KORZH, D.D.; VELYUS, L.M.

Lead determination by the absorption of radioactive rays in lead ore concentration products. Izv. vys. ucheb. zav.; tsvet. met. 5 no.6:35-40 '62. (MIRA 16:6)

1. Magnitogorskiy gornometallurgicheskiy institut, kafedra fiziki.
(Lead ores—Analysis)
(Radioisotopes—Industrial applications)

110

KORZH, P.D.

PHASE I BOOK EXPLOITATION SOV/6181

Ural'skoye soveshchaniye po spektroskopii. 3d, Sverdlovsk, 1960. Materialy (Materials of the Third Ural Conference on Spectroscopy) Sverdlovsk, Metallurgizdat, 1962. 197 p. Errata slip inserted. 3000 copies printed.

Sponsoring Agencies: Institut fiziki metallov Akademii nauk SSSR. Komissiya po spektroskopii; and Ural'skiy dom tekhniki VSNTO.

Eds. (Title page): G. P. Skornyakov, A. B. Shayevich, and S. G. Bogomolov; Ed.: Gennadiy Pavlovich Skornyakov; Ed. of Publishing House: M. L. Kryzhova; Tech. Ed.: N. T. Mal'kova.

PURPOSE: The book, a collection of articles, is intended for staff members of spectral analysis laboratories in industry and scientific research organizations, as well as for students of related disciplines and for technologists utilizing analytical results.

Card 1/15

COVERAGE: The collection presents theoretical and practical problems of the application of atomic and molecular spectral analysis in controlling the chemical composition of various materials in ferrous and nonferrous metallurgy, geology, chemical industry, and medicine. The authors express their thanks to G. V. Chentsova for help in preparing the materials for the press. References follow the individual articles.

TABLE OF CONTENTS:

KORZH, P.D.; IVANOV, V.I.

Determination of iron in an agglomerate based on the absorption of radioactive radiation. Zav.lab. 28 no.8:965-966 '62. (MIRA 15:11)

1. Magnitogorskiy gornometallurgicheskiy institut.
(Iron--Analysis) (Radioactivity--Measurement)

SKOROKHODOV, N.Ye., prof. otv. red.; AGAPOV, V.F., prof. po nauchnoy rabote, dots., red.; BOYARSHINOV, M.I., prof., red.; VESELOVSKAYA, Ye.S., red.; GAGEN-TORN, A.V., red.; GOL'DSHTEYN, N.A., red.; IVANOV, N.I., kand. tekhn. nauk, dots., red.; KORZH, P.D., prof., red.; PETROV, V.M., dots. kand. tekhn. nauk, red.

[30 years of the Magnitogorsk Mining and Metallurgical Institute] XXX let MGMI. Magnitogorsk, 1962. 170 p. (MIRA 17:3)

1. Magnitogorsk. Gorno-metallurgicheskiy institut. 2. Sekretar' partiynogo byuro Magnitogorskogo gorno-metallurgicheskogo instituta (for Petrov). 3. Dekan metallurgicheskogo fakul'teta Magnitogorskogo gorno-metallurgicheskogo instituta (for Ivanov). 4. Zaveduyushchiy kafedroy fiziki Magnitogorskogo gorno-metallurgicheskogo instituta (for Korzh). 5. Zaveduyushchiy kafedroy obrabotki metallov davleniye. Magnitogorskogo gorno-metallurgicheskogo instituta (for Boyarshinov).

KORZH, P.D.; GULYAYEVA, G.P.; GINIYATULIN, I.N.

Thermoelectric method for determining antimony in lead-antimony alloys. Zav.lab. 29 no.3:289-291 '63. (MIRA 16:2)

1. Magnitogorskiy gorno-metallurgicheskiy institut.
(Antimony--Analysis) (Lead-antimony alloys)
(Thermoelectricity)

IVANOV, V.I.; KORZH, P.D.

Radiometric determination of iron in sulfide ore concentrates and agglomerates. Zav.lab. 29 no.11:1296-1298 '63. (MIRA 16:12)

1. Magnitogorskiy gorno-metallurgicheskiy institut.

FOMINA, M.A.; KORZH, P.D.

Dependence of the reflecting power of binary alloys (Pb - Sb and Cu - Fe) on their phase composition. Izv. vys. ucheb. zav.; fiz. no. 3:41-45 '64. (MIRA 17:9)

1. Magnitogorskiy gorno-metallurgicheskiy institut.

VELYUS, L.M.; KORZH, P.D.

Selecting the optimal parameters for the radiometric determination of lead in beneficiation products. Izv. vys. ucheb. zav.; tsvet. met. 7 no. 4:39-46 '64 (MIRA 19:1)

1. Magnitogorskiy gornometallurgicheskiy institut, kafedra fiziki.

SHUBENKO-SHUBIN, Leonid Aleksandrovich; LISETSKIY, Nikolay Longinovich; SHVARTS, Viktor Aleksandrovich; KORZH, Petr Ivanovich; PROSKURA, G.F., akademik, retsenzent [deceased]; YERSHOV, V.N., dotsent, kand.tekhn.nauk, retsenzent; SOROKA, M.S., red.

[Atlas of drawings and diagrams of gas turbine units] Atlas konstruktsii i skhem gazoturbinnykh ustanovok. Pod obshchei red. L.A.Shubenko-Shubina. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1960. 183 p. (MIRA 14:1)

1. Chlen-korrespondent AN USSR (for Shubenko-Shubin). 2. AN USSR (for Proskura).
(Gas turbines--Design)

SHUBENKO-SHUBIN, L.A.; KORZH, P.I., inzh.; KAPLAN, M.P., inzh.; PALEY, V.A., inzh.

Gas turbines for large power stations. Teploenergetika 8 no.11: 5-12 N '61. (MIRA 14:10)

1. Khar'kovskiy turbinnyy zavod. 2. Chlen-korrespondent AN USSR (for Shubenko-Shubin).

(Gas turbines)
(Power engineering)

37247 S/193/62/000/003/004/005
A004/A101

AUTHOR: Korzh, P. I.

TITLE: ГТУ -50-800 (GTU-50-800) gas-turbine plant

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 3, 1962, 35 - 37

TEXT: The Khar'kovskiy turbinny zavod (Khar'kov Turbine Plant) has developed and produced the first pilot model of the 50 Mw power GTU-50-800 gas-turbine plant, which is stated to be the first 50 Mw power gas-turbine plant operating on natural gas able to compete with steam-turbine plants. The GTU-50-800 gas-turbine plant has an open operating cycle with three compression stages (low, medium and high-pressure compressors), two intermediate air coolers, two stages of gas heating, heat regeneration of exhaust gases and district heating. The author gives the following technical data: power at an ambient air temperature of +20°C - 50 Mw; degree of pressure increase - 18; gas temperature before the high-pressure turbine - 800°C; gas temperature before the low-pressure turbine - 770 C; regenerating degree - 0.75; efficiency at the rated load - 33.5%; ef-

X

Card 1/2

ACCESSION NR: AP4038898 S/0114/64/000/005/0006/0009

AUTHOR: Korzh, P. I. (Engineer); Povolotskiy, L. V. (Engineer); Knabe, A. G. (Engineer); Arkad'yev, B. A. (Engineer)

TITLE: Investigating nonsteady operation of cooled disk-type rotor of a gas turbine

SOURCE: Energomashinostroyeniye, no. 5, 1964, 6-9

TOPIC TAGS: turbine, gas turbine, gas turbine quick starting, gas turbine nonsteady operation, gas turbine disk rotor

ABSTRACT: Peak-load or reserve gas turbines in power-supply systems operate under repeated start-stop and quick-start conditions. Hence, it is essential to know the behavior of the most important gas-path parts subjected to varying high temperatures. Results of an experimental investigation of the temperature field in a disk-type rotor under nonsteady-operating conditions are reported. The temperature fields were measured under these conditions: (a) starting from the cold state without warming up; the maximum gas temperature was attained in

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ACCESSION NR: AP4038898

1-1.5 min, and the rated load was taken in 3.5-4 min; (b) starting with a 5-min, 40%-rpm, 520-550C-gas warm-up; and (c) starting one hour after the turbine shutdown, with the disk temperature 250-300C. Stresses in the disk (hub, tip) were estimated. These conclusions were reached: (1) Cold starting is not limited by the disk stresses; (2) The radial-blow system of cooling the test turbine is satisfactory; (3) N. A. Minyaylenko's method ("Determining temperature fields and stresses in gas-turbine disks," AN UkrSSR, 1960) ensures good agreement with the experiment. Orig. art. has: 6 figures, 1 formula, and 3 tables.

