BOBROV, Ye.G., inzh.; GLUKH, Ye.M., inzh.; KOVTUN, N.F., inzh.; FLEYSHMAN, L.S., inzh

Utilization of the power potentials of traction substations. Zhel.dor.transp. 43 no.6:22-27 Je '61. (MIRA 14:7)

1. Glavnyy konstruktor po rtutnym vypryamitelyam zavoda "Uralelektroapparat" (for Glukh). 2. Nachal'nik konstruktorskogo byuro zavoda "Uralelektroapparat" (for Fleyshman).
(Electric railroads--Substations)

GLUKH, Ye.M., kand.tekhn.nauk; ZEMLYANOY, Yu.M., inzh.;
ETTINGER, Ye.L., kand.tekhn.nauk

Ionic exciters in the hydrogenerators of the Bratsk Hydroelectric Power Station. Vest. elektroprom. 33 no.10:15-22 O '62. (MIRA 15:9)
(Bratsk hydroelectric power station)
(Turbogenerators)

ETTINGER, Ye.L., kand.tekhn.nauk; GLUKH, Ye.M., kand.tekhn.nauk; GOL'DIN, R.G., inzh.; TITOV, V.V., kand.tekhn.nauk; MEYMAN, Z.B., inzh.

Concerning L.V.Rosman's article. Vest. elektroprom. 34 no.1: 62-64 Ja '63. (MIRA 16:1)
(Electric generators) (Rosman, L.V.)

BOGDANOV, Valentin Nikolayevich; FOGEL', A.A. kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, G.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V., inzhener, redaktor; VASIL'YEVA, V.P., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Use of through induction heating in industry] Primenenie skvoznogo induktsionnogo nagreva v promyshlennosti. Izd.2-oe, ispr. i dop. Pod red. A.A.Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 78 p.(Bibliotechka vysokochastotnika-termista, no.12) (MLRA 10:6)

(Induction heating)
(Metals--Heat treatment)

AUTHOR: Rustem, S.L. 129-4-12/12

TITLE: All-Union Conference on Industrial use of High frequency currents held in Leningrad. (Vsesoyuznoye soveshchaniye po promyshlennomu primeneniyu t.v.ch. v g. Leningrade).

PERIODICAL: Metallovedeniye i Obrabotka Metallov, 1958, No.4, pp. 61-64 (USSR).

ABSTRACT: The conference held in November, 1957 was convened by the Leningrad Scientific and Technical Society of the Engineering and Power Generation Industry (Leningradskoye Nauchno-Tekhnicheskoye Obshchestvo Mashinostroitel'noy i Energeticheskoy Promyshlennosti). The task of the conference was to report on advanced experience, to discuss achievements in this field outside the Soviet Union and to evolve recommendations for expanding the use of high frequency in industry and introduction of progressive technology and also evolving organisational measures for improving the quality of high frequency equipment and apparatus. The conference included sections for induction heating technology, metals technology, non-conducting materials and equipment.
Candidate of Technical Sciences, M.A. Spitsyn (NII TVCh imeni V. P. Vologdin) read the paper "New developments in the field of industrial application of high frequency

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currents". In this paper he outlined the most important trends in the use of high frequency heating between 1955 and 1957 dealing with surface hardening of components with complicated configurations; high speed gas carburisation using induction heating; heating right through of blanks for forging, stamping and rolling; development of apparatus for controlling heat treatment processes and automation and mechanisation in large batch and mass production. During the last three years the following technological processes have been developed which are based on induction heating:

1. Two-frequency "hardening" of the surface of toothed gears with average moduli. First, heating is effected with a frequency of 1000-2500 c.p.s. during which the heat is generated mainly at the bottom of the tooth gap and, following that, radio frequency is fed to the inductor for a duration of 0.5 to 0.8 sec for heating the tips of the teeth. Subsequent quenching permits obtaining a hardened layer which reproduces the shape of the teeth.
2. Gas case hardening of toothed gears using induction heating ensures a sharp increase of the speed of the

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chemical-heat treatment and is used successfully in the automobile industry.
3. Hardening of the drilling bits for use in the oil industry.
4. "Bright" annealing of steel strip.
5. Two-frequency heating of steel blanks for heating by applying pressure, particularly for rolling.
6. Heating and hardening of leaf springs on automatic machines.
7. High speed tempering of hardened components using high frequency heating etc. For automating technological processes, the following are at present manufactured: An automatic machine for heating and hardening of leaf springs; manipulator for horizontal forging machines; automatic machines for hardening of small components. Of the new apparatus used in induction heating, the author mentioned a stabiliser of the temperature of components being heated, a photo-electric pyrometer with a direct reading off of the temperature, relay for dosing the energy, etc. Of particular interest were the data he gave on the two-frequency heating of gears. The entire process

