Moscow); Zuyev, E. N. (Moscow)

ORG: none

80

TITLE: Increasing the throughput capacity of a dual circuit electric transmission line by efficient location of conductors

SOURCE: AN SSSR. Izvestiya. Energetika i transport, no, 6, 1965, 59-66

TOPIC TAGS: transmission line, electric power transmission, electric inductance, electric conductor

ABSTRACT: The results are presented from an analysis of the possibility of increasing the throughput capacity of a two-circuit electric power transmission line by decreasing the mean phase inductance by changing the locations of the conductors on poles. The investigations indicated that proper location can provide a reduction in amount of mean inductance by the negative mutual inductive influence of one circuit on another. Six possible conductor groupings were analyzed. Orig. art. has: 4 figures, 5 tables, 7 formulas. [JPRS]

SUB CODE: 10, 09 / SUBM DATE: 01Jul65 / ORIG REF: 006

Card 1/1 B&C

UDC: 621.311.1

ZUYEV, E.N. (Moskva)

Modeling of the frequency dependence of the parameters of electric power transmission lines. Izv. AN SSSR. Energ. i transp. no. 53602-607 S-O '64. (MIRA 17:12)

Seminar on operating modes and cybernetics of electric power systems. Ibid.:648

ZUYEV, E.N.; SMIRNOV, S.S.

Modeling of the zero-sequence parameters of electric power
transmission lines and their frequency dependence. Trudy
MEI no.54:195-216 '64. (MIRA 17:12)

ZUYEV, F

ZUYEV, F., slesar'-montazhnik

I had a good rest and recuperation. Sov. profsoiuzy 6 no.1:29
Ja '58.

(Sanatoriums)

(MIRA 11:1)

ZUYEV, F. G., Cand Tech Sci -- "Study of the resistances ^{of} ~~offered~~
~~by pipelines during~~ *branch pipes in* the pneumatic transportation of grain and
~~its processed products.~~ *products of* Odessa, 1961. (Min of Higher
and Sec Spec Ed UkSSR. Odessa Technol ^{Inst} *Inst* im I. V. Stalin)
(KL, 8-61, 243)

ZUYEV, F.G.

Experimental study of air movement in bends. Trudy MTIPP 16:
162-166 '60. (MIRA 16:6)

(Vortex motion)

ZUYEV, F.G.

Use of high-speed cinematography in the study of the process of
pneumatic-tube transportation. Izv.vys.ucheb.zav. pishch.tekh.
no.4:90-98 '60. (MIRA 13:11)

1. Moskovskiy tekhnologicheskii institut pishchevoy promyshlennosti.
Kafedra detaley mashin i pod'yemno-transportnykh ustanovok.
(Pneumatic-tube transportation)

ZUIEV, F.G.

Flow structure and velocity of the particles of products
during pneumatic conveying. Trudy MTIPP 16:149-158 '60.
(MIRA 16:6)

(Pneumatic conveying)
(Dynamics of a particle)

VOYTEKUNAS, Stanislav Stefanovich; ZUYEV, F.P., nauchnyy red.; SUDAKOVICH, D.I., nauchnyy red.; KAEPOV, V.V., red.izd-vo; PUL'KINA, Ye.A., tekhn.red.

[Designing reinforced concrete elements; from the experience of planning organizations in Leningrad] Konstruirovaniye zhelezobetonnykh elementov; iz opyta proektnykh organizatsii Leningrada. Leningrad, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit. materialam, 1959. 210 p. (MIRA 12:4)
(Reinforced concrete)

ZUYEV, G

AUTHOR: Zuyev, G. (Moscow)

107-87-7-47/86

TITLE: A Pressure Pad in the Tape Recorder. Experience Exchange.

(Regulyator natyazheniya magnitnoy lentyy v magnitofone. Obmen opytom)

PERIODICAL: Radio, 1957, Nr 7, p 53 (USSR)

ABSTRACT: A simple device is described which essentially consists of a pressure pad rubbing against a little flywheel mounted on the feed-reel spindle. The pad functions as a brake whose pressure is controlled by a spring and a lever resting on the tape. The device is so arranged that the braking pressure decreases with the decrease of the amount of tape on the feed reel. Thus the tape speed becomes more uniform with the one driving motor on the take-up reel construction adopted in Soviet amateur recorders. The above device allows use of driving motors under 50 w capacity.

There is 1 figure.

AVAILABLE: Library of Congress

Card 1/1

ZUYEV, G. (Moskva).

Tension regulator for tapes in magnetic recorders. Radio no.7:
53 J1 '57. (MIRA 10s8)

(Magnetic recorders and recording)

ZUYEV, G.I.

Conditions of the higher nervous activity in mold breakers. Gig.i
san. 26 no.1:91-96 Ja '61. (MIRA 14:6)

(VIBRATION—PHYSIOLOGICAL EFFECT)
(NERVOUS SYSTEM—DISEASES)
(FOUNDRYMEN—DISEASES AND HYGIENE)

~~Суралева, Л. Я. и Булев, Г. Т.~~

Use of the data from compulsory periodic medical examinations in the fight to lower the incidence of disease with loss of work capacity. Zdrav. Ros. Feder. 5 no.12:8-11 p '61. (MIRA 15:1)

1. Kafedra gigiyeny truda s klinikoy professional'nykh zabolevaniy (zav. - prof. Ye. IS. Andreyeva-Galanina) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (rektor - prof. A. Ya. Ivanov).
(MEDICAL SCREENING) (DISABILITY EVALUATION)

ZUYEV, G.I.

Some features of the neurodynamics of persons subjected to the combined effect of industrial noise and vibration. Gig.i san. 25 no.9:36-40 8 '60. (MIRA 13:9)

1. Iz kafedry gigiyeny truda s klinikoy professional'nykh zabolevaniy Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.
(NERVOUS SYSTEM) (NOISE--PHYSIOLOGICAL EFFECT)
(VIBRATIONS--PHYSIOLOGICAL EFFECT)

ARTAMONOVA, V.G.; ZUYEV, G.I.; KHAYMOVICH, M.L.

Characteristics of vibration pathology in persons working
on vibrational compaction of concrete. Trudy ISGMI 75:74-
80 '63. (MIHA 17:4)

1. Kafedra gigiyeny truda s klinikoy professional'nykh
zabolevaniy (zav. kafedroy - prof. Ye.TS. Andreyeva -
Galanina) Leningradskogo sanitarno-gigiyenicheskogo me-
ditsinskogo instituta.

