- 35 -

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

AUTHOR:

Kurochkin, 4. ... ispirant

1107 154-18-3-7 24

TIME B:

Town Triangulation in the USSR (Gorodskine triangulvatell v USOR)

PERTUDIUS CA

Izvestiya vysahikh uchebnykh zavedeniy. Geodeziya : aerofutos"yemka, 1958, Nr 3, pp 57-74 (USSR)

ABSTRACT:

In this paper firstly a historic survey of the development of town surveying is presented. The first instructions in this field were published by I. A. Iveronov in 1900, on the occasion of surveying the town of Serpukhov in 1897. This was followed by manuals from 1923, 1932, 1940, and by a supplement to the latter from 1946. This paper includes an exposition of the mast typical systems of town triangulation. In 1940, towns were classified into first order towns, with a total area econodina 150 km², second order towns, with a total area of 50 - 100 km².

and third order towns, with an area of 25 - 50 km^2 . The principal systems used in the different types of town are uiscussed, and the advantages and the shortcomings of town triangulation in the USBR are exposed. A suggestion is made to the point or classifying town triangulation as follows: Second-

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Town Triangulation in the USER

BOV/154-98-1-7/24

grade systems with traverses with a length of 4 km, and forcinthird-grade cyarems with a traverse length of 4 km, and forcingrade systems with 2 km traverses. On January 1, 1987, 1990 towns and 2464 mettlements with a town meraster were counted in the USSR, nousing a total of 87 000 000 people. The technical requirements on the establishment and the accuracy of toon triangulation systems are compiled in a table. There are is figures, 5 tables, and 10 references, 10 of which are boviet.

ASSOCIATION:

Moskovskiy institut inzhenerov geodezii, gerofotes yeski i kartografii (Moscow Institute of Surveying-, lerial ourveying-, ana Cartography Engineers)

1 18.11 (# sB:

March 19. 1958

. ೧೯೯೮ - ೧೯೮೮ ಪ್ರಶ್ನೇಗ ಭಿರಾವಧ ಸಂಪ್ರಕ್ಷ ಕರ್ವರ ೧೯೩೮ - ೧೯೮೮ ಕ್ರಿಮಿ

 $\mathbf{C}_{-1}(\mathbf{C}_{+1})$

3(4) AUTHOR: Kurochkin, A. A., Junior Research Assistant SOV/154-58-5-11/18

TITLE:

On Typical Schemes of Town Triangulation (O tipichnykh skhemakh postroyeniya gorodskikh triangulyatsiy)

PERIODICAL:

Izvestiya vyashikh uchebnykh zavedeniy. Geodeziya i aerofotos"yemka: 1958, Mr 5, pp 117 - 129 (USSR)

APSTRACT:

This is a presentation of typical schemes of establishing town triangulation nets, based upon data from the paper cited by reference 4. From the considerations contained in this paper the following can be concluded: 1) Town in this paper the following can be concluded: 1) Town triangulation nets must be established from a few at least triangulation nets must be established from a few at least hexagonal central systems with additional diagonals, which increase the accuracy of net elements from 18.5 to 57%. In a central system consisting of at least heptagonal figures the diagonals are even more indispensable. It is considered to be most expedient to establish town triangulation nets from hexagonal central systems consisting of triangles of regular or arbitrary shape with all diagonals required and to measure the side bases of every

Card 1/3

On Typical Schemes of Town Triangulation

507/154-58-5-11/18

4th or 5th triangles which are not to be closing triangles.
2) Continuous nets consisting of triangles of arbitrary shape without diagonals can be established if a number of central hexagonal systems not below 15-20 is available. Side base lines must be established not more frequently than at each 8th or 10th triangle. It is expedient to establish such nets in large towns with a compact rounded-off lay-out, when earlier nets are rerun. The scheme developed in this work establishes a certain order in the construction of 2nd and 3rd grade town triangulation nets. The economy of this system becomes particularly obvious when used in aerial surveys. The calculation of the geometrical weight of a town triangulation constructed according to the scheme presented in this paper is rather complicated. For this reason an approximative calculation of the geometric weight is presented. There are 14 figures, 3 tables and 4 Soviet references.

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CIA-RDP86-00513R000927720019-4 "APPROVED FOR RELEASE: 06/19/2000

On Typical Schemes of Town Triangulation

307/104-58-5-11/18

ASSOCIATION: Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i kartografii (Moscow Institute of Geodesy, Aerial Surveying,

and Cartography Engineers)

SUBMITTED:

March 19, 1958

Card 3/3

307/154 - 59-3-17/19

3(4) AUTHOR:

Kurochkin, A. A.

TITLE:

Letter to the Editor (Pistmo v redaktsiyu)

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Geodoziya i aerofotos yemka, 1959, Nr 3, p 147 (USSR)

ABSTRACT:

The author corrects an error occurred in his paper "On Typical Schemes of the Setup of Town Triangulations" published in the issue Nr 5 of "Izvestiya", 1958. In the comparison of the values of the mean root square error in the weight unit μ , a wrong formula was printed on page 122, which is hereby rectified.

Card 1/1

CIA-RDP86-00513R000927720019-4" APPROVED FOR RELEASE: 06/19/2000

KOS'KOV, B. I.; KUROCHKIN, A.A.

Urgent problems in developing and improving the organization of city surveying. Geod. 1 kart. no.7:3-6 Jl '60. (MIRA 13:9) (Surveying)

GERZHULA, Boris Ivanovich, prof., doktor tekhn. nauk; KURCCHKIN,
A.A., red.; SHURYGINA, A.I., red.izd-va; ROMANOVA, V.V.,
tekhn. red.

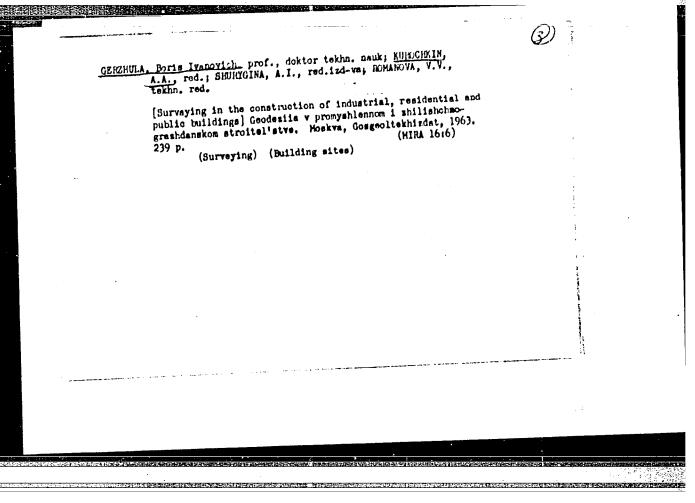
[Survaying in the construction of industrial, residential and public buildings] Geodeziia v promyshlennom i zhilishchmograzhdanskom stroitel'stve. Moskva, Gosgeoltekhizdat, 1963.

(MIRA 16:6)

(Surveying) (Building sites)

"APPROVED FOR RELEASE: 06/19/2000

CIA-RDP86-00513R000927720019-4



KOS'KOV, Boris Ivanovich; PAVLOV, Kuz'ma Petrovich; GAN'SHIN, V.N., prof., retsenzent; VIDUYEV, N.G., prof., retsenzent; KUROCHKIN, A.A., kand. tekhn. nauk, red.; SHURYGINA, A.I., red.izd-va; ROMANOVA, V.V., tekhn. red.