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takes only a few seconds and can be used in mass production for heat treatment of gears with average moduli. Heating of blanks which are to be shaped by applying pressure is also effected by two-frequency induction heating using 50 c.p.s. current for heating to 700-750°C followed by heating with high frequencies to 1100-1150°C. The two-frequency induction heating reduces the consumption of electricity in the case of heating right through of blanks. For tempering and annealing of weld joints, induction heating with 50 c.p.s. and with higher frequencies is used. The paper of M. G. Lozinskiy, Doctor of Technical Sciences, Institute of Engineering Technology, Ac.Sc. USSR (Institut Mashinovedeniya AN SSSR) dealt with the problems of strength of surface hardened components and the features of high frequency heating. The deformation detected by the author in engineering magnetic steels "45" and "40X" forms in the surface layer as a result of magnetostriction caused by the a.c. electromagnetic field of the inductor. On a smooth surface of blanks consisting of magnetic steels which were subjected to repeated cycles of heating and cooling, "mounds" and

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"valleys" form at spacings equalling the half-wave of the supersonic oscillations generated by the high frequency. In non-magnetic steels no such phenomenon was observed. It was also observed that with increasing number of cycles, heating-cooling, the diameter of the cylindrical specimens in the heating zone increases, whilst the height of the specimens decreases. Furthermore, the author reported on the method of G. V. Ushik which enables increasing the static strength up to 300%; this is achieved by using h.f. heating of a thin layer in the zone of stress concentrations at the surface of steel components. Thus, for instance, cylindrical specimens made of hardened 40X steels with a stress concentrator in the form of a notch will be 2.5 times stronger if the notch zone is tempered by using h.f. heating. M. G. Lozinskiy considers that use of the method of strengthening applying h.f. tempering of the stress concentration zones will permit evolving specifications which would justify more rational designs than those used hitherto.

Card 5/14 K. Z. Shepelyakovskiy (ZIL) read the paper "On reducing the hardenability as a means of achieving contour (surface)

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hardening of toothed gears of average moduli". For this purpose a steel with low hardenability, ЭИ 937, was used. Gears made of this steel, of 180 mm dia. with a modulus of 4.2, were heated by means of an 8000 c.p.s. current of 100 kW capacity for a duration of 24 secs. The heating was effected in a ring-shaped inductor after which the gears were moved into a ring-shaped shower with a fixed direction of the holes. The teeth and the rims of the gears were subjected to hardening. The strength of the hardened teeth was investigated by loading until failure. In the case of gears made of the steel 30ХГТ (after carburisation and hardening) this load was 15.6 tons, for the steel ЭИ 937 the load was 16 tons. In the case of hardening of gears made of the steel ЭИ 937, a minimum deformation occurs, the fluctuations along the pitch circle after hardening amounted to 0.01-0.02 mm. In some cases the contact strength should be increased by increasing the carbon content to 0.6-0.7%.

I. L. Glukhanov, V. N. Bogdanov, Ye. D. Makarova, M.F. Scientific Research Institute imeni V.P. Vologdin

Card 6/14 (NII TVCh imeni V. P. Vologdina) presented a paper on

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surface hardening of gears by induction heating with two frequencies. The method ensures heating along the contour of gears with moduli of 3.5 to 5. During heating with a lower frequency (1000 to 2000 c.p.s.), the bottom of the tooth gap is heated intensively, whilst at radio frequency (300 000 c.p.s.) the tip of the tooth is heated. The same inductor is used for both frequencies. The heating with the lower frequency lasts 2.5 to 4 secs; thereby, the specific power consumption is 1.5 to 1.7 kW/cm^2. Heating with the higher frequency is effected for 0.5 to 0.7 sec using a specific power of 1.1 to 1.2 kW/cm^2. The 1000 c.p.s. current is generated by a 500 kW rotary generator, whilst the 300 kc/sec current is generated with an oscillator circuit of 400 kW rating. During hardening of gears made of steel "45" cracks occur and, therefore, the carbon content was reduced and alloy steels 36ГС, 35СГ etc. are being used. For fracturing a tool of a surface hardened gear a force of 9.5 to 17 tons is required, whilst the force required for fracturing case hardened gears after hardening, made of the steel 18ХГТ,

Card 7/14 did not exceed 10 tons per tooth. Gears produced by using

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two-frequency hardening more than three times faster than gears produced according to the old technology. Therefore, in the further tests the steels 65Г, 50ХГ, 40ХН and 40ХНМА were used.

The paper of N. M. Rodigin, Ural Branch of the Ac.Sc. USSR (Ural'skiy Filial AN SSSR) was devoted to the new method of induction heating of steel strip. The novel feature consists in the fact that the electro-magnetic field produced by an alternating current is directed perpendicular to its surface and not in the longitudinal direction of the strip. This enables using economical sources of current of elevated frequency, namely, rotary generators. The required temperature distribution along the width of the strip is ensured by an appropriate configuration of the magnetic path and by an air gap between the poles. This method can be used for annealing cold rolled strip, for heating and for preheating of strip during rolling, pickling, deposition of coatings, etc.