ARTAMONOVA, V.G.; ZUYEV, G.I.; KHAYMOVICH, M.L.

Some clinicophysiological data on the hygienic evaluation of
new types of riveting hammers. Trudy LSGMI 75:119-124 '63.

(MIRA 17:4)

1. Kafedra gigiyeny truda s klinikoy professional'nykh
zabolevaniy (zav. kafedroy - prof. Ye.TS. Andreyevna-
Galanina) Leningradskogo sanitarno-gigiyenicheskogo me-
ditsinskogo instituta.

ZUYEV, G.I. (Odessa); NEEESNOV, V.I. (Odessa); SURKOV, Ye.M. (Odessa)

Transient operating conditions in a system consisting of a vessel hull, propellers, and engines. Izv. AN SSSR. Otd. tekhn. nauk. Energ. i avtom. no.3:65-72 My-Je '62. (MIRA 15:6)
(Marine engineering) (Electromechanical analogies)

MEBESHOV, V.I., prof.; ZUYEV, G.I., dotsent

Geometry of gearing in one type of oil pump used in marine diesel
engines. Nauch.trudy OIMF no.13:22-32 '57. (MIRA 11:11)
(Gearing) (Fuel pumps) (Marine diesel engines)

NEBESNOV, V.I., doktor tekhn.nauk; ZUYEV, G.I., kand.tekhn.nauk

Engine performance in a water-jet propelled unit. Sudostroyeniye 27
no.5:14-18 My '61. (MIRA 14:6)
(Ship propulsion)

ZUYEV, G.N.

Bipolar shielded parametric system for studying specific electrical resistivity. Sbor.luch.rats.predl. pt. 2:65-68 '63.
(MIRA 17:5)

1. Yakutskoye geologicheskoye upravleniye.

ZUYEV, G.N.

Methods for the combined logging of dry holes drilled with bottom clearance by compressed air under conditions of permafrost. Sbor. luch.rats.predl. pt. 2:33-35 '63. (MIRA 17:5)

1. Yakutskoye geologicheskoye upravleniye.

ZUYEV, G.N.

Studying the seasonal changes in the electric conductivity of loose sediments in situ on a stationary vertical electric sounding unit in a permafrost region. *Biul.nauch.--tekh.inform.* VIMS no.1:51-57 '63.

(MIRA 18:2)

1. Yakutskoye geologicheskoye upravleniye.

ZUYEV, G.N.

Long-distance polarity reversal of lines in electric prospecting using
direct current. Geofiz. razved. no.3:111-114 '61. (MIRA 17:2)

ZUYEV, G.V.

Specific gravity of the squid *Ommastrephes sagittatus* Lamark.
Trudy SBS 16:383-386 '63. (MIRA 17#6)

ZUYEV, G.V.

Body form of Cephalopoda. Trudy SB3 17:379-387 '64.

(MIRA 18:6)

ZUYEV, G.V.

Speed of the movement of flying squids. Priroda 53 no.9:
96-97 '64. (MIRA 17:10)

1. Institut biologii yuzhnykh morey AN UkrSSR, Sevastopol'.

ZUYEV, G.V.

Adaptation to locomotion in Cephalopoda. Zool. zhur. 43 no.9:
1304-1308 '64. (MIRA 17:11)

1. Sevastopol'skaya biologicheskaya stantsiya AN UkrSSR.

ZUYEV, G.V.

Ability of cephalopod larvae for active movement. Zool.
zhur. 43 no.10:1440-1445 '64. (MIRA 17:12)

1. Institute of Biology of Southern Seas, Academy of Sciences
of the Ukrainian S.S.R. (Sevastopol).

ZUYEV, G.V.

Body of Cephalopoda as a supporting surface. Nauch. dokl. vys.
shkoly; biol. nauki no.1:22-25 '65.

(MIRA 18:2)

1. Rekomendovana Institutom biologii yuzhnykh morey AN UkrSSR.

ZUYEV, G.V.; MAKHLIN, V.Z.

Functional significance of rostrum in Actinoptera. Paleont. zhur.
no.1:150-152 '65. (MIRA 18:4)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologoraz-
vedochnyy institut i Institut biologii yuzhnykh morey.

ZUYEV, G.V.

Mechanism of soaring in pelagic squids. Biofizika 10 no.1:
191-192 '65. (MIRA 18:5)

1. Institut biologii yuzhnykh morey AN UkrSSR, Sevastopol'.

ZUYEV, G.V.

Mechanism of developing carrying power by the body of cephalopod mollusks.
Bicfizika 10 no.2:360 '65. (MIRA 18:7)

1. Institut biologii yuzhnykh mory AN UkrSSR, Sevastopol'.

ZUYEV, G.V.

Basic characteristics and adaptive significance of the evolution of the shell in Cephalopoda. Zool. zhur. 44 no.2:284-286 '65.

(MIRA 18:5)

1. Institut biologii yuzhnykh morey AN UkrSSR, Sevastopol'.

ZUYEV, G.V.

Cephalopoda and shipbuilding. Priroda 54 no.3:102-103 Mr '65.

(MIRA 18:4)

1. Institut biologii yuzhnykh morey AN UkrSSR, Sevastopol'.

ZUYEV, G.V.

Characteristics of the mover position in Cephalopoda. Izv. AN SSSR.
Ser. biol. no. 3:403-409 My-Je '65. (MIRA 18:5)

1. Institut biologii yuzhykh morey AN SSSR, Sevastopol'.

ZUYEV, G.V.

How strong are the octopuses? Priroda 54 no.4:115-116 Ap '65.
(MIRA 18:5)

1. Institut biologii yuzhnykh morey AN UkrSSR, Sevastopol'.

ZUYEV, G.V.

Occurrence of the squid *Symplecototeuthis oulaniensis* (Løsson)
Pfeffer in the Mediterranean Sea. Zool. zhur. 44, no. 5: 767-768
'65. (MIRA 18:6)

1. Institut biologii yuzhnykh morey AN UkrSSR, Sevastopol'.

ZUYEV, G.V.

Nonstationary water circulation in *Ommastrephes sagittatus*
Lam. Nauch. dokl. vys. shkoly; biol. nauki no. 1:14-17 '66.