[Manual for the realization of plans and building of towns and settlements] Rukovodstvo po perenosu proektov planirovki i zastroiki gorodov i poselkov v natury. 2 izd., ispr. i dop. Moskva, Gosgeoltekhizdat, 1963. 261 p. (MIRA 16:11)

(City planning)

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

KUROGUKIN, A.A.; MAKSIMOV, G.N.

Fower supply for the test equipment of electrical laboratories. From. energ. 20 no.6:19-20 Je 165. (MIRA 18:6)

SHUROVSKIY, V.G.; VLADIMTROV, V.P.; GNATYSHENKO, G.I.; KUROCHKIN, A.F.; SHCHUROVSKIY, Yu.A.; ADSON, N.I.; GOLOVKO, V.V.

Some physicochemical properties of charges for and the products of the electric smelting of Dzhezkazgan copper concentrates. Izv.AN Kazakh.SSR.Ser.met., obog.i ogneup. no.1:8-13 '61. (MIRA 14:6) (Dzhezkazgan—Copper—Electrometallurgy)

TSEFT, A.L.; CHAYEV, I.A.; SHIERLA PAY, 7.6.; FUR CHERR, A.B.; LARFHOV, I.F.; AISON, N.I.; GALOVEO, V.V.

Liquative electric smelting of Dzhezkazgan copper concentrates with the prediction of high calcium slag. Trudy Inst. met. i obog. AN Kazakh. SSR 8:40-49 *63 (MIRA 17:8)

FINKEL', V.M.; SAVEL'YEV, A.M.; KUTKIN, I.A.; KUROCHKIN, A.F.

Investigating the characteristics of failure in transformer steel. Fiz. met. i metalloved. 15 no.5:781-784 My '63.

(MIRA 16:8)

1. Sibirskiy metallurgicheskiy institut im. Ordzhonikidze, Novokuznetsk.

> (Steel--Metallography) (Dislocations in metals)

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

ONAYEV, I.A.; KUROCHKIN, A.F.: TONKONOGIY, A.V.; SALGMATOV, N.K.

Overall processing of Balkhash copper concentrates by the cyclone method. Vest. AN Kazakh. SSR 20 no.2:42-49 F *64.

(MIRA 18:1)

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

KUROCHKIN, A.F.; ONAYEV, I.A.

Distribution of copper, lead and zinc between the complex metal matte and cinder in copper smelting. Vest. AN Kazakh. SSR 20 no.10s 3-24 0 164. (MIRA 17:11)

KUROCHKIN, A.F.; ONAYEV I.A.; PONOMAREV, V.D., akadomik, komanlitant; TSEFT, A.L., akademik, konsul'tunt

Copper distribution in the system copper matte - slag. Vest. AN Kazakh. SSR 20 no.7:21-33 Jl 164.

1. Akademiya nauk Kazakhskey SSR (for Ponorarev, TSeft).

APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4"

arichu de de l'exporte arabatant podris estrat d'emperature de l'emperature de l'emperature de l'emperature de

OMAYEV, I.A.; EUROCHEIN, A.F.; AN ST, A.E.; ALAI, B.I.; GOLOVEO, V.V.; KRUTASOV, V.I.

Smelting of the Palkhash conver concentrates with an oxygenenriched blow in cyclone furnaces. Vest. AN Fazakh. SSR 21 no.1:27-34 Ja 165. (MEA 18:7)

GANDIN, L.S. (Leningrad); KUROCHKIN, A.F. (Moskva)

Use of the method of full flows in the atmosphere. Meteor. i
gidrol. no.9:7-12 S '62. (MIRA 15:8)

(Weather forecasting)

24(1) AUTHORS:

Zolotov, V. A., Kurochkin, A. I.

TITLE:

The Dehydration of Gypsum in an Ultrasonic Field

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 127, Nr 5, pp 1009-1010

SOV/20-127-5-20/58

(USSR)

ABSTRACT:

By the action of ultrasonics (frequency 1 megacycle) sundialshaped dehydration figures (Fig 1) are observed on the (010)surface of gypsum crystals. These figures occurred already at a temperature of 80°C, whereas without ultrasonics this recrystallization in $\beta\text{--semihydrate }\text{CaSO}_4\text{O.5H}_2\text{O}$ occurs only at

120-1250. The starting point for dehydration are small vestiges of plastic deformation (cracks, scratches etc), i.e. apparently defects of the crystal lattice. A formation of a-semihydrate, on the other hand, did not occur even after the weak ultrasonic field had been allowed to act for several hours. There are

1 figure and 1 Soviet reference.

ASSOCIATION:

Arzamasskiy gosudarstvennyy pedagogicheskiy institut (Arzamas

State Pedagogical Institute)

PRESENTED:

April 21, 1959 by P. A. Rebinder, Academician

SUBMITTED:

March 27, 1959

Card 1/1

KUROCHKIN, A.M.

Comparing the efficiency of some defoliants for lupine. Zemledelie 23 no.8:84-85 Ag :61. (MIRA 14:10)

1. Gomel'skaya oblastnaya sel'skokhozyaystvennaya stantsiya. (Lupine) (Defoliation)

KUROCHKIN, $A_{\cdot,\cdot}^{(i)}$ inzhener.

Standard reinforced concrete silo blocks of grain elevators. Muk.-elev.prom. 20 no.9:5-7 S '54. (MLRA 7:12)

1. Gosudarstvennyy institut Promzernoproyekt. (Grain elevators)

SHELKOVNIKOV, Stepan Grigor'yevich, inzhener; KUROCHKIH, A.M., inzhener, nauchnyy redaktor; POPOV, V.I., redaktor izdatel stva; TOKER, A.M., tekhnicheskiy redaktor

[Sliding forms] Podvizhnaia opalubka. Izd. 3-e, psrer. i dop.

Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 242 p.

(Concrete construction--Pormwork) (MIRA 9:10)

BRUN P.P., otvetstvennyy red.; KOGAN, A.O., red.; KUZNETSOV, S.M., kand. tekhn.nauk, red.; KUIAKOVSKIY, A.B., inzh., red.; KUROCHKIN, A.H., red.; PISAK, B.Ya., red.; TROITSKIY, N.A., red.; SHICYDER, Ya.A., red.; KOCHETKOV, L.I., red.; GOLUBKOVA, L.A., tekhn.red.

[Designing grain warehouses and grain-processing plants]
Proektirovanie zernokhranilishch i predpriiatii po pererabotke
zerna; sbornik statei kollektiva sotrudnikov instituta. Hoskva,
Izd-vo tekhn.i ekon. lit-ry po voorosam mukomol'no-krupianoi,
kombikormovoi promyshl. i elevatorno-skladskogo khoziaistva,
Vol. 1. 1957. 59 p. (MIRA 11:5)

1. Gosudarstvennyy institut promzernoproyekt.
(Granaries) (Flour mills)

ħÙ. KUROCHKIN, A., inzh.

> Determining the speed of wheat flow from silos. Muk.-elev. prom. 25 no.2:23 F '59. (HIRA 12:4)

1. GI Promzernoproyekt. (Wheat-Storage)

GOLOVNYA, Ivan Tikhonovich, inzh.; KUROCHKIN, Aleksey Mikhaylovich, inzh.; RAL'TSEVICH, Viktor Appolinar'yevich, inzh.; SHEVTSOV, Georgiy Aleksandrovich; SAMOYLOVA, G.V., red.; GOLUBKOVA, L.A., tekhn. red.