V. N. Bogdanov and V. A. Pejsakhovich reported on the practical application of the above method for annealing thin strip in the Leningrad Steel Rolling Mill (Leningradskiy

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Staleprokatniy Zavod). The optimum frequency depends on the thickness and the width of the strip. For a thickness of 0.2 to 0.6 mm and a width of 100 mm it is recommended to use a current of 8000 c.p.s.; for strip of 200 mm a current of 2500 c.p.s. and for a width of 400 mm a current of 1000 c.p.s. On heating strip to 700-900°C, the uniformity of the temperature along the breadth of the strip is ± 25°C. For heating, a two-turn inductor was used, whereby the conductors of the current and of the magnetic flux were water cooled. This method was applied in the case of bright annealing of cold rolled strip. For a speed of movement of the strip of 25 m/min the required power was 200 kW (for a frequency of 2500 c.p.s.). The productivity of the equipment equalled 1 ton/hr. The specific power consumption during induction heating is 180-190 kWh/ton. Compared with annealing in chamber furnaces, this method has a number of advantages since thereby the productivity per m² of production space is increased two to threefold, the annealing time is reduced by several hundred times, uniform mechanical properties are ensured along the entire length of the

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strip coil and welding together of the strip during annealing is prevented. The specific consumption of electricity is higher for induction heating than for electrical furnaces.

V. N. Gridnev, Doctor of Technical Sciences, Kiyev Polytechnical Institute (Kiyevskiy Politekhnicheskiy Institut) dealt with the influence of the speed of heating on the structure and the properties of steel. Apparatus was built for the investigations which enabled simultaneous recording of several physical parameters so that the following could be oscillographically recorded: temperature, change in the length of the specimen and in its electric resistance and also current intensity in the inductor. The recording was effected with a speed of 50 to 10 000°C/sec and the dilatometric curves were recorded with a speed of 60 000°C/sec. The following binary alloys were investigated - Fe-Cr (up to 8%); Fe-Si (up to 3%); Fe-Ti; Fe-W; the C content was about 0.02%. Steels containing 0.1; 0.45; 0.54; 0.77 and 1.12% C were also investigated. The author has established that during heating of annealed carbon-free alloys, the

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transformation temperature does not depend on the speed of heating and the magnitude of the volume effects depends on the composition of the alloy and the preceding heat treatment. When heating annealed iron-carbon alloys, the transformation temperature is determined by the speed of heating and by the initial structure. On heating hardened low alloy carbon-free alloys, the transformation temperature compared to that in the alloys in the annealed state does not change at all in some cases (Fe-Si; Fe-Ti), whilst in other cases it decreases by 30 to 40°C (Fe-Cr and Fe-W). On heating hardened steels, the dilatometric recordings show clearly the volume changes caused by the martensite decomposition and by the phase transformation; the decomposition cannot be suppressed not even at heating speeds of 60 000°C/sec. At high heating speeds of hardened steels, the phase transformation takes place in the range of 700°C, i.e. at lower temperatures than the transformation during slow heating. Investigations of the influence of the heating speed on the structure and properties of hardened, carbon and alloy steels in the case of electric tempering showed that at elevated

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heating speeds a favourable combination can be obtained of the strength and ductility and also an increased resistance to wear which is of practical interest. In their paper I. N. Kidin, Doctor of Technical Sciences, and Yu. A. Bashnin, Moscow Institute of Steel (Moskovskiy Institut Stali) expressed the view that the higher the heating speed the larger will be the temperature range in which phase transformations will take place. Experimental data show that pearlite-austenite transformations proceed in the range of higher temperatures. In the case of high frequency hardening, higher temperatures are required than in the case of heating in an ordinary furnace. This is attributed to the fact that the phase transformations proceed with a higher speed due to the more rapid rise in the temperature and due to the sharp acceleration of the dissociation of carbides and the diffusion of carbon in the ferrite. The authors showed that it is justified to introduce a new thermal parameter, namely, the speed of induction heating in the range of phase transformations. This would enable the plotting of diagrams of preferential and permissible

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hardening regimes which would conserve the character of generally valid relations under conditions which are reproduceable in normal production.
V. P. Pleshachkova (TsNIITMASh) read an interesting paper on the deformation of surface hardened steel. H.F.surface hardening permits reducing the deformation of the steel. The author investigated the influence on the deformation of the following factors: heating temperature, cooling speed, depth of the hardened layer, structure of the starting material and also of the temperature and time of heating in the case of low temperature tempering. The results have shown that in the case of h.f. surface hardening of ring specimens with small height to diameter ratios (1:4; 1:7) produced from various steels, the deformation manifests itself in a decrease of the outside diameter and an increase in the height and in the inner diameter. An increase in the temperature leads to an increase in the deformation along the outside and inside diameters and manifests itself less on the height of the rings. The deformation of rings made of alloy steels

 is greater than for rings made of carbon steels under

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equal conditions of heating and cooling. Cooling in a 30 to 35% solution of glycerine and a 5% solution of potassium permanganate brings about a reduction in the deformation and in the crack formation, particularly in the case of alloy steels (40X, 40XH). Tempering at 140 to 200°C reduces the dimensions as compared to the hardened state and thereby the changes in the dimensions of the height and the internal diameter are compensated but the changes of the external diameter are amplified. Increase of the tempering temperature brings about an increase of the deformation.

Representatives from Roumania and East Germany participated in the Conference. The German delegate, E. Trippmacher, reported on the designs of compact h.f. transformers with built-in magnetic paths produced in East Germany.

NOTE: This is a complete translation and not an abstract.