ASSOCIATION: none

SUBMITTED: 00	DATE ACQ: 05Jun64	ENCL: 00
SUB CODE: PR	NO REF SOV: 006	OTHER: 000

Card 2/2

KORZH, P.I., inzh.; POVOLOTSKIY, L.V.; KNABE, A.G.; ARKAD'YEV, B.A.

Study of the nonsteady mode of operation of a cooled disc rotor of a gas turbine. Energomashinostroenie 10 no.5:6-9 My '64. (MIRA 17:8)

KORZH, P. M. (Vet.)

"On the morbidity of calves."

SO: Vet. 26 (10) 1949, p. 14

Tsirkunov Zooveterinary District, Kharkov raion Ukrainian SSR

KORZH P.M.

PUSTOVAR, Ya.P., dots.; SHALDUGA, N.Ye., dots.; KORZH, P.M., vetvrach.

Cancer of the eye region in cows. Veterinariia 35 no.4:57-62 Ap '58. (MIRA 11:3)

1. Khar'kovskiy veterinarnyy institut.
(Eye--Cancer) (Cows--Diseases and pests)

KORZH, S.B. (Baranovichi, Brestskoy oblasti, Shosseynaya ul., d.55)

Ten years' results of the activities of the Municipal Oncological Dispensary in Baranovichi [with summary in English]. Vop.onk. 4 no.3:362-267 '58 (MIRA 11:8)

1. Iz gorodskogo onkologicheskogo dispansera (glavnyy vrach - S.B. Korzh), Baranovichi, BSSR.
(NEOPLASMS, prevention and control, in Russia (Rus))

KORZH, S.B., kand. med. nauk

Life expectancy of cancer patients. Zdrav. Belor. 5 no.3:41-42 Mr '59.
(MIRA 12:7)

1. Iz Baranovichskogo gorodskogo onkologicheskogo dispansera.
(CANCER)

KORZH, V.

It is necessary to keep the staff of specialists. Mias. ind. SSSR 33 no.4:42 '62. (MIRA 17:2)

1. Dnepropetrovskiy myasokombinat.

Korzh, V. A.

USSR /Chemical Technology. Chemical Products and Their Application I-31

Fermentation industry

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32859

Author : Korzh V. A.

Title : Malt Production from Rye

Orig Pub: Spirt. prom-st', 1956, No 4, 35-36

Abstract: Cleaned and sorted grain is charged to the steeping vat at the same time as the water. After charging is completed compressed air is blown into the vat and at the same time water is admitted at the bottom (22-23°). The grain is washed for 80-90 minutes and allowed to steep under water for 3.5 additional hours. The water is discharged and the grain is unloaded in

Card 1/3

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32859

a heap. Moisture content of the steeped grain is 36-37%. The grain is kept in a heap until the temperature rises to 19-20°, after which it is spread out in a layer 15 cm deep. During the first day the temperature in the layer is 19-20°, the grain is shoveled-over 3 times with addition of 1.5-2 decaliters of water per ton of grain. During the next 3 days the temperature in the layer is maintained at 19-20°, shoveling-over 3 times daily with addition of 2.5-3 decaliters of water per ton of grain; depth of layer 10 cm. On the 5-th day the temperature drops to 17°, the addition of water prior to the shoveling being reduced to 1-1.5 decaliters per

BOGATYREV, A.V., inzh.; KORZH, V.D., inzh.

Ways to improve the repair of line machinery and equipment.
Stroi. truboprov. 6 no.5:26-27 My '61. (MIRA 14:7)

1. Trest Mosgazprovodstroy.
(Building machinery--Maintenance and repair)

ACC NR: AP7007054 SOURCE CODE: UR/0142/66/009/004/0458/0465

AUTHOR: Vaganov, V. I.; Korzh, V. I.

ORG: none

TITLE: Complementing dynistor flip-flops

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 4, 1966, 458-465

TOPIC TAGS: flip flop circuit, RC circuit, differentiating circuit

ABSTRACT: On the basis of the equivalent circuit of a dynistor the authors perform a qualitative analysis of the transient response in the flip-flop in the phase plane (current across the dynistor-voltage in dynistor). Two different flip-flop circuits are proposed and analyzed; one with load capacitance and the other with separation capacitance. The mechanism of operation of both circuits in the presence of triggering pulses of positive and negative polarities is elucidated. The qualitative effect of parameters on the performance of the flip-flops is established, and the possibility of cascading such circuits is demonstrated. Thus it is shown that even the most elementary complementing flip-flops for a single dynistor can be cascaded by means of a differentiating RC-circuit, and the performance of the scaling device obtained by cascading depends not only on the selection

Card 1/2 UDC: 621.373.45: 621.382

ACC NR: AP7007054

of the parameters of the differentiating circuit but also on the rapidity of action of the dynistor. This analysis was carried out on the assumption that the equivalent circuit of the dynistor represents a series-connected pair of elements: a nonlinear voltage generator $U_1 = f(I)$ and a current-independent inductance L, and that the input pulses are of ideally square shape. Orig. art. has: 11 figures and 2 formulas. [JPRS: 39,577]

SUB CODE: 09

Card 2/2

ZVYAGINTSEV, A.F.; IVANOV, Yu.N.; KAZAKOV, V.E.; STETSENKO, A.M.; SOLOMOVICH, M.Ya.; KORZH, V.I.; DASHKEVICH, A.A.; Prinimali uchastiye: LIPTSEN, S.Kh.; RYZHIKOV, A.P.; STAL'NOKRITSKIY, V.N.; LEVENETS, L.Ye.; MOGILA, V.A.; KOVAL', A.A.; VLASOV, V.F.; ROSHCHIN, A.G.; RAYKO, V.P.; KORNIYENKO, V.G.; PANTYUSHKIN, N.V.

Investigating the possibility of manufacturing all-rolled electric locomotive wheels with existing equipment. Kuz.-shtam. proizv. 5 no.11:11-14 N '63.