[Fundamentals of construction] Osnovy stroitel'nogo dela. By I.T.Golovnia i dr. Moskva, Izd-vo tekhn.i ekon. lit-ry po vo-prosam khleboproduktov, 1960, 243 p. (MIRA 15:1) (Building) (Grain handling)

KUZNETSOW, S.M., kand.tekhn.nauk; EPSHTEYN, B.V., kand.tekhn.nauk;
KULAKOVSKIY, A.B., inzh.; KUROCHKIN, A.M., inzh.

Precast reinforced concrete granaries. Bet.i zhel.-bet.
no.8:337-345 Ag '61...'
(Granaries) (Precast concrete construction)

DUZENKEVICH, S.Yu., inzh., red.; KUROCHKIN, A.M., inzh., red.

[Instructions for designing silos for loose materials] Ukazaniia po proektirovaniiu silosov dlia sypuchikh materialov (SN 302-65). Moskva, Stroiizdat, 1965. 50 p.

(MIRA 18:11)

1. Russia (1923- U.S.S.R.) Gosudarstvennyy komitet po delam stroitel'stva.

Watering headings in openpits. Bezop.truda v prom. 4 no.4:23 Ap '60.
(MIRA 13:9)

(Krivoy Rog Busin--Mining engineering--Safety measures)

VINOGRADOV, V.S., inzh.; AL'TSHUIER, M.A., kand. tekhn. nauk; POLYAKOV, V.G., inzh.; KUROCHKIN, A.N., inzh.; KARMAZIN, V.I., doktor tekhn. nauk; ZAIKIN, S.A., inzh.; OSTROVSKIY, G.P., inzh.[deceased]; NAUMENKO, P.I., inzh.; BOBRUSHKIN, L.G., inzh.; RUSTAMOV, I.I., inzh.; SHIFRIN, I.I., inzh.; GOLOVANOV, G.A., inzh.; KRASOVSKIY, L.A., inzh.; TSIMBALENKO, L.N., inzh.; RAVIKOVICH, I.M., inzh.; BAZILEVICH, S.V., kand. tekhn.nauk; ZORIN, I.P., inzh.; ZUBAREV, S.N., inzh.; TIKHOVIDOV, A.F., inzh.; SHITOV, I.S., inzh.; GAMAYUROV, A.I., inzh.; KUSEMBAYEV, Kh.N., inzh.; DEKHTYAREV, S.I., inzh.; VORONOV, I.S., inzh.; BURMIN, G.M., inzh.; BARYSHEV, V.M., inzh.; GOLOVIN, Yu.P., inzh.; MARCHENKO, K.F., inzh.; RYCHKOV, L.F., inzh.; NESTEMENKO, A.M., inzh.; KABANOV, V.F., inzh.; PATRIKEYEV, N.N., inzh.[deceased]; ROSSMIT, A.F., inzh.; SOSEDOV, O.O., inzh.; POKROVSKIY, M.A., inzh., retsenzent: POLOTSK, S.M., red.; GOL'DIN, Ya.A., glav. red.; GOLUBYATNIKOVA,G.S., red. izd-va; BOLDYREVA, Z.A., tekhn. red.

[Iron mining and ore dressing industry] Zhelezorudnaia promyshlennost'. Moskva, Gosgortekhizdat, 1962. 439 p.

1. Moscow. TSentral'nyy institut informatsii chernoy metallurgii.
(Iron mines and mining) (Ore dressing)

ARSENT'YEV, A.I., dotsent; KUROCHKIN, A.N., inzh.

1. Krivorozhskiy gornorudnyy institut. Rekomendovana kafedroy razrabotki mestorozhdeniy poleznykh iskopayemykh.

(Strip mining)

KUROCHKIN, A.N., gornyy inzh.; ARSENT'YEV, A.I., dotsent, kand. tekhn. nauk

Speeding up the development of the -.5m² level of the strip mine at the Southern Mining and Ore Dressing Combine by excavating a temporary approach. Sbor. nauch. trud. KGRI no.15:9-13 '63. (MIRA 17:8)

KURCCHKIN, A.N., gornyy inzh.; ARSLITTYEV, A.I., detrent, kand. tekhn. nauk; GUGLYA, V.L., student; MASTAKOV, G.F., student

Prospects for the third stage of the open pit at the Southern Mining and Ore Dressing Combine. Sbor, nauch. trud. KGRI no.15: 13-17 '63. (MIRA 17:8)

1 37762-66 EWT(4)/EWT(m)/EWP(c)/EWP(v)/T/EWP(t)/ETI/EMP(k)/EWF(1) IJF(c)
ACC NR: AP6028845 JD/AM SOURCE CODE: UR/0125/66/000/003/0076/0077

AUTHOR: Abramovich, I. A.; Kurochkin, A. II.

ORG: nono

50

TITLE: Tubular defects in electroslag welding

3

SOURCE: Avtomaticheskaya svarka, no. 3, 1966, 76-77

TOPIC TAGS: electroslag welding, weld defect, flaw detection, molten metal, sheet metal, steel/09G2S steel

ABSTRACT: Small tubular defects were observed at the Barnaul Boiler Plant in vessels made by electroslag welding from 09G25 steel with walls 110 and 155 mm thick. Ultrasonic flaw detection revealed tubes 10-500 mm long and 1-10 mm in diameter with oval cross sections lying in the weld joint at a depth of approximately 1/3-2/3 the thickness of the metal. Careful observation showed that in all cases, without exception, where ultrasonic detection showed a tubular flaw in the molten metal, there was defects in the base metal which impeded ultrasonic flaw detection in the weld joint due to interference. This indicated that the formation of tubular defects in a joint welded by the electroslag method is associated with the quality of the initial metal. It was decided to study the sheets used in making the vessels in parallel with the study of the tubular defects. Photographs con-

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277

ACC NR: AP6028845

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firmed the conclusion that the tubular defects are formed at the edges of the stratified base metal. It was therefore decided to use the ultrasonic method for sorting out the sheets. Sheets with defects exceeding COST standards were rejected, and the remaining sheets were put into production. No tubular defects were detected in vessels welded from these sheets. Orig. art. has:

SUB CODE: 13, 11 / SUBM DATE: nono

Card 2/2

06176

25 (1, 5), 28 (1)

SOV/115-59-11-4/36

AUTHORS:

Kurochkin, A.P., Tsidulko, F.V.

TITLE:

The Response Time of Pneumatic Measuring Systems

PERIODICAL: Izmeritel'naya tekhnika, 1959, Nr 11, pp 15-18

ABSTRACT:

The authors report on an experimental investigation of the response time of a "Solex" pneumatic measuring device which they performed at the Byuro Vzaimozamenyayemosti (Bureau of Interchangeal/11ity). This measuring device was investigated under all possible operating conditions and with different nozzles. The dependence of the response time on the diameter of the input nozzle is shown by curve 1 in Fig 1. The experimental data were compared to theoretical calculations and showed a good coincidence. The authors discuss various possibilities of decreasing the response time which will depend in each case on the design of the pneumatic measuring system. Fig 2 shows a test installation for determining the response time of high-pressure measuring instruments with bellows-type pressure gages. The re-

Card 1/2

06176 SOV/115-59-11-4/36

The Response Time of Pneumatic Measuring Systems

sponse times of the bellows-type devices are compiled in a table. There are 1 diagram, 3 graphs, 1 table and 1 Polish reference.

Card 2/2

PHASE I BOOK EXPLOITATION

SOV/5074

- Berklayd, I. M., A. P. Kurochkin, A. V. Lyakhovskiy, A. M. Snetkov, and V. A. Chudov.
- Datchiki i izmeritel'nyye golovki (Pickups and Dial-Indicators) Moscow, Mashgiz, 1960. 158 p. Errata slip inserted. 10,000 copies printed. (Series: Progressivnyye sredstva kontrolya razmerov v mashinostroyenii)
- Eds. of Series: B. S. Bayburov, M. I. Kochenov, and D. D. Malyy; Scientific Ed.: T. P. Bespakhotnaya; Ed. of Publishing House: M. S. Yeliseyev; Tech. Ed.: A. Ya. Tikhanov; Managing Ed. for Literature on Instrument Construction and Means of Automation N. V. Pokrovskiy, Engineer.
- PURPOSE: This book is intended for technical and design personnel It may also be used by students specializing in instrument designing at schools of higher technical education and tekhnikums.
- COVERAGE: The authors discuss the designs, schematic diagrams, and characteristics of pickups and dial-indicators used as inspection

Card 1/4

Pickups and Dial-Indicators

SOV/5074

devices. Electrocontact, pneumatic, inductive, and capacitive measuring systems and their pickups are described. Particular attention is given to special features of the designs, circuit diagrams, testing methods, and fields of application of these pickups. Specifications are also given. The book is a part of a larger work in the field of modern means of inspection which was recommended by the Commission on the Introduction of Advanced Methods and Means of Dimensional Inspection in Machine Building under the auspices of Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR (State Scientific Technical Committee of the Council of Ministers of the USSR). No personalities are mentioned. There are 15 references, all Soviet.

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Introduction

5

Ch. I. Electric-Resistance-Type Measuring Systems (Berklayd, I. M.,
A. V. Lyakhovskiy, A. M. Snetkov, V. A. Chudov)

1. Basic designations and typical subassemblies of pickups

10

Card 2/4

Pickups and Dial-Indicators SO	V/ 5074
 Design of electric-resistance pickups Circuit diagrams of electric-resistance pickups Testing electric-resistance pickups for accuracy Bibliography 	14 57 63 70
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Ch. III. Inductive Measuring Systems (Lyakhovskiy, A. V., A. M. Snetkov) 1. Inductive pickups designed by the Byuro vzaimozamenyayemo (Interchangeability Bureau) 2. Inductive pickups of new design 3. Vibratory-contact-type induction pickups for dimensional feedback control	115
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Ch. V. Dial-Indicators and Transfer Mechanisms (Chudov, V. l. Types of dial-indicators and their characteristics 2. Designs of dial-indicators 3. Schematics of transfer mechanisms Bibliography	130 130 133 150 159
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S/115/60/000/06/05/031 B007/B014

AUTHORS:

Vysotskiy, A. V., Antonov, P. P., Kurochkin, A. P.

TITLE:

An <u>Instrument</u> for Automatic Compensation of the Temperature

Error in Measurements of Length

PERIODICAL:

Izmeritel'naya tekhnika, 1960, No. 6, pp. 9-10

TEXT: This is a description of an instrument developed by the Byuro vzaimozamenyaimosti (Bureau of Interchangeable Manufacturing) for automatic compensation of the temperature error (types 58-1029 (BV-1029) and 58-1087 (BV-1087)). It is used for a simple and reliable pneumatic measurement of length. Small-size thermistors of the type EMT-1 (YeMT-1), attached to the workpiece to be tested or to the gauge of the measuring instrument, serve as sensitive elements. The two thermistors are connected to the branches of a self-balancing bridge (Fig. 1). The dimensions of the workpiece are measured by means of a pneumatic differential instrument (Fig. 2). Within a certain temperature range, the indications of the instrument depend only on the size of the workpiece which is kept at a constant temperature. The applicability of this instrument was experimental-

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"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

An Instrument for Automatic Compensation S/115/60/000/06/05/031 of the Temperature Error in Measurements B007/B014 of Length

ly checked. These experiments have shown that the temperature error is almost completely eliminated as soon as the temperature of the end-measure gauge has been balanced. There are 2 figures.

Card 2/2

s/121/60/000/007/006/011

AUTHORS: Kurochkin, A.P., Lind, A.B., Tsirul'nikov, I.M.

TITLE: Assemblies of Pneumatic Measuring Systems

PERIODICAL: Stanki i Instrument, 1960, No. 7, pp. 25-27

TEXT: The Byuro vzaimozamenyayemosti (Office of Interchangeability) carried out investigations of filtering materials used in Soviet and foreign filters of various design in order to develop a new two-stage air filter. The investigations showed that most of the filters do not meet the requirements, since the greater part of the contaminated air, taking the course of least resistance, bypasses the filtering material and passes between filtering material and filter walls. As a result of the investigations, the Office of Interchangeability together with the result of the investigations, the Office of Interchangeability together with the "Kalibr" Plant has developed the T Φ (TF)-17-11 two-stage air filter, operating in the first stage with glass wool and in the second stage with the Φ (FPP)-15-1.5 the first stage with glass wool and in the second stage with the Φ (FPP)-15-1.5 the first stage with glass wool and in the second stage with the Φ (FPP)-15-1.5 the first stage with glass wool and in the second stage with the Φ (FPP)-17-12 operation and cite technical data. Simultaneously, investigations were carried out by the Office of Interchangeability in order to develop a new design of air pressure stabilizer, being also one of the most important units in pneumatic measuring systems. The authors describe the design of the new T Φ (TF)-17-12

Card 1/2

Assemblies of Pneumatic Measuring Systems

S/121/60/000/007/006/011

stabilizer with booster and gives technical and operational data. Filter and pressure stabilizer are also manufactured by the "Kalibr" Plant as one combined unit of the TO (TF)-17-13 type, the overall dimensions of which are (diameter x height) 98 x 298 mm, weighing 2.17 kg. There are 2 diagrams and 1 photo.

Card 2/2

87950 S/115/60/000/012/003/018 B021/B058

9.6100

AUTHORS:

Kurochkin, A. P. and Tsidulko, F. V.

TITLE:

Use of Pneumoelectric Pickups Under Transient Conditions

PERIODICAL:

Izmeritel'naya tekhnika, 1960, No. 12, pp. 11-13

TEXT: The results of metrological investigations of the so-called "dynamic" utilization of pickups, i.e. their utilization under transient conditions, are mentioned in this paper. This investigation method was worked out at the Bureau of Interchangeability with bellows-sealed and membrane pickups in a wide range of the pneumatic-system parameters. Fig. 1 shows some experimental curves, characterizing the movement of the mobile system of the bellows-sealed pickup as a time function. For the purpose of determining the error amounts, a special installation was fitted which made it possible to standardize the time by means of an electronic time relay. The feed voltage was stabilized by means of a ferroresonance voltage stabilizer of the type CM3-120-0.1 (SME-120-0.1), in order to increase the operating accuracy of the time relay. The actual length of time was determined by an electric stop watch of the type NB -53N(PV-53L) with a

Card 1/2

Use of Pneumoelectric Pickups Under Transient Conditions 87950 S/115/60/000/012/003/018 B021/B058

scale division of 0.01 sec. Fig. 2 shows the summary errors in μ which were found experimentally. The curves of dynamic errors, obtained from the curves in Fig. 2 through mathematical calculation, are shown in Fig. 3. The data were compiled and tabulated on the basis of the curves in Fig. 5 as well as a number of other curves of this type. The dynamic measuring error, caused by a known reduction of the measuring time, can be found by means of the data tabulated. These data may be utilized for a membrane pickup, by cutting the error amounts by 10%. Investigations showed that the errors of time standardization do not exceed 0.05 sec, if this standardization is provided by the kinematics of the automatic control itself. It follows therefrom that in such automatic controls the measuring time may be cut by 1.5 to 2 times without the installation of time relays. This was put into practice in one of the automatic devices for the control of motor car pistons. There are 3 figures, 1 table, and 1 Soviet reference.