(MIRA 19:1)

1. Rekomendovana Institutom biologii yuzhnykh morey AN
UkrSSR. Submitted April 21, 1964.

ISAKORIN, B.N.; YAKUBOVICH, I.A.; ZUYEV, G.P.; KRASOV, V.G.; SMIRNOV, V.F.;
PIVOVAROV, F.Ya.

Mix-and-settle apparatus for the extraction of uranium and rare
metals from aqueous solutions. Atom. energ. 12 no.6:503-513 Je '62.
(MIRA 15:6)

(Extraction apparatus)

ZUYEV, V. S.

"Amplifier-oscillator combination of ruby with a peak output of about eight joules in $1\frac{1}{4}$ nanoseconds."

paper presented at the Lasers & Their Applications Conf, London, 29 Sep-1 Oct 64.

ZUYEV, I.; VEDEK'KOV, S.

Experimental showed good results. Prof. tekhn. obr. 21 no.1:27-28
Ja '64. (MIRA 17:3)

1. Direktor Tsentral'nogo uchebnogo kombinata Yuzhno-Ural'skogo
soveta narodnogo khozyaystva (for Zuyev). 2. Zaveduyushchiy meto-
dicheskim kabinetom Chelyabinskogo oblastnogo upravleniya profes-
sional'no-tekhnicheskogo obrazovaniya (for Veden'kov).

ZUYEV, I.

Creating methodological sections for individual occupations.
Prof.-tekh. obr. 19 no.12:27-28 D '62. (MIRA 16:2)

1. Direktor uchebno-kurovogo kombinata Chelyabinskogo
soveta narodnogo khozyaystva.
(Chelyabinsk Region - Vocational education)

ZUYEV, I.

Methodological study rooms in factories. Prof.-tech. obr. 19
no.5:27-28 My '62. (MIRA 15:5)

1. Direktor uchebno-kursovogo kombinata Chelyabinskogo
sovnarkhoza.
(Chelyabinsk Province--Vocational education)

ZUYEV, I.

Attention to the training of master workers. Prof.-tekh. obr. 20
no.5:30-31 My '63. (MIRA 16:7)

1. Direktor Tsentral'nogo uchebno-kursovogo kombinata Yuzhno-Ural'skogo ekonomicheskogo rayona.
(Chelyabinsk Province---Evening and continuation schools)

ZUYEV, I.

Inflammability of "lederin". Posh.delo 3 no.12:13-14 D '57.
(MIRA 10:12)

1.Nachal'nik Upravleniya pozharnoy okhrany Latvyskoy SSR.
(Leather substitutes)

MITROFANOV, V.; ZUYEV, I.; MASHKAUTSAN, S.; YARTSEV, G.; KAMKIN, L.; ZBARSKIY, S.; GLUSHCHENKO, M.; ROZKIN, G.

Shortcomings of the stage system of teaching. Prof.-tekh. obr. 21
no.7:29-31 JI '64. (MIRA 17:11)

1. Nachal'nik otдела podgotovki kadrov Yuzhno-Ural'skogo soveta narodnogo khozyaystva (for Mitrofanov). 2. Direktor tsentral'nogo uchebnogo kombinata Yuzhno-Ural'skogo soveta narodnogo khozyaystva (for Zuyev). 3. Nachal'nik otдела tekhnicheskogo obucheniya Chelyabinskogo traktornogo zavoda (for Yartsev). 4. Nachal'nik otдела tekhnicheskogo obucheniya Chelyabinskogo metallurgicheskogo zavoda (for Kamkin). 5. Direktor TSentral'nogo uchebnogo kombinata "Glavyuzhuralstroy" (for Zbarskiy). 6. Nachal'nik otдела tekhnicheskogo obucheniya Magnitogorskogo metallurgicheskogo kombinata (for Glushchenko).

ZUYEV, I.

With common efforts. Pozh. delo 9 no.4:32, 3 of cover
Ap '63. (MIRA 16:4)

1. Nachal'nik Upravleniya pozharney okhrany Latvyskoy SSR.
(Latvia--Fires and fire prevention)

ZUYEV, I.

We need a close connection. Prof.-tekh.obr. 22 no.8:29
Ag '65.

(MIRA 18:12)

1. Direktor Tsentral'nogo uchebnogo kombinata Yuzhno-
Ural'skogo soveta narodnogo khozyaystva.

ZUYEV, I.I., inzh. (Moskva); STREL'NIKOV, V.N., inzh. (Ryazan')

Textbook for technical schools. Put' i put. khoz. 8 no.10:32-33
'64. (MIRA 17:12)

SHEVCHENKO, A.A., doktor tekhn. nauk; GULYAYEV, G.I., kand. tekhn. nauk;
YURCHENAS, V.A., mladshiy nauchnyy sotrudnik; KITAYENKO, V.P.,
inzh.; DERGACH, A.Ya., inzh.; ZUYEV, I.I., inzh.; KORBOCHKIN, I.Yu.,
inzh.

Reduction of stretched thin-walled pipes. Izv. TSNIICM no.4:
31-33 '58.

(MIRA 11:5)

(Pipe) (Rolling (Metalwork))

18.5100

77612
SOV/133-60-2-12/25

AUTHORS: Osadchiy, V. Ya. (Candidate of Technical Sciences),
Golubchik, R. M., Vasilenko, S. I., Zuyev, I. I.,
Shvedchenko, A. A., Kirvalidze, N. S. (Engineers)

TITLE: Improvement in Operation of Plug Rolling Mills of
400-mm Tube Rolling Installation

PERIODICAL: Stal', 1960, Nr 2, pp 136-139 (USSR)

ABSTRACT: The authors investigated power and speed rates of tube rolling by the plug mill process in an attempt to determine factors which would enhance productivity and improve tube quality, as follows: (1) Metal pressure on rolls was studied in plug mill Nr 2 equipped with a 900 hp motor. The mill is farthest from the automatic stand and, consequently, rolls the tube at comparatively low temperatures. The cylindrical part of the grooved tapered rolls is 91 mm long. Pressure gages installed between housing screws and roll pads and oscillograph MPO-2 were used. Tubes of various sized and steels (see Table A) were experimentally rolled. The steel compositions are not given.

Card 1/7

Improvement in Operation of Plug Rolling
Mills of 400-mm Tube Rolling Installation

77612
SOV/133-60-2-12/25

Table A. Roll pressure and coefficient of axial slip in tube rolling. (A) Pipe sizes (mm): (1) finished, (2) after automatic mill, (3) after plug mill; (B) designation of steel; (C) mandrel diam (mm); (D) number of rolled tubes; (E) mean full metal pressure on roll (tons); (F) coefficient of axial slip (γ_{ax}); (G) mean specific pressure on roll (kg/mm^2); (H) starting and finishing temperature ($^{\circ}C$).