(MIRA 17:1)

(k)-2/T/EEC(b)-2

14988

I.; Korzh, V. I.

analysis of the transient

SOURCE: IVUZ. Radiotekhnika, v. 8, no. 2, 1965, 253-262

transient process, tunnel diode

theory

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the graph

transient

positive

the minimum

experiment

and negative

decreased with

a diode and

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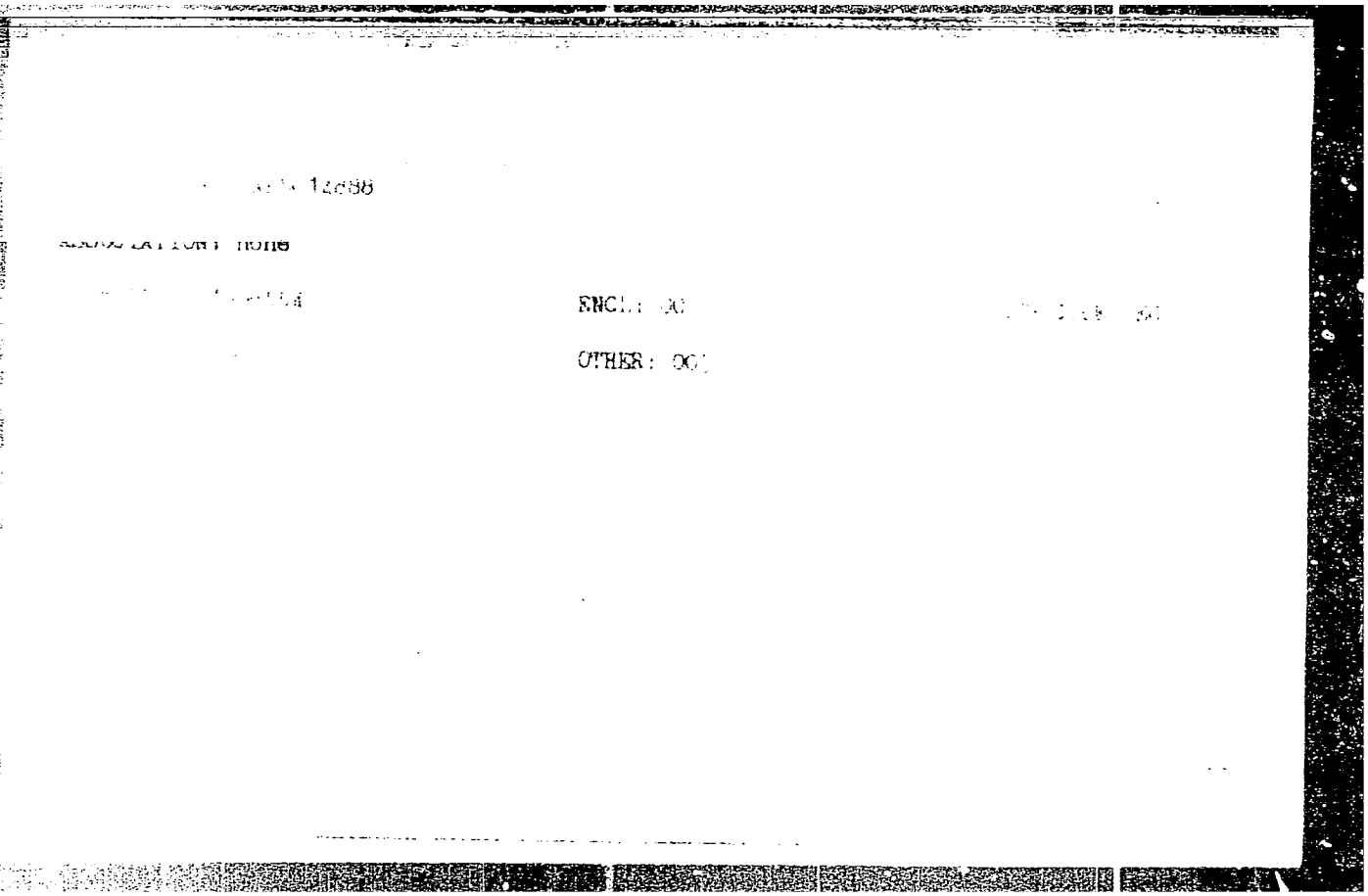
and 1 table.



ENCL:

OTHER:

BUTENKO, G.A.; KORZH, V.P.; RODIONOVA, Ye.M.

Conditions for the separation of arsenic and production of a blue arsenic-molybdenum complex. Zhur.anal.khim. 16 no.6:692-694 N-D '61. (MIRA 14:12)

1. Institut of Ferrous Metallurgy, Academy of Sciences, Ukrainian S.S.R., Dnepropetrovsk.
(Arsenic--Analysis)
(Molybdenum compounds)

BUTENKO, G.A.; RODIONOVA, Ye.M.; KORZH, V.P.

Photocolorimetric determination of arsenic in ferrous metals. Zav.lab. 27 no.7:808-810 '61. (MIRA 14:7)

1. Institut chernoy metallurgii Akademii nauk USSR.
(Arsenic--Analysis)

38703
S/598/62/000/007/030/040
D217/D307

1,1300
18.1285

AUTHORS: Shilov, V. I., Odinokova, L. P., Korzh, V. P. and Suyarov, D. I.

TITLE: Investigation of the resistance to deformation and of the specific pressures of certain titanium alloys during cold rolling

SOURCE: Akademiya nauk SSSR. Institut metallurgii. Titan i yego splavy. no. 7, Moscow, 1962. Metallokhimiya i novyye splavy, 219-225

TEXT: The resistance to deformation was studied by compressing cylindrical specimens of the materials under investigation in an apparatus specially designed at the Institut metallurgii UF/AN (Institute of Metallurgy UF/AS). The yield-point on compression in the as-received state was determined oscillographically from the pressure curve, being taken as either the yield plateau or the kink in the curve formed on transition from the elastic to the plastic state. Curves for the resistance to deformation of a num-

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ber of Ti alloys were plotted. The conditions for cold-rolling Ti alloys were also studied and the parameters of rolling, pressure, stress and roll and reeler speeds were determined. The total pressure of the metals on the rolls and the forward and rear stresses in strip rolling were calculated. The authors conclude that in spite of the moderate plasticity exhibited by some of the new high-strength titanium alloys during reduction, high reductions in area are possible in the rolling of strip under stress owing to the favorable influence of the stressed state. Reductions of 20 - 30% depending on the type of alloy, are possible. The alloys in question were ИМП2 (IMP2) and ИМП3 (IMP3), produced by vacuum arc melting of the alloys АТ3 (AT3), AT4 and AT8. There are 6 figures and 1 table.

Card 2/2

KORZH, V.P.; SHILOV, V.I.

Equipment for the investigation of the strip rolling process. Trudy Inst.met.UFAN SSSR no.9:63-68 '62.

Investigating power conditions for the cold rolling of a titanium alloy strip. 87-99 (MIRA 16:10)

KORZH, V.P.; SUYAROV, D.I.

Measurement of rolling moments. Trudy Inst.met.UFAN SSSR no.9: 61-62 '62. (MIRA 16:10)

SUYAROV, D.I.; KORZH, V.P.; SHILOV, V.I.

Using glass as a metalworking lubricant during hot rolling.
Trudy Inst.met.UFAN SSSR no.9:83-86 '62. (MIRA 16:10)

SHILOV, V.I.; KORZH, V.P.; Prinimali uchastiye: SBITSIN, V.D.; POKHLEBAYEV, L.A.; ODINOKOVA, L.P.; ALEKSEYEV, V.I.; TELEZHNIKOVA, G.N.

Rolling of titanium alloy foil. Trudy Inst.met.UFAN SSSR no.9: 101-105 '62. (MIRA 16:10)

ODINOKOVA, L.P.; KORZH, V.P.; SHILOV, V.I.

Plastic properties of certain titanium alloys. Trudy Inst.met.UFAN SSSR no.9:107-110 '62. (MIRA 16:10)

ACCESSION NR: AT4007050 S/2598/63/000/010/0265/0277

AUTHOR: Shilov, V. I.; Korzh, V. P.; Odinokova, L. P.