Card 2/2

Units of pneumatic measuring systems. Stan.i instr.
31 no.7:25-27 J1 '60. (MIRA 13:7)
(Measuring instruments) (Pneumatic gauges)

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

AKSENOV, Ya.V.; KOGAN, V.B.; KURGCHKIN, A.P.; LIPD, A.B.

Device for selective corting of plunger-pair parts. Izm. tekh.
no. 3:7-8 Mr '61.

(Photoelectric measurements)

S/115/61/000/008/001/009 E194/E119

AUTHORS: Kurochkin, A.P., and Tsidulko, F.V.

TITLE: Pressure stabilisers for compressed air instruments.

for linear measurements

PERIODICAL: Izmeritel'naya tekhnika, no.8, 1961, 4-7

TEXT:

A theoretical and experimental study has been made by the Byuro vzaimozamenyayemosti Gosudarstvennogo Komiteta avtomatizatsii 1 mashinostroyeniya (Interchangeability Bureau of the State Committee for Automation and Mechanical Engineering) of pressure stabilisers which operate with air supply pressures of 3 to 6 atm and output (or working) pressures of 0.3 to 2.8 atm at flow rates up to 150 n.t.p. litres/min or occasionally up to 250 n.t.p. litres/min. They are required to maintain the working pressure accurately. The four main classes of pressure regulator are shown in Fig.1: (a) inverse acting, (b) direct acting, (c) inverse acting with amplifier, (c) variant of direct acting. For stabilisers of the inverse acting type the following expression is derived for the working pressure as function of the supply pressure and flow rate:

Card 1/8

Pressure stabilisers for compressed ... $\frac{5/115/61/000/008/001/009}{E194/E119}$

$$H = \left(\frac{P_1 - P_2}{F_{\vartheta \varphi \varphi} - f_{K\Pi}}\right) - \left(\frac{f_{K\Pi}}{F_{\vartheta \varphi \varphi} - f_{K\Pi}}\right) P_z - \left[\frac{K_1 + K_2}{Bd_{K\Pi} (F_{\vartheta \varphi \varphi} - f_{K\Pi})}\right] \left(\frac{Q}{P_z + 1.03}\right)$$
(1)

where: H - working pressure, atm; P_1 - supply pressure, atm; Q - air flow rate n.t.p. litres/min; P_1 and P_2 - forces in main and return springs of stabiliser with valve shut, kg. $P_1 > P_2$; $P_2 > P_3 > P_4$ - effective diaphragm area, cm² deg. valve diameter, cm; fkg - valve aperture area, cm²; $P_3 > P_4 > P_4$ when air flow conditions through the valve are superiritical in when $P_4 > P_4 > P_4$ are superiritical in when $P_4 > P_4 > P_4$ are superiritical in when $P_4 > P_4 > P_4$ and $P_4 > P_4$ are superiritical in when $P_4 > P_4$ are superiritical in when $P_4 > P_4$ and $P_4 > P_4$ are superiritical in when $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superiritical in $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ and $P_4 > P_4$ are superirities.

through the valve are supercritical, i.e. when $\frac{H}{P} + \frac{1.03}{1.05} < 0.528$ and

Card 2/8

$$B = 241 \cdot 10^{3} \frac{\alpha}{\sqrt{273 + 1^{9}}} \sqrt{\left(\frac{H + 1.03}{P_{c} + 1.03}\right)^{1.43} - \left(\frac{H + 1.03}{P_{c} + 1.03}\right)^{1.73}} \frac{1 \text{ tres}}{\text{kg min}}$$

for subcritical air flow through the valve, i.e. when

 $\frac{H+1.03}{P_C+1.03}>0.528$, where: α is the valve flow factor, t^C is the air temperature at the stabiliser inlet. In an inverse acting regulator, at zero flow, as the supply pressure is raised from zero the working pressure rises until the rated value is slightly exceeded, and at higher supply pressures the working pressure drops slightly to the rated value. As the flow rate is increased the working pressure rises more slowly to the rated value at which it remains. The effect is shown in the experimental curve of Fig. 3 in which the working pressure is plotted against the supply pressure for flow rates Q ranging from 10 n.t.p. litres/min to 153 n.t.p. litres/min. The

Card 3/8

Pressure stabilisers for compressed ... \$\frac{\\$5/115/61/000/008/001/009}{\\$2194/\\$2119}

dependence of the working pressure on the supply pressure might be reduced either by reducing the second and third terms on the right hand side of Eq. (1) or by making these terms compensate one another. The terms can only be reduced by increasing the effective area of the diaphragm, which should not be made more than 60-100 mm diameter to avoid having regulators of excessive size, However, the valve diameter acts differently in the second and third terms and so $d_{k,\eta}$ should be selected to give the maximum The experimental curves show that for any given compensation. stabiliser there exists a flow rate for which the characteristic is mostly near in the working range, e.g. in Fig.3 at 80 n.t.p. litres/min. By reducing $f_{k,\eta}$ the characteristics become flatter. As regulators work over a wide range of flow mates, fun should be selected in such a way that the maximum and minimum flow rates give curves of approximately equal but opposite angles to the horizontal. It should be noted that the second component of Eq.(1) can be removed by relieving the valve of system pressure, but as this term can then not be used to compensate the third term this only increases the error which

Card 4/8

Pressure stabilisers for compressed ... S/115/61/000/008/001/009 E194/E119

results from variations in system pressure. The third component can be reduced by making the spring less stiff but longer, but this too gives an increase in overall dimensions. For direct acting stabilisers the equilibrium equation is as follows:

$$H = \left(\frac{P_1 - P_2}{F_{\hat{\boldsymbol{\beta}}\hat{\boldsymbol{\psi}}\hat{\boldsymbol{\psi}}} + f_{\boldsymbol{K}\boldsymbol{R}}}\right) + \left(\frac{f_{\boldsymbol{K}\boldsymbol{R}}}{F_{\hat{\boldsymbol{\beta}}\boldsymbol{\varphi}\boldsymbol{\varphi}} + f_{\boldsymbol{K}\boldsymbol{R}}}\right) P_c - \left[\frac{K_1 + K_2}{Bd_{\boldsymbol{K}\boldsymbol{R}}(F_{\hat{\boldsymbol{\beta}}\boldsymbol{\varphi}\boldsymbol{\varphi}} + f_{\boldsymbol{K}\boldsymbol{R}})}\right] \cdot \left(\frac{Q}{P_c + 1.03}\right) (2)$$

In this case the second and third terms do not compensate one another and so the error can be reduced only by reducing the size of the second and third terms. Examination of the relationship between H and Q for inverse and direct acting regulators shows that whilst both are of about the same size and complexity the inverse acting type is more accurate than the direct acting type and so is to be preferred. A stabiliser of the inverse acting with amplifier type has an error less than that of the inverse acting stabiliser alone by a factor of 2.5, which results from its more complicated design and construction. There is a need for accurate construction which at the same time is simple, and that of Fig. 12 is recommended. The equation for this regulator is as Card 5/8

