KOYDA, N.U.; BUKHBINDER, M.A. (Gomel)

Height and rate of capillary rise in a porous medium. Zhur. fiz. khim. 36 no.6:1205-1209 Je '62 (MIRA 17:7)

1. Belorusskiy institut inzhenerov zheleznodorozhnogo transporta.

BUKHBINDER, M.A.

Law of di tribution of the specific surface of pores in an isotropic porous medium. Dokl. AN SSSR 163 r .4:924-926 Ag '65.

(MIRA 18:8)

1. Kishinevskiy gosudarstvennyy universitet. Submitted January 20, 1965.

BUKHBINDER, M.A.

Capillary equilibrium in real porous media. Koll. zhur. 27 no.5: 661-667 S-O '65. (MIRA 18:10)

1. Kishinevskiy universitet.

BUKHBINDER N.I.

FAYERMAN, A.I.; MATSOV, M.M.; STOMA, V.V.; BUKHBINDER, N.I.

Selecting the design of a semiautomatic welding machine. Avtom.svar. 7 no.4:78-82 Jl-Ag '54. (MLRA 7:9)
(Electric welding)

VELEV, Dimitur, k. t. n., inzh.; BUKHCHEV, Georgi; KHRISTEVA, Mariia, inzh.

Characteristics of mazut, and their influence on the flame during combustion. Tekhnika Bulg 13 no. 2: 19-20 '64.

1. "Druzhba" Glass Factory.

BUKHCHEV, I.

Repairing the radiators of the tractor motors. p. 20.
(Mashinizirano Zemedelie, Vol. 8, no. 1, Jan. 1957, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

BUKHCHEV, I.

Examining the angle of injected fuel of DT-54 motor. p. 23.
(Mashinizirano Zemedelie, Vol. 8, no. 1, Jan. 1957, Bulgaria)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, no. 6, June 1957, Uncl.

BUKHCHEV, I.

Correct distribution of the time periods for repairing the machines for plant protection. p. 14.
MASHINIZIRANO ZEMEDELIE. Vol. 7, no. 7, July 1957. Sofiia, Bulgaria

SOURCE: East European Accessions List, (EEAL) Library of Congress, Vol. 6, No. 1, January 1957

BUKHCHEV, Iv., inzh.

New machines for farming. Nauka i tekh mladezh 14 no.5:20-21 My '62.

BUKHCHEV, Iv., inzh.

Bulgarian technical science on the road of progress. Nauka i tekh mladezh 14 no.7:12-15 Jl '62.

BUKHCHEV, Iv., inzh.

Portable sidewalks. Nauka i tekh. v mladezh. no.10:9 '61.

(Transportation)

BUKHCHEV, Iv.; STOIANOV, Khr.; BEBIN, N.

Traction characteristics of a tractor with hydraulic transmission. Izv mekh selsko stop BAN no. 2:39-63 '62.

BUKHDRUKER, M.

New system for calculating turnover taxes and billing purchasers of cereal products. Muk.-elev.prom. 25 no.6:28-29 Je '59. (MIRA 12:9)

(Cereal products)

KADUKOV, Ya.; MARGOLIN, M.; BUKHDRUKER, M.; (Tallin, Estonskaya SSR); MANUYLOV, A.; PISHCHETS, S.

Improve record keeping in grain storage. Muk.-elev. prom. 26 no.10: 28-30 O'60. (MIRA 13:10)

1. L'vovskoye oblastnoye upravleniye khleboproduktov (for Kadukov, Margolin). 2. Glavnyy inzhener Upravleniya po priyemke i sokhrannosti zernovykh, maslichnykh kul'tur i sortovykh semyan Ministerstva khleboproduktov Kazakhskoy SSR (for Manuylov). 3. Belotserkovskaya realizatsionnaya baza (for Pishchets).
(Grain elevators--Accounting)

YELIN, A.; SELYAKOV, [redacted].; VISKIN, S.; LOYKO, N.; BUKHGALTER, B.; VORONKOV, I.; SPERANSKIY, N.

Improvement of planning in the meat industry. Mias. ind. SSSR 32 no.4:33-37 '61. (MIRA 14:9)

1. Astrakhanskiy myasokombinat (for Yelin). 2. Kazgipromyasomolprom (for Selyakov). 3. Khar'kovskiy myasokombinat (for Viskin). 4. Leninskiy myasokombinat (Kemerovskiy sovnarkhoz) (for Bukhgalter). 5. Novgorodskiy myasokombinat (for [redacted]oronkov). 6. Buryatskiy sovnarkhoz (for Speranskiy).
(Meat industry)

BUKHGALTER, V. D.

Bukhgalter, V. D. -- "Investigation of the Heat Insulating and Water-proofing Properties of Hydrophobic Ash in the Constructionsof Subterranean Heat Lines." Min Higher Education USSR, Moscow Order of Labor Red Banner Engineering-Construction Inst imeni V. V. Kuybyshev, Moscow, 1955 (Dissertation for the Degree of Candidate in Technical Sciences)

SO: Knizhnaya Letopis', No 24, 11 June 1955, Moscow, Pages 91-104

BUKHGALTER, V.D.

ZHUKOV, D.V., kand. tekhn. nauk; BUKHGALTER, V.D.

Methods of drying plaster and interior walls of buildings. Nov. tekh. i pered. op. v stroi. 19 no.9:10-14 S '57. (MIRA 10:11)
(Plastering) (Drying apparatus)

BUKHGALTER, V.D., kand.tekhn.nauk

Drying and heating buildings constructed during winter. Nov. tekh. i pered. op. v stroi. 20 no.10:9-13 O '58. (MIRA 11:10)
(Drying apparatus)

BUKHGALTER, V., kand.tekhn.nauk

Heating units designed by the Scientific Research Institute No. 200. Stroitel' no.11:14-15 N '60. (MIRA 13:11)
(Heating)

VOLCHEK, I.Z., inzh.; BUKHGALTER, V.D., inzh.; KUZNETSOV, G.F., inzh.

Manufacture of asbestos-silicate insulating articles. Mont. i spets. rab. v stroi. 24 no.5:13-15 My '62. (MIRA 15:5)

1. Nauchno-issledovatel'skiy institut stroitel'noy promyshlennosti i Glavteplomontazh.

(Insulating materials)

BUKHGALTER, V.I.

DANILOV, S. N.; MATVEYEV, V. M.; BUKHGALTER, V. I.

"On the Theory of the Nitration of Cellulose," Zhur. Obshch. Khim., 10, Nos. 5-6, 1940. Laboratory for the Chemical Treatment of Cellulose Leningrad Chemico-Technological Institute.

Report U-1526, 24 Oct 1951

S/191/60/000/002/009/012
B027/B058

AUTHORS: Bukhgalter, V. I., Severovostokova, Ye. D.