TITLE: Cold rolling of titanium alloy strip

SOURCE: AN SSSR. Institut metallurgii. Titan i yego splavy*, no. 10, 1963. Issledovaniya titanovy*kh splavov, 265-277

TOPIC TAGS: titanium alloy, AT-3 titanium alloy, AT-4 titanium alloy, AT-2 titanium alloy, AT-6 titanium alloy, titanium alloy strip, titanium alloy foil, titanium alloy cold rolling, strip cold rolling, foil rolling, strip property, foil property, titanium alloy property, titanium aluminum chromium alloy, iron containing alloy, silicon containing alloy, boron containing alloy

ABSTRACT: New high-strength alloys encounter an ever-larger technical application. Manufacture of strip, particularly of thin strip and foil, made of such alloys by cold rolling, is a complicated and laborious process not yet sufficiently studied. Therefore, investigations in this direction have certain practical and theoretical interest. The authors present results of investigations on cold rolling of thin strip and foil of titanium alloys AT, on a four-high rolling mill 55 x 260 x 200 provided with equipment for measuring metal

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ACCESSION NR: AT4007050

pressure on the rolls, tension of the strip, and velocities of the rolls and winding drums. Samples of the titanium alloys were provided by I. I. Kornilov and V. S. Mikheyev of the Laboratroiya khimii metallicheskikh splavov Instituta metallurgii im. A. A. Baykova (Laboratory of the Chemistry of Metallic Alloys, Institute of Metallurgy). Computations of Contact pressures were conducted. These calculations accounted for the elastic compression of the rolls by using expressions based on the contact stress theory of Hertz, in particular the Hitchcock formula. The alloys AT-3N, AT-3S, AT-3V, AT-4N, AT-4S, AT-2N, AT-6N were tested and the test results tabulated. At rolling, the strip was lubricated by machine oil SU. The high contact pressures, attaining values on the order of 450 kg/mm^2, which were obtained can be explained by high initial resistance-to-deformation values of prerolled-alloys, by their intensive work hardening, and by the apparently high coefficient of friction at a low speed of rolling. Because of the high contact pressures appearing at rolling of the titanium alloys, it is recommended that the contact strength of the rolls be checked. In the given case, the surface hardness of rolls was 680 kg/mm^2 of Brinell hardness, thus exhibiting a safety factor of 1.5 in plastic contact strength. For the determination of minimum strip thickness depending on the strength of the rolls and on the formability of the rolled material, the following expression was given:

$$h_{min} = 1.4 \mu dmk,$$

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ACCESSION NR: AT4007050

where μ is the coefficient of friction, d the diameter of the roll, $m = 8(1-\nu^2)/\pi E$, and k the resistance of the strip to deformation. For d = 53.6 mm, μ = 0.115, $E = 2.2 \cdot 10^4$ kg/mm^2, ν = 0.3, and k = 160.2 kg/mm^2, a minimum thickness of 0.145 mm was determined by this formula, comparable to 0.155 mm obtained experimentally. For rolls of hard metal such as VK-10 with $E \approx 5 \times 10^4$ kg/mm^2, the minimum calculated thickness of strip is 0.064 mm. Calculation of tensile stresses and contact pressures in the titanium sheet during cold rolling was considered by the authors and compared with experimental results obtained with titanium alloy AT-4S. Reduction regimes at strip cold rolling of the alloys AT-3S, AT-4N, and AT-6N, and the influence of annealing on these regimes was also considered and discussed. On the basis of results of investigations described above it was concluded that: (1) the plastic deformation of strong and high strength titanium alloys at cold rolling of strip occurs at high specific pressures (on the order of 200-450 kg/mm^2) and at specific tensions of 30-60 kg/mm^2, i.e. at most at 0.3 - 0.5 of the corresponding yield strength value; (2) titanium alloys AT combine high strength with satisfactory plastic properties, indicating a possibility of obtaining foil from these alloys; by cold rolling with tension of alloys AT-3 and AT-4, foil with a thickness of 0.07 mm and a width of 70-80 mm was obtained; (3) after work hardening of a strip at cold rolling (with a reduction of 40-10%, depending on the type of alloy and previous working) a vacuum annealing at a temperature of 680-750C is necessary; (4) because of high specific pressures during rolling, considerable elastic deformation occurs

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ACCESSION NR: AT4007050

at the contact surface of the working and supporting rolls; therefore, it is suggested that rolls of hard metal be used for titanium rolling in order to increase the strength of rolls or to obtain the thickness limit of thin foil. Orig. art. has: 6 tables and 6 figures.

ASSOCIATION: Institut metallurgii AN SSSR (Institute of Metallurgy AN SSSR)

SUBMITTED: 00 DATE ACQ: 27Dec63 ENCL: 00

SUB CODE: MT, MM NO REF SOV: 019 OTHER: 005

Card 4/4

ACCESSION NR: AP4042349 S/0136/64/000/007/0070/0072

AUTHOR: Shilov, V. I.; Korzh, V. P.

TITLE: Specific pressures in cold rolling of titanium alloys

SOURCE: Tsvetny*ye metally*, no. 7, 1964, 70-72

TOPIC TAGS: titanium aluminum alloy, AT3 alloy, AT4 alloy, AT6 alloy, titanium alloy cold rolling, mean specific rolling pressure, rolling pressure calculation formula, rolling pressure calculation

ABSTRACT: Experiments have been carried out to verify a formula derived by A. I. Tselikov for calculating mean specific pressures in the cold rolling of thin foil from high-strength metals and alloys. A specific feature of the formula is that it takes into account the elastic properties of the metal being rolled. In these experiments, titanium AT-3, AT-4, and AT-6 alloys, containing 2.5—3.5% Al, 3.5—5.0% Al, 5.0—6.5% Al, respectively, and each containing, 0.4—0.9% Cr, 0.25—0.60% Fe, 0.25—0.60% Si, and 0.01% B, in the form of 50- or 75 mm-wide foil varying in thickness from 0.165 to 0.360 mm, were subjected to one-pass rolling under a mean specific

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ACCESSION NR: AP4042349

pressure calculated from the A. I. Tselikov as well as the conventional (Hitchcock) formulas. The experimental data showed that the taking into account of the elastic properties of the material being rolled resulted in a significantly lower calculated value of the mean specific pressure required to produce an identical thickness reduction. The pressure difference varied from 36 to 41% for AT-3 alloy, from 34 to 39% for AT-4 alloy, and from 32 to 38% for AT-6 alloy, increasing generally with the greater initial thickness of the foil. Orig. art. has: 1 figure, 2 tables, and 1 formula.

ASSOCIATION: none

SUBMITTED: 00	ATD PRESS: 3070	ENCL: 00
SUB CODE: MM, IE	NO REF SOV: 010	OTHER: 000

Card 2/2

L 08323-67 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AR6033785 SOURCE CODE: UR/0058/66/000/007/E050/E050

AUTHOR: Korzh, E. D.; Korzh, V. P. 39

TITLE: Determination of heat volume released during plastic deformation of a medium with nonlinear strengthening

SOURCE: Ref. zh. Fizika, Abs. 7E373

REF SOURCE: Uch. zap. Ural'skogo un-ta. Ser. fiz., vyp. 1, 1965, 151-154

TOPIC TAGS: plastic deformation, heat, strengthening

ABSTRACT: The diagram of a plane deformation is used to describe the compression of a sample by die blocks of different widths. The equation of the condition of the deformed medium is postulated in the form of $\delta=\delta_s+E\varepsilon^{\alpha}$, in which δ is the stress, ε is the deformation, α is the indicator, E is the strengthening modulus, and δ_s is the yield point. The quantitative correlation between the deformation energy transformed into heat, and the total deformation energy, is derived by a standard method. V. N. [Translation of abstract]

SUB CODE: 20/

Card 1/1 nst

TARNOVSKIY, I.Ya.; KORZH, V.P.