A			B	C	D	E *	F	G	H
1	2	3							
146x7	153x7	162x7	D	145	4	12,0	0,65	10,4	—
146x9	153x9	162x9	D	141	5	13,2	0,88	11,4	—
146x12	154x12	162x12	D	135	4	15,2	0,91	12,7	—
245x7	242x7	255x7	10-20	237	4**	18,0	0,47	15,6	860/835
					6***	13,5	0,90	9,7	880/835
245x8	242x8	255x8	45	235	4	13,5	0,52	11,0	935/935
245x10	242x10	255x10	20	231	7	16,0	0,75	10,6	965/935
245x12	242x12	255x12	20	227	4	19,0	0,60	13,5	900/930
245x12	242x12	255x12	45	227	4	15,0 (22,5)	0,53	11,5	980/950
245x17	242x17	254x17	10	217	4	20,5	0,50	12,0	1000/965

Card 2/7

77612 SOV/133-60-2-12/25

Table A (cont'd)

A			B	C	D	E *	F	G	H
1	2	3							
245x18	242x18	251x18	20	215	4	26,0	--	--	890/960
245x23	243x23	252x23	45	206	5	27,0	--	--	980/950
245x24	243x24	252x24	45	204	4	23,0	--	--	880/950
273x7	266x7	280x7	20	262	6	14,0 (18)	0,50	11,8	870/830
273x9	266x9	280x9	10--20	258	6	16,5 (18,5)	0,62	10,8	940/830
273x9	266x9	280x9	15 KhM	258	6	18,7 (22)	0,39	15,7	930/830
273x10	266x10	280x10	20	256	5	17,8 (22,5)	0,60	10,2	930/880
273x14	267x14	279x14	20	248	4	17,2 (32)	0,65	10,5	920/900
273x17	268x17	279x17	20	242	5	20,0	0,51	12,0	1020/990
273x20	268x20	279x20	20	236	5	18,7	--	--	960/940
273x20	268x20	279x20	45	236	5	10,5 (26,5)	--	--	1010/960
273x22	268x22	279x22	12XMF	232	5	16,3	--	--	930/960
273x38	270x38	277x38	20	199	4	23,2	0,75	12,2	1110/1055
273x39	270x39	277x39	12XMF	197	4	15,8 (21)	0,65	9,0	1120/1090
273x42	270x42	277x42	20Td	191	5	22,2	0,69	13,1	1060/1030
273x44	270x44	277x44	46Kh	187	6	25,0 (36)	0,70	14,5	1085/1060
273x45	270x45	277x45	20	185	7	20,0 (27,5)	0,67	12,5	1070/1040

*Parentheses--peaks at biting period; brackets--peaks during jamming of tube

**Without salt

***With salt

Card 3/7

Improvement in Operation of Plug Rolling
Mills of 400-mm Tube Rolling Installation

77612
SOV/133-60-2-12/25

Jamming of the tube at the site of deformation caused by improper setting up of the mill was found to represent a potential danger to other parts. Pressure in that case was at least double the normal pressure exerted during the process. However, the authors failed to establish an accurate correlation between metal pressure on the rolls on the one hand, and tube diameter and effects of the chemical composition of steel on the other. As wall thickness increases (see Table A) so does the metal pressure on the rolls. This pressure increase is assumed to be a decisive factor at the initial stage of axial slip. With an increasing coefficient of axial slip, the pressure on the rolls increases as a result of the greater reduction of metal during the half-turn of the tube. After reaching a maximum the pressure gradually falls off despite further increases in wall thickness; this is due to the decreased coefficient of axial slip and higher temperatures of the tube. (2) Axial slip is of major technological importance in mill productivity and in power and

Card 4/7

Improvement in Operation of Plug Rolling
Mills of 400-mm Tube Rolling Installation

77612
SOV/133-60-2-12/25

speed rates of metal deformation. The authors determined axial speed by measuring the time required for the front end of the tube to travel through a certain section on delivery guides. These coefficients decrease with increased tube diameters due to impaired biting conditions and rolling process as a result of the greater tube-roll diameter ratio. (3) Mean specific pressure was calculated from:

$$p_m = \frac{P_{def}}{F} = \frac{P_r - P_b}{F} \quad (2)$$

where P_{def} = force of plastic deformation in reduction as it affects area of contact F ; P_r = total force acting on roll in plane perpendicular to the axis of rolling; P_b = bending force exerted by pressing tubes between rolls. P_b is found from equation:

$$P_b = 2\eta_b \cdot \frac{\sigma_s h^3}{d_{st} - h} l_b \quad (3)$$

Card 5/7

Improvement in Operation of Plug Rolling
Mills of 400-mm Tube Rolling Installation

77612
SOV/133-60-2-12/25

where $\eta_b = 2.1-2.4$ is coefficient of the effect of outer tube ends on bending force; $\sigma_s =$ yield point; $h =$ thickness of metal under rolls; $d_{ot} =$ outside diameter of rolled tube; $l_b =$ length of tube under action of rolls. Experimental data revealed that the difference between the mean specific pressure obtained by dividing the full pressure of metal on rolls by the area of contact and the mean specific pressure of reduction calculated from Eq. (2) ranges between 10 and 20% (see Table A). In designing new mills the authors suggest calculating the full pressure of metal on the rolls by either utilizing (a) the mean specific pressure or (b) the "pressure of reduction" increased by 10-20% and determined by a method of Bur'yanov, V. F. ("Force Originating in Tube Rolling in Plug Mill," in collected articles, "Working of Metals by Forces of Pressure," Issue IV, Metallurgizdat, 1956) and Smirnov, V. V. ("Determination of Forces and Moments in Tube Rolling in Plug Mill," in collected articles

Card 6/7

Improvement in Operation of Plug Rolling
Mills of 400-mm Tube Rolling Installation

77612
SOV/133-60-2-12/25

same as above). (4) Various types of lubricants were tested in order to reduce rolling time by decreasing the slip between metal and rolls. As seen from Table A the coefficient of axial slip is considerably increased by spraying the inside of the tube with NaCl before rolling. However, NaCl promotes the escape of gas and enhances corrosion. A mixture consisting of one part salt, one part graphite, and three parts air-dried scale decreased slip by 1.17 times and contaminated the working area considerably less than NaCl. Rolling process was much more stable and mandrel wear decreased. The authors emphasize that the use of the proper lubricant cuts rolling time from 20 to 30%. For more efficient operation of the plug mill the authors recommend: (1) improving roll pass design and make; (2) establishing optimal setting up parameters; (3) systematic use of lubricant. There are 2 figures; 1 table; and 5 Soviet references.

ASSOCIATION: Moscow Steel Institute (Moskovskiy institut stali), Southern Pipe Plant (Yuzhnotrubnyy zavod)

Card 7/7

ZUYEV, I. I.

3

11500

also 1415, 1454

8/137/81/ACC/001/013/049
AC05/A101

AUTHORS: Shevchenko, A.A., Olyeyev, O.I., Yurgelonen, V.A., ~~Kisachenko, V.~~
F., Bergach, A.Ya., Zuyev, I.I., Korobochkin, I.Ya.

TITLE: A technology of pipe reduction with tension

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 3, 1961, 33, abstract 52266
("Byul. nauchno-tekhn. inform. Ukr. n.-i. traba. Inst.", no. 6 - 7,
1959, 15 - 21)

TEXT: VNIIT together with the Yuzhno-ukrainnyy Plant determined the para-
meters of pipe reduction with tension, in order to assist the pipe-rolling shop
in assimilating the given technology. For the first time pipes of 57x4.75; 50x
x2.75; 38 x 2.75; and 38 x 2.5 mm with ± 10% tolerances of wall thickness were
obtained by hot rolling for the cold drawing shop. The authors investigated and
recommended the grooving of rolls of the reduction mill with higher partial de-
formations.
K. U.

[Abstractor's note: Complete translation.]

Card 1/1

ZUYEV, Ivan Ivanovich; KABANOVSKIY, I.I., red.; SMIRNOV, A.V., red.; PREE-
DERIY, S.P., tekhn. red.

[Equipment for areas used for training in track laying] Oborudovanie
uchebnogo poligona zheleznodorozhnogo puti. Moskva, Vses. uchebno-
pedagog. Proftekhizdat, 1961. 88 p. (MIRA 14:8)
(Railroads--Employees--Education and training) (Railroads--Track)

OSADCHIY, V.Ya., kand.tekhn.nauk; GOLUBCHIK, R.M., inzh.; VASILENKO,
S.I., inzh.; ZUYEV, I.I., inzh.; SHVEDCHENKO, A.A., inzh.;
KIRVALIDZE, N.S., inzh.

Improving the performance of spinning equipment on pipe rolling mills no. 400. Stal' 20 no.2:136-139 P '60.
(MIRA 13:5)

1. Moskovskiy institut stali i Yuzhnotrubnyy zavod.
(Rolling mills)

ZUYEV, I.I.

Lie ideals of associative rings. Usp.mat.nauk 18 no.1:155-158
Ja-F '63. (MIRA 16:2)

(Ideals (Algebra))

AKIMOVA, Ye.P.; RUDOY, V.S.; SHEVCHENKO, L.N.; NESTEROVA, N.H.;
Prinimali uchastiye: VASILENKO, S.I.; ZUYEV, I.I.; VIL'YANS, O.S.;
LAGUTINA, R.V.; DERGACH, A.Ya.; KITANENKO, V.P.; KIRVALIDZE, N.S.;
YAKIMENKO, N.S.; SAMOYLENKO, V.D.

Effect of the method of manufacturing E1847 steel on the quality
of tubes. Stal' 21 no.12:1113-1114 D '61. (MIRA 14:12)

1. Ukrainskiy nauchno-issledovatel'skiy trubnyy institut (for
Akimova, Rudoy, Shevchenko, Nesterova). 2. Nikopol'skiy
yuzhnotrubnyy zavod (for Vasilenko, Zuyev, Vil'yans, Lagutina,
Dergach, Kitanenko, Kirvalidze, Yakimenko, Samoilenko).
(Steel, Stainless--Electrometallurgy)
(Pipe mills--Quality control)

Zuyev, I. I.

137-1957-12-23783

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 12, p 132 (USSR)

AUTHOR: Zuyev, I. I.

TITLE: On the Production Technology of Low-cost Pipe Profiles (O tekhnologii proizvodstva ekonomichnykh profiley trub)

PERIODICAL: V sb.: Ratsionalizatsiya profiley prokata. Moscow, Profizdat, 1956, pp 267-270

ABSTRACT: Low-cost profiles of pipes (P) can be divided into the following categories depending on the manufacturing technology and the nature of the equipment employed: profiles of pipes (P) can be divided into profiled P's, P's of variable cross-section, P's with profiled external surface, bi-metallic P's, P's for petroleum and gas lines, P's of metal (M) of improved mechanical properties, thin walled P's, and ball-bearing P's. The profiled P's are manufactured in square, rectangular, oval, and other shapes. For a wall thickness of < 3 mm they are produced by means of cold drawing (in a single pass), while hot rolling (R) in reduction mills is employed for P's with thicker walls. The Nikopol'skiy plant is turning out these P's in various sizes and is presently

Card 1/3

137-1957-12-23783

On the Production Technology of Low-cost Pipe Profiles

setting up the production of thin-walled, rectangular P's of stainless steel 16x14x0.5 mm and 16x8x0.5 mm and in sections 11 m long. The P's of variable cross section are obtained by varying the diameter or the wall thickness or both simultaneously along the P in accordance with a certain law. Pipes with profiled external surfaces are manufactured by means of pressing. The Yuzhnotrubby plant is producing bi-metallic P's of the following metals: steel + Cu and the alloy SiCrAl + Cu. Along with the production of P's for petroleum gas lines by means of electric welding, it is also essential to set up for the production of seamless rolled, thin-walled P's of large diameter by means of the method of rolling a preheated, hollow, thick-walled casting in a common piercing mill. P's made of M with increased mechanical properties are manufactured from carbon- and low-alloy steel with a subsequent heat treatment according to the following technology: heating in passage (continuous) furnaces for quick annealing, quenching in circular systems, annealing in a pass-through furnace. Such procedure ensures a high output, as well as adequate uniformity of mechanical properties. The employment of P's made of M with improved mechanical properties results in considerable

Card 2/3

137-1957-12-23783

On the Production Technology of Low-cost Pipe Profiles

economy of M and decreased construction weight. The requirements for thin-walled P's of large diameter with a high quality of surface and profile cannot be met by existing production methods. The construction of mills for cold rolling of P's of large diameters (up to 400 mm) is essential. The ball-bearing P's of diameter > 80 mm made of steel ShKh-15 are usually turned after rolling. Depending on the dimensions, about 25 per cent of M is lost in shavings. The employment of sizing will eliminate or greatly diminish the machining of parts made from P's.

Ye. T.

1. Pipes-Profiled-Characteristics

Card 3/3

OYKS, G.N.; SOKOLOV, G.A.; ZUYEV, I.M.; PETROV, V.K.; ZUBAREV, A.G.;
KLIMASHIN, P.S.

Treatment of liquid transformer steel in the ladle. Stal'
25 no.8:711-715 Ag '65. (MIRA 18:8)

SOKOLOV, G.A.; ZUYEV, I.M.; LOBANOV, V.V.; ZUBAREV, A.G.; KLIMASHIN, P.S.

Treatment of converter and open-hearth steel with electric furnace
slag. Stal' 24 no.7:612 J1 '64. (MIRA 18:1)

1. Moskovskiy institut stali i splavov i Novolipetskiy metallur-
gicheskiy zavod.

SOKOLOV, G.A.; ZUYEV, I.M.; KLIMASHIN, P.S.

Siphon device for draining liquid slag from the ladle.

Metallurg 10 no.1:19-22 Ja '65.

(MIRA 1844)

1. Moskovskiy institut stali i splavov i Novolipetskiy metal-
lurgicheskiy zavod.

ZUYEV, I.V. (Kazan')

Circular integral curves of the equation $f(x, y, y') = 0$

Izv. vys. ucheb. zav.; mat. no.6864-71 '63 (MIRA 1788)

86180

S/140/60/000/005/007/021
C111/C222

16.560.0

AUTHOR: Zuyev, I.V.

TITLE: On the Straight Lines Belonging to an Algebraic Surface With a Double Net of Königs

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1960, No. 5. pp. 52 - 61

TEXT: Let to the point of the plane with central-affine coordinates $X = x_1 + ix_2, Y = x_3 + ix_4$ correspond the point with canonical coordinates x_1, x_2, x_3, x_4 (cf.(Ref. 1)) in the biaxial space B_3 . To an algebraic curve of the complex plane the equation of which is

$$(1) A_n + A_{n-1} + \dots + A_k = 0,$$

where A_1 are the terms of 1-th order, in the B_3 there corresponds the surface with the equation

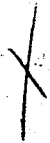
Card 1/5

X

86180

On the Straight Lines Belonging to an Algebraic Surface With a Double Net of Königs

S/140/60/000/005/007/021
C111/C222



$$\begin{vmatrix}
 A_n & A_{n-1} & \dots & \dots & A_k \\
 & A_n & A_{n-1} & \dots & A_k \\
 & & & \dots & A_k \\
 & & & A_n & A_{n-1} & \dots & A_k \\
 \bar{A}_n & \bar{A}_{n-1} & \dots & \dots & \bar{A}_k \\
 & A_n & \bar{A}_{n-1} & \dots & \bar{A}_k \\
 & & & \dots & \dots & \dots & \bar{A}_k \\
 & & & \bar{A}_n & \bar{A}_{n-1} & \dots & \bar{A}_k
 \end{vmatrix} = 0, \quad (2)$$

where $\bar{A}_1 = \bar{A}_1(\bar{X}, \bar{Y})$ is conjugate complex with $A_1(X, Y)$. At the empty places of the determinant there are 0. If (1) has the form $A_n + A_k = 0$ then $n + k$ is the order of the surface. The surfaces of third order correspond to the curves $A_2 + A_1 = 0$ or $A_3 + A_0 = 0$. The equation of the curve which corresponds to a surface of fourth order is $A_2 + A_1 + A_0 = 0$.

Card 2/5

86180

On the Straight Lines Belonging to an Algebraic Surface With a Double Net of Königs

S/140/60/000/005/007/021
C111/C222

or $A_3 + A_1 = 0$ or $A_4 + A_0 = 0$. The points of the complex plane with real coordinates are mapped into the points of the straight line

(3) $x_2 = 0, x_4 = 0$

in B_3 . The motions of the real central affine group transform real points into real ones so that the corresponding 3-parametric subgroup of the bi-axial motions in the B_3 leaves (3) invariant.

Theorem 1: If the coefficients of (1) are real then the corresponding surface in the B_3 contains the straight line (3). X

Theorem 2: To an irreducible algebraic surface to which (3) belongs, there corresponds a curve in the complex plane the equation coefficients of which are real or can be made real after a multiplication of the whole equation with a number.

Let L be a curve in the complex plane, \mathcal{C} be a set of curves of the complex plane which have real coefficients and are central-affine equivalent to L .

Card 3/5

86180

On the Straight Lines Belonging to an Algebraic Surface With a Double Net of Königs $S/140/60/000/005/007/021$
 $C111/C222$

Theorem 3: If \mathcal{C} is empty then on the surface corresponding to the curve L in B_3 there exist no non-singular real straight lines.

Let \mathcal{C} be non-empty and let \mathcal{C} be subdivided into classes so that to one class there belong curves arising from each other by real central-affine transformations, while curves of different classes can be obtained from each other only by complex central-affine transformations. Let exist s classes. In each class a representative is chosen. Let the curve of the i -th class admit the group $G^{(i)}$ of transformations into itself. Let the real transformations form the subgroup $g^{(i)}$. Let I_i be the index of $g^{(i)}$.

Theorem 4: Let r be the number of real straight lines on the given algebraic surface with a double net of Königs. Then it holds $r = \sum_{i=1}^s I_i$.

Theorem 5: Every algebraic ruled surface having an imaginary double net of Königs admits a continuable group of transformations into itself. The straight line of a surface is called a torso straight line if the surface in the points of this straight line has the same tangential planes.

Card 4/5

86140

On the Straight Lines Belonging to an Algebraic Surface With a Double Net of Königs S/140/60/000/005/007/021
C111/C222

Theorem 6 : An algebraic surface with an imaginary double net of Königs has no real non-singular torso straight lines if it is different from a plane.

Theorem 7 : There are no developable algebraic surfaces with an imaginary double net of Königs.

Then the author gives a classification of those curves which correspond to surfaces of third and fourth order. The classification is used for giving the number of real straight lines which carry the single surfaces, e.g. on

$$(18) F_1(x_1x_4 + x_2x_3)^2 + (x_2 + x_4) [x_4(x_1^2 + x_2^2) + x_2(x_3^2 + x_4^2)] = 0$$

there lie two real non-singular straight lines.

The author mentions A.P. Norden. There are 3 Soviet references.

[Abstracter's note: (Ref. 1) concerns a paper of A.P. Norden in Matematicheskiy sbornik, 1949, Vol. 24, No. 3]

ASSOCIATION: Kazanskiy aviatsionnyy institut (Kazan' Aviation Institute)

SUBMITTED: June 6, 1959

Card 5/5

X

ZUYEV, I.V.

Application of analytic functions to the problem involving
straight lines on a plane containing an imaginary double
Königs net. Trudy KAI no.71:97-105, 1962.

(MIRA 18:5)

~~Name: ZUBOV, I. V.~~

Dissertation: Actual interpretation of the curves of a complex centro-affinic plane

Degree: Cand Phys-Math Sci

Defended at
Affiliation: Min Higher Education USSR, Kazan' Order of Labor Red Banner State U imeni V. I. Ul'yanov-Lenin

Publication
~~Defense~~ Date, Place: 1956, Kazan'

Source: Knizhnaya Letopis', No 45, 1956

ZUYEV, I.V. (Kazan')

True interpretation of curves in a complex centroaffine plane.
Uch.zap.Kaz.un. 115 no.10:13-15 '55. (MIRA 10:5)
(Geometry, Differential)
(Invariants)

ZUYEV, I.V.

Straight lines belonging to an algebraic surface with a
double Königs net. Izv.vys ucheb.zav.;mat.no.5:52-61 '60.
(MIRA 13:10)

1. Kazanskiy aviatsionnyy institut.
(Surfaces)

DRIZOVSKAYA, T.M.; ZUYEV, K.A. (g.Moskva)

Industrial practice of students in chemical laboratories of
plants. Khim. v shkole 14 no.2:82-83 Mr-Apr '59.

(MIRA 12:4)

(Chemistry--Study and teaching)

ZUYEV, K.P.

Thermo-emf of cuprous oxide at high temperatures (1000° - 1250° C).
Part 4. Fiz.tver.tela 1 no.7:1102-1111 JI '59.

(MIRA 13:2)

1. Institut poluprovodnikov AN SSSR, Leningrad.
(Copper oxide - Electric properties)

ZUYEV, K. P., Candidate Phys-Math Sci (diss) -- "The electrical properties of cuprous oxide at high temperatures". L'vov, 1959. 16 pp (Min Higher Educ Ukr SSR, L'vov Polytech Inst), 150 copies (KL, No 25, 1959, 126)

66257

SOV/181-1-7-13/21

24(6) 247700

AUTHOR:

Zuyev, K. P.

TITLE:

Thermo-e.m.f. of Copper Protoxide at High Temperatures (1000 - 1250°C). IV

PERIODICAL:

Fizika tverdogo tela, 1959, Vol 1, Nr 7, pp 1102-1111 (USSR)

ABSTRACT:

The production of CuO_2 , the mounting of the samples to the standard electrodes and other experimental details as especially the measuring method applied are described in a detailed manner by references 12 and 13. The thermo-e.m.f. was measured by means of a compensation method referring the measurements to platinum. The accuracy of thermo-e.m.f. determination amounted to about 5%. The thermo-e.m.f. was determined in oxygen ($P_{O_2} = 1 \pm 760$ torr).

The results of the measurement permit the following conclusions:
1) Within the temperature of 30 - 1250°C the sign of the thermo-e.m.f. coefficient for Cu_2O is constant. This corresponds to a hole type conductivity of Cu_2O . It was possible to show that the absolute amount of the thermo-e.m.f. of Cu_2O rises constantly

Card 1/3

4

66257
SOV/181-1-7-15/21
(1000 - 1250°C). IV

Thermo-e.m.f. of Copper Protoxide at High Temperatures

with heating, and attains a maximum at those temperatures which are located in the transition zone of Cu_2O-CuO . With higher temperatures the e.m.f. decreases quickly and reaches the amount of $250 \mu v/grade$ for the melting temperature of $1235^{\circ}C$. 2) On the transition of Cu_2O from rigid to liquid phase the electric conductivity as well as the thermo-e.m.f. show a remarkably abnormal course. 3) With constant temperature the thermo-e.m.f. of Cu_2O is a function of the partial oxygen pressure. A lower thermo-e.m.f. corresponds to a higher partial oxygen pressure. 4) As shown by an investigation of the dependence of the thermo-e.m.f. on the composition Cu_2O-CuO the maxima of all curves with respect to the dependence of thermo-e.m.f. of Cu_2O on temperature exhibit a certain displacement from each other. This displacement is plotted - within the range of accuracy of measurement - on a straight line which indicates the limit range as far as Cu_2O may exist. 5) Within the limits of 1000 and $1250^{\circ}C$ a correlation between the progress of temperature of the

Card 2/3

66257

SOV/181-1-7-13/21

Thermo-e.m.f. of Copper Protoxide at High Temperatures (1000 -- 1250°C). IV

thermo-e.m.f. of Cu_2O and the progress of its electric conductivity in the stabilization zone was stated. The investigation was performed under the scientific supervision of the Doctor of Physical and Mathematical Sciences A. R. Regel'. V. P. Zhuze displayed great interest in this investigation, and assisted by valuable advice. Investigations by Zhuze, Kurchatov, Nikolayev, Ioffe, A. R. Regel', Gokhberg, Kvasha, and Kurnakov were especially mentioned and results obtained by them were compared to results yielded by the investigation under review. There are 6 figures, 1 table, and 29 references, 16 of which are Soviet.

ASSOCIATION: Institut poluprovodnikov AN SSSR, Leningrad (Institute of Semiconductors of AS USSR, Leningrad)

SUBMITTED: May 26, 1958

Card 3/3

ZUYeV, K. P.

7485. ZUYeV, K. P. Proiskhozhdenie zemli i planet. Stavropol',
kn. izd., 1954 56s. s. ill. 20sm. 3,000 EKZ. 50k.--(55-3883)
P 523.2 & 551.12

So. ^knizhnaya Letopis', Vol. 7, 1955

ZUYEV, K.P.

Electric conductivity of Cu_2O in the region of stabilization in
air (1020-1070°C). Part 1. *Fiz.tver.tela 1* no.1:124-133 Ja '59.

(MIRA 12:4)

1. Institut poluprovodnikov AN SSSR, Leningrad.
(Copper oxides--Electric properties)

ZUYEV, K.P.

Electric conductivity of Cu_2O during dissociation (1070-1250°C).
Part 2. Fiz.tver.tela 1 no.1:134-141 Ja '59. (MIRA 12:4)
(Copper oxides—Electric properties)

ZUYEV, K.P.

Effect of oxygen pressure on the electric conductivity of cuprous oxide at high temperatures. Part 3. Fiz.tver.tela 1 no.5:774-782 My '59. (MIRA 12:4)

1. Institut poluprovodnikov AN SSSR, Leningrad.
(Copper oxides--Electric properties)

S/081/62/000/009/023/075
B158/B101

24.2700

AUTHOR: Zuyev, K. P.

TITLE: Procedure for investigating the electrical conductivity and thermo-emf of cuprous oxide in solid and liquid state

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 9, 1962, B3, abstract 9B569 (Tr. Stavropol'sk. s-kh. in-ta, no. 9, 1960, 121-131)

TEXT: Pure Cu_2O is prepared by etching a Cu plate (99.993% Cu) for 1 min in 30% HNO_3 , washing with 5% NaOH and water, drying and then oxidizing in a stream of O_2 , carefully maintaining the required temperature and pressure. Procedures are developed for determining the electrical conductivity and thermo-emf of Cu_2O in the temperature range 20 - 1250°C and for examining Cu_2O at atmospheric pressure with a given partial pressure of O_2 at 0.5 - 760 mm Hg. [Abstracter's note: Complete translation.]

Card 1/1

ZUYEV, L. A.

Mbr., Moscow Order Lenin State Univ. im. M. V. Lomonosov, -1949-. Mbr. Lab. Physico-Chem., Moscow Agric. Acad. im. Timiryazev, -c1948-; Mbr., All-Union Inst. Fertilizers, Agronomy, & Agric. im. Gedroyts, -c1948-. "Adsorption of Water Vapor by Alumosilicates," Pochvoved., No. 8, 1943; "Dynamics of the Forms of Phosphorus Compounds in Plants," Dok. AN, 58, No. 6, 1947; "Heat of Hydration of Soils," Kolloid. Zhur., 10, No. 2, 1948; "Conversion of Phosphorus Compounds in the Ripening Grains of Spring Wheat," Dok. AN, 70, No. 3, 1950.

USSR/Soil Science
Water Vapor - Adsorption

Feb 1948

"Adsorption of Water Vapors by Soils," L. A. Zayev,
Lab Physicochem Soils, VIUAA imeni Gedroyts; Ye. N.
Gapon, Lab Physicochem, Moscow Agr Acad imeni
Timiryazev, 7 1/2 pp

"Pochvoved" No 2

Results of measurement of water vapor adsorption
with the aid of MacBain scales. The adsorption
curve frequently is S-shaped. Freundlich's equations
used for initial stages of the experiments. No data
obtained on the adsorption of cation with reference
to adsorption of water vapors.

627103

ZUYEV, L. A.

USSR/Soil Science
Chemistry - Heat of Hydration

Mar/Apr 1948

"Heat of Hydration of Soils," Ye. N. Gapon, L. A. Zuyev, All-Union Inst of Fertilizers, Agr Acad imeni K. A. Timiryazev, 10 $\frac{1}{2}$ pp

"Kolloid Zhur" Vol X, No 2

Discusses the integral and differential heat of hydration, results of experiments, evaluation of results, and conclusions reached. Submitted 20 Jan 1947.

PA 70T106

ZUYEV, L. A.

USSR/Biology - Wheat
Phosphorus Compounds

Jan 50

"Conversion of Phosphorus Compounds in the Ripening Grains of Spring Wheat," L. A. Zuyev, V. I. Poruchikova, Moscow State U imeni M. V. Lomonosov, 4 pp

"Dok Ak Nauk SSSR" Vol LXX, No 3

Tests samples of grain of spring wheat at five times over ripening period and determines percent of total dry weight of grains which various phosphorus oxide fractions represent. Determines actual weight of fractions and starch for one plant over same period. Graphs data and discusses reasons for changes in ratio between fractions as grain approaches full maturity. Submitted 14 Oct 49.

158711

USSR/Geophysics - Soil science

FD-1150

Card 1/1 Pub. 129-14/23

Author : Zuyev, L. A., and Golubeva, P. F.

Title : Absorption of phosphorus by the shoots of various plants

Periodical : Vest. Mosk. un., Ser. fizikomat. i yest. nauk, 9, No 7, 111-117, Oct 1954

Abstract : The authors conducted a comparative study of the intensity of absorption of phosphorus from a feeding solution by the shoots of various plants. They did not observe any dependence of the intensity of absorption upon the nitrogen content in the sprouting seeds. Four references (e.g. N. S. Avdonin, "Introduction of granulated superphosphate into rows," Agrobiologiya, No 2, 1949).

Institution : Chair of Agrochemistry

Submitted : January 7, 1954

USSR/Physiology of Plants

Card 1/1

Authors : Zuev, L. A., and Golubeva, P. F.

Title : Absorption of phosphorus by germinating seeds and sprouts of spring wheat

Periodical : Dokl. AN SSSR, 96, Ed. 2, 387 - 389, May 1954.

Abstract : Experiments show that the absorption of phosphorus begins simultaneously with the swelling (germination) of the seeds. The absorbed phosphorus concentrates mainly in the seed and its content in the seed is 18 times higher than in the endosperm. During further cultivation of the seed the phosphorus content increases gradually in the roots, sprouts and even in the endosperm. This absorption is closely connected with the intensive and constructive interchange of the meristematic tissues. Five USSR references. Tables.

Institution : The M. V. Lomonosov State University, Moscow

Presented by : Academician A. L. Kursanov, March 16, 1954.

"APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065620016-3

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R002065620016-3"

ZUYEV, L.A.; GOLUBEVA, P.F.

Determination of P^{31} and the activity of P^{32} of mineral phosphates
in acid extract of plants. Vest.Mosk. un. 10 no.10:143-149 0 155.

(MIRA 9:4)

1.Kafedra agrekhimii.
(Minerals in plants) (Phosphorus--Isotopes)