TITLE: Optimum Conditions in the Processing of Thermoplastic Material

PERIODICAL: Plasticheskiye massy, 1960, No. 2, pp. 44-47

TEXT: The authors deal with a method for determining the flow of polymer melts, permitting their production directly on rod presses; temperature conditions and yield stress are the same as may be observed during processing of polymers. Starting from the rheological principles (Newton's law), an experimental apparatus was built, warranting the plastic flow of the melt and a sufficient rate of heating of the polymer to a certain temperature, the yield stresses being similar to those in practice. P. A. Rebinder already mentioned this system. Two types of polyethylene were used as experimental material, i.e., a high-pressure and a low-pressure product. The test results with both these products showed the analytical dependence between the mean flow velocity S and the yield stress τ at a certain temperature of the melt, i.e. $S = A\tau^K$, A and K being the constants

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Optimum Conditions in the Processing of Thermoplastic Material

S/191/60/000/002/009/012
B027/B058

of the melt. The dependence of the apparent viscosity of the melt on its temperature may be expressed as $\eta = Be^{\beta t}$, B and β being the constant empiric values for the polymer given. There are 8 figures and 9 Soviet references.

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S/191/62/000/012/009/015
B101/B186

AUTHORS: Bukhgalter, V. I., Severovostokova, Ye. Ye.

TITLE: Application of rheologic analysis in the processing of thermoplastics

PERIODICAL: Plasticheskiye massy, no. 12, 1962, 32-36

TEXT: Previously (Plast. massy, no. 2, 44, 1960) the authors had described a method for the plotting of the rheologic curves shearing rate, s, versus shear stress, τ, or apparent viscosity versus s. In this paper the curves are discussed for high-pressure ethylene, ethylene propylene copolymer, block polystyrene, emulsion polystyrene, and CH-28 (SN-28) styrene acrylonitrile copolymer and their practical use is shown for calculating the pressure in the extruder and for choosing the extruder die and the extrusion temperature. The following indications are stated for calculating τ and s in dies of simple geometrical form: circular orifice: $\tau = PD/4L$ dynes/cm^2, $s = 32Q/\pi D^3$ sec^{-1}, where L is the length and D the diameter of the orifice, and Q is the volume rate of extrusion; slot with parallel walls: $\tau = PH/2.15L$, $s = 5.58Q/WH^2$, where H is the

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internal height and W the width of the slot; annular orifice: $\tau = P(R-r)/2.15L$, $s = 5.58Q/\pi(R + r)(R - r)^2$, where R is the outer and r the inner radius of the annular orifice. It is shown that the change in viscosity brought about by heating the plastic is negligible for the friction at the die walls, since its effect is within the experimental error (± 5%). Using rheologic curves the extrusion conditions can be adjusted to suit the variable properties of the material, but the quality of the extrusion product has to be checked visually. There are 6 figures and 3 tables. The English-language references are: E. C. Bernhardt (editor), Processing of Thermoplastic materials, Reinhold Publishing Corporation, N. Y., 1959; D. J. Week, British Plastics, 31, no. 4, 156 (1958).

BUKHGALTER, V.I.; GRIBKOVA, V.I.

Reaction of cellulose esters with plasticizers. Plast.massy no.4:34-36 '63. (MIRA 16:4)

(Cellulose esters) (Plasticizers)

BUKHGALTER, V.I.; PIROZHNAYA, L.N.; SAZHIN, B.I.; SERGEYEVA, N.I.

Study of polyermization kinetics of polyacrylates by the methods electric conductivity, infrered spectroscopy, and viscosimetry. Vysokom. soed. 6 no.1:118-121 Ja'64. (MIRA 17:5)

1. Nauchno-issledovatel'skiy institut polimerizatsionnykh plastmass.

AUTHOR: Bukhgendler, K. (Tirana, Albania). 50-58-3-19/22

TITLE: The Hydrometeorological Service of Albania on the Upgrade (Gidrometeorologicheskaya sluzhba Albanii na pod"yeme)

PERIODICAL: Meteorologiya i Gidrologiya, 1958, Nr 3, pp. 68-69 (USSR)

Received: [illegible]

ABSTRACT: The first meteorological station of Albania was established in the harbor Durrës (Durazzo.) in 1868. In 1888 the meteorological observations began at Shkoda and in 1924 in Tirana. Since 1930 various offices and private persons began to establish stations and observation posts at which observations were mainly performed as a hobby by teachers and agronomists. In the year 1932, when the number of stations and posts increased to 30, a group of three persons, which took over the planned direction of these stations, was formed in the Office for Water Economy. During the occupation of Albania (first by Italy - 1939 and later by Germany - 1934) the occupation forces established meteorological stations exclusively for military purposes near the airports of Shkodër, Korçë, Gjinokastër, Vlonë, Kuçovë and

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The Hydrometeorological Service of Albania on the Upgrade