Investigating asymmetrical deformation by means of the variation principle of mechanics. Izv. vys. ucheb. zav.; chern. met. 8 no.5: 65-69 '65. (MIRA 18:5)

1. Ural'skiy politekhnicheskiy institut.

KORZH, Ye.G. [Korzh, IE.H.]

Sixth Scientific Pharmaceutical Congress of the Polish People's Republic. Farmatsev. zhur. 18 no.1:82-85 '63. (MIRA 17:10)

1. Zamestitel' nachal'nika Glavnogo aptechnogo upravleniya Ministerstva zdravookhraneniya UkrSSR.

LUKESH [Lukes], R.; DUDEK, V.; SEDLAKOVA, O.; KORZHAN [Koran], J.

Effect of Grignard reagents on amide group. Part 31: Reaction of N-methylcaprolactam on paraffin Grignard reagents. Coll Cz Chem 26 no.4:1105-1112 Ap '61.

1. Kafedra organicheskoy khimii, Khimiko-tekhnologicheskiy institut, Praga.

(Amide group) (Grignard reagents)

YELENEVICH, B.; KORZHANOVSKIY, A.

Strengthen bank connections with regional economic councils.
Den.i kred. 18 no.6:43-48 Je '60. (MIRA 13:6)

1. Predsedatel' Omskogo sovnarkhoza (for Yelenevich). 2. Nachal'nik finansovogo otdela Khar'kovskogo sovnarkhoza (for Korzhanovskiy).
(Omsk Province--Economic policy)
(Kharkov Province--Economic policy)
(Banks and banking)

KORZHANOVSKIY, A.

Ties of the regional economic council with financial and bank organs have improved. Fin.SSSR 21 no.5:58-61 My '60. (MIRA 13:7)
1. Nachal'nik finansovogootdela Khar'kovskogo sovnarkhoza.
(Kharkov District--Economic policy)
(Finance)

KORZHANOVSKIY, A.I.

Utilization of working capital in the automotive and tractor industry. Avt. trakt. prom. no.5:1-2 My '55. (MIRA 8:8)

1. Ministerstvo avtomobil'nogo, traktornogo i sel'skokhozyaystvennogo mashinostroyeniya.
(Automobile industry--Finance)

KORZHAVIN, A.N.

DEVYATKIN, V.V., gornyy inzhener; KORZHAVIN, A.N., mayor meditsinskoy sluzhby

Using divers for the control of mine flooding. Gor. zhur. no.8:58-63 Ag '57. (MLRA 10:9)

(Mine rescue work) (Mine water)

ACC NR: AR6033093 SOURCE CODE: UR/0269/66/000/007/0045/0045

AUTHOR: Borovik, V. N.; Korzhavin, A. N.; Peterova, N. G.

TITLE: Observations of a radiation source associated with a rapidly developing group of sunspots

SOURCE: Ref. zh. Astronomiya, Abs. 7.51.314

REF SOURCE: Solnechnyye dannyye, no. 10, 1965, 67-71

TOPIC TAGS: sunspot, radiation source, photosphere, sunspot group, brightness temperature, kinetic temperature

ABSTRACT: On 18—19 March 1965, the size of the group of sunspots No. 23 [according to the numeration used in the bulletin "Solnechnyye dannyye" (Solar data)], which was in a stage of decay, suddenly increased sixfold. On 19 March, the flux density from a source connected with this group increased by approximately as many times. The source was observed with the large Pulkovo radio telescope in the 3.2- and 4.5-cm wavelengths (telescope resolving power of [illegible] and [illegible], respectively). Source dimensions, which were constant during the entire period of the observation, were [illegible] at the 3.2-cm wavelength and [illegible] at the 4.5-cm

Card 1/2 UDC: 523.164.32

ACC NR: AR6033093

wavelength. On 19 March 1965 the brightness temperature of the source calculated, assuming its circular symmetry was 120,000K at the 3.2-cm wavelength and 170,000K at 4.5-cm wavelength. The kinetic temperature, calculated on the basis of these data, was 200,000K. On 19 March, the optical thickness of the radiating region was 0.9 at the 3.2-cm wavelength and 1.8 at the 4.5-cm wavelength. The emission measure was $\int N^2 ds = 0{,}5 \cdot 10^{28}$. . On 19 March 1965 as compared with 18 March, the kinetic temperature of the source increased fourfold, and the emission measure increased eightfold. Before and after 19 March, the effective center of source radiation was above the photosphere at a distance of $(0{,}04 \pm 0{,}01)\ R\odot$ at the 3.2-cm wavelength, and $(0{,}05 \pm 0{,}01)\ R\odot$ at the 4.5-cm wavelength. No close connection was observed between the variation in the area of the optical sunspot group and the flux radiation from the corresponding radio source; this is in accord with results obtained earlier by the authors for the same wavelengths. The bibliography has 5 titles. N. Petrova [Translation of abstract] [DW]

SUB CODE: 03/

Card 2/2

KORZHAVIN, A.N.

Radiokymographic study of the stroke and minute blood volume in man during the respiration of gas mixtures with a high oxygen and carbon diozide content. Trudy LSGMI 53:273-280 '59.
(MIRA 13:10)

1. Kafedra rentgenologii s meditsinskoy radiologiyey Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta (zav. kafedroy - prof. B.M. Shtern).
(BLOOD--CIRCULATION) (CARBON DIOXIDE--PHYSIOLOGICAL EFFECT)
(OXYGEN--PHYSIOLOGICAL EFFECT)

ACC NR: AR7000897 SOURCE CODE: UR/0058/66/000/009/H043/H043

AUTHOR: Borovik, V. N.; Peterova, N. G.; Korzhavin, A. N.

TITLE: Observations of a radio source related to a group of rapidly developing sunspots

SOURCE: Ref. zh. Fizika, Abs. 9Zh315

REF SOURCE: Solnechnyye dannyye, no. 10, 1965, 67-71

TOPIC TAGS: sunspot, solar radio emission, radio source, radio emission, ~~radio source brightness temperature, radio source kinetic temperature~~ SOLAR RADIATION INTENSITY

ABSTRACT: It is reported that in March 1965 the sunspot group No. 23 (numbered according to the bulletin "Solnechnyye dannyye"—"Solar Data") which was undergoing disintegration, suddenly increased six-fold in area between March 18 and 19. On March 19, 1965 the flux of radio emission from the source associated with the group and observed simultaneously on two wavelengths, 3.2 and 4.5 cm, through the Great Pulkovo radio telescope (the resolving power of the telescope being 1'.1 2'.3 respectively), was also seen to increase by almost as

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ACC NR: AR7000897

much. The dimensions of the source, constant throughout the entire period of observation, were 1',5 on the 3.2-cm wave, and 2',3 on the 4.5-cm wave. On March 19, 1965 the brightness temperature of the source, assuming its circular outline to be symmetrical was computed to be 120,000K on the 3.2-cm wavelength and 170,000K on the 4.5-cm wavelength. The kinetic temperature of the source, computed on the basis of these data, was 200,000K. In comparison with March 18, on March 19, 1965 the kinetic temperature of the source increased four-fold, and the amount of emission eight-fold. The effective center of the source's radio emission before and after March 19 was above the photosphere at a distance of $(0.04 \pm 0.01) R_\odot$ on the 3.2-cm wavelength and $(0.05 \pm 0.01) R_\odot$ on the 4.5-cm wavelength. No close correlation was observed between changes in the area of the optical group of sunspots and the flux of radiation from a radio source corresponding to it, which agrees with results obtained earlier by the authors on the same wavelengths. [Translation of abstract] [SP]