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GLUKHAREV, A.G., mayor meditsinskoy sluzhby

Treatment of dry callosities by an alcohol-novocaine block.
Voen.-med. zhur. no. 6:81-82 Je '60. (MIRA 13:7)
(CALLOSITIES)

GLUKHANOV, N.P.; FOGEL', A.A., kandidat tekhnicheskikh nauk; redaktor; VASIL'YEV, A.S., kandidat tekhnicheskikh nauk; retsenzent; SOKOLOVA, L.V., tekhnicheskiy redaktor.

[Physical principles of high-frequency heating] Fizicheskie osnovy vysokochastotnogo nagreva. Pod red. A.A.Fogelia. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 54 p. (Bibliotechka vysokochastotnika-termista, no.2) (MLRA 7:11)
(Induction heating)

GLUKHANOV, N.P.

Electromagnetic processes in a ferromagnetic medium during induction heating. [Izd.] LONITOMASH no.33:12-25 '54. (MLRA 8:2)
(Induction heating)(Ferromagnetism)

VISHNEVSKIY, Nikolay Yevgen'yevich; GLUKHANOV, Nikolay Parmenovich; KOVALEV, Ivan Sidorovich; STOLYAROV, V.I., retsenzent; MERKIN, G.I., kandidat tekhnicheskikh nauk, redaktor; CHERNOUSOV, N.P., inzhener, redaktor; GOFMAN, Ye.K., redaktor izdatel'stva; SOKOLOVA, L.V., tekhnicheskiy redaktor

[High pressure apparatus with hermetically sealed electric motors] Apparatura vysokogo davleniia s ekranirovannym elektrodvigatelem. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1956. 178 p. (MIRA 9:8)

(Electric motors) (Machinery industry)

YEVANGULOVA, Yevgeniya Pavlovna; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; MIKHAYLOV-MIKHEYEV, P.B., doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Quality control of surface hardening] Kontrol' kachestva poverkhnostnoi zakalki, Izd. 2-oe, ispr. i dop. Pod.red. A.A. Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 33 p.(Bibliotechka vysokochastotnika-termista, no5) (MLRA 10:6)

(Metals--Hardening) (Quality control)

AYSKIN, Solomon Yefimovich; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; SLUKHAY-NOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMYNER, A.B., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiy redaktor

[Hardening machines] Zakalochnye stanki. Izd. 2-oe, ispr. i dop. Pod red. A.A.Fogelia. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 46 p. (Bibliotechka vysokochastotnika-termista, no.11)

(Induction heating) (Metals--Hardening)

ZHEZHERIN, Rostislav Petrovich; SPITSYN, Mikhail Aleksandrovich, kandidat tekhnicheskikh nauk; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Power generators for high-frequency heating] Mashinnye generatory dlia vysokochastotnogo nagreva. Izd.2-oe, ispr. i dop. Pod red. A.A. Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 49 p. (Bibliotechka vysokochastotnika-termista, no.8) (MLRA 10:6)

(Induction heating) (Electric generators)

Glukhanov, N. P.

DEMICHEV, Aleksey Dmitriyevich; SHASHKIN, Semen Vasil'yevich; DONSKOY, A.V., prof., doktor tekhn.nauk, retsenzent; FOGEL', A.A., kand.tekhn.nauk, red.; GLUKHANOV, N.P., red.; GOFMAN, Ye.K., red.izd-va; SPERANSKAYA, O.V., tekhn.red.

[Highfrequency hardening] Vysokochastotnaia zakalka. Izd. 2-oe, ispr. i dop. Pod red. A.A.Fogelia. Moskva, Gos.nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1957. 52 p. (Bibliotechka vysokochastotnika-termista, no.3) (MIRA 11:2)
(Metals--Hardening) (Induction heating)

SHEKALOV, Aleksandr Alekseyevich; SHTRAYS, Yakov Iosifovich; BLINOV, Boris Vladimirovich; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; FOGEL', A.A., kandidat tekhnicheskiy nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUMER, A.V., inshener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; SYCHEVA, O.V., tekhnicheskiy redaktor

[Smelting in small coreless induction furnaces] Plavka v malykh besserdechnikovykh onduktsionnykh pechakh. Izd. 2-oe, ispr. i dop. Pod red. A.A.Fogelia. Moskva, Gos. nauchno-tekhn.izd-vo mashinostroit.lit-ry, 1957. 53 p. (Bibliotechka vysokochastotnika-termista, no.14) (MIRA 10:7)

(Electric furnaces)

SLUKHOTSKIY, Aleksandr Yevgen'yevich, kandidat tekhnicheskikh nauk;. FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.B., inzhener, redaktor; VASIL'YEVA, V.I., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, redaktor; SYCHEVA, O.V., tekhnicheskiy redaktor.

[Inductors used in steel hardening] Zakalochnye induktory. Izd.2-oe, ispr. i dop. Pod. red.A.A.Fogelia. Moskva, Gos.nauchno-tekhn. izd-ve mashinostroit.lit-ry, 1957. 54 p. (Bibliotechka vysokochastotnika-termista, no.6) (MLRA 10:6)
(Induction heating) (Steel--Hardening)

SUDAKOV, P.M.; DONSKOY, A.V., prof., doktor tekhn.nauk, retsenzent; FOGEL', A.A., kand.tekhn.nauk, red.; SPITSYN, M.A., kand.tekhn.nauk, red.; SLUKHOTSKIY, A.Ye., kand.tekhn.nauk, red.; GLUKHANOV, N.P., kand. tekhn.nauk, red. BAMUNER, A.V., inzh., red.; SPERANSKAYA, O.V., tekhn.red.