50-58-3-19/22

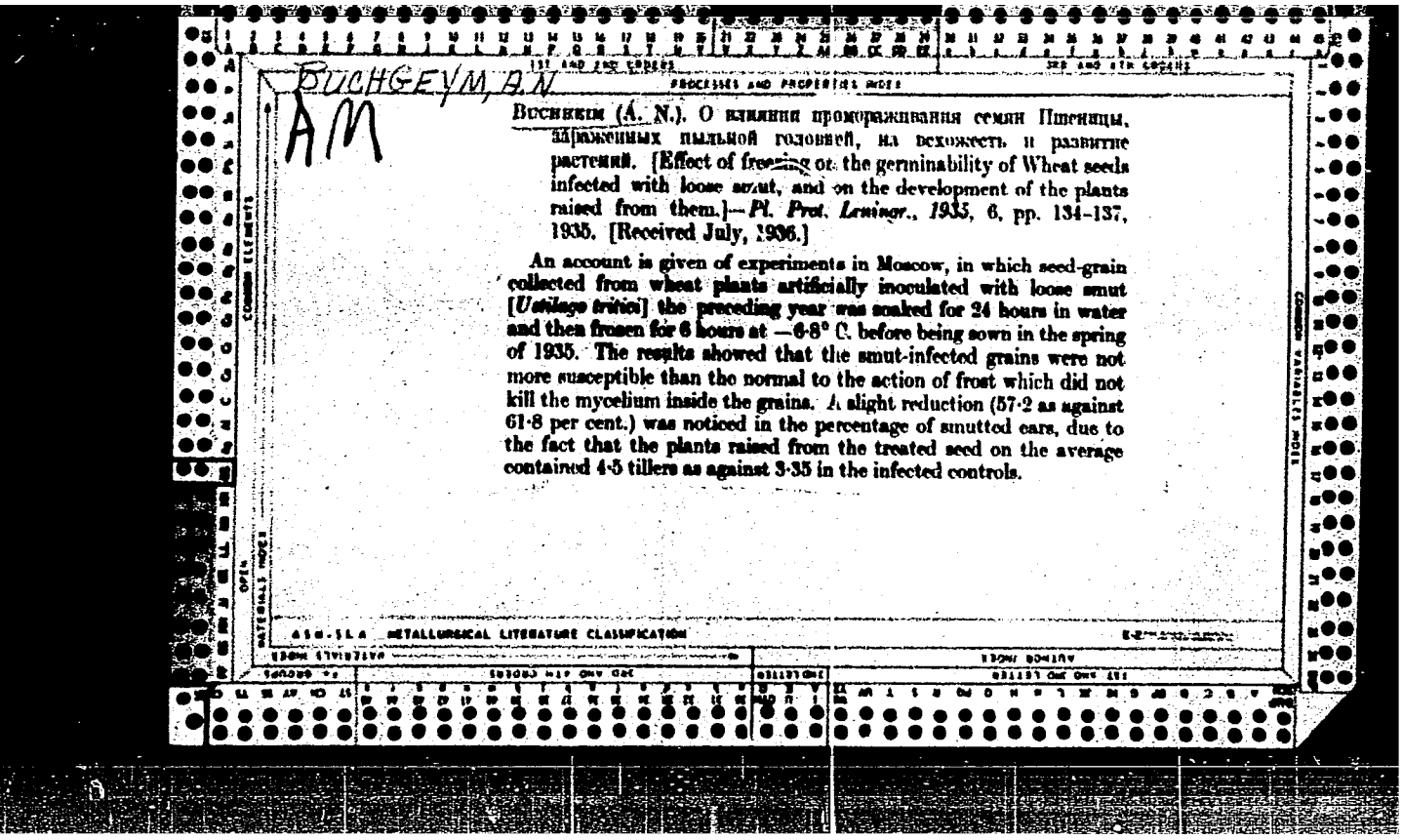
the synoptical service in Tirana. The observation data of these stations were kept, but the synoptical archives were burned in a bombing-raid on Tirana. In 1947 the hydrometeorological service was handed over to the Albanian army. If the number of stations and observation posts in the year 1938 are assumed as 100%, the following dynamics of the rise is obtained: 1945-113%; 1948-219%; 1957-471%.
On the whole the extent of work of the hydrometeorological network and its staff of collaborators in the time between 1938 and 1957 increased 50-fold. The hydrometeorological sector treated an extensive material on alluvial deposits, temperature, water consumption etc., and edited a "Several Years Bulletin" (Mnogoletniy byulleten') for the time from 1947 to 1955 where the data on all rivers, lakes and seas of Albania are to be found. Albania at present participates in the International Geophysical Year.

1. Meteorology--Albania 2. Weather station--Development

Card 2/2

BUKHGENDLER, M.A., arkhitektor; DOLMATOVA, Ye.V. inzhener; POPOV, V.I. redaktor izdatel'stva; STEPANOVA, E.S., tekhnicheskiy redaktor

[Use of precast concrete construction in building multi-story industrial structures] Primenenie sbornykh zhelezobetonnykh konstruktsii pri stroitel'stve mnogoetazhnykh promyshlennykh zdanii. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1957. 37 p. (MLRA 10:5)
(Precast concrete construction)
(Printing plants)



BUCHGEYM, A.N.

AM

Восникин (А. N.). О влиянии промораживания семян Пшеницы, зараженных пыльной головней, на всхожесть и развитие растений. [Effect of freezing on the germinability of Wheat seeds infected with loose smut, and on the development of the plants raised from them.]—*Pl. Prot. Leningr.*, *1935*, 6, pp. 134–137, 1935. [Received July, 1936.]

An account is given of experiments in Moscow, in which seed-grain collected from wheat plants artificially inoculated with loose smut [*Ustilago tritici*] the preceding year was soaked for 24 hours in water and then frozen for 6 hours at —6·8° C. before being sown in the spring of 1935. The results showed that the smut-infected grains were not more susceptible than the normal to the action of frost which did not kill the mycelium inside the grains. A slight reduction (57·2 as against 61·8 per cent.) was noticed in the percentage of smutted ears, due to the fact that the plants raised from the treated seed on the average contained 4·5 tillers as against 3·35 in the infected controls.

BUCHGEYM, A.N.

BUCHHEIM, A. N. [Co-author]

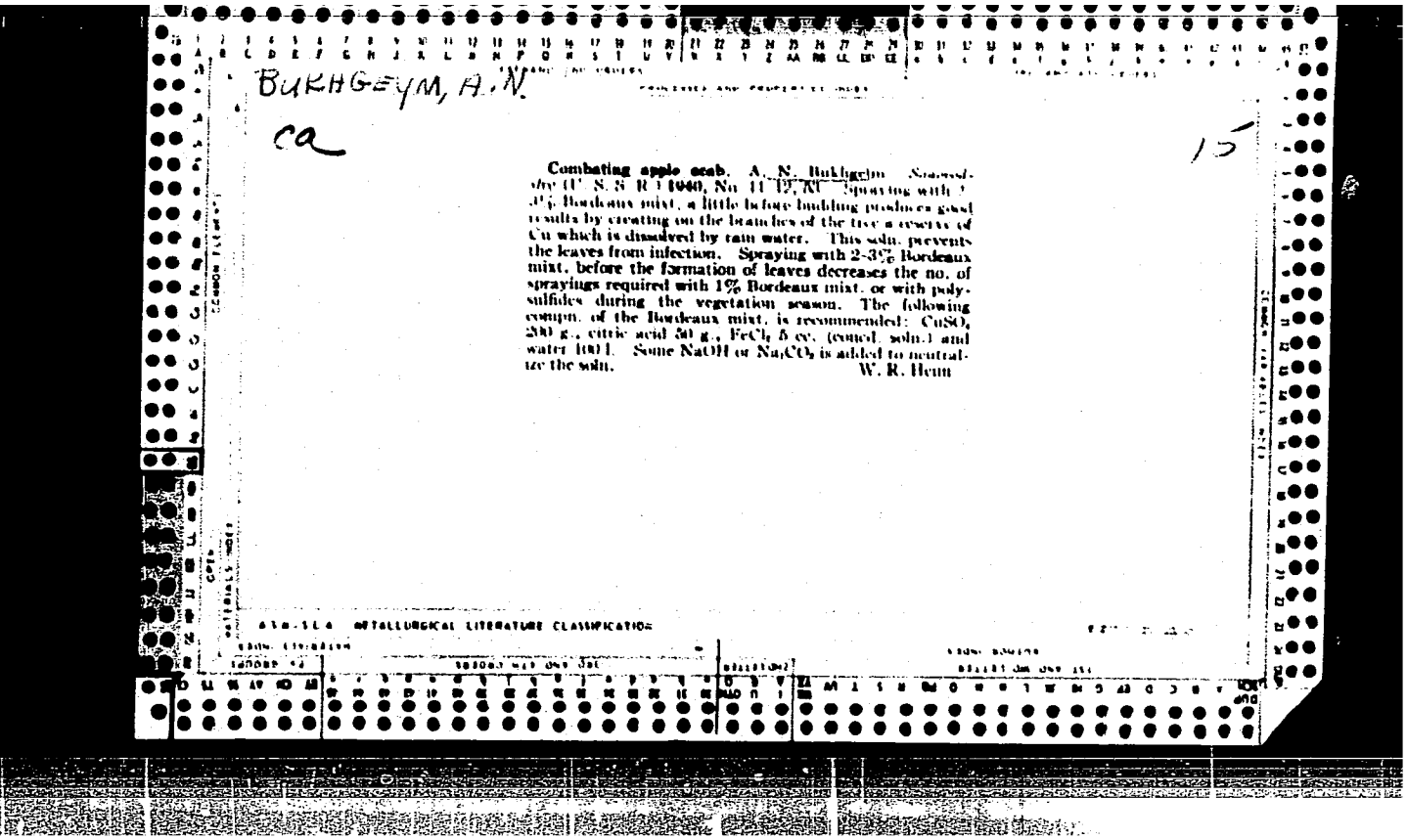
See: BOLDYREV, V. F. Principles of the Protection of Plants from Pests and Diseases, 1936.

SO: SIRA, SI 90-53, 15 December 1953

BUCHINYN, A. N.

"Contemporary Methods of Controlling Rust in Grain Crops," Zashchita Rastenii, no. 12, 1937, pp. 11-34. 421 P942

SO: SIRA, SI 90-53, 15 December 1953



BUKHGEYM, A. N.

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Combating apple scab. A. N. Bukhgeim. *Sadovodstvo* (U. S. S. R.) **1940**, No. 11-12, 37. Spraying with 1% Bordeaux mixt. a little before budding produces good results by creating on the branches of the tree a reserve of Cu which is dissolved by rain water. This soln. prevents the leaves from infection. Spraying with 2-3% Bordeaux mixt. before the formation of leaves decreases the no. of sprayings required with 1% Bordeaux mixt. or with polysulfides during the vegetation season. The following compn. of the Bordeaux mixt. is recommended: $CuSO_4$, 300 g., citric acid 50 g., $FeCl_3$ 5 cc. (concd. soln.) and water 10 l. Some NaOH or Na_2CO_3 is added to neutralize the soln.

W. R. Heun

BUKHGEYM, A.N.

BUKHG[illegible], A. N.

"Root Disease Fungi" (p.296) by Garret, S. D. M.A., D. [illegible]. D. (194[illegible], Mass., U.S.A. (sic), 177 pages) Reviewed by A. N. Bukhg[illegible]m

SO: Advances in Modern Biology (Uspekhi Sovremennoi Biologii) Vol. XXI, No. 2, 1946

BUCHGEYM, A. N.

"Plant Diseases," Sel'skokhoziaistvennaia Entsiklopediia, State Publishing House of Agricultural Literature, Moscow, Ed. 3, vol. 1, 1949, pp. 219-222.
30.1 Se42 Ed. 3

SO: SIRA, SI 90-53, 15 December 1953

BUKHGEYM, A.N.

GRECHKIN, V.P.; BUKHGEYM, A.N., nauchnyy red.; KOGAN, M.I., prof., vedushchiy red.

[Studies on the biology of forest pests] Ocherki po biologii vreditelei lesa. Moskva, Izd-vo Mosk. ob-va ispytatelei prirody, 1951. 149 p. (Materialy k poznaniiu fauny i flory SSSR. Otdel zoologicheskii, no.31). (MIRA 11:3)

(Forest insects)

ABRAMOV, Konstantin Konstantinovich; BUKHGEYM, Lev Ernestovich; MALYSHEV, Aleksandr Ivanovich; SHMIDT, Viktor Isaakovich; SHUMILIN, Nikolay Pavlovich; MEL'NIKOV, P.V., otv. red.; KOMAROVA, Ye.V., red.

[Special measurements in wire communication] Spetsial'nye izmereniia v provodnoi sviazi. [By] K.K.Abramov i dr. Moskva, Sviaz', 1965. 231 p. (MIRA 18:5)

BUKHGOL'TS, N.N.

SUSLOV, Gavriil Konstantinovich, 1837-1935.

[Teoretical mechanics] Teoreticheskaia mekhanika. Izd. 3. posmertnoe, pod red. N.N.Bukhgol'tsa i V.K.Gol'tsmana. M, Gos. izd-vo tekhn.-teoretich. lit-ry, 1946. (MLRA 7:5)
(Mechanics)

BUKHGOL'TS NIKOLAY NIKOLAEVICH, I. M. VORONKOV and A. P. MINAKOV

Sbornik zadach po teoreticheskoi mekhanike. Izd. 3., perer i dopoln. Dop. v kachestve uchebn. posobiia dlia universitetov. Moskva, Gostekhizdat, 1949. 275 diagrs.

Collection of problems in theoretical mechanics.

DLC: QA809.B85 1949

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

BUKHGOL'TS, Nikolay Nikolayevich; TARG, S.M.; MARKUZON, I.A., red.

[Fundamental course on theoretical mechanics] Osnovnoi kurs teoreticheskoi mekhaniki. Izd.6, perer. i dop. S.M. Targom. Moskva, Nauka. Part 1. 1965. 467 p.
(MIRA 19:1)

BUKHGOL'TS, NIKOLAY NIKOLAEVICH, I. M. VORONKOV AND A. P. MINAKOV

Sbornik zadach po teoreticheskoi mekhanike. (Spetsial'nye posobiia dlia vyssh. shkoly) Moskva, Gosizdat, 1952? 284 p. diagrs.

Bibliography: p. 3-4.

Collection of problems in theoretical mechanics.

DLC: QA809.B85 1925

SO: Manufacturing and Mechanical Engineering in the Soviet Union, Library of Congress, 1953.

L 05671-67 EWP(l)/EWT(d) IJP(c) GG/BB

ACC NR: AR6023253 SOURCE CODE: UR/0044/66/000/003/V077/V077

AUTHOR: Bukhgol'ts, N. V.; D'yachenko, V. F.; Lazarev, V. G.; Chernyshev, K. K.; Sharov, V. A.

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B

REF SOURCE: Sb. Vychisl. sistemy. Vyp. 18. Novosibirsk, 1965, 119-137

TITLE: On the problem of economy of a computer operating memory 16C

SOURCE: Ref. zh. Matematika, Abs. 3V371

TOPIC TAGS: computer memory, computer programming, computer storage device

TRANSLATION: An application for computer storage of programs and constants used for the automatic control of a constant memory makes it possible to decrease the volume of the operating memory. The problem is solved without introducing changes in the program to find an image of the set of program variables in its field of operation such that the number of operating cells is a minimum. To construct this image, a space-time diagram is made up of traces of variables and their projections, making it possible to combine the addresses of different variables. Theorems are proved on the minimum number of addresses of variables in the program. A block diagram for the program of minimizing the number of memory cells is given. Offered as an example is a program for the computation of square roots requiring five operating cells. A programmer of average

UDC: 681.142.001:51

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L 05671-67

ACC NR: AR6023253

skill used 8 cells. The method set forth here is applicable to ready-made programs, in systems of automatic programming, and in the design of specialized computers. 6 figures, 10 references. Yu. M.

SUB CODE: 09/ SUBM DATE: none

Card 2/2

ACC NR: AR6021233 SOURCE CODE: UR/0271/66/000/003/B007/B007

AUTHOR: Bukhgol'ts, N. V.; D'yachenko, V. F.; Lazarev, V. G.; Chernyshev, K. K.; Sharov, V. A.

TITLE: The economy of digital computer memory 16

SOURCE: Ref. zh. Avtomat telemekh i vychisl tekhn, Abs. 3B64

REF SOURCE: Sb. Vychisl. sistemy. Vyp. 18, Novosibirsk, 1965, 119-137

TOPIC TAGS: computer memory, computer program logic, computer design, digital computer

ABSTRACT: The use of read-only memory units for program and constants storing in automatic control computers makes it possible to reduce the volume of immediate-access storage units. Without introducing changes in the existing programs, the problem of mapping a set of program variables on its operating field is solved in order to obtain a minimum number of working cells. The method is applicable to automatic programming systems, to complete programs, and to special-purpose computer design. [Translation of abstract] 6 illustrations and bibliography of 10 titles. Yu. M.

SUB CODE: 09

Card 1/1 UDC: 681.142.2

BUKHGOL'TS, O.

BARANSKIY, N.; BLIZNYAK, Ye.; BUKHGOL'TS, O.; VOSKRESENSKIY, S.; IVANOV, K.; KOVALEV, S.; KOVAL'SKAYA, N.; MAKIYEVA, A.; MARKOV, K.; PETROVSKIY, I.; PROZOROV, Ye.; RAKITNIKOVA, A.; SAUSHKIN, Yu.; SOLOVTSEVA, T.; STEPANOV, P.; SHAPOSHNIKOV, A.; KHRUSHCHEV, A.

Nikolai Nikolaevich Kolosovskii. [Obituary] Vest.Mosk.un.9 no.12:139-141 D '54. (MLRA 8:3)
(Kolosovskii, Nikolai Nikolaevich, 1891-1954)

LYALIKOV, Nikolay Ivanovich; BUKHGOL'TS, O.E.; RODIONOVA, F.A., red.; TYUTYUNNIK, S.G., red. kart; BORISKINA, V.I., red. kart; TSIRUL'NITSKIY, N.P., tekhn. red.

[Economic geography of the U.S.S.R.; textbook for the ninth grade of the secondary school] Ekonomicheskaia geografiia SSSR: uchebnik dlia IX klassa srednei shkoly. Izd.5., ispr. Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv. RSFSR, 1961. 310 p. (MIRA 14:12)
(Geography, Economic)

BUKHGOL'TS, O.E.

Interdepartmental conference on the population geography.
Geog. v shkole 25 no.3:84-85 My-Je '62. (MIRA 15:7)
(Russia—Population—Congresses)

BUKHGOL'TS, O.E.

Prospects for the development and distribution of the national economy of the U.S.S.R. in 1960-1980; according to the materials of the 22d Congress of the CPSU. Geog. v shkole 25 no.5:2-7 S-O '62. (MIRA 15:9)

(Russia—Economic policy)

LYALIKOV, Nikolay Ivanovich; BUKHGOL'TS, O.E.; KOZLOV, M.V., red.; RODIONOVA, F.A., red.; TYUTYUNNIK, S.G., red. kart; BORISKINA, V.I., red. kart; TSIRUL'NITSKIY, N.P., tekhn. red.

[Economic geography of the U.S.S.R.; textbook for the ninth grade of the secondary school] Ekonomicheskaia geografiia SSSR; uchebnik dlia 9 klassa srednei shkoly. Izd.3. Moskva, Uchpedgiz, 1959. 342 p. (MIRA 16:7)
(Geography, Economic)

BUKHGOL'TS, V., inzhener.

Washing away waste rock from a rock dump. Mast.ugl.6 no.2:9-10 F '57. (MLRA 10:4)
(Waste products) (Coal mines and mining) (Mine pumps)

BUKHGOL'TZ, V.P.

SMORODINSKIY, Ya.M., kandidat tekhnicheskikh nauk; ZNAMENOK, R.T., inzhener; BUKHGOL'TZ, V.P., inzhener.

Protection of electric motors by the use of a totalizer with symmetrical components. Ugol' 31 no.8:38-40 Ag '56. (MLRA 9:10)
(Electricity in mining) (Electric motors) (Automatic control)

BUKHGOL'TS, V., inzh.

Pumps with submersible motors. Mast ugl. 7 no.10:20-21 O '58.
(Mine pumps) (MIRA 11:11)

14(5) SOV/118-59-2-5/26

AUTHOR: Bukhgol'ts, V.P., Engineer

TITLE: Telemechanization of Dispatcher Control in Mines (Telemekhanizatsiya dispetcherskogo kontrolya v shakhtakh)

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, 1959, Nr 2, pp 19-22 (USSR)

ABSTRACT: The Laboratoriya avtomatiki VUGI (Laboratory of Automatics of the VUGI) has developed a noncontact telemechanical pulse system of dispatcher control with time division of channels, based on the principle of frequency and voltage phase preservation at any moment and in various circuit points. The synchronism of the transmitting and receiving devices is automatically secured. The transmitting arrangement contains 3 peak transformers, fed from a three-phase network, can transmit from 6 to 12 pulses, differing in polarity or phase, i.e. can control from 6 to 12 signals. If connecting the peak transformers, the capacity of the system may be increased up to 24

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Telemechanization of Dispatcher Control in Mines

signals. The receiving arrangement accordingly contains from 3 to 6 peak transformers, of which the pulses are in step and cophased with the peak transformer pulses of the transmitting arrangement. The Institut avtomatiki i telemekhaniki AN SSSR (Institute of automation and Telemechanics of the AS USSR) has developed a telecontrol system using magnetic cells with a rectangular hysterisis loop as noncontact distnibutors. The system is based on the time division of telesignals and has more signals than the VUGI system, but the signal increase reduces the operating speed of the system. The Institut Dongiprouglemash (the Dongiprouglemash Institute) has developed a system of dispatcher telesignaling with frequency division of the telesignals. The superiority of the DTS-1 dispatcher control system consists in the working control of traveling mechanisms, of which the starters are far away from each other or from the distributing

Telemechanization of Dispatcher Control in Mines

center. An evaluation of these systems will be possible only after operational tests in mines. In 1957 the Dnepropetrovskiy zavod selenovykh vypryamiteley (the Dnepropetrovsk Selenium Rectifier Plant) produced dispatcher control apparatus of the type TMK-1 and TMK-2, which have been successfully tested in the "Oktyabr'skaya revolyutsiya" mine of the "Rostovugol'" Combine. There are 6 diagrams.