SUB CODE: 03/

Card 2/2

KORZHAVIN, A.N., kand. med. nauk

Providing for rest and relaxation of the crew. Sudostroenie 30 no.10: 25-28 O '64. (MIRA 17:12)

AUTHOR: ~~Korzhavin, A.S.~~ 130-58-2-9/21

TITLE: Ingot Moulds of a New Design (Izlozhnitsy novoy konstruktsii)

PERIODICAL: Metallurg, 1958, 3 Nr 2, pp 18 - 19 (USSR)

ABSTRACT: The author describes the design and performance of a new design of ingot mould at the imeni Dzherzhinskogo (imeni Dzerzhinskiy) Works. The new design (Fig.1b) differs from the normal (Fig.1a) in its taper, bottom shape and corner profile (Fig.2). The tapers of the new design are 2.1 and 4.6% less along the major and minor axes, respectively, and the top 300 mm has the walls parallel; the corners are formed by three arcs, the central one having its centre outside the ingot-mould cross-section, the others inside. Seven of the ingot moulds were tested with tube steel melted in basic-roof 75-ton open-hearth furnaces, the metal being bottom poured. The ingots were rolled into 180-mm diameter tube billets which were inspected for flaws: rejects (cracks, tears, macrostructure) amounted to 2.1% compared with 5.0 and 3.9 for stools before and after, respectively, those with the new ingot moulds. Temperature measurements of ingot-mould walls showed that the temperature was more evenly distributed in the new than in the old design; the ingot mould life was the same, failure of the new-design ones occurring through crazing in the lower third; ingots

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Ingot Moulds of a New Design 130-58-2-9/21

were less liable to cracking.
There are 3 figures.

ASSOCIATION: Zavod im. Dzerzhinskogo (imeni Dzherzhinskiy Works)

AVAILABLE: Library of Congress

1. Steel ingot molds 2. Steel-Production

KORZHAVIN, B.D., otv.red.; MUKHAMEDZHANOV, M.V., akademik, red.; KHANAZAROV, D.N., red.; ZAKIROV, K.Z., akademik, red.; RYZHOV, S.N., akademik, red.; YEREMENKO, V.Ye., akademik, red.; DADABAYEV, A.D., akademik, red.; RAKHIMOV, A.A., akademik, red.; DZHALILOV, Kh.M., kand.ekonom. nauk, red.; BONDARENKO, M., red.; BAKHTIYAROV, A., tekhn.red.

[Farm management system in recently reclaimed areas of the Golodnaya Steppe; measures for obtaining the maximum output of farm products per 100 hectares of cropland with a minimum expenditure of labor and other means] Sistema vedeniia sel'skogo khoziaistva na zemliakh novogo osvoeniia Golodnoi stepi; meropriiatiia po maksimal'nomu vykhodu sel'skokhoziaistvennykh produktov na 100 ga zemel'nykh ugodii pri naimen'shikh zatratakh truda i sredstv. Tashkent, Gos. izd-vo Uzbekskoi SSR, 1959. 158 p. (MIRA 14:2)

1. Uzbekskaya akademiya sel'skokhozyaystvennykh nauk. 2. Chleny-korrespondenty AN Uzbekskoy SSR (for Korzhavin, Yeremenko). 3. AN Uzbekskoy SSR (for Mukhamedzhanov, Zakirov). 4. Uzbekskaya akademiya sel'skokhozyaystvennykh nauk (for Mukhamedzhanov, Zakirov, Ryzhov, Yeremenko, Dadabayev, Rakhimov). 5. Ministr sel'skogo khozyaystva UzSSR (for Khanazarov). 6. Chlen-korrespondent Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Ryzhov). 7. Direktor instituta ekonomiki Uzbekskoy akademii sel'skokhozyaystvennykh nauk (for Dzhalilov).

(Golodnaya Steppe--Agriculture)

KOVALEV, Ye.I., kandidat meditsinskikh nauk; KORZHAVIN, B.V., kandidat meditsinskikh nauk (Moskva)

Electrosphygmographic examinations in endarteritis obliterans. (MLRA 9:7)
Vrach.delo no.2:121-124 F '56.
(ARTERIES--DISEASES) (SPHYGMOGRAPH)

L 00593-66 EWT(1)/EWP(m)/FCS(k)/ECC(m)/EWA(1)

ACCESSION NR: AR5019352 UR/0124/65/000/007/B034/B034
533.6.011.3/.5

SOURCE: Ref. zh. Mekhanika, Abs. 7B245

AUTHOR: Korzhavin, G.N.

TITLE: Approximate analytical solution of some problems in gas dynamics

CITED SOURCE: Dokl. 3-y Sibirsk. konferentsii po matem. i mekhan., 1964. Tomsk, Tomskiy un-t, 1964, 317-318

TOPIC TAGS: gas dynamics, nonlinear equation analysis, approximate solution

TRANSLATION: The author analyzed the nonlinear equation $y'' = f(x, y, y')$, with two of the four values $y(0)$, $y'(0)$, $y(x_1)$, and $y'(x_1)$ previously assigned. He illustrates a method of formulating an approximate solution for sector $[0, x_1]$ in the form of a 2m power polynomial in x, which provides an m-order tangency with the accurate solution at end points 0, x_1. A formula is given for the remainder of the term. All formulations observe the condition that an analytic solution of the nonlinear equation in question exists for sector $[0, x_1]$. It is noted that the author employed the cited procedure to obtain an approximate analytical solu-

Card 1/2

L 00593-66

ACCESSION NR: AP5019352

tion to a problem concerning a supersonic flow past a circular cone. Ya. G. Sapunkov

SUB CODE: ME, MA ENCL: 00

Card 2/2 DP

L 47148-66 EWT(1)/EWP(m) WW
ACC NR: AR6000706 SOURCE CODE: UR/0124/65/000/009/B039/B039

72
B

AUTHORS: Korzhavin, G. N.; Khrapovitskiy, V. G.

TITLE: Flow of a supersonic gas stream over a symmetric profile

SOURCE: Ref. zh. Mekhanika, Abs. 9B254

REF SOURCE: Dokl. 3-y Sibirsk. konferentsii po matem. i mekhan., 1964, Tomsk, Tomskiy un-t, 1964, 318-319

TOPIC TAGS: gas flow, supersonic flow, shock wave, differential equation, approximation method

ABSTRACT: The shape of the detached shock wave and the flow parameters behind the shock wave are determined for the flow over a given symmetric profile in a supersonic inviscid gas stream. A second order nonlinear differential equation is obtained for the stream function. The solution of the equation is obtained in series form. The boundary conditions are given on the body, on the axis of symmetry, and on the shock wave, whose equation is known. The shock standoff distance from the body is determined. A. F. Kryuchin [Translation of abstract]

SUB CODE: 20

Card 1/1 afs

S/124/61/000/012/020/038
D237/D304

AUTHOR: Korzhavin, G. N.

TITLE: Longitudinal flow of an incompressible fluid around a system of two solids of revolution

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 12, 1961, 52, abstract 12B333 (Dokl. Nauchn. konferentsii po teor. i prikl. vopr. matem. i mekhan., Tomsk, Tomskiy un-t, 1960, 96-97)

TEXT: The problem considered is that of longitudinal flow of an incompressible fluid around a solid of revolution near the wall. This is equivalent to the longitudinal flow around the system of two solids of revolution. The problem is solved by distributing the critical points on the chords of those two solids of revolution. The velocity potential is given as

$$\varphi = x + \sum A_n P_n(\mu) Q_n(\zeta) + \sum B_n P_n(\overline{\mu}) Q_n(\overline{\zeta}) \quad , \qquad (1)$$

Card 1/2

KORZHAVIN, K.N., kandidat tekhnicheskikh nauk, dotsent.

Efficient type of bridge support under ice flow conditions of Siberian rivers. Trudy NIIZHT no.7:15-34 '49. (MLRA 9:10)

(Railroad bridges)

KORZHAVIN, K.N., professor, doktor tekhnicheskikh nauk

Effect of the speed of deformation on the magnitude of the strength limit of river ice subjected to monoaxial compression. Trudy NIIZHT no.11:205-216 '55. (MLRA 9:10)

(Ice on rivers, lakes, etc.) (Deformations (Mechanics))

KORZHAVIN, K.N.

New method for determining the actual pressure of ice on the abutments of a bridge. Izv. vost. fil. AN SSSR no.1:88-94 '57. (MIRA 11:4)

1. Zapadno-Sibirskiy filial AN SSSR.
(Ice on rivers, lakes, etc.) (Bridges—Foundations and piers)

KORZHAVIN, K.N., doktor tekhn. nauk

New method of determining the actual pressure of ice on bridge abutments. Trudy Transp.-energ. inst. Zap.-Sib. fil. AN SSSR no.7:59-83 '58. (MIRA 13:2)
(Ice on rivers, lakes, etc.) (Bridges--Foundations and piers)

KORZHAVIN, K.N., doktor tekhn. nauk

Experiment in determining the actual pressure of ice on bridge abutments. Trudy Transp.-energ. inst. Zap.-Sib. fil. AN SSSR no.7:83-91 '58. (MIRA 13:2)
(Ice on rivers, lakes, etc.)
(Bridges--Foundations and piers)

KORZHAVIN, K.N., doktor tekhn.nauk, prof.

Determining actual ice pressure on bridge piers. Transp.stroi. 8 no.12:23-24 D '58. (MIRA 12:1)
(Ice on rivers, lakes, etc.)
(Bridges--Foundations and piers)

KORZHAVIN, K.N.

Action of ice on engineering structures in Siberia. Izv. Sib. otd. AN SSSR no.10:31-42 '61. (MIRA 14:12)

1. Transportno-energeticheskiy institut Sibirskogo otdeleniya AN SSSR, Novosibirsk.
(Siberia--Ice on rivers, lakes, etc.)
(Hydraulic structures)

KORZHAVIN, K.N., doktor tekhn.nauk, prof.

Action of ice on the piers of bridges and hydraulic structures.
Trudy Transp.-energ.inst.Zap.-Sib.fil.AN SSSR no.5:3-13 '55.
(MIRA 15:5)

(Ice on rivers, lakes, etc.) (Hydraulic structures)

KORZHAVIN, K.N., doktor tekhn.nauk, prof.

Effect of the angle of inclination of the ice-breaking edge of a bridge pier on the intensity of ice pressure. Trudy Transp.-energ.inst.Zap.-Sib.fil.AN SSSR no.5:15-41 '55. (MIRA 15:5)
(Ice on rivers, lakes, etc.) (Bridges--Foundations and piers)

KORZHAVIN, Konstantin Nikolayevich; SHALINA, L.V., red.; LOKSHINA, O.A., tekhn. red.

[Effect of ice on engineering structures]Vozdeistvie l'da na inzhenernye sooruzheniia. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1962. 202 p. (MIRA 16:4)
(Ice on rivers, lakes, etc.)
(Hydraulic structures)

KORZHAVIN, K.N.

Winter regime of rivercourses of Siberia and problems of its study. Trudy Transp.-energ. inst. Sib. otd. AN SSSR no.15: 3-10 '64. (MIRA 18:6)

KORZHAVIN, K.N.

Some problems of the action of ice on structures of great length. Trudy Transp.-energ. inst. Sib. otd. AN SSSR no.15:60-66 '64. (MIRA 18:6)

L 05889-67 EWT(1) GW

ACC NR: AR6032256 (N) SOURCE CODE: UR/0398/66/000/006/B004/B004 /3

AUTHOR: Korzhavin, K. N. B

TITLE: Calculation of the dynamic ice loads caused by jammed ice masses

SOURCE: Ref. zh. Vodnyy transport, Abs. 6B22

REF SOURCE: Sb. Vozdeystviye l'da na sooruzh. i raschet otverstiy malykh mostov. Novosibirsk, 1966, 3-10

TOPIC TAGS: ice, climate, ice pressure, ice movement

ABSTRACT: Evaluation of the interaction between ice masses and structures were studied. A relationship $P = \omega m D$ is assumed for evaluating the possible maximum ice pressure; ω is the projection of the contact area of the support and the ice block on the vertical, m is the coefficient of the support shape; and D is the specific pressure per 1 square meter of contact area of support and ice. For the vertical support $D = \frac{2,5\kappa R_{rc}}{\sqrt[3]{v}}$ (k is the coefficient of leakage of the support contact and the ice mass; v is the velocity of the movement of the ice mass; 2.5 is the distortion coefficient; and R_{rc} is the resistance limit of the ice mass to crushing). If the effect of the velocity of the movement of the ice masses is not

Card 1/2 UDC: 626.01

L 05889-67

ACC NR: AR6032256

considered, the maximum force for the case of supports with a vertical face can be calculated by the formula $P = AbohmKR_{rc}$ (A is the climatic coefficient; bo is the width of the support in the cross section). The case of an inclined plane structure is examined, in which the vertical component of the reaction of the structure support can lead to crushing of the ice mass from bending or from shearing. The magnitudes of the calculation parameters are given for the practical application of the formulas suggested: the limits of ice strength during compression, bending, and shearing; the coefficients of the support shape during compression and bending; contact closeness; and a climatic coefficient. Orig. art. has: 1 figure, 2 tables, and 17 reference items. [Translation of abstract]

SUB CODE: 13/

kh

Card 2/2

FRENKEL', S.YA., SHALTYKO, L.G., KORZHAVIN, L.N., PRYKOV, L.M.

Use of active media for shaping and strengthening synthetic fibers.

Report presented at the 13th Conference on high-molecular compounds Moscow, 8-11 Oct 62

ACCESSION NR: AP4043767 S/0080/64/037/008/1802/1807

AUTHOR: Py*rkov, L.M.; Korzhavin, L.N.; Sorokin, A.Ya.; Frenkel', S.Ya.

TITLE: Preparation of concentrated solutions and the removal of air in an atmosphere of solvent vapors

SOURCE: Zhurnal prikladnoy khimii, v. 37, no. 8, 1964, 1802-1807

TOPIC TAGS: solvent vapor, concentrated solution, polyvinyl alcohol, synthetic fiber, spinning, polyacrilonitrile, dimethylformamide, polymer

ABSTRACT: The authors describe a simple laboratory method for the removal of air from spinning solutions of polyvinyl alcohol (PVS) and polyacrilonitrile (PAN). This method can be easily adapted for other systems and technological conditions. Both solutions were prepared in a laboratory device. The initial components of the solution were introduced into a container which was placed inside a larger container filled with solvent and equipped with an electric heating element. The solution container was covered by an isolating glass cover. The cover had one opening for the introduction of nitrogen and another for a thermometer. The glass cover has a bottle neck which contains a bearing and a mixer with a waterproof seal. A nitrogen flux is injected during a period of 5-10 minutes. Then the solvent is poured into

Card 1/2

L 23328-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6006982 SOURCE CODE: UR/0190/66/008/002/0278/0281

AUTHORS: Ginzburg, B. M.; Korshavin, L. N.; Frenkel', S. Ya.; Layus, L. A.; Adrova, N. A.

ORG: Institute of High-Molecular Polymers, AN SSSR (Institut vysokomolekulyarnykh soyedineniy AN SSSR)

TITLE: Crystallinity of poly-2,2'-octamethylene-5,5'-dibenzimidazole

SOURCE: Vysokomolekulyarnyye soyedineniya, v. 8, no. 2, 1966, 278-281

TOPIC TAGS: x ray diffraction study, crystalline polymer/ URS-50I x-ray diffraction apparatus, GUR-3 goniometer

ABSTRACT: X-ray diffraction study of freshly prepared fibers and films of poly-2,2'-octamethylene-5,5'-dibenzimidazole (I) disclosed a crystalline structure of high order for that polymer, in spite of earlier observations to the contrary by the authors as well as by other workers (A. A. Izyneyev, V. V. Kurashev, V. V. Korshak, T. M. Frunze, and N. Sh. Aldarova. Izv. AN SSSR, Otd. khim. n., 1963, 2019; L. A. Layus, M. I. Bessonov, N. A. Adrova, and M. M. Koton. Plast. massy, 1965, No. 6, 34). The x-ray diffraction study was performed using instrument URS-50I with goniometer GUR-3 adjusted for measurements at small angles. It was established that a 3-hr thermal treatment at 160C results in almost total amorphization of the structure, as can be seen in Fig. 1. However, it also leads to a two-fold rise of tenacity and a

Card 1/2 UDC: 678.01:53+678.6

Fig. 1. Low angle x-ray diffraction on fibers (meridional direction): 1 - freshly formed; 2 - treated at 160C for 3 hours.

five-fold rise in the elasticity modulus. Relaxation mechanisms and structural processes related to the mobility of the heterocyclic sections of the chain of I, as well as the direct influence of formic acid, are discussed as probable causes of the crystallinity in freshly formed I. The authors express their gratitude to Ye. M. Pokrovskiy and K. K. Kalnyn'sh for taking the IR spectra and to A. I. Slutsker for evaluation of the results. Orig. art. has: 8 figures and 1 formula.

SUB CODE: 07/ SUBM DATE: 15Mar65/ ORIG REF: 007 OTH REF: 003

KORZHAVIN, Oleg Arkad'yevich, assistent

Magnetic amplifier transducer with d.c. excitation current and a semigraphical method for its design. Izv. vys. ucheb. zav.; elektromekh. 8 no.10:1142-1149 '65. (MIRA 18:11)

1. Kafedra elektroizmeritel'noy tekhniki Kuybyshevskogo politekhnicheskogo instituta. Submitted September 17, 1964.

KORZHAVIN, O.A.

Investigating an inductive converter with a laminated magnetic circuit. Izv.vus.ucheb.zav.; prib. 6 no.3:10-18 '63. (MIRA 16:9)

1. Kuybyshevskiy politekhnicheskiy institut Kuybysheva. Rekomendovana kafedroy elektroizmeritel'noy tekhniki.

L 22487-66 EWT(d)/EEC(k)-2

ACC NR: AP6009140 SOURCE CODE: UR/0144/65/000/010/1142/1149

AUTHOR: Korzhavin, O. A.

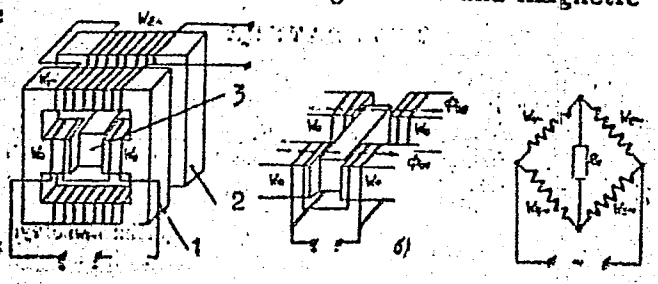
ORG: none

TITLE: Magnetic-amplifier sensor with constant magnetizing current and a grapho-analytical method of its design

SOURCE: IVUZ. Elektromekhanika, no. 10, 1965, 1142-1149

TOPIC TAGS: measuring sensor, measuring transducer, primary detector

ABSTRACT: A combination nonelectric-quantity-measuring sensor and magnetic amplifier is described in which (see figure) the magnetic amplifier is controlled by means of an armature (electromagnet or permanent magnet) whose linear movement varies the magnetization of the common magnetic system. The latter comprises two parallel stacks 1 and 2 with airgaps in their middle cores; movable core 3 is pivoted in



Magnetic-amplifier sensor

Card 1/2

UDC: 621.313.334

Card 2/2 OK

L 18510-66
ACC NR: AP6002169 SOURCE CODE: UR/0146/65/008/006/0025/0032

AUTHOR: Korzhavin, O. A.; Kulikovskiy, L. F.

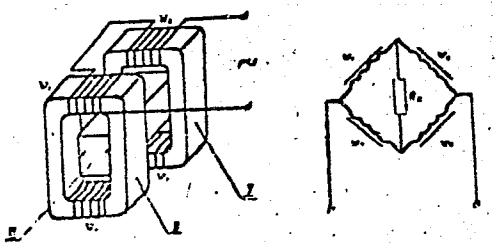
ORG: Kuybyshev Polytechnic Institute (Kuybyshevskiy politekhnicheskiy institut)

TITLE: Investigation of a magnetic-amplifier-type permanent-magnet linear-displacement sensor and its errors

SOURCE: IVUZ. Priborostroyeniye, v. 8, no. 6, 25-32

TOPIC TAGS: displacement sensor, strain gauge

ABSTRACT: The results of tests are reported of a new linear-displacement sensor which combines, in a common magnetic system, the features of an inductive sensor and a magnetic amplifier. This combination permits obtaining an output power sufficient for operating a recorder. In its initial position, permanent magnet III overlaps one-half of both O-shaped cores I and II (see figure, left). Hence, the constant fluxes in both cores (due to this magnet) are equal, and their combined effect on w_2 and w_1 is zero. When the permanent magnet is displaced, its overlaps change, and an a-c emf



Magnetic-amplifier-type linear-displacement sensor: magnetic system (left) and circuit (right)

UDC: 621.3.082.7

Card 1/2

L 18540-66

ACC NR: AP6002169

appears across the windings. The sensor is held particularly suitable for application where displacement of a few mm are involved. A laboratory model exhibited errors of 1,5 and 2.5% for supply-voltage variations of +5—10% and +10—15%, respectively. Still better results were obtained with the sensor operated as a voltage element and when the ferroresonance phenomenon was utilized. The temperature error was 2% per 10C within —15+55C; it can be considerably reduced by using a thermistor. Orig. art. has: 4 figures, 5 formulas, and 1 table.

SUB CODE: 13, 09 / SUBM DATE: 29Oct64 / ORIG REF: 008

Card 2/2 mgs

KORZHAVIN, Oleg Arkad'yevich, assistent

Magnetic amplifier pickup devices of linear displacements. Izv.vys. uchob.zav.; elektromekh. 7 no.1:104-110 '64.

1. Kafedra elektroizmeritel'noy tekhniki Kuybyshevskogo politekhnicheskogo instituta.

KORZHAVIN, S.S., red.; KUZNETSOVA, M.I., red. izd-va; MATVEYEVA, A.Ye., tekhn. red.

[Instruction 24-57 for checking kerosene pumps] Instruktsiia 24-57 po poverke dozatorov kerosina. Izd. ofitsial'noe. Moskva, 1957. 7 p. (MIRA 14:5)

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