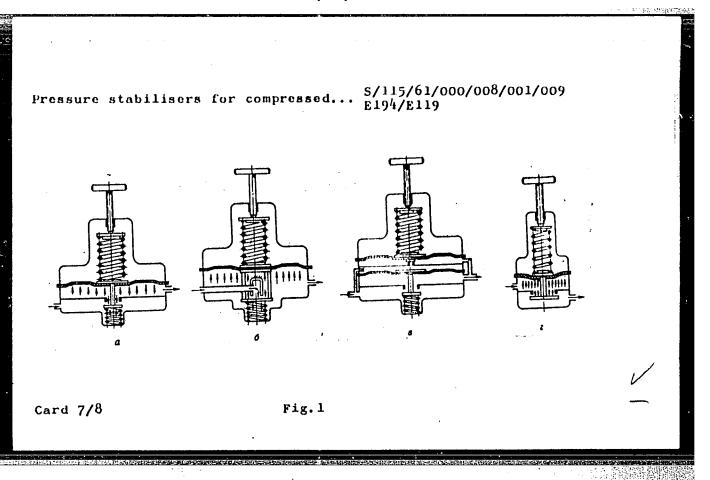
Pressure stabilisers for compressed ... \$\frac{\\$5/115/61/000/008/001/009}{\\$E194/\\$E119}\$

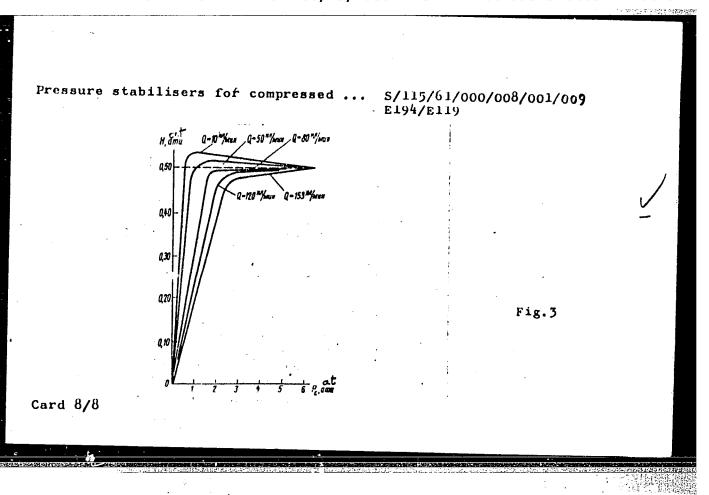
follows:

$$H = \frac{P}{f_{K}\pi} + \left(\frac{f_{K}\pi - F_{30\phi}}{f_{K}\pi}\right)P_{c} - \frac{K}{Bd_{K}\pi}\frac{Q}{f_{K}\pi}\left(\frac{Q}{P_{c} + 1.03}\right)E$$
(3)

In this case the second term may be reduced practically to zero by making $F_{300} = f_{KL}$ whilst the third term is several times less than in stabilisers of the inverse acting and direct acting types because d_{KL} is greater. In this stabiliser there is no need to increase F_{300} excessively to improve accuracy and so the overall dimensions can be smaller. There are 3 figures,

Card 6/8





APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4"

VYSOTSKIY, A.V.; KUROCHKIN, A.P.; LIND, A.B.; TSIDULKO, F.V.;
ROSTOVYKH, A.Ya., kand. tekhn. nauk, dots., retsenzent;
KURATSEV, L.Ye., red. ind-we; SOKOLOVA, T.F., tekhn. red.

[Pneumatic measurements of linear dimensions] Pnevmaticheskie izmereniia lineinykh razmerov. Moskva, Mashgiz, 1963.

(MIRA 16:5)

(Pneumatic gauges) (Pneumatic control)

(Length measurement)

S/115/63/000/001/003/017 E194/E155

AUTHORS:

Kurochkin, A.P., and Okun', I.Yu.

TITLE:

Self-balancing pneumatic (measuring) systems

ILKIUDICAL: Izmeritel'naya tekhnika, no.1, 1963, 10-11

The object of the device is to make pneumatic length gauges insensitive to air-supply pressure. It consists of a chamber bisected by a flexible diaphragm into two halves, each with its own inlet nozzle; the lower half is connected to the measuring nozzle; the upper discharges to atmosphere through an aperture which is constricted by a wedge carried on the diaphragm. This forms a self-balancing bridge arrangement which maintains equal pressure in the upper and lower halves. A formula is derived which shows that the sensitivity depends on the linear diameter of the measuring mozzle and the square of the diameter of the inlet nozzle, whereas in the usual systems the sensitivity depends on the square of the diameter of the measuring nozzle and the fourth power of that of the inlet nozzle. Broader tolerances can therefore be permitted in nozzle diameters of the new device. The diaphragm area should be as large as possible. The inlet nozzles may be Card 1/2

Self-balancing pneumatic

S/115/63/000/001/003/017 E194/E155

identical. The discharge nozzle may be of different shape and flow characteristics and this can be a source of measurement error. The effect is marked when the pressure drop across the nozzle is low, but above a certain critical pressure-drop the system becomes insensitive and this condition is used in practice. This pneumatic bridge system is more accurate than spring devices. With suitable combinations of inlet and discharge nozzle variations in supply pressure are unimportant; thus variations of $h = 6 \text{ kg/cm}^2$ change the reading by 2 = 3% of the full-scale limit of 80 microns. An additional pressure stabiliser should, however, be used for instruments measuring fractions of a micron. With this device, larger than usual measurement clearances can be used, which makes for greater speed and accuracy. The device is simple and easy to make, and has proved satisfactory on test.

Card 2/2

KUROCHKIN, A.P.; NOSKIN, E.L.; TSIDULKO, F.V.

Errors of pneumatic systems for measuring linear dimensions.

Izm.tekh. no.2:14-16 F 163. (MIRA 16:2)

(Pneumatic gauges)

KUROCHKIN, A.P.; TSIDULKO, F.V.

Amplitude-frequency characteristics of pneumatic measuring instruments. Stan.i instr. 34 no.3:31-33 Mr '63. (MIRA 16:5)

(Pneumatic gauges)

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

ACC NR: AP7002933

SOURCE CODE: UR/0020/66/171/006/1309/1312

Bakhrakh, L.D. (Corresponding member AN SSSR); Kurochkin, A.P. AUTHOR:

ORG: none

TITLE: The use of optical systems and holographic methods to regenerate radiation patterns of shf antennas from field measurements in the

Tresnel zone

AN SSSR. Doklady, v. 171, no. 6, 1966, 1309-1312 SOURCE:

TOPIC TAGS: shf antenna, antenna radiation pattern, opic 545 ren, HOLOGRAPY/4

ABSTRACT: The feasibility is considered of using holographic methods and optical models based on the known properties of coherent optical systems to determine radiation patterns of shf antennas. Schematically, such a method of regenerating the radiation pattern consists of the following: the distribution of the shf field is fixed at some distance from the antenna aperture. Its optical model is then built to a certain scale and a distribution similar to the measured one is subsequently formed in a field of coherent light. The field thus obtained is converted by a system of lenses arranged to produce a distribution corresponding to the radiation pattern in some plane at the output.

1/2 Card

621,396,671 UDC:

ACC NR: AP7002933

A theoretical analysis is made of the above technique using the Huygers-Kirhoff principle. It is noted that, although the proposed technique makes it possible, in principle, to obtain a solution to the problem of shf field distribution, its direct application is difficult because the phase-amplitude distribution in the antenna field must be measured and an optical model, which modulates the light with respect to phase and amplitude, must be used. Practical measurements of the shf field and formation of a corresponding light field were therefore made using holographic methods. Experiments were conducted with an antenna operating in a 3-cm waveband. The antenna consisted of two linear radiators about 15 cm long, lying 29 cm apart on the same straight line. The region which the radiation pattern was formed was at a distance of 16 m. Reference signals were generated by an open-end waveguide acting as a spherical wave source. Intensity distribution in the interference pattern was measured by a probe moving along a circle $(r_0 = 1.8 \text{ m})$. Recordings were made on film to the scale m = 150. The obtained hologram was placed in a converging spherical wave ($\lambda = 0.63 \mu$). After conversion by means of a photoelectric circuit in the optical system the radiation pattern was measured.

SUB CODE: 09,20/SUBM DATE: 148ep66/ ORIG REF: 003/ OTH REF: 005/ ATD PRESS: 5114

Card 2/2

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

KUROCHKIN, A. S., Cand Tech Sci - (diss) "Combined Survey of the Populated Points for Pleasing Plans in the Scale of 1:2,000."

Mos, 1957. 24 pp (Mos Inst of Land Improvement), 120 copies (KL, 51-57, 93)

- 19 -

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

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851,18

5/190/60/002/011/015/027 B004/B060

15.8107

Fedotova, O. Ya., Kurochkin, A AUTHORS:

The Problem of Producing Polyamides From Neutral Esters of TITLE:

Dicarboxylic Acids and Aromatic Diamines

Vysokomolekulyarnyye soyedineniya, 1960, Vol. 2, No. 11, PERIODICAL:

pp. 1688 - 1691

TEXT: A thorough study was made of the reaction between dicarboxylic acid esters and diamines. The investigation made by the authors covered the reaction of m-toluylene diamine with dimethyl., diethyl-, and dibutyl ester of adipic and sebacic acid. The reaction rate decreased from methylto butyl esver. Adipic acid reacted more vigorously than sebacic acid. The reaction of methyl esters with m-toluylene diamine yielded macromolecules with an ester group on one and, and an amino group on the other Polymers of low molecular weight (500) were obtained at 1800C. An increase of temperature to 260°C increased the molecular weight, the optimum being observed at 260°C and a reaction time of 7 hours, while decomposition sets in above 260°C. Molecular weights ranged between 2530 and 4200. Bright-Card 1/2

85418

The Problem of Producing Polyamides From Neutral Esters of Dicarboxylic Acids and Aromatic Diamines S/190/60/002/01¹/0¹5/027 B004/B060

yellow brittle substances, melting at 200°C, soluble in cresol and glacual acetic acid, were obtained. Addition of 2.5% orthophosphoric acid gives rise to a high molecular weight. Polymers become stronger and can be drawn to threads. Only sirupy substances, soluble in organic agents, were obtained with diethyl and dibutyl esters. This different reactivity could be utilized for regulating the properties and the molecular weight of polymers, so that the latter could be used as lacquer binding media.

1. P Losev is mentioned. There are 2 figures. 1 table, and 1 Soviet reference.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im

D. I. Mendeleyeva (Moscow Institute of Chemical Technology
imeni D. I. Mendeleyev)

SUBMITTED: May 10, 1960

Card 2/2

S/123/61/000/023/007/018 A052/A101

AUTHOR:

Kurochkin, A. S.

TITLE:

The effect of certain factors on the dimensional wear of the knife

when turning 3| -617 (EI-617) alloy

PERTODICAL:

Referativnyy zhurnal, Mashinostroyeniye, no. 23, 1961, 27-28,

abstract 23B211 ("Tr. Ufimsk. aviats. in-ta", no. 5, 1960, 40-68)

TEXT: Experimental dependences of the intensity of the radial wear of knife on various factors when turning 3M-6i7 (EI-6i7) alloy are discussed. Experimental data on the temperature and cutting forces as well as characteristics of the service life of various grades of tool materials are given. At the finish turning of EI-6i7 alloy when the feed does not exceed 0.2 mm/rev the temperature in the cutting zone depends to a great extent on the cutting speed and less on the feed and cutting depth. From the viewpoint of temperature conditions it is more favorable to work with an increased cutting depth, and, when this possibility is exhausted, to increase the feed, adjusting the cutting speed correspondingly. When heated up to 700 - 750°C EI-6i7 alloy does not change practically the initial mechanical qualities. At the temperature of

Card 1/3

3/123/61/000/023/007/018 A052/A101

The effect of certain factors ...

over 750°C the HB hardness of the alloy decreases sharply. An increase of the cutting speed and of the thickness of the layer cut leads to a certain inconsiderable decrease of the shinkage of cuttings. When the rake angle changes from +5° to -10° a considerable spread of points appears on the shrinkage diagram. In this interval of angles at different cutting speeds both increase and decrease of the shrinkage of cuttings is observed. Obviously not the deformation of the layer cut but the wear of the tool must be the criterion for selecting the optimum rake angle. Por a higher precision of machining it is more favorable to work at increased cutting speeds decreasing the cutting depth and the feed correspondingly. At that the radial component decreases and along with it the elastic centrifugals of the system. The dimensional wear determined by a direct measurement should be considered as the main characteristic of the wear of the tool. The maximum stability when turning EI-617 alloy have shown the knives furnished with BK 8 (VKd) alloy plates; however, their maximum service life at the cutting speed of 20 m/min, feed of 0.15 mm/rev and cutting depth t = 0.5 mm does not exceed 18 - 16 min. Therefore the development of new tool materials for machining heat-resistant alloys is a very timely task. When turning ET-617 alloy the mechanical qualities, shrinkage of cuttings, cutting force, wear of the tool and other characteristics change, depending on temperature in the

Card 2/3

"APPROVED FOR RELEASE: 06/19/2000 CIA-RDP86-00513R000927720019-4

The effect of certain factors ...

S/123/61/000/023/007/018 A052/A101

cutting zone. For the semifinish turning conditions at t>0.75 mm and S<0.2 mm/rev the optimum cutting speed securing the maximum tool life when turning EI-617 alloy with VK-8 knives is the cutting speed of 18-22 m/min. As the optimum knife angles should be taken $\gamma=0-(+5^\circ)$; $\alpha=14^\circ-16^\circ$; $\gamma=45^\circ$. There are 7 references and 51 figures.

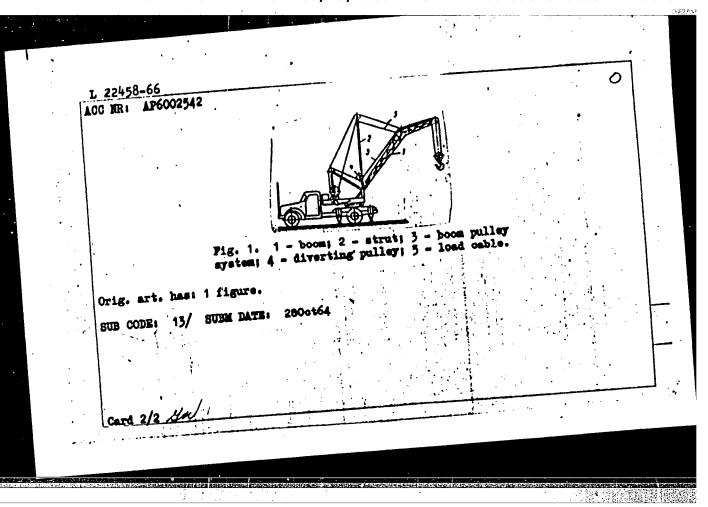
I. Militsina

[Abstracter's note: Complete translation]

V

Card 3/3

L 22458-66 EWT(d)/FWP(h)/EWP(1) ACC NR: AP6002542 (A,N) SCIRCE CODE: UR/028 AUTHORS: Kolot, I. I.; Gladkiy, V. I.; Sorokin, Ye. K.; Zhan Sluchevskiy, V. A.; Gul'ko, A. I.; Kurochkin, A, S. ORG: none TITLE: Crane with variable extension boom. Class 35, No. 1 SOURCE: Byulleten' imbreteniy i tovarnykh znakov, no. 23, TOPIC TAGS: crane, loading machinery, transport equipment ABSTRACT: This Author Certificate presents a crane with variable has a pinned supporting strut. The end of the strut which has a pinned supporting strut. The end of the strut compound pulley system to the crane boom. To increase the extended boom by eliminating compressive loads and to decreated a structure of the pulley forces are directed upward, opposing the forces the pulley forces are directed upward, opposing the forces the pulley forces are directed upward, opposing the forces the pulley forces are directed upward, opposing the forces the pulley forces are directed upward, opposing the forces the pulley forces are directed upward, opposing the forces the pulley forces are directed upward, opposing the forces the pulley forces are directed upward, opposing the forces are directed upward (see Fig. 1).	76667 1965, 43 riable extension boom is connected through a lifting capacity with case crane height during case of the boom and is that
the pulley forces are directed upward, opposing the two two pulley system (see Fig. 1).	UDO: 621.873.3
Card 1/2	• · · · · · · · · · · · · · · · · · · ·
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NAME OF THE OWNER O

ALEKSEYENKO, Nikoley Grigor'yevich; YAKIMOV, Semen Ivanovich; KUROCHKIN,
A.Ye., red.; MARCHUKOVA, M.G., red. izd-va; LAVRENOVA, N.B.,
Tekhn. red.

[Package transportation and the mechanization of cargo-hardling operations; practices of Nakhodka harbor dock workers] Paketnye perevozki i mekhanizatsiia gruzovykh rabot; iz opyta portovikov perevozki. Moskva, Izd-vo "Morskoi transport," 1961. 49 p. (MIRA 14:9)

(Nakhodka-Cargo handling-Equipment and supplies)

· 中国特别的

YEROFEYEV, Nikolay Ivanovich; POLIKARPOV, A.D., inzh., retsengent;

KUROCHKIN, A.Ye., inzh., retsenzent; REKEMMAN, I.G., inzh.,
retsenzent; SKOEELING, L.V., red.; USANOVA, N.B., tekhn. red.

[Gantry cranes]Portal'nye krany. Moskva, Morskoi transport,
1962. 561 p.

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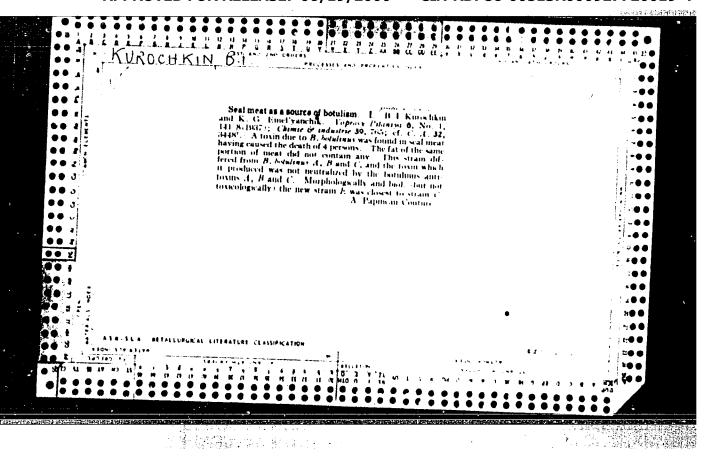
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1. Direktor Novocherkasskogo elektrovosostroitel'nogo zavoda
(for Kurochkin). 2. Predsedatel' zavodskogo komiteta profsoyusa
Novocherkasskogo elektrovosostroitel'nogo zavoda (for Charchenko).
3. Sekretar' partkoma Novocherkasskogo elektrovosostroitel'nogo
zavoda (for Pyatibratov). 4. Sekretar' komiteta Vsesoyusnogo
Leninskogo kommunisticheskogo soyusa molodeshi Novocherkasskogo
elektrovosostroitel'nogo zavoda (for Sokolenko).
(Hactric locomotives) (Insulating materials)
(Lacquers and Lacquering)

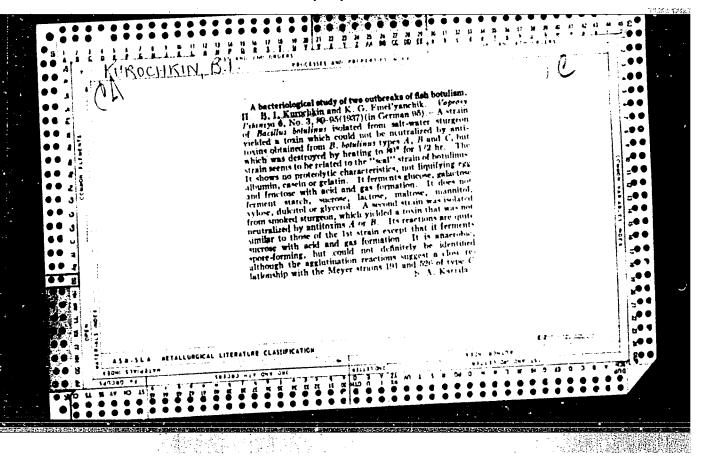
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Zhar Microbiol., Epidemiol., i Immunobiol., No. 4-5, 1944.
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(TINAKI, LAKE—SERRATIA)

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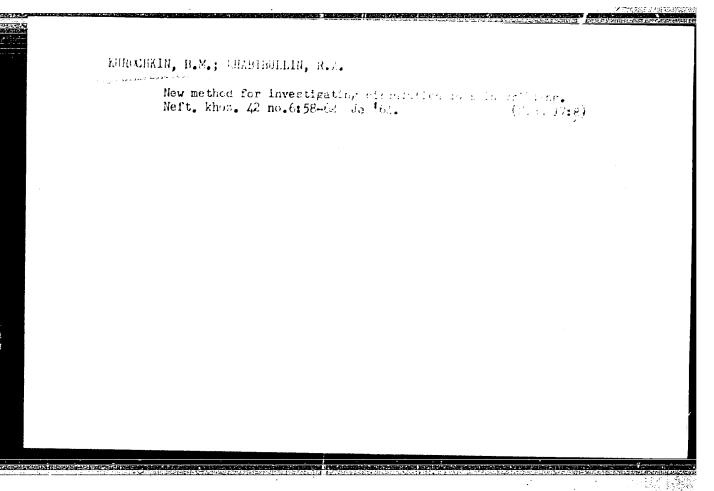
(MIRA 18:10)

SAFRONOV, M.G.; Kelledinin, c.V.; ERMSBELLE, E.A.

Well drilling with water flucking to a predetermined depth in Romaehkino old field. Eurenic mo.11:3-6 16%.

1. Kontora bureniya No.2 tree's "Tatburneft".

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WERE HEING W.

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