BUKHGOL'TS, V.P., inzh.; PEREVOZOV, P.S., inzh.

[redacted]

Leakage relay with automatic voltage supply. Bezop. truda v prom. 3 no.6:25-27 Je '59. (MIRA 12:10)
(Electric relays) (Electricity in mining--Safety measures)

BUKHGOL'TS, V.P.; PEREVOZOV, P.S.

Introducing automatic control of mine pumping systems with use of electrode transducers. Shakht.stroi. no.11:28-31 N '59. (MIRA 13:3)

1. Institut gornogo dela AN SSSR (for Bukhgol'ts). 2. Shakhta No.13/15 tresta Shchekinugol' (for Perevozov).
(Mine pumps) (Automatic control)

BUKHGOL'TS, V.P.

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PHASE I BOOK EXPLOITATION SOV/5473

Gornoye delo; entsiklopedicheskiy spravochnik. t. 8: Statsionarnoye elektromekhanicheskoye oborudovaniye. Elektrosnabzheniye shakht (Mining Industry; an Encyclopedic Handbook. v. 8: Stationary Electromechanical Equipment. Electric Power Supply to Mines) Moscow, Gosgortekhizdat, 1960. 784 p. Errata slip inserted. 18,500 copies printed.

Chief Ed.: A. M. Terpigorev (Deceased); Members of the Editorial Board: A. I. Baranov, F. A. Barabanov (Deceased), A. A. Boyko, V. K. Buchnev, A. N. Zaytsev; Deputy Chief Eds.: I. K. Kit and N. V. Mel'nikov; I. N. Plaksin, N. M. Pokrovskiy, A. A. Skochinskiy (Deceased), A. O. Spivakovskiy, I. K. Stanchenko, A. P. Sudoplatov, A. V. Topchiyev, S. V. Troyanskiy, A. K. Kharchenko, L. D. Shevyakov and M. A. Shchedrin; Editorial Board for this volume: Resp. Ed.: F. A. Barabanov; Deputy Resp. Ed.: Z. M. Melamed; N. A. Arzamasov, G. M. Yelanchik, V. K. Yefremov, B. I. Zasadych, I. M. Zhumakhov, N. A. Letov, P. P. Nesterov, I. A. Rabinovich, K. I. Skorkin, and V. A. Sumchenko; Authors: G. A.

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Mining Industry (Cont.) SOV/5473

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Candidate of Technical Sciences, N. S. Karpyshev, Candidate of Technical Sciences, N. A. Letov, Candidate of Technical Sciences, Z. M. Melamed, Candidate of Technical Sciences, Yu. A. Mikheyev, Engineer, V. P. Morozov, Engineer, V. I. Polikovskiy, Professor, Doctor of Technical Sciences, I. A. Rabinovich, Engineer, M. S. Rabinovich, Candidate of Technical Sciences, I. A. Raskin, Engineer, V. S. Tulin, Engineer, S. Ye. Unigovskiy, Engineer, K. A. Ushakov, Honored Scientist and Technologist, Professor, Doctor of Technical Sciences, M. M. Shemakhanov, Candidate of Technical Sciences, P. F. Shishkov, Candidate of Technical Sciences, and V. B. Yablonovskiy, Engineer; Eds. of Publishing House: N. A. Arzamasov and T. I. Rybal'nik; Tech. Ed.: V. L. Prozorovskaya and M. A. Kondrat'yeva.

PURPOSE: This handbook is intended for mining and mechanical engineers as well as for other skilled personnel of the mining industry concerned with the handling and operation of various installations and equipment used in mines.

COVERAGE: Volume VIII of the mining handbook contains detailed information on mine hoisting installations, machines and equipment, mine ventilation units, duct systems, dewatering facilities, various types of pumps, pump meters, pumping stations, and the automatic remote control of these units. The handbook also describes and explains the operation of the air compression units and compressors. Heat-generating and heat-supply equipment of mines is described, as are the electric power supply systems and other electrical equipment such as transformers, power distribution systems, and grounding devices. Telephone communication and signaling systems used in mines are also treated. No personalities are mentioned. Each part of the handbook is accompanied by references, mostly Soviet.

TABLE OF CONTENTS [Abridged]:

BUKHGOL'TS, V.P., starshiy nauchnyy sotrudnik

Automation of counting and control in mine railroad transportation. Gor. zhur. no.4:49-52 Ap '60. (MIRA 14:6)

1. Institut gornogo dela AN SSSR.
(Mine railroads)
(Automatic control)

BUKHGOL'TS, V.P., starshiy nauchnyy sotrudnik

Single unit for the automation of mine drainage. Gor.zhur. no.6: 74 Je '60. (MIRA 14:2)

1. Institut gornogo dela AN SSSR, Lyubertsy Moskovskoy oblasti.
(Mine drainage) (Automatic control)

BUKHGOL'TS, V.P., inzh.

Computing devices for dispatcher control in mines. Mekh.i avtom. proiz. 14 no.6:34-37 Je '60. (MIRA 13:7)
(Electronic digital computors)
(Mining engineering)

BUKHGOL'TS, V.P.

The SID-2 differential pulse counter. Biul.tekh.-ekon.inform. no.10:48-50 '61. (MIRA 14:10)

(Electric instruments)

BUKHGOL'TS, V.P.

Concerning the protection of electric motors. Prom.energ. 16 no.11:20-23 N '61. (MIRA 14:10)
(Electric motors) (Electric protection)

BUKHGOL'TS, V.P.

Industrial testing of remote control systems for the TMK-4 dispatcher control and car recording apparatus. Ugol' 36 no.10:40-43 O '61. (MIRA 14:12)

1. Institut gornogo dela im. A.A. Skochinskogo.
(Remote control)
(Coal mines and mining--Equipment and supplies)

BUKHGOL'TS, V. P., inzh.

Study of the networks of contactless transducers for use on railroad tracks. Mekh. i avtom. v gornoi prom. no.2:374-389 '62. (MIRA 16:1)

(Mine railroads—Electric equipment)
(Transducers)

BUKHGOL'TS, V.P., kand.tekhn.nauk

High-speed contactless pedal. Avtom.telem.i sviaz' 7 no.3: 15-17 Mr '63. (MIRA 16:2)
(Railroads—Electric equipment)

POSPELOV, Leonid Petrovich; BUKHGOL'TS, V.P., kand. tekhn. nauk, retsenzent; BELOGRUDOV, V.A., retsenzent; KHONINEV, L.P., retsenzent; MIRSKAYA, V.V., red.izd-va; IL'INSKAYA, G.M., tekhn. red.

[Automatic and remote control in mines] Rudnichnaia avtomatika i telemekhanika. Moskva, Gosgortekhizdat, 1963. 414 p. (MIRA 16:12)
(Mining machinery--Electric driving)
(Automatic control)
(Remote control)

BUKHGOL'TS, V.P., kand.tekhn.nauk; TIKHOMIROVA, Z.T., inzh.

Graphoanalytic method of designing a magnetic circuit with a large air space. Mekh. i avtom. v gor. prom. no.3:267-287 '63.
(MIRA 16:10)

BUKHGOL'TS, V.P., kand. tekhn. nauk; KOBEVNIK, V.F.

Telemechanical apparatus in mines of the Dzerzhinskiy Trust. Gor. zhur. no.7:50-54 Jl '63. (MIRA 16:8)

1. Institut gornogo dela im. Skochinskogo (for Bukhgol'ts).
2. Glavnyy energetik Dzerzhinskogo gosudarstvennogo tresta zhelezorudnoy promyshlennosti, Krivoy Rog (for Kobevnik).

TIKHOMIROVA, Z.T., inzh.; BUKHGOL'TS, V.P., kand. tekhn. nauk

Calculation of the permeance of an inductive transducer with complex configuration. Elektrichestvo no.11:72-75 N '63. (MIRA 16:11)

1. Vsesoyuznyy zaochnyy energeticheskiy institut (for Tikhomirova). 2. Institut gornogo dela imeni Skochinskogo.

BUKHGOL'TS, V.P., kand.tekhn.nauk

Noncontact rail transducers. Mekh.i avtom. proizv. 17 no. 3: 33-34 Mr '63. (MIRA 17:9)

BUKHGOL'TS, Valentin Petrovich; VEREM'YEV, V.M., red.

[Circuit track pickups for automatic control in rail transportation] Putevye datchiki avtomaticheskogo kontrolia na rel'sovom transporte. Moskva, Energiia, 1965. 79 p. (Biblioteka po avtomatike, no.137) (MIRA 18:6)

BUKHGOL'TS, V.P., kand. tekhn. nauk; DRANNIKOV, Yu.A., inzh.; KORSAK, V.Yu.

Use of remote control in the "Zapoliarnyi" mine. Gor. zhur. no.10:65-68 O '65. (MIRA 18:11)

1. Institut gornogo dela im. A.A. Skochinskogo (for Bukhgol'ts, Drannikov). 2. Glavnyy energetik rudnika "Zapolyarnyy" Noril'skogo gornometallurgicheskogo kombinata im. A.P. Zavenyagina (for Korsak).

BORISOV, V.T., kand.fiziko-matematicheskikh nauk; BUKHIN, A.I., kand. fiziko-matematicheskikh nauk

Mechanism of the growth of metal crystals. Probl.metalloved.i fiz.met. no.7:363-374 '62. (MIRA 15:5)
(Metal crystals—Growth)

Bukhin, B

VAYNSHTEYN, N., mayor; BUKHIN, B., inzhener-mayor.

Training roentgenmeter with a gas meter. Voen.vest. 37 no.8:63-64 Ag '57. (MIRA 10:10)

(Nuclear counters)

PHASE I BOOK EXPLOITATION SOV/3862

Raschety na prochnost': teoreticheskiye i eksperimental'nyye issledovaniya prochnosti mashinostroitel'nykh konstruktsiy; sbornik statey, vyp. 5 (Strength Analysis; Theoretical and Experimental Investigations of the Strength of Machine Elements; Collection of Articles, No. 5) Moscow, Mashgiz, 1960. 298 p. Errata slip inserted. 5,000 copies printed.

Ed.: V.N. Arbuzov, Candidate of Technical Sciences; Ed. of Publishing House: L.N. Danilov; Tech. Ed.: B.I. Model'; Managing Ed. for Literature on General Technical and Transport Machine Building (Mashgiz): A.P. Kozlov, Engineer; Editorial Board: G.S. Glushkov, Doctor of Technical Sciences, Professor; V.M. Makushin, Candidate of Technical Sciences, Docent (Secretary); S.D. Ponomarev, Honored Scientist and Technologist of the RSFSR, Doctor of Technical Sciences, Professor; S.V. Serensen, Member of the Academy of Sciences UkrSSR, Doctor of Technical Sciences, Professor; S.N. Sokolov, Doctor of Technical Sciences, Professor; N.D. Tarabasov, Doctor of Technical Sciences, Professor; and Ye.N. Tikhomirov, Honored Scientist and Technologist of the RSFSR, Professor (Chairman).

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PURPOSE: The book is intended for engineers and scientists specializing in stress analysis.

COVERAGE: This collection of 15 articles deals with the design and calculation of machine elements for strength, rigidity, and stability. The collection is divided into three sections; 1) calculation for strength, 2) stress and strain analysis, and 3) calculation for stability. Methods and formulas for calculating strength parameters are presented. No personalities are mentioned. References follow several of the articles.

TABLE OF CONTENTS:

SECTION I. DESIGN OF PARTS FOR STRENGTH AND RIGIDITY

Strength Analysis (Cont.) SOV/3862

Values for critical speeds of a rotating shaft are derived and the effects of deflecting forces analyzed.

AVAILABLE: Library of Congress

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S/572/60/000/006/002/018
D224/D304

AUTHOR: Bukhin, B. L., Engineer

TITLE: Calculating stresses and deformations appearing in pneumatic tires during their rotation

SOURCE: Raschety na prochnost'; teoreticheskiye i eksperimental'nyye issledovaniya prochnosti mashinostroitel'nykh konstruktsiy. Sbornik statey. No. 6, Moscow, 1960, 56-65

TEXT: Free rotation is assumed and the effect of centrifugal forces considered. It is also assumed that the cord threads are not expansible, and that the stresses in the rubber are small compared with those in the threads. Denoting by ρ the radius of meridian curvature, q the mass of a unit surface of tire, Π the total potential energy, u the potential of centrifugal forces and p the internal pressure, the intensity of centrifugal force Q and total potential energy Π are given by

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Calculating stresses and ...

$$Q = qr\Omega^2 \qquad (2)$$

and

$$\Pi = U - p\Delta V \qquad (3)$$

The increment of volume of the tire after deformation is determined up to the terms of the second order in the displacements. The problem of the displacements reduces to finding the minimum of the integral with the condition of constant length of the cord; this is an ordinary isoperimetric problem and the author uses Ritz's method for solving it. The author obtains

$$\Pi = -4\pi p\rho_0^2 r_0\left(\frac{1}{2}J_1k^2 + \frac{1}{2}J_2l^2 + J_3kl + AJ_4k\right) \qquad (12)$$

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Calculating stresses and ...

$$J_5 k + J_6 l + \frac{1}{2}(J_7 k^2 + J_8 l^2) = 0 \qquad (13)$$

where $J_1 \ldots J_8$ are constant for a given tire and must be determined numerically. The condition of minimum of Π is formulated and dl/dk is derived from Eq. (12) by differentiation. The system of equations is to be solved by taking different values of k and computing l. Expressions for the forces are derived. An equation for the zero radius is derived which is to be solved graphically. Graphs of the results for a 7.50-16 tire obtained by this method are given and compared with experimental data derived by S. P. Zakharov; the agreement is found satisfactory. There are 7 figures and 1 Soviet-bloc reference.

Card 3/3

BIDERMAN, V.L. (Moskva); BUKHIN, B.L. (Moskva)

Calculating critical rolling speed of pneumatic tires. Izv. AN SSSR. Otd. tekh.nauk.Mekh. i mashinostr. no. 1:52-57 Ja-F '61. (MIRA 14:2)

(Tires, Rubber—Testing)

S/179/60/000/006/028/036
E081/E135

AUTHORS: Biderman, V.L., and Bukhin, B.L., (Moscow)

TITLE: Equilibrium of Rubber-Cord Cylindrical Shells

PERIODICAL: Izvestiya Akademii nauk SSSR,Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, No. 6, pp. 156-158

TEXT: The paper is a continuation of previous work in which (Refs 1, 2) the differential equilibrium equation of a rubber-cord shell of revolution was obtained, neglecting bending strains. In the present paper, the equation for a cylindrical rubber-cord shell is derived, taking into account the energy of the rubber and the bending strains in the rubber-cord wall. It is assumed that the fibres of the cords are inextensible for membrane deformations. The notation is the same as in the earlier paper (Ref.2). All relations for a cylindrical shell can be obtained from those for a shell of revolution (Ref.2) if it is assumed that the distance r from the axis of revolution is infinite, and in place of the central angle θ a new coordinate is taken as the distance on the generators of the cylinder, so that $dx = rd\theta$. The profile

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Equilibrium of Rubber-Cord Cylindrical Shells

of the cylindrical shell is a circle; the angle of elevation of the cord filaments β and the density of the fibres i is identical at all points. The total potential energy of the shell is written as the sum of the following energy terms:
energy of external forces;

$$U = - \iint (Q_n w + Q_m v + Q_t u)\, ds\, dx : \qquad (1)$$

energy of the compressed air;

$$W_1 = \frac{1}{2} p \iint \left\{ u \frac{\partial w}{\partial x} - w \frac{\partial u}{\partial x} + w \frac{\partial v}{\partial s} - v \frac{\partial w}{\partial s} + \rho \left[\left(\frac{\partial w}{\partial s} \right)^2 + \left(\frac{\partial v}{\partial s} \right)^2 + \left(\frac{\partial u}{\partial s} \right)^2 \right] + \right.$$
$$\left. + \rho \operatorname{tg}^2 \beta \left[\left(\frac{\partial w}{\partial x} \right)^2 + \left(\frac{\partial v}{\partial x} \right)^2 + \left(\frac{\partial u}{\partial x} \right)^2 \right] \right\} ds\, dx \qquad (2)$$

energy of membrane deformation of the rubber;

$$W_3 = \iint 2 G_p h^* (1 - \operatorname{tg}^2 \beta + \operatorname{tg}^4 \beta) \left(\frac{\partial u}{\partial x} \right)^2 ds\, dx \qquad (3)$$

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S/179/60/000/006/028/036
E081/E135

Equilibrium of Rubber-Cord Cylindrical Shells

φ ($\varphi = s/\rho$) and ψ ($\psi = x/\rho$) and the function Z are introduced; they are expressed in terms of the displacements by:

$$u = \rho \frac{\partial Z}{\partial \psi}, \quad v = -\rho \frac{\partial Z}{\partial \varphi}, \quad w = \rho \left(\frac{\partial^2 Z}{\partial \varphi^2} - \frac{\partial^2 Z}{\partial \psi^2} tg^2 \beta \right) \qquad (7)$$

Eq.(6) is satisfied identically and the equilibrium equation for the cylinder is then expressed as an 8th order partial differential equation with constant coefficients:

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S/179/60/000/006/028/036
E081/E135

Equilibrium of Rubber-Cord Cylindrical Shells

applied in technology. Discussion of the deformation of pneumatic tyres leads to the consideration of a cylindrical shell fixed along two generators, analogous to the fixing of a tyre on a wheel rim. In this case the boundary conditions are:

$$Z = \partial Z/\partial\varphi = \partial^2 Z/\partial\varphi^2 = \partial^3 Z/\partial\varphi^3 = 0$$

An erratum notice to an earlier paper (Ref.2) is included. There are 2 Soviet references.

SUBMITTED: June 13, 1960

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BUKHIN, B.L.; PRASHCHIKIN, V.N.

Tires with removable tread. Avt.prom. no.2:44 F '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Automobiles--Tires)

BIDERMAN, V.L.; BUKHIN, B.L.

Methods for calculating stresses and strain in the elements of a pneumatic tire. Kauch.i rez. 20 no.3:15-20 Mr '61. (MIRA 14:3)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Tires, Rubber--Testing) (Strains and stresses)

BIDERMAN, Vadim L'vovich; GUSLITSER, Ruvim L'vovich; ZAKHAROV, Sergey Petrovich; NENAKHOV, Boris Viktorovich; SELEZNEV, Ivan Ivanovich; TSUKERBERG, Solomon Maksimovich; BUKHIN, B.L., red.; KOGAN, V.V., tekhn. red.

[Motor-vehicle tires; design, construction, testing, and operation] Avtomobil'nye shiny i konstruktsiia, raschet, ispytanie, ekspluatatsiia. [By] V.L.Biderman i dr. Moskva, Goskhimizdat, 1963. 382 p. (MIRA 16:12)
(Motor vehicles--Tires)