[Instruments and measuring in high-frequency heating] Pribory i izmereniia pri vysokochastotnom nagreve. Pod red. A.A.Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 54 p. (Bibliotechka vysokochastotnika-termista, no.16) (MIRA 11:2)
(Electric heating--Measurement)
(Electric meters)

SHAMOV, Aleksandr Nikolayevich; FOGEL', A.A. kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.S., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BANUMER, A.V., inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; DONSKOY, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V, tekhnicheskiy redaktor.

[Current supply of high-frequency heating installations by power generators] Pitanie vysokochastotnykh nagrevatel'nykh ustroistv ot mashinnykh generatorov, Izd.2-oe, ispr. i dop. Pod red. A.A. Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 55 p. (Bibliotechka vysokochastotnika-termista, no.10) (MLRA 10:6)

(Induction heating)

GLUKHANOV, NIKOLAY PARMENOVICH

Glukhanov, Nikolay Parmenovich

Fizicheskiye osnovy vysokochastotnogo nagreva (Physical Principles of High-frequency Heating) 2nd ed., rev. and enl. Moscow, Mashgiz, 1957, 58 p. (Bibliotechka vysokochastotnika-termista, vyp. 2) 10,000 copies printed.

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Physical Principles of High-frequency Heating (Cont.)

PURPOSE: The brochures published in the series "Bibliotechka vysokochastotnika-termista" are intended for wide circles of industrial workers interested in high-frequency heating technique.

COVERAGE: The brochure presents in an easily accessible form the physical principles of high-frequency heating of metals and dielectrics. An understanding of the theory of electric and magnetic phenomena, of the theory of electromagnetic fields and of heating with an electromagnetic field is considered necessary in order to be able to work in the field covered by the brochures of the series. A complete list of the brochures included in the series is published at the end of each issue. There are 5 Soviet references.

Card 2/4

Physical Principles of High-frequency Heating (Cont.)

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Physical Principles of High-frequency Heating (Cont.)

AVAILABLE: Library of Congress

Card 4/4

GLUKHANOV N.P.

BRITSYN, N.L.; DONSKOY, A.V., prof., doktor tekhn.nauk, retsenzent; FOGEL', A.A., kand.tekhn.nauk, red.; SPITSYN, N.A., kand.tekhn.nauk, red.; SLUKHOTSKIY, A.Ye., kand.tekhn.nauk, red.; GLUKHANOV, N.P., kand. tekhn.nauk, red.; BAMUNER, A.V., inzh., red.; GOFMAN, Ye.K., red. izd-va; SPERANSKAYA, O.V., tekhn.red.

[High-frequency electric field heat treatment] Nagrev v elektricheskom pole vysokoi chastoty. Izd. 2-oe, ispr. i dop. Pod red. A.A. Fogelia. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. 62 p. (Bibliotechka vysokochastotnika-termista, no.15) (MIRA 11:2)
(Dielectric)
(Lumber--Drying)

GLUKHANOV, N. P.

VOLOGDIN, Vladislav Valentinovich; FOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; SPITSYN, M.A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHANOV, N.P., kandidat tekhnicheskikh nauk, redaktor; BAMUNER, A.V. inzhener, redaktor; SIMONOVSKIY, N.Z., redaktor izdatel'stva; KHOROSHAYLOV, V.G., kandidat tekhnicheskikh nauk, retsenzent; SYCHEVA, O.V. tekhnicheskiy redaktor.

[Induction soldering] Paika pri industsionnom nagreve. Izd.2-oe, ispr. i dop. Pod.red.A.A.Fogelia. Moskva, Gos.nauchno-tekhn.izdve mashinostroit.lit-ry, 1957. 66 p. (MLRA 10:6)
(Induction heating)(Solder and soldering)

GLUKH[illegible] [illegible]OGDIN, Vsevolod Valentinovich; SLUKHOTSKIY, Aleksandr [illegible]yevich; DOLOKOV, A.V., professor, doktor tekhnicheskikh nauk, retsenzent; VOGEL', A.A., kandidat tekhnicheskikh nauk, redaktor; [illegible]TOV[illegible], [illegible]A., kandidat tekhnicheskikh nauk, redaktor; SLUKHOTSKIY, A.Ye., kandidat tekhnicheskikh nauk, redaktor; GLUKHA[illegible] V. [illegible] kandidat tekhnicheskikh nauk, redaktor; SAMUNER, A.V., inzhener, [illegible]; VASIL'YEVA, V.P., redaktor izdatel'stva; SPERANSKA[illegible], [illegible], tekhnicheskiy redaktor

[Transformers for high-frequency heating] Transf[illegible] dlia vysokochastotnogo nagreva. Pod red. A.A.Vogelia. [illegible], Gos. nauchno-tekhn.izd-vo mashinostroit. lit-ry, 1957. [illegible] (Bibli[illegible] techka vysokochastotnika-termista, no.7) (MIRA 10:11)
(Induction heating) (Electric transformers)

GLUKHANOV, N.P.; KOVALEVSKAYA, Ya.P.; KRYLOV, K.I., prof.; MURAV'YEVA, G.Ya.; RUDAKOV, V.N.; SMIRNOV, P.S., tekhn.red.

[Laboratory work on electromagnetic fields] Laboratornye raboty po elektromagnitnomu poliu. Pod obshchei red. K.I.Krylova. Leningrad, Leningr. elektrotekhnicheskii in-t im. V.I.Ul'ianova (Lenina), 1957. 246 p. (MIRA 11:7)

1. Zaveduyushchiy kafedroy "Teorii elektrichestva, magnetizma i stroyeniya materii" (for Krylov)
(Electromagnetic theory)

S/112/59/000/013/033/067
A002/A001

Translation from Referativnyy zhurnal, Elektrotekhnika, 1959, No 13, p 125, # 27099

AUTHORS: Bogdanov, V. N., Glukhanov, N. P., Makarova, Ye. D.

TITLE: Surface Hardening of Gears With Induction Heating by Currents of Two Frequencies

PERIODICAL: V sb.: Prom. primeneniye tokov vysokoy chastoty. Riga, 1957, pp. 7-18

TEXT: The authors enumerate methods of induction hardening of gears and indicate peculiarities of their heating. A gear model is used for discussing the physics of heating "along the outline" (po obvodu). The authors give analytical dependences of the optimum hardening frequency on the module and formulae for determining heating time and required power. They describe a two-frequency heating circuit operating on frequencies of 1,000 and 25,000 cps, a design of a single-loop inductor for these purposes, a circuit of an electric device, and the operating conditions for processing gears of module 4.25. The

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3/112/59/000/013/033/067
A002/A001

Surface Hardening of Gears With Induction Heating by Currents of Two Frequencies

control of the heating process has been automated. The current sources are a 350-kw rotary converter and a tube generator with four 100-kw tubes. The design of an improved inductor and the circuit for its connection are given, which make it possible to carry out a simultaneous heating by currents of two frequencies. The inductor consists of four semi-rings. Each of them is a bridge arm into whose diagonal a feed source is switched. The inductor will harden 2 gears simultaneously. The control of the heating has been automated. It is possible to regulate the moments of switching on or off the h-f and l-f currents. There are 6 references.

L. A. G.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

8(4) SOV/112-59-3-5237

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 3, pp 132-133 (USSR)

AUTHOR: Glukhanov, N. P., and Bogdanov, V. N.

TITLE: High-Frequency Heating for Metal Welding (Svarka metallov pri vysokochastotnom nagreve)

PERIODICAL: V sb.: Prom. primeneniye tokov vysokoy chastoty. Riga, 1957, pp 39-46

ABSTRACT: Use of high-frequency heating for welding of metals is examined, as well as the techniques and methods for butt welding of sheets, strips, plates, etc.; direct passing of high-frequency currents through the parts being welded with utilization of the proximity effect is considered, as well as the induction heating methods for longitudinal and butt pipe welding. The following examples of practical application of high-frequency heating for metal welding are described: butt welding of pipe ends using a split-ring inductor; welded-pipe

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SOV/112-59-3-5237

High-Frequency Heating for Metal Welding

production from a strip by means of a plane inductor acting on the continuously moving pipe; longitudinal welding of large-diameter pipes in which the current passes through an intermediate bus placed between the pipe edges and returns through the pipe edges. Technological welding parameters and pictures of welding outfits are presented.

L. Ya. L.

Card 2/2

BOGDANOV, V.N., laureat Stalinskoy premii; GLUKHANOV, N.P.; MAKAROVA, Ye.D.

Hardening gears by two-frequency currents. Avt. i trakt. prom. no.5: 38-41 My '57. (MIRA 10:6)
1. Nauchno-issledovatel'skiy institut tokov vysokoy chastoty.
(Gearing) (Metals--Hardening) (Induction heating)

Glukhanov, N.P.

28(1) PHASE I BOOK EXPLOITATION SOV/2156

Soveshchaniye po kompleksnoy mekhanizatsii i avtomatizatsii tekhnologicheskikh protsessov. 2nd, 1956.

Avtomatizatsiya mashinostroitel'nykh protsessov; /trudy soveshchaniya/, tom. 1: Goryachaya obrabotka metallov (Automation of Machine-Building Processes; Proceedings of the Conference on Over-All Mechanization and Automation of Technological Process, Vol 1: Hot Metal-Forming) Moscow, 1959. 394 p. 5,000 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut mashinovedeniya. Komissiya po tekhnologii mashinostroyeniya.

Resp. Ed.: V.I. Dikushin, Academician; Compiler: V.M. Raskatov; Ed. of Publishing House; V.A. Kotov; Tech. Ed.: I.P. Kuz'min.

PURPOSE: The book is intended for mechanical engineers and metallurgists.

COVERAGE: The transactions of the Second Conference on the Over-All Mechanization and Automation of Industrial Processes, September 25-29, 1956, have been published in three volumes. This book, Vol. I, contains articles under the general title, Hot Working of Metals. The investigations described in the book were conducted by the Sections for Automation and Hot Working of Metals, under the direction of the following scientists: casting - P.N. Aksenov, D.P. Ivanov and G.M. Orlov; forming - A.I. Tselikov, A.D. Tomlenov and V.T. Meshcherin; welding - G.A. Nikolayev, B.I. Frolov and G.A. Maslov. There are 183 references: 142 Soviet, 34 English, 6 German, and 1 French.

TABLE OF CONTENTS:

Card 6/8

GLUKHANOV, N.P., kand. tekhn. nauk; BOGDANOV, V.N., inzh.; KULZHINSKIY, V.L., inzh..

Longitudinal seam welding of large diameter pipes with high frequency resistance heating. Svar. proizv. no.2:6-8 F '59. (MIRA 12:1)

1.Nauchno-issledovatel'skiy institut tokov vysokoy chastoty.
(Pipe, Steel--Welding)
(Electric welding)
(Induction heating)

PHASE I BOOK EXPLOITATION SOV/4787

Vishnevskiy, Nikolay Yevgen'yevich, Nikolay Parmanovich Shumakov, and Ivan Sidorovich Kovalev

Apparatura vysokogo davleniya s germeticheskim privodom (High-Pressure Apparatus With an Airtight Drive) 2nd ed., rev. and enl. Moscow, Mashgiz, 1960. 246 p. Errata slip inserted. 5,000 copies printed.

Reviewers: G. N. Dobrokhotov, Candidate of Technical Sciences, and I. M. Stolyarov, Engineer; Managing Ed. for Literature on the Design and Operation of Machines (Leningrad Department, Mashgiz): F. I. Fetisov, Engineer; Ed. of Publishing House: I. A. Borodulina; Tech. Ed.: A. I. Kontorovich.

PURPOSE: This book is intended for engineers and technicians in machine and instrument construction, and in establishments of the chemical and petroleum industries who are engaged in the construction and use of high-pressure apparatus.

Card 1/7

High-Pressure Apparatus With an Airtight Drive SOV/4787

COVERAGE: The authors discuss new types of airtight apparatus intended for operation under high and superhigh pressures and in a corrosive medium. Experimental data on the hydraulic condition of reaction apparatus are presented. Information is included on airtight pumps and gas blowers, used in the chemical industry, with electromagnetic drive by a built-in shielded electric motor. Chs. I, II, VI, VII, VIII, IX, and X were written by N. Ye. Vishnevskiy, Candidate of Chemical Sciences. Ch. III was written by I. S. Kovalevskiy, Candidate of Technical Sciences. Ch. IV was written jointly by I. S. Kovalevskiy and N. P. Glukhanov, Candidates of Technical Sciences. Ch. V was written by N. P. Glukhanov, Candidate of Technical Sciences. No personalities are mentioned. There are 63 references: 52 Soviet (including 2 translations), 10 English, and 1 German.

TABLE OF CONTENTS:

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[illegible], [illegible]

Electromagnetic processes in plates and [illegible] [illegible] at high frequencies. Trudy NIITVCH no.1/2:5-23 '60.

[illegible] in [illegible] motor. Ibid.:35-54 [illegible]

S/137/62/000/002/1[illegible]
A052/A101

AUTHOR: Glukhanov, N. P.

TITLE: The selection of current frequency when welding large-diameter pipes

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no.2, 1962, 57, abstract 2E[illegible] (V sb. "Prom. primeneniye tokov vysokoy chastoty v elektrotermii", Moscow-Leningrad, Mashgiz, 1961, 58-73)

TEXT. Based on the studies carried out on the selection of current frequency when welding large-diameter pipes the following conclusions are drawn. 1. The main factors determining the selection of frequency are the irregularity of the energy distribution over the wall thickness of a pipe ingot and the degree of energy concentration in the heated metal volume compared with the total energy transfered to the pipe ingot. These two factors are antagonistic. 2. Based on point 1, a range of frequencies can be recommended, which gives the ratio of the wall thickness of a pipe ingot to the penetration depth of current into steel (b/Δ) within $b/\Delta = 1 - 2$.

V. Tarisova

[Abstracter's note: Complete translation]

Card 1/1

PHASE I BOOK EXPLOITATION SOV/6216

Glukhanov, Nikolay Parmenovich, and Valentin Nikolayevich Bogdanov

Svarka metallov pri vysokochastotnom nagreve (High-Frequency Welding of Metals). Moscow, Mashgiz, 1962. 189 p. 7000 copies printed.

Reviewer: A. A. Alekseyev, Professor; Ed.: K. A. Kochergin, Candidate of Technical Sciences; Eds. of Publishing House: R. N. Onishchenko and N. Z. Simonovskiy; Tech. Ed.: M. M. Peterson; Managing Ed. for Literature on the Design and Operation of Machines, Leningrad Department, Mashgiz: F. I. Fetisov, Engineer.

PURPOSE: This book is intended for engineering personnel of machine-building and metallurgical plants, as well as of scientific research and planning institutes.

COVERAGE: The book reviews physical phenomena utilized in heating metal with high-frequency current in the welding process. Conditions for the high-frequency welding of various articles are

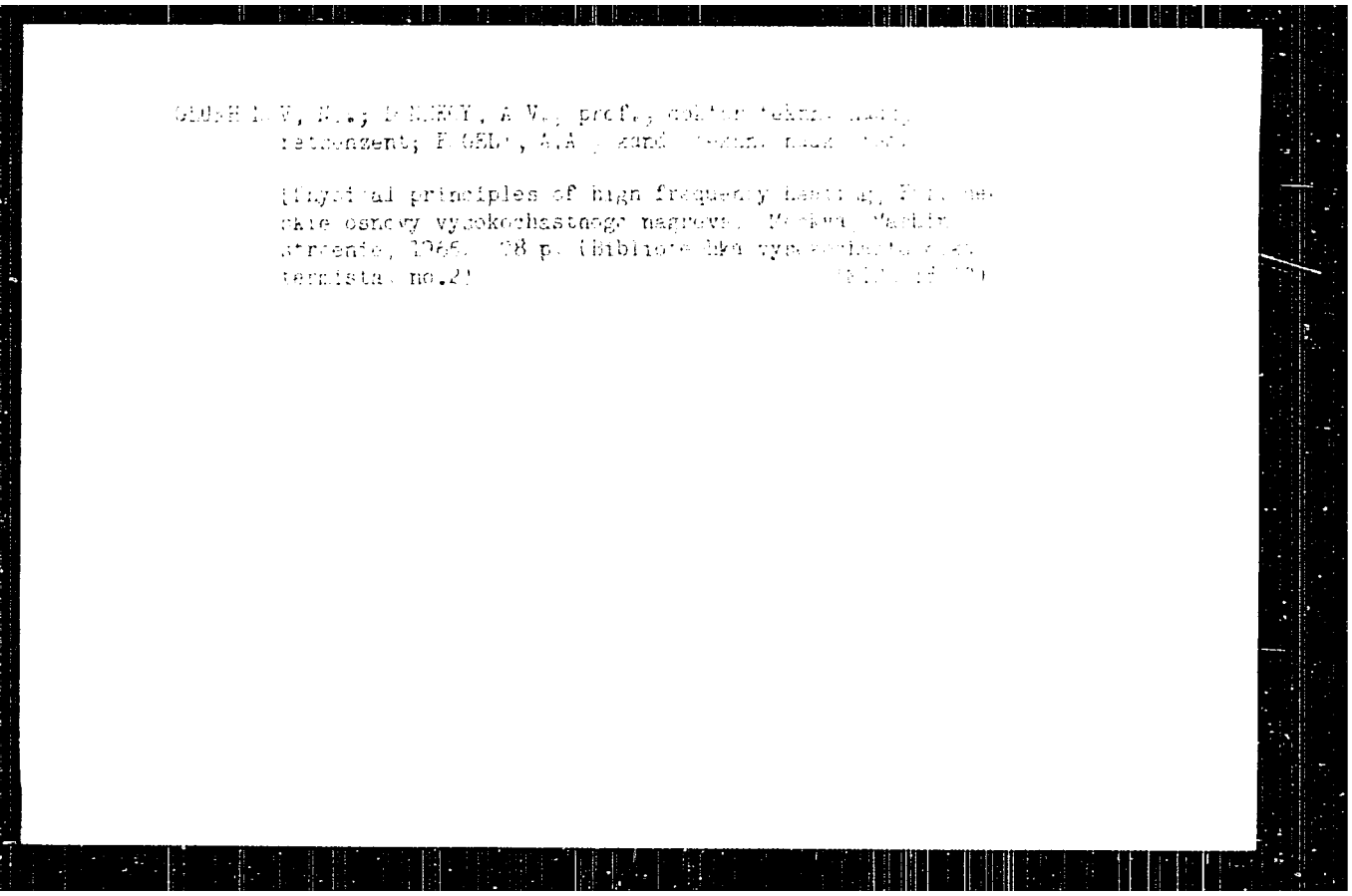
Card 1/2

GLUKHANOV, N. P., kand.tekhn.nauk

Electromagnetic processes in a conducting cylinder during induction heating in a circular inductor with a magnetic circuit. Trudy NIITVCH no.4:22-35 '63. (MIRA 17:7)

GLUKHANOV, N. P., kand.tekhn.nauk; GRIGORIEV, I. M., inzh.

Shielded synchronous magnetic clutches. Trudy NIITVCH no.4:
114-120 '63. (MIRA 17:7)



ACC NR: AP6035534 SOURCE CODE: UR/0292/66/000/010/0036/0038

AUTHOR: Glukhanov, N. P. (Candidate of technical sciences); Ganzburg, L. B. (Engineer)

ORG: none

TITLE: Shielded clutches

SOURCE: Elektrotekhnika, no. 10, 1966, 36-38

TOPIC TAGS: clutch, synchronous clutch, electric clutch

ABSTRACT: A few shielded synchronous clutches developed or tested at VNII TVCh and intended for chemical, nuclear, and other industries are described. The clutches transmit rotation or thrust to the inside of a sealed industrial machine or apparatus. Essentially, they consist of a toothed outside (wound) member, an isolating shield (1Kh18N9T nonmagnetic steel), and a toothed inside

UDC: 621.825.7.001.3

APPROVED FOR RