KOZHEVNIKOV, V. A., Cand Tech Sci -- "Problems of the electrodynamic ~~brake action~~ braking on locomotives ~~driven by an internal-combustion engine.~~" Khar'kov, 1961. (Min of Higher and Sec Spec Ed UkSSR. Kar'kov Polytech Inst im V. I. Lenin)
(KL, 8-61, 244)

KOZHEVNIKOV, V.A., inzh.; KOCHNEV, A.V., inzh.

Choice of the characteristics of the air gap of a d.c. machine with given regulatory characteristics. Vest. elektroprom. 32 no.4:35-40 Ap '61. (MIRA 15:5)
(Electric railway motors)
(Magnetic circuits)

KOZHEVNIKOV, V.A., inzh.

Bitumen and vacuum waterproofing of bridges. Avt.dor. 25 no.8:22 Ag '62. (MIRA 16:2)

(Bridge construction)

ALEKSEYEV, A.Ye.; VASIL'YEV, V.A.; DEMBO, A.R.; KOZHEVNIKOV, V.A.; KOCHNEV, A.V.

Premises and features of the standardization of the traction motors of diesel locomotives and single-phase d.c. locomotives. Sbor.rab.po vop. elektromekh.no.8:327-336 '63. (MIRA 16:5)

(Electric locomotives) (Diesel locomotives)

ALEKSEYEV, A.Ye.; KOZHEVNIKOV, V.A., kand.tekhn.nauk

Commutational stability factor of d.c. motors. Vest. elektroprom. 34 no.4:44-47 Ap '63. (MIRA 16:10)

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

DEMBO, Anna Ruvimovna, kand. tekhn. nauk; KOZHEVNIKOV, Vladimir Arsen'yevich, kand. tekhn. nauk; KOCHNEV, Anatoliy Vasil'yevich, inzh.; PRUSS-ZHUKOVSKIY, Vladimir Vladimirovich, inzh.

[Parameters of the modern traction motors for electric and autonomous locomotives] Parametry sovremennykh tiagovykh dvigatelei elektrovozov i avtonomnykh lokomotivov. [By] A.R. Dembo i dr. Moskva, Nauka, 1964. 146 p. (MIRA 17:11)

1. Leningrad. Institut elektromekhaniki.

KOZHEVNIKOV, V.A., inzh.

Full-scale investigations of slabs on the traveled part of bridges. Transp. stroi. 16 no.1:46-47, 57. Ja '66. (MIRA 19:1)

DMITRIYEV, A.D.,dots.,kand.tekhn.nauk; KOZHEVNIKOV, V.A.,inzh.; ZABOLOTNEV, A.M.,inzh.; GLOTOV, B.A.,inzh.

Using reinforced concrete bridges for 50 years without waterproofing. Avt.dor. 22 no.2:18-19 F '59. (MIRA 12:2)
(Bridges, Concrete) (Waterproofing)

KOZHEVNIKOV, V. A., inzh.

Bridge floor slabs without reinforcements. Avt. dor. 25 no.10:22-24 O '62. (MIRA 15:10)

(Bridges, Concrete)

SHTETS, K.A.; KOZHEVNIKOV, V.A.

Calculating the optimum loading of rolling mills by the linear programming method. Izv.vys.ucheb.zav.; chern.met. 8 no.8:182-189 '65. (MIRA 18:8)

1. Khar'kovskiy inzhenerno-ekonomicheskiy institut.

8

ACC NR: AP6032534 SOURCE CODE: UR/0413/66/000/017/0141/0141

INVENTOR: Tselikov, A. I.; Rozanov, B. V.; Nistratov, A. F.; Gol'man, L. D.; Maksimov, L. Yu.; Pobedin, I. S.; Fridman, A. Z.; Kitain, R. S.; Kurovich, A. N.; Nadtochenko, A. F.; Kaganovskiy, F. I.; Kozhevnikov, V. F.; Zonenko, V. V.

ORG: none

TITLE: Hydraulic press reinforced with wire wrapping. Class 58, No. 185696 [announced by the All-Union Scientific Research Institute for the Planning and Design of Metallurgical Machinery (Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut metallurgicheskogo mashinostroyeniya)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 141

TOPIC TAGS: hydraulic press, reinforced hydraulic press, HYDRAULIC EQUIPMENT, METAL PRESS

ABSTRACT: This Author Certificate introduces a hydraulic press reinforced (see Fig. 1) with wire wrapping. The press includes a cylinder, housing consisting of upper end lower crossmembers and columns with a concave oval-shaped outside surface which makes it possible to wind a reinforcing band or wire around the housing. To improve the technical and economic characteristics and the reliability of the press at the same main parameters, the housing is provided with stiffenning ribs located

Card 1/2 UDC: 621.226

ACC NR: AP6032534

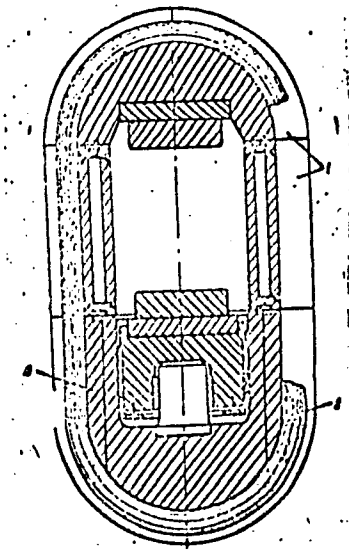

Fig. 1. Hydraulic press reinforced with wire wrapping

1 - Stiffenning ribs; 2 - wrapping; 3 - lower crossmember.

between the wrapping, and the lower crossmember of the press is laminated and serves as a hydraulic cylinder. Orig. art. has: 1 figure.

SUB CODE: SUBM DATE: 20Aug64/

Card 2/2

YEGOROV, Nikolay Mikhaylovich, dots., kand. tekhn. nauk; KOZHEVNIKOV, V.G., retsenzent; BULAKH, G.D., retsenzent; YEFREMOV, G.V., red.; VITASHKINA, S.A., red. izd-va; BODROVA, V.A., tekhn. red.

[Technology of building reinforced concrete ships] Tekhnologiia postroiki zhelezobetonnykh sudov. Moskva, Izd-vo "Rechnoi transport," 1961. 191 p. (MIRA 14:9)
(Shipbuilding) (Ships, Concrete)

KOZHEVNIKOV, Viktor Grigor'yevich; MILOV, Sergey Grigor'yevich; SELETSKIY, S.I., red.; MIKHAYLOVA, L.G., red.izd-va; PARAKHINA, N.L., tekhn.red.

[Mechanization of log loading and sorting in lumber mills] Mekhanizatsiia vygruzki i sortirovki breven na lesozavodakh. Moskva, Goslesbumizdat, 1961. 161 p.
(Sawmills) (MIRA 15:4)

Kozhevnikov, V.I.

S/180/60/000/02/028/028
E071/E135

AUTHOR: Ogurtsov, S.V.

TITLE: Scientific Conference on the Metallurgy, Chemistry and Electrochemistry of Titanium

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1960, Nr 2, pp 167-168 (USSR)

ABSTRACT: The conference took place on January 14-20 1960 in Moscow in the Institute of Metallurgy, Academy of Sciences, USSR. It was organised by the Committee for Coordination of Scientific Research on Titanium. About 400 representatives of academic and research institutions and works participated in the conference. The conference was divided into four sections: 1) raw materials and smelting of ores; 2) chemical technology and chlorination; 3) metallothermic methods of smelting titanium; and 4) electrolysis. The following papers were read:
Metallurgical evaluation of some new deposits (B.B. Dnikrovskiy); State and prospects of improving the technology of smelting of ilminite concentrates (V.A. Reznichenko and V.I. Solov'yev);

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Thermodynamic investigations of titanium compounds (P.B. Khalimov and V.A. Reznichenko); An investigation of the process of reduction of iron-titanium concentrates with carbon (M.B. Rapoport); Some hydrodynamic and kinetic features of the process of chlorination of titanium dioxide in molten chlorides (Kim Men-rin); Oxidation of titanium tetrachloride with oxygen (G.S. Morgav, B.N. Kolentiyov, V.A. Reznichenko); Utilisation of ilminite concentrates for the production of titanium dioxide pigment by the sulphuric acid method (M.L. Borodina, S.B. Sharkevich, N.A. Gubarova); An investigation of some properties of the system $TiCl_4 - AlCl_3 - FeCl_3$ (M.K. Druzhinina); An investigation of phase equilibria liquid-vapour in systems formed by titanium tetrachloride with chloroanhydrides of mono- and trichloroacidic acids (G.V. Seryakov, S.A. Vaks, L.S. Sidorina); Determination of the summary content of carbon in titanium tetrachloride (G.V. Seryakov, S.A. Vaks, I.M. Golovanov); Basic conditions for standardised

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results of the process of production of titanium by the magnesium thermite method (S.V. Ogurtsov, V.A. Reznichenko, V.K. Ustinov, V.I. Kozhevnikov, A.I. Dodkov); On the two stage method of production of titanium by the sodium thermite method (V.A. Reznichenko, S.V. Ogurtsov); Production of a high purity titanium ([illegible]); The influence of the content of chlorine in a high purity titanium sponge on the process of smelting and on the quality of the metal produced (G.M. Vaynshteyn); The production of titanium and its alloys by refining of black anodes (Academician I.P. Bardin, A.D. Khrapov, V.I. Lukashin); On the theory of refining of titanium (V.A. Vikhodskiy); Production of titanium by electrolysis of titanium dioxide in fluoride-chloride melts (I.P. Bardin, A.A. Kitayn); Electrolytic production of titanium from chloride-fluoride melts (V.M. Ioffe, N.N. Rozanov, N.A. Lyubimova); Electrolytic refining of titanium waste products (V.M. Lozovitskiy); and a number of other reports.
There are no figures, tables or references.

Card 3/3

M

KOZHEVNIKOV, V. K.

413. OPERATION OF FURNACE WITH SCRAPER BAR ON PEAT CRUMBS. Pyatyshkin, N. M. and Kozhevnikov, V. K. (Z Ekon. Topliva (Fuel Econ.), Sept. 1951, 7-10). An illustrated description is given of a grate with a reciprocating scraper bar, fitted to a locomotive-type boiler giving 600 kg of steam per h. (L).

BUN'KO, V.A., kand. tekhn. nauk; PODOL'SKIY, V.A., kand. tekhn. nauk; KOZHEVNIKOV, V.L., inzh.

Industrial testing of apparatus for increasing safety in contact networks of electric locomotive haulage. Vop. rud. transp. no.5:345-350 '61. (MIRA 16:7)

1. Dnepropetrovskiy gornyy institut.
(Nikopol' region(Dnepropetrovsk Province)—
Electric locomotives—Safety measures)

BUN'KO, V.A., kand.tekhn.nauk; PODOL'SKIY, V.A., kand.tekhn.nauk;
KOZHEVNIKOV, V.L., inzh.

Electric locomotive trap in the safety network for preventing electric shock. Vop. rud. transp. no.6:296-301 '62. (MIRA 15:8)

1. Dnepropetrovskiy gornyy institut.
(Mine railroads—Safety appliances)

KOZHEVNIKOV, V.M.

Development by wheat of additional spikelets in the same region of the axis of the ear. Sbor. trud. asp. i mol. nauch. sotr. VIR no.5:19-24 '64. (MIRA 18:3)

S/598/61/000/006/001/034
D245/D302

AUTHORS: Ogurtsov, S.V., Reznichenko, V.A., Ustinov, V.K., Kozhevnikov, V.N., and Dedkov, A.I.

TITLE: Basic conditions for the magnesiothermal process of producing titanium

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 6, 1961. Metallotermiya i elektrokhimiya titana, 3 - 13

TEXT: A series of experiments was carried out in a laboratory reactor to study the distribution of reaction components in the formation and growth of Ti sponge and the factors governing the reaction of $TiCl_4$ with Mg. In all experiments, the following were recorded: Furnace temperature before insertion of retorts, furnace heating rate, Ar temperature and pressure in the retort at the beginning of the process, amount of $MgCl_2$ formed and pressure over the tanks containing $TiCl_4$. The Mg was completely fused prior to the process. An exponential relation was found between the feed

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S/598/61/000/006/001/034
D245/D303

Basic conditions for the ...

rate of $TiCl_4$ and specific pressure. Detailed results are shown in diagrams. The authors conclude that automation of the process can best be effected by optimum programming of $TiCl_4$ feed. There are 4 figures.

Card 2/2

L 17418-63 EWT(1)/BDS AFFTC/ASD/ESD-3 RB

ACCESSION NR: AP3005555 S/0049/63/000/007/1108/1116

AUTHOR: Kozhevnikov, V. M.

TITLE: Nonlinear problem on the orographic disturbance of a stratified air current (presented by I. A. Kibel', member of editorial staff)

SOURCE: AN SSSR. Izvestiya, ser. geofiz., no. 7, 1963, 1108-1116

TOPIC TAGS: orographic disturbance, stratified flow, eddy current, wind velocity

ABSTRACT: The author has studied the plane stratified nonlinear problem of disturbance by an obstacle of an unlimited stratified flow of air. He has obtained a solution to this problem for a semicircular obstacle, for the case when the wind at sufficient distance in front of the mountain (obstacle) is independent of the height. He has plotted the flow lines for an actual case and discovered the relations that give rise to eddy currents above obstacles. If the obstacle is low, no eddy currents arise. Only one eddy current will arise above obstacles of moderate height; more than one over high obstacles. The actual dimensions of these obstacles depend on complexly derived factors not readily expressed in physical terms. The author concludes that the appearance of eddy currents above

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ACCESSION NR: AP3005555

3

a mountain range is apparently associated with the nature of nonlinear flow and with stratification in this flow. "In conclusion I consider it necessary to express my deep thanks to the scientific guidance of Professor A. F. Dyubyuk for daily aid in completing this problem, and also to B. N. Trubnikov for very valuable advice and consultations." Orig. art. has: 1 figure and 32 formulas.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University)

SUBMITTED: 10Dec62 DATE ACQ: 20Sep63 ENCL: 00

SUB CODE: PH, AS NO REF SOV: 011 OTHER: 008

Card 2/2

ZYRYANOV, Ye.O.; KOLEVATOV, P.A.; OSIPOV, Yu.A.; KOZHEVNIKOV, V.N.

Industrial testing and introduction of dry PermNIUI-4 dust collectors at the Lenin Mine of the Kizelugol' Combine. Nauch. trudy PermNIUI no.6:215-223 '64.

(MIRA 18:2)

POBEDINSKIY, M.N., professor, redaktor; KOZHEVNIKOV, V.P., professor, redaktor; KISELEV, P.N., professor, redaktor; DOLGOV, A.P., redaktor; MARGULIS, U.Ya., redaktor; BEL'CHIKOVA, Yu.S., tekhnicheskiy redaktor.

[Use of radioactive phosphorus in the treatment of skin diseases] Primenenie radioaktivnogo fosfora dlia lecheniia kozhnykh zabolevanii. Moskva, Gos.izd-vo meditsinskoi lit-ry, 1955. 171 p. (MLRA 8:10)

1. Chlen-korrespondent AMN SSSR (for Kozhevnikov).
(PHOSPHORUS--THERAPEUTIC USE) (SKIN--DISEASES)

KOZHEVNIKOV, V.P., inzhener; BAKHTINOV, B.P., inzhener; MEREKIN, S.V., inzhener; SHTERNOV, M.M., inzhener; GRITSUK, N.F., inzhener.

Turn-over rollers for continuous billet mills. Stal' 15 no.1:54-58 Ja '55. (MIRA 8:5)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Rolling-mill machinery)

Kozhevnikov, V.P.

AUTHOR: KOZHEVNIKOV,V.P., UZIYENKO,A.M., KUSTOBAYEV,G.G. PA - 2379
TITLE: Rise in Productivity of the No 2 Blooming Mill. (Uvelicheniye proizvoditel'nosti bluminge no 2, Russian).
PERIODICAL: Stal', 1957, Vol 17, Nr 1, pp 47 - 52 (U.S.S.R.).
Received: 5 / 1957 Reviewed: 5 / 1957

ABSTRACT: A research-party occupied itself with the study of the work of individual rolling mill train and aggregates, and visualized various measures in order to increase the productivity of the blooming mills. Here no 2 blooming mill is concerned. Reconstruction after 1946 and the therewith connected rise in productivity up to 1955 are described. In 1946, before reconstruction blocks of 6 - 6,6 t on ingots of 210 x 210 and 230 x 230 were bloomed. 9 groups of regeneration soaking pits existed, there followed shears for max 650 t and the billet rolling trains 630 and 450, each consisting of 6 roll stands. Investigations were carried out by the uninterrupted photographing of the rolling process, registering of operationsby means of a chronometer, and by determination of the productivity of the aggregates. It proved to be necessary to reduce the total rolling time, to increase the weight of the blocks to be rolled, to increase the permeability of the soaking pits, and to improve the quality of heating, to increase the rolling velocity on the billet rolling trains 450, and to increase the permeability of

Card 1/2

Rise in Productivity of the No 2 Blooming Mill.

the cooling beds. After having carried out all these measures the rolling-velocity on the train 450 rises by 28 % and billets 97 x 97 mm were produced which are much more rational. 1955 two roll trains were put into operation. The one led from the blooming mill to the billet rolling train 630, and then to 450. On the second the material moves to 630 by means of a tractor, on the roll tables to the bench shears No 2, without moving the train 450, where they are cut up as billets for the sectional iron trains. The rise in productivity amounted to 86,5 % in 1955 as compared with 1946. (3 tables, 4 illustrations)

ASSOCIATION: Metallurgic Combine of Magnitogorsk.
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress.

Card 2/2

8530
S/133/60/000/009/008/015
A054/A029

18.5100

AUTHORS: Kozhevnikov, V.P. Shternov, M.M.

TITLE: About Rolling With Over-Reduction

PERIODICAL: Stal', 1960, No. 9, pp. 827-828

TEXT: In recent years many experiments have been carried out to utilize the "reserve" frictional forces in the rolling process in order to increase the rate of reduction. Several suggestions have been made to employ the optimum relation between the forces pushing and pulling the strip after the bite, for instance, to use tapered strips, special devices for the forced pushing of the strip, to press the rolls after the strip has been pushed in with a special mechanism, etc. According to experience in the Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine), these methods have certain drawbacks. In the first place, the increase in reduction did not always increase the output of the continuous, semi-continuous and cross country mills. When rolling with reductions which are near the limit of the bite conditions, certain difficulties arise. For instance, the bite becomes unreliable, thus slowing down the process speed, slippage also increases the time of the rolling process, breakdowns of the machine become more frequent, etc. Evidently, rolling with reductions be-

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About Rolling With Over-Reduction

yond a certain limit will even aggravate these phenomena. The reserve of frictional forces in shaping mills appears to be slightly lower than in theory. Soft steel strips are nipped fairly easily at α = 19-22°, but soon after the grip they tug and skid interfering with the rhythm of the operation. The increase in the rate of reduction is suggested mainly for blooming mills by several research workers. However, for this kind of mills the limits set for the bite do not correspond to the normal operation of the electric motor. The best way of increasing the output of shaping mills, as found in the Magnitogorsk Metallurgical Combine, is the differentiation of the dimensions of products, by which the reductions could be considerably decreased on shaping mills. However, according to the author the output of the mills can be raised more efficiently by working with 10 or even with 12 stands operating in the conventional manner than by using 8 stands and apply grooves or other measures to increase the rate of reduction. In some cases it is justified to increase reduction, for instance, on old-type shape mills with three-roller roughing stands. On these mills an increased rate of reduction resulting in a smaller number of passes, to some extent increases productivity. Also on some types of continuous mills good results can be obtained

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85030
S/133/60/000/009/008/015
A054/A029

About Rolling With Over-Reduction

by an increased rate of reduction, because on these machines the forced feed can increase the degree of reduction without changes in the design of the equipment. The output can be increased best by mechanization and automation, by increasing the rolling speed, by adding more stands and lines, by using a successive instead of a linear arrangement of the stands, but in any case, the operation of the stand must be based on a normal (not forced) angle of bite.

ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine)

Card 3/3

L 44005-66 EWT(m)/EWP(t)/T/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AP6029871 SOURCE CODE: UR/0413/66/000/015/0022/0022

INVENTOR: Voronov, F. D.; Filatov, A. D.; Gun, S. B.; Selivanov, N. M.; Nosov, V. D.; Savel'yev, G. V.; Concharov, F. I.; Plotnikov, P. I.; Roshkov, S. A.; Kustobayev, G. G.; Polushkin, V. P.; Arkhipov, V. M.; Uziyenko, A. M.; Kolov, M. I.; Kozhevnikov, V. P.; Shapiro, B. S.; Kalugin, V. F.; Grudev, P. I.; Aksenov, B. N.; Khomyachkov, A. P.; Rudakov, Ye. A.; Kuzema, I. D.; Gomzhin, V. V.; Poydyshev, B. N.; Shternov, M. M.

58
B

ORG: none

TITLE: Method of making high-strength steel plates by pack rolling. Class 7, No. 184232

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 22

TOPIC TAGS: high strength steel, high strength steel plate, high strength steel sheet, steel plate rolling, steel sheet rolling

ABSTRACT: This Author Certificate introduces a method of pack rolling high-strength steel plates and sheets up to 10 mm thick and up to 3500 mm wide in a carbon steel envelope. The method includes cleaning, coating, making of the pack, heating, rolling and subsequent heat treatment. To ensure an accurate thickness of the plates

Card 1/2 UDC: 621.771.23

L 44005-66

ACC NR: AP6029871

or sheets regardless of their location in the pack, the thickness of the envelope must be at least 0.6 of the total initial thickness of the high-strength plates of the pack. [ND]

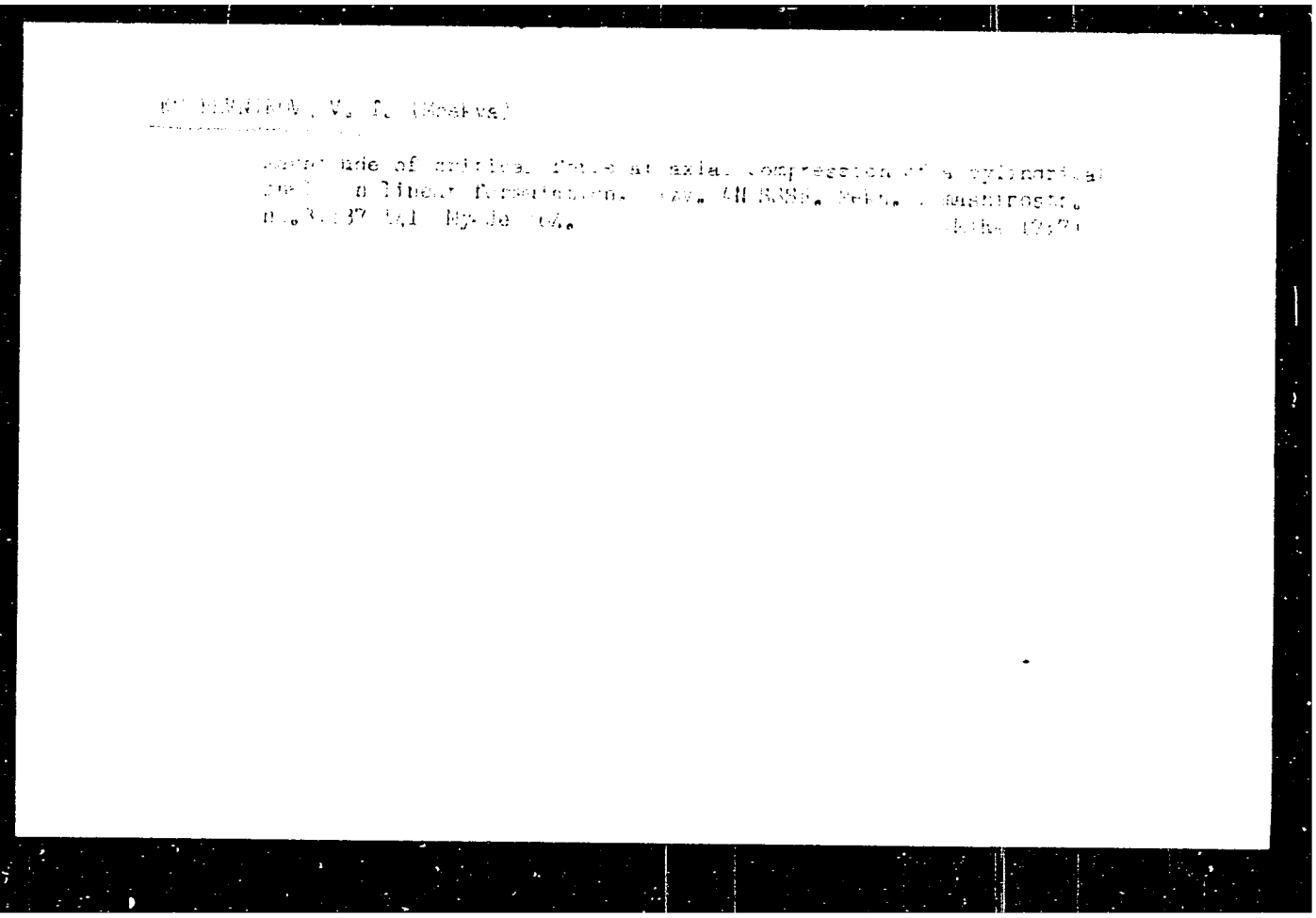
SUB CODE: 13/ SUBM DATE: 18Jun64/ ATD PRESS: 5070

Card 2/2 blg

KOZHEVNIKOV, V.S.

Experiences in the transition to a shortened working day.
Kozh.-obuv.prom. no.10:7-8 O '59. (MIRA 13:2)

1. Nachal'nik otdela truda i zarplaty fabriki "Belka."
(Leather industry--Labor productivity)
(Hours of labor)



KOZHEVNIKOV, V.V.

Theory of the equilibrium state of the level of bodies of water. Soob. AN Gruz.SSR 25 no.2:167-170 Ag '60. (MIRA 13:11)

1. AN GruzSSR, Institut energetiki im.A.I.Didebulidze, Tbilisi. Predstavleno akademikom R.I.Agladze.
(Hydrology)

AUTHOR: Kozhevnikov, V. V. SOV/130-58-11-13/16

TITLE: Automatic Detection of Strip Breaking in an Anodic Electrolytic Cleaning Line (Avtomaticheskiy kontrol' obryva polosy na linii anodno-elektroliticheskoy ochistki)

PERIODICAL: Metallurg, 1958, Nr 11, pp 40-41 (USSR)

ABSTRACT: In the tinplate shop of the Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk metallurgical combine) an anodic cleaning line is installed in which breakage of the strip is liable to occur. The quicker such breakages can be detected and the line stopped the less the disruption of production. The author has developed an installation in which the distance of the strip from a set point is measured indirectly with the aid of induction transducers (type 1KV-10 made by the "Elektroprivod" trust): in the event of breakage the distance increases, and the resulting change in current from the transducer

Card 1/2

Automatic Detection of Strip Breaking in an Anodic Electrolytic Cleaning Line

SOV/130-58-11-13/16

circuit (Fig 1) is electronically amplified (Fig 2) and through electromagnetic relays and contactors stops the tensioning rollers and the line. The adoption of the installation has reduced idle time due to strip tearing to less than half its former value.

There are 2 figures

ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk metallurgical combine)

Card 2/2

S/118/60/000/009/005/009
A161/A026

AUTHOR: Kozhevnikov, V.V., Engineer

TITLE: Automatic Thickness Control of Strip in Continuous Rolling Mills

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1960, No. 9, pp. 18-19

TEXT: According to information by the central laboratory of Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine), the thickness difference between the front and rear end of a strip rolled in a continuous mill varies between 0.03 and 0.47 mm. The article describes the design and operation of an automatic strip thickness regulator developed by Laboratoriya elektroprivoda i avtomatiki (Laboratory of Electric Drives and Automation) of NIPIGORMASh for a five-stand rolling mill of the Magnitogorsk Combine thin sheet shop. The regulator works on the screwdown drive of the first mill stand. A contact micrometer of ЭМК-3М (EMK-3M) type behind the first stand is used for indication of thickness deviations. A block diagram of the regulator is given (Fig. 1) (where M - the micrometer; ФУВ (FUV) - phase-discriminating amplifier-rectifier; НП (NP) - nonlinear converter where the controllable insensitivity zone, work zone and blocking zone is formed (1,2, and 3, respectively, in Fig. 2). The blocking zone

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A161/A026

Automatic Thickness Control of Strip in Continuous Rolling Mills

is needed to prevent screwdowns displacement when the micrometer rollers are idling. Transformed voltage is amplified in the power amplifier УМ (UM) (Fig. 1) and fed to the excitation windings of an electromechanical amplifier of quadratic generator-motor ГД (GD) system that controls the screwdown drive. Stable negative generator-voltage feedback is fed to the input of the power amplifier. A tachometer generator Т (T) matches the regulator with the strip speed. The screwdowns are returned into start position by the РВИ (RVI) relay, switching the thickness control system from the micrometer over to the selsyn С (S) which is connected through an electromagnetic clutch ЭМ (EM) and a kinematic reducer directly to the screwdown. The system is in use for 8 months and proved reliable. The first step for elimination of uneven strip thickness in the "1,450" mill was the automatic system for holding down the rear strip end. Detailed description of its operation is given. It works in time function only. The additional compression of the rear strip end for 1 mm in one stand reduces the thickness unevenness by 0.1 mm. When such additional compression of the rear strip end was used in three stands, the thickness unevenness was reduced by 0.25 mm. There are 3 figures.

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A161/A026

Automatic Thickness Control of Strip in Continuous Rolling Mills

Figure 1:

Block diagram of automatic regulator

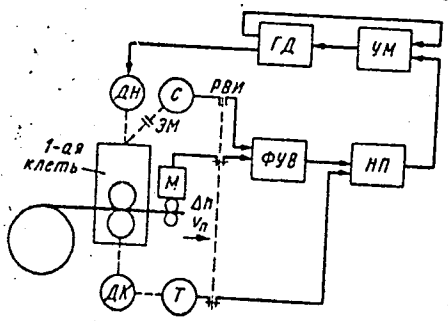

Рис 1. Схема автоматического регулятора толщины листа.

Figure 2:

Output diagrams of regulator

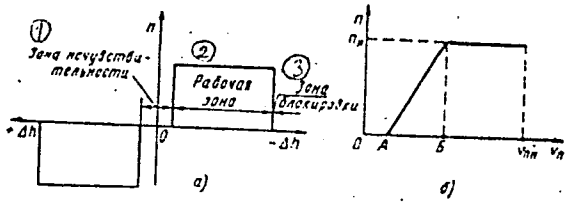

Рис. 2. Выходные характеристики регулятора.

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S/118/60/000/012/002/009
A161/A033

AUTHORS: Kozhevnikov, V.V., and Shvartsgorn, M.A., Engineers

TITLE: Automatic Seam Detection in Steel Strip

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1960, No. 12, pp. 7-8

TEXT: Two continuous sheet cold-rolling mills in the rolling shop No. 3 of the Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine) are rolling sheet from 2.2 mm strip hot-rolled from 3-ton slabs; 3-ton strips are being joined by butt-welding during pickling (or cleaning) into 15-ton coils. The mill must be slowed down to pass a seam for otherwise the strip may get torn apart and the rolls scarred. At present the mill operators have to watch, and they tend to decelerate too early and sometimes miss a seam despite this. The Automation Laboratory of the Combine has designed an instrument with a light source and two photo-heads that detects the seam at the right moment and decelerates the mill with a time delay. The seams are marked by paint. The instrument is placed in front

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of the mill (Fig. 1) and measures light reflected from the strip and from the paint. The system is illustrated by block diagram (Fig.2). The РБ (RB) relay is the memory unit for commands from the photorelay ФР (FR), it gives commands to electronic time relay ЭРВ to start counting time. Voltage proportional to rolling speed is supplied from tachometer generator ТГ (TG) that is coupled with the work rolls of the first mill stand; an additional resistance switches into the excitation winding of the main drive generator, and the rolls decelerate. The operator has to press the "сброс" ("off") push button when the seam has passed, to return the system to zero. The ФСК-1 (FSK-1) cells in the comparing and amplifying unit of the photo-relay are high-sensitive. The comparing unit is a cathode follower with a 6Ж4 (6Zh4) tube. Signals from the comparing unit go to the input of the amplifier of the photo-relay ФРС-53. The output relay is of the РЭ-100 (RE-100) type. The electronic time relay (Fig.3) has a cathode circuit trigger receiving voltage from the tachometer generator. The seam passage signal opens the РБ relay contacts, and the capacitor charges. When the grid voltage exceeds the closing potential, the trigger jumps over into the new stable

Automatic Seam Detection in Steel Strip

state. The capacitor-charging time determines the relay operation time, and the charging time depends on the tachometer generator voltage that is proportional to the work rolls velocity. The PG contact closes after the passing of a seam, and negative voltage goes to the tube grid, and the trigger returns into stable state. There are 3 figures.

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Automatic Seam Detection in Steel Strip

Fig. 1

1 - uncoiler; 2 - mill stand;

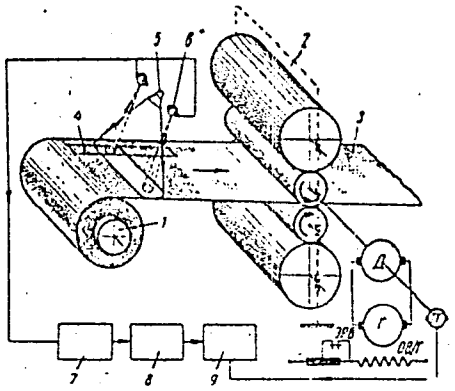
3 - strip; 4 - paint mark;

5 - light source; 6 - photo-heads;

7 - comparison unit;

8 - amplifier photo-relay;

9 - electronic time relay.



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Automatic Seam Detection in Steel Strip

S/118/60/000/012/002/009
A161/A033

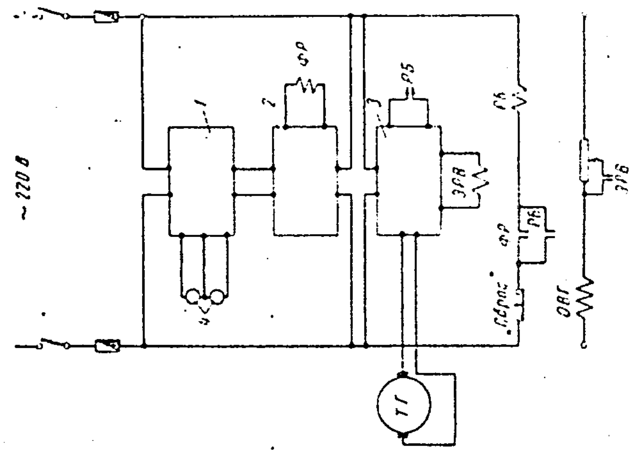
Fig. 2

1 - Comparison unit;

2 - amplifier photo-relay;

3 - electronic time relay;

4 - photo-heads.



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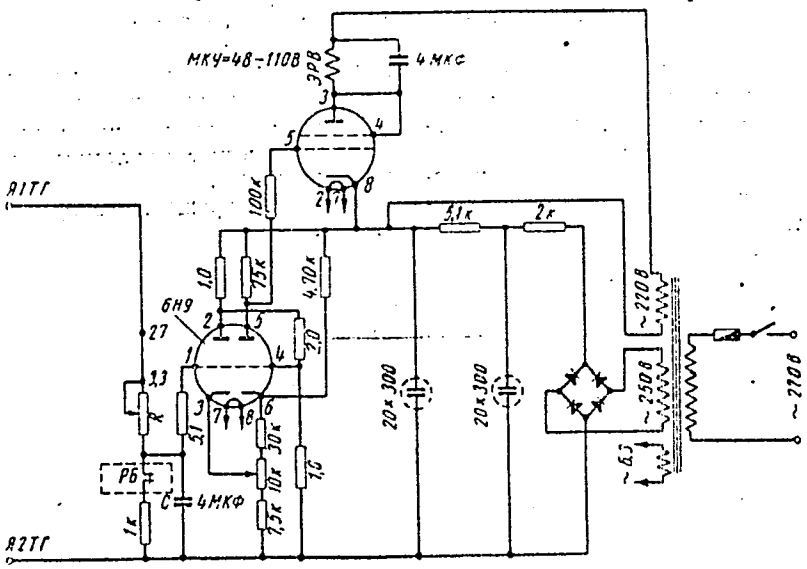
S/118/60/000/012/002/009
A161/A033

Automatic Seam Detection in Steel Strip

Fig. 3 : Electronic time relay circuit.



Card 6/6

S/133/62/000/008/003/003
A054/A127

AUTHORS: Khusid, S.Ye.; Kozhevnikov, V.V.

TITLE: The application of computers at the Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine)

PERIODICAL: Stal', no. 8, 1962, 760 - 763

TEXT: The computers used at this combine operate either on non-heating transistor units or on electron tubes. Some of the computers operate continuously and are used to obtain information and to control the characteristics of a production process, while others operate discretely under current or voltage impulses. The computers and computer-systems have been designed by the Tsentral'nyy nauchno-issledovatel'skiy institut kompleksnoy avtomatizatsii (TsNIIKA) (Central Scientific Research Institute of Overall Automation), Nauchno-issledovatel'skiy institut upravlyayushchikh vychislitel'nykh mashin (NIIUVM), (Scientific Research Institute of Control Computers), Leningradskiy institut inzhenerov zheleznodorozhnogo transporta, (LIIZhT), (Leningrad Institute of Railway Engineers), Leningradskiy gornyy institut (Leningrad Mining Institute), Tbilisskiy nauchno-issledovatel'skiy institut sredstv avtomatizatsii (Tbilisi Scientific Research Institute of Means

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The appli:tion of.....

of Automation), Institut avtomatiki i telemekhaniki (IAT), (Institute of Automation and Telemechanics), TsNIICnM, etc. Computers were first applied by the combine for controlling flying shears which cut strips up to 10 mm thick on the 2,500 mm stand into sheets up to 2,350 mm wide and 2.5 - 12 m long. The schematic operation diagram of the shears which is given in a figure is based on the following algorithm:

$$A - \sum_{0}^{A} n = 0,$$ (A = represents the given sheet length with

correction, n = the number of impulses obtained from the path transmitter). In cutting the first sample sheet the following algorithm is used:

$$A + B - \sum_{0}^{C} n = 0 \quad (B = \text{constant coefficient}, C = A + B).$$

Controlling this operation by computer saved 1 million rubles a year, mainly by cutting the deviation in sheet length from 300 to 30 mm. The instrument costs 1000 rubles. The Сталь-1 (Stal'-1) type computer controls the cutting out of sheets without losses by means of planetary shears on the 450 stand. The computer, which is mounted between the 630 stand and the shears controls with a

The application of.....

photorelay the length of sheets to be cut and registers on a punched card the theoretical weight of sheets turned out by the 630 and 450 stands, the number of slabs rolled, the number of sheets passing the shears, the number of heats, etc. The data are recorded by the standard ПД -45-2 (PD-45-2) type punching machine. The apparatus consists of ferrite-diode cells, which are divided into measuring, cutting-out and weighing units. The Stal-1 computer increased the annual output of the stand by 22,000 tons and saved about 400,000 rubles. The УВУ (UVU) computer is used in combination with a photoelectric flaw detector, radioactive thickness gauge, electro-magnetic switch-over devices and photorelays for the continuous elimination of defective sheets, 0.2 - 0.6 mm thick, which move at a 5 m/sec rate and are cut in sizes of 512 - 1500 mm. Sheets not coming up to the standard thickness or having holes are removed from the flow line and directed into the rejects receiver. The computer operates on the principle of the shift register and the following mathematical function: $x = A \cdot 2^n - \Delta - \Delta_1$ [where x = the coordinate of the position of defective sheet in relation to the flaw detector axis; A = measuring pitch of this coordinate which equals one sheet length; n = number of the cut sheets after the defect has been detected, (n = 0,1,2...); Δ = correction for the ratio of sheets, necessary because the distance between the flaw detector and switch-over is not the integral multiple of the number of sheets; Δ_1 = correction for the transit of the strip into the sheet]. The block diagram of UVU, which

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saves 400,000 rubles a year, is given in a figure. Computers are used in ore mining, to supply the dressing plants with ores of the prescribed composition. The algorithm governing this control process consists of two parts, one relating to the changes in the quality and quantity of the ore for every kind of ore mined, based on information obtained from the mining machines, regarding the actual conditions of ores. In the computer information is fed also on stocks in hand, the amounts required by the dressing plant, etc. Based on the information obtained the computer informs on the amount of ore dispatched, the iron content of the ore, the deviations from the standard composition. It makes any necessary corrections, determines the numbers of RR cars required for the dressing plant and where the cars are needed, moreover the place of discharge of the ores. The car trains are controlled by the transport algorithm, based on the distances of block sections, junctions, number of stations to be passed, etc. The collected data are transmitted to the central dispatcher board; the data on the required changes in the processes are produced in print. In 1961, a computer center was established at the Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine), based on the УРАЛ-1 (URAL-1) type computer, with a capacity of 100 instructions per sec., consisting of 800 electron tubes and 3000 crystal diode-rectifiers; the computer covers an area of approximately 40 m^2. Information is fed in by means of punched films passing through a photoelectric instrument, the

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memory device consists of a ferro-lacquer-coated rotating drum, the external storage element is a magnetic tape. The URAL-1 is applied, inter alia, for determining the pattern of rolled products, the natural gas consumption in open-earth furnaces, the weight of finished products, the output of the blooming and the slabbing mills, the load of the principal engines as to root mean square current, the parameters of blast furnace operation. Computer systems with light signals for the operator have been designed for the stripping shops and soaking pits. Apparatus controlling the transport systems operate on mnemonic schemes. For centralised control of blooming mills algorithms have been developed to determine heat conditions (temperature of soaking pits, fuel consumption, etc.); the coordination of blooming and soaking pits and the transport. If there are deviations from the schedules given for these units, the algorithm gives instructions for appropriate changes in the algorithms of heat conditions and transport. This unit of the computer system issues printed information on the time discrepancies between various shops involved, on the condition of soaking pits covering about 500 parameters. The transport algorithm commands the dispatching of slabs onto the blooming mill train and the setting of slabs into the soaking pits with a minimum of heat loss. There are 2 figures.

ASSOCIATION: Magnitogorskiy metallurgicheskiy kombinat (Magnitogorsk Metallurgical Combine)

KOZHEVNIKOV, V.V., inzh.

Automatic control of ingots for rolling mills. Mekh.i avtom.-proizv. 16 no.8:22 Ag '62. (MIRA 15:9)
(Rolling (Metalwork)) (Photoelectric measurements)

KHUSID, S.Ye.; KOZHEVNIKOV, V.V.

Use of computer techniques at the Magnitogorsk Metallurgical Combine. Stal' 22 no.8:760-763 Ag '62. (MIRA 15:7)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Magnitogorsk--Iron and steel plants)
(Automation)

PHASE I BOOK EXPLOITATION SOV/4857

Kozhevnikov, Vasiliy Yakovlevich, Ivan Gavrilovich Ksenzhuk, and Ivan Ivanovich Khudyakov

Gorizontal'no-kovochnyye mashiny; ustroystvo, elementy rascheta i obsluzhivaniye (Horizontal Forging Machines; Arrangement, Fundamentals of Designing, and Servicing) Moscow, Mashgiz, 1960. 236 p. 6,000 copies printed.

Reviewer: I. I. Girsh, Candidate of Technical Sciences; Eds.: A. V. Sivay, Docent, and D. B. Rikberg; Chief Ed. (Southern Department, Mashgiz): V. K. Serdyuk, Engineer.

PURPOSE: This book is intended for technical personnel in factories, design bureaus, and scientific research organizations.

COVERAGE: The book contains detailed descriptions of Soviet-made horizontal forging machines (upsetters). The design calculations of these machines are also given. Basic operational problems (setting-up, control, servicing) are examined, and brief comparative data on non-Soviet upsetters are presented. New

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constructional solutions of the subassemblies of machines, based on experience gained during their design, manufacture, operation and repair are given special attention. The upsetters built by the Novo-Kramatorskiy mashinostroitel'nyy zavod (New Kramatorsk Machine-Building Plant) have been used to illustrate design calculations, and machine operation and servicing. Chs. II, III, V, IX, and Secs. 1 and 3 of Ch. I were written by V. Ya. Kozhevnikov; Chs. IV, VI, VII, VIII, X, XI, XII, and Sec. 2 of Ch. XIII were written by I. G. Ksenzhuk; I. I. Khudyakov wrote Chs. XIV, and XV, Sec. 2 of Ch. I, and Sec. 1 of Ch. XIII. The theoretical material of Chs. II, III, IV and V pertaining to the construction of kinematic diagrams of the clamping mechanism, the construction of the cycle diagram and the determination of the angles of action of cams were taken primarily from works published during 1946-1956 by I. I. Girsh, Candidate of Technical Sciences, (TsNIITMASh). The authors thank Engineers B. S. Karasev, Yu. N. Lyubimov, and A. I. Shilo for their help. There are 21 references, all Soviet.

Card 2/9

KOZHEVNIKOV, V.Ya.

Introduced and projected forging and pressing equipment. Innovations in the design of NKM3 forging machines. Sbor. Novo-Kram.mashinostroi. zav. no.3:3-12 '59. (MIRA 17:1)

SOF'INA, T.V.; KOZHEVNIKOV, Ye.A.

Construction of mechanical models. Fiz. v shkole 16 no.6: 66-69 N-D '56. (MLRA 9:12)

1. 121-ya i 108-ya sredniye shkoly, g. Gor'kiy.
(Mechanical models)

KOZHEVNIKOV, Ye. F.

Raising industrialization standards and lowering costs of construction for the transportation industry; report by E.F. Kozhevnikov, Minister of Construction for the Transportation Industry at the session of the section of construction for the transportation industry of the All-Union Conference on Building. Transp. stroi. 8 no. 5:1-8 My '58. (MIRA 11:7)

1. Ministr transportnogo stroitel'stva.
(Railroad engineering)
(Transportation)

KOZHEVNIKOV, Ye.F., ministr transportnogo stroitel'stva

Famous deeds of young transportation construction workers. Transp. stroi. 11 no.4:4-6 Ap '61. (MIRA 14:5)
(Construction industry) (Transportation)

KOZHEVNIKOV, Ye.P.

Toward new successes in the construction of transportation systems during the fifth year of the seven-year plan.
Transp. stroi. 13 no.1:1-4 Ja '63 (MIRA 16:2)

1. Ministr transportnogo stroitel'stva SSSR.

KOZHEVNIKOV, Ye.F.

To new labor successes in 1966. Transp. stroi. 16 no.1: 1-4 Ja '66. (MIRA 19:1)

1. Ministr transportnogo stroitel'stva SSSR.

KOZHEVNIKOV, Ye.I., inzhener-kapitan-leytenant

Training of students in training squadrons and schools. Mor. sbor. 47 no.11:55-61 N '63. (MIRA 16:11)

[illegible], Ye.I., veterinarnyy vrach; [illegible], [illegible]
DMITRIYEVA, P.M., veterinarnyy vrach; [illegible]

Erysipelatous septicemia of turkeys. Veterinariia 40 [illegible]
Ag '63.

1. Voronezhskaya veterinarnaya laboratoriya [illegible] (for Babkina, Dmitriyeva). 2. Glavnyy veterinarnyy vrach [illegible] "11 pyatiletka" Voronezhskoy oblasti (for Babkina).

KOZHEVNIKOV, Ye.M., veterinarnyy vrach po boleznyam ptits; GOLYSHKIN, I.M., veterinarnyy vrach po boleznyam ptits; DMITRIYEVA, P.M., veterinarnyy vrach po boleznyam ptits; BABKINA, A.A., veterinarnyy vrach po boleznyam ptits; TAYTLER, Ya.N., veterinarnyy vrach; TACHANOV, A.T., veterinarnyy fel'dsher

Eliminating pasteurellosis in poultry. Veterinariia 42 no.8:8-10 Ag '65. (MIRA 18:11)

1. Voronezhskaya oblastnaya veterinarnaya laboratoriya (for Khozhevnikov, Golyshkin, Dmitriyeva, Babkina). 2. Sovkhoz "Buda-Koshelevskiy" Gomel'skoy oblasti (for Taytler, Tachanov).

ZHURAVEL', A.I., kand. ekonom. nauk; KAZAKOVTSEV, N.M.; SIDOROVICH, Ye.A., inzh.; KOZHEVNIKOV, Ye.N., inzh.; RAZUVAYEV, A.S., inzh.

Improvement of the economic work in stations. Zhel. dor. transp. 47 no.3:69-72 Mr '65. (MIRA 18:5)

1. Nachal'nik proizvodstvenno-tekhnicheskogo otdela stantsii Novosibirsk-Glavnyy (for Kazakovtsev).

KLIMOV, N.M.; BUTRIMENKO, V.P.; VSYAKIKH, A.S., prof.; LITOVCHENKO, G.R.; KOLOBOV, G.M.; KOZHEVNIKOV, Ye.V.; ALIKAYEV, V.A.; KRASNOV, V.S.; MAKAROV, A.P.; GRIGOR'YEV, Ye.P., red.; ROZIN, M.A., red.; GUREVICH, M.M., tekhn. red.

[Animal husbandry] Zhivotnovodstvo. Moskva, Sel'khozgiz, 1959. 477 p. (MIRA 16:3)
(Stock and stockbreeding)

Name: KOZHEVNIKOV, Yu. A.

Dissertation: Epidermomembrane method in experimental work with fleas

Degree: Cand Biol Sci

Affiliation: Molotov State Med Inst

Defense Date, Place: 1956, Molotov

Source: Knizhnaya Letopis', No 1, 1957

USSR / Zooparasitology - Mites and Insects as Disease Vectors. G-3

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 81778

Author : Kozhevnikov, Yu. A.
Inst : Molotov Med. Inst.
Title : Epidermomembrane Method in Experiments with Fleas

Orig Pub : Tr. Molotovsk. med. in-ta, 1957, No 26, 211-216

Abstract : So as not to have to pick each flea by pincers when they are removed from insectaria, an ordinary glass funnel was used which was submerged to the edge of the insectarium substrate; the fleas jumping along the insectarium fall down into the funnel and accumulate in its tube, which had been previously corked at the end. With the same purpose in view a sieve in tubular form was used for removing fleas from test tubes with sand, the tube being fastened down with a fine metallic net. In examining live fleas microscopically, the author used a homemade

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Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 81778

chamber consisting of a piece of glass tube pasted onto a glass plate; fleas within this chamber were fixed by a cellophane membrane. Attachments are suggested in the form of rubber rings for fastening a glass tube, needed for feeding the fleas, to the Pshonichnov apparatus or to the animal (in the latter case the fleas were fed by a melnichny (?) gas). The skins of mice used as epidermomembranes should be sterilized by chloroform vapors for 1-2 days. Through epidermomembranes Xenopsylla choopis were successfully infected by a rickettsia of spotted and rat typhus. By this method it was established that the infective dose has an effect on the duration of the incubational process in fleas, but does not reflect on the intensity and accumulation of rickettsia in their bodies. The great effect of temperature at which the insects were kept was noted: at 31-32° rickettsia in fleas

USSR / Zooparasitology - Mites and Insects as Disease Vectors. G-3

Abs Jour : Ref Zhur - Biol., No 18, 1958, No. 81778

were found more frequently and in larger numbers than at room temperature, while the incubational period is cut to $\frac{1}{2}$ to $\frac{1}{4}$. At room temperature rickettsia are preserved in X. cheopis for epidemic spotted typhus up to 102 days, and for endemic -- up to 111 days. -- N. F. Darskaya

Card 3/3

CHERNOGOROV, I.A.; KOZHEVNIKOV, Yu.A.

Treatment of angina pectoris with methylthiouracil. Terap. arkh. 32 no. 7:17-21 Jl '60. (MIRA 14:1)
(ANGINA PECTORIS) (URACIL)

CHERNOGOROV, I.A., prof.; KOZLOVSKAYA, I.A., kand.med.nauk;
KOZHEVNIKOV, Yu.A.

Effect of reserpine on hypertension of the pulmonary artery.
Terap.arkh. 32 no.9:15-19 '60. (MIRA 14:1)

1. Iz kafedry vnutrennikh bolezney (zav. - prof. I.A. Chernogorov) Moskovskogo meditsinskogo stomatologicheskogo instituta.
(RESERPINE) (PULMONARY ARTERY--DISEASES) (HYPERTENSION)

CHERNOGOROV, I. A., prof; KOZHEVNIKOV, Yu. A.

Pathogenesis of arrhythmias in myocardial lesions. Terap. 34 no.1:13-18 '62. (MIRA 15:7)

1. Iz Instituta terapii (dir. - deystvitel'nyy chlen AMN SSSR prof. A. L. Myasnikov) AMN SSSR.

(ARRHYTHMIA)

KOZHEVNIKOV, [illegible].A.

Pathogenesis of arrhythmia. Pat. fiziol. i eksp. terap. 8 no.4:60-61 Jl-Ag '64. (MIRA 18:2)

1. Kardiologicheskoye otdeleniye (zav.- prof. I.A. Chernogorov) Instituta terapii (dir. - deystvitel'nyy chlen AMN SSSR prof. A.L. Myasnikov) AMN SSSR, Moskva.

IBIKH, B.N., GAVOR, G.A., KOZHEVNIKOV, Yu.A.

Electronic computing device for measuring the quantity of methane obtained from a mine during degasification. Nauch. trudy KNIUI no.15:306-311 '64. (MIRA 18:8)

KOZHEVNIKOV, Yu.N.

With metallurgists of Sweeden. Metallurg no.11:37-39 N '56.
(MLRA 10:1)

(Sweden--Metallurgy)

KOZHEVNIKOV, Yu.N.

With the metallurgists of Sweden. Metallurg no.12:38-40 D '56.
(MLRA 10:1)

(Sweden--Metallurgy)

KOZHEVNIKOV, Yu.N.

On a visit to metallurgists of Sweden. Metallurg. 2 no.4: 42-43 Ap '57. (MLRA 10:5)
(Sweden--Metallurgy)

AUTHOR: KOZHEVNIKOV,YU.N. PA - 2775
TITLE: At the Swedish Metallurgists. (U metallurgov Shvetsii, Russian)
PERIODICAL: Metallurg, 1957, Vol 25, Nr 4, pp 42-44 (U.S.S.R.)
Received: 5 / 1957 Reviewed: 7 / 1957

ABSTRACT: Steel Production: The Siemens Martin steel production of Sweden remained on the same level as in previous years owing to the shortage of own fuel; the output of electro- and converter steel was, however, raised considerably. In 1955 26% more basic and 11% more acidous Martin steel in relation to the total production were melted.
Alloyed and not alloyed steels of different brands are produced in the acidous Martin furnaces, among them also steel for ballbearings. The opinion prevails that for the latter the best quality has to be taken from the acidous furnace. In some works acidous steel is blown through with oxygen. Ball-bearing steel is produced by a reduced silicon method and is finally neutralized with aluminum. This promotes plasticity. In one plant half the nitrogen quantity obtained in the case of Bessemer steel is produced by blowing horizontally through the converter during half of the time.
The production of steel in electric arc furnaces and induction electric furnaces is widely in use. The bottom of the furnace consists of non-magnetizable steel for the purpose of a later use of the electromagnetic mixing device. In Sweden the delivery of converter metal for crude sheet iron and rails is forbidden although a

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At the Swedish Metallurgists.

high-quality steel with a low content of nitrogen can be produced in Thomas converters. The conviction, however, prevails that converter steel blown through with oxygen is by no means inferior to Martin steel, but the necessary tests have not yet been carried out. In some plants special pressed thermit packets are pushed into the block moulds in order to heat the upper part of the blocks. They form a sort of a feed head and increase the output.

Electromagnetic Trough Stirring: According to its principle the electromagnetic mixer is analogous to a nonsynchronic motor. An arc stator is installed under the furnace and fixed to the bottom part of the shell to mix the trough which acts as a rotor. The winding of the mixer acts in a manner similar to that of the stator. The magnetic field produced during passage of the current through this part of the furnace causes currents by induction in the trough which move the metal in rising and falling flows. Low frequency currents are used in order to avoid greater losses by vortex flows. Control of the plant is easily arranged by means of press buttons.

Plant for Continuous Steel Casting: A plant that produces rolled sheet iron and tubes of stainless steel is arranged according to the American Rossii-Junghans type. Square semifinished steel is cast of stain- and carbon-less steel, round bar steel of 180 mm for pressed

At the Swedish Metallurgists. PA - 2775

tubes and sheet bars of 330 x 55 mm for sheet iron and cold rolling bands. The surface quality of the billets and sheet bars of the carbon steel were satisfactory, that of the stainless steel a little inferior, so that the semifinished steel for tubes had to be ground. Structure was mostly good. The plant which is of light construction, is built against the front wall of the steel smelting plant, partly above and partly below the ground level. Casting is carried out from a platform 18 m above the ground, were the casting vessel, which is of the tea-pot type, is mounted without a stopper rod. An intermediate device is used for casting which directs the metal into a fully cast copper crystallizer. It is cooled with water through an inner cavity and it is covered by a copper plate (20-25 mm thickness). The lubricant enters by means of a grove that is placed in between. The second cooling of the semifinished steel is carried out by means of sprayed water. The cut-off casts fall into a basket, are turned on edge on a roller conveyor, and lifted on to the level of the working-floor level by means of a hoisting apparatus.

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED:
AVAILABLE: Library of Congress

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KOZHEVNIKOV, Yu.N.

KOZHEVNIKOV, Yu.N.

Visiting the metallurgists of Sweden. Metallurg 2 no.5:44-48 My '57.
(Sweden--Metallurgy) (MIRA 10:6)

KOZHEVNIKOV, Yu.N., inzh.; SUROVOV, I.I., inzh.

Main directions in the redesign of pipe mills. Stal' 23 no.10: 925-927 O '63. (MIRA 16:11)

ORLOV, A.S., inzh.; LUK'YANOV, K.I., inzh.; KOZHEVNIKOV, Yu.M., inzh.

Organization of preparatory work in the assembly of the elements of a blast furnace at the Western Siberian Metallurgical Plant. Prom. stroi. 41 no.2:13-17 F '63. (MIRA 16:3)

(Blast furnaces)

KOZHEVNIKOV, Ye.M., veterinarnyy vrach; BOBROV, A.A., veterinarnyy vrach

Influenza in ducklings. Veterinariia 38 no.10:48-50 O '61.
(MIRA 16:2)

1. Voronezhskaya oblastnaya veterinarno-bakteriologicheskaya laboratoriya.
(Voronezh Province—Ducks—Diseases and pests)
(Influenza)

ACCESSION NR: AP4036578 S/0139/64/000/002/0173/017

AUTHOR: Kozhevnikov, Yu. P.

TITLE: Solution of 4-contact method for measuring electrical resistivity of thin semiconducting films

SOURCE: IVUZ. Fizika, no. 2, 1964, 173-175

TOPIC TAGS: electric conductivity, semiconductor film, substrate, current strength bipolar coordinate

ABSTRACT: An expression has been derived for the electric conductivity σ of thin semiconductor films on nonconducting substrates, relating the conductivity to the potential V between contact points, current strength I, and film thickness t. The problem is treated as two-dimensional and Ohm's law is used to determine in bipolar coordinates, or

$$\sigma = \frac{I}{4\pi t V} \ln \frac{[(2a-l_1)^2+y^2][(2a-l_2)^2+y^2]}{(l_1^2+y^2)(l_2^2+y^2)},$$

where

$$l_1 = s_1 + a - \sqrt{r_1^2+a^2}, \quad l_2 = s_2 + a - \sqrt{r_2^2+a^2},$$
$$a = \frac{1}{2s}\sqrt{(s^2+r_1^2-r_2^2)^2 - 4s^2 r_1^2}, \quad s = s_1 + s_2 + s_3,$$

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ACCESSION NR: AP4036578

where s_1, s_2, s_3, r_1, r_2, and y_1, y_2 are geometric parameters given in Fig. 1 on the Enclosure. Orig. art. has: 7 equations and 1 figure.

ASSOCIATION: Sibirskiy fiziko-tekhnicheskiy institut pri Tomskom gosuniversitete imeni V. V. Kuyby*sheva (Siberian Physicotechnical Institute, Tomsk State University

SUBMITTED: 27Dec62 DATE ACQ: 05Jun64 ENCL: 01

SUB CODE: EE NO REF SOV: 001 OTHER: 002

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ACCESSION NR: AP4036578

ENCLOSURE: 01

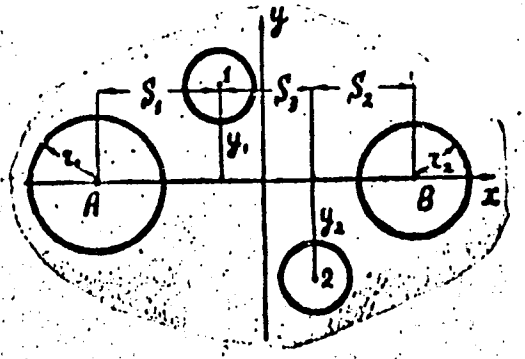

Fig. 1.

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PETYUNIN, P.A.; KOZHEVNIKOV, Yu.V.

Reactions of magnesylamines. Part 7: Synthesis and properties of aryl (alkyl) amides of anthranilic acid. Zhur. ob.khim. 30 no.6:2028-2030 Je '60. (MIRA 13:6)

1. Permskiy farmatsevticheskiy institut.
(Anthranilic acid)

PETYUNIN, P.A.; KOZHEVNIKOV, Yu.V.

Chemistry of heterocyclic compounds. Part 33: Synthesis of quinazolone compounds based on aryl amides of anthranilic acid. Zhur.ob.khim. 30 no.7:2352-2357 Jl '60. (MIRA 13:7)

1. Permskiy farmatsevticheskiy institut.
(Quinazolinone) (Anthranilic acid)

PETYUNIN, P.A.; KOZHEVNIKOV, Yu.V. . .

Reactions of magnesyl amines. Part 8: Synthesis and properties of aryl amides of N-aryl (Alkyl)- and N-acyl-substituted anthranilic acids. Zhur.ob.khim. 30 no.8:2453-2457 Ag '60. (MIRA 13:8)

1. Permskiy farmatsevticheskiy institut.
(Anthranilic acid)

KOZHEVNIKOV, Yu. V.

Cand Pharm Sci - (diss) "Substituted amides of anthranilic acid and their transformations into quinazoline compounds." Moscow, 1961. 11 pp; (Ministry of Public Health RSFSR, First Moscow Order of Lenin Med Inst imeni I. M. Sechenov); 250 copies; price not given; (KL, 7-61 sup, 263)

PETYUNIN, P.A.; KOZHEVNIKOV, Yu.V.; TETYUYEVA, L.A.

Reaction of magnesyl amines. Part 16: Magnesyl amine method of preparation of amino acid arylides. Zhur.ob.khim. 33 no.4: 1261-1263 Ap '63. (MIRA 16:5)

1. Permskiy farmatsevticheskiy institut.
(Magnesium organic compounds) (Amino acids)

L 16886-65 EWT(d)/EWT(l)/EWT(m) IJP(c) JD
ACCESSION NR: AR4045229 S/0124/64/000/007/A019/A019

SOURCE: Ref. zh. Mekhanika, Abs. 7A139

AUTHOR: Kozhevnikov, Yu. V.

TITLE: The solution of discontinuous optimal problems with parameters

CITED SOURCE: Tr. Kazansk. aviats. in-ta, vy*p. 80, 1963, 42-50

TOPIC TAGS: discontinuous optimal problem, functional maximization, successive approximation

TRANSLATION: The article poses the problem of determining the maximum of a certain functional on a set of functions $x_i(t)$ $(i = 0, 1, \ldots, n)$, U_β $(\beta = 1, 2, \ldots, r)$, which satisfy at time segments O, t_j $(j = 1, 2, \ldots, k)$ the equations

$$x_{it} = Q_i^j(t, x_\alpha, U_\beta, a_q)$$

$(\alpha, i = 0, 1, \ldots, n; \beta = 1, 2, \ldots, r; q = 1, 2, \ldots, p)$

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with given boundary conditions. Control functions U_β and parameters a_q are assumed to be limited. The author obtains the necessary conditions for the maximum with r = 1, k = 2. A method of successive approximations is indicated for finding the solution. F. I. Yereshko.

SUB CODE: MA ENCL: 00

PETYUNIN, P.A.; KOZHEVNIKOV, Yu.V.

Heterocycles. Part 35: Use of polyphosphoric acid for the synthesis of quinazolone compounds. Zhur. ob. khim. 34 no. 3:854-856 Mr '64. (MIRA 17:6)

1. Permskiy farmatsevticheskiy institut i Khar'kovskiy farmatsevticheskiy institut.

L 58545-65 EPF(n)-2/EWP(k)/EWT(d)/EWP(h)/EWP(l)/EWP(v) Pf-4/Pg-4/Pk-4/Pl-4/
Po-4/Pq-4/Pae-2/Pu-4 IJP(c) WW/BC

ACCESSION NR: AP5012883 UR/0280/65/000/002/0129/0137 61 B

AUTHOR: Koshevnikov, Yu. V. (Kazan)

TITLE: Synthesizing the optimum control for linear nonstationary stochastic systems

SOURCE: AN SSSR. Izvestiya. Tekhnicheskaya kibernetika, no. 2, 1965, 129-137

TOPIC TAGS: automatic control, automatic control design, automatic control system, automatic control theory

ABSTRACT: An optimal-on-the-average control law is found for a system describable by these equations:

$$\dot{x}_i = \sum_{k=1}^{n} A_{ik}x_k + \sum_{k=1}^{m} B_{ik}z_k + R_i u + P_i, \quad \dot{z}_j = \sum_{k=1}^{n} m_{jk}z_k + n_j u + p_j,$$

$$x_i(t_0) = x_{i0}, \; z_j(t_0) = z_{j0}, \; t_0 \leq t \leq t_1 \; (i = 1, \ldots, n; \; j = 1, \ldots, m). \quad (1.1)$$

Here, t is time; t_0, t_1, x_{i0}, z_{j0} are specified numbers; x_i, z_j are phase coordinates (continuous functions of time); u is the control(ling) function; m_{jk}, n_j, p_j are the

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L 58545-65

ACCESSION NR: AP5012883

known functions of time; X_{i0} are the specified random values; A_{ik}, B_{ik}, R_i, F_i are the known random functions of time. The (1.1) case happens when the actual values of A_{ik}, B_{ik}, etc., are not measured but rather guessed at from a probabilistic (mathematical expectations, dispersions, etc.) model. In such cases, the system can be optimized only "on the average." The initial stochastic equations are transformed in such a way that the problem is reduced to synthesizing an optimal control for an auxiliary determinate system which probabilistically simulates the initial system. The solution of the above problem is obtained for linear systems and also for systems reducible to linear with respect to their centered random functions. Orig. art. has: 63 formulas.

ASSOCIATION: none

SUBMITTED: 18Apr64 ENCL: 00 SUB CODE: DP, IE

NO REF SOV: 005 OTHER: 001

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KOZHEVNIKOV, Yu.V.

Theory of optimal on-the-average controlled stochastic systems.
Izv. vys. ucheb. zav.;av. tekh. 8 no. 4:7-17 '65
(MIRA 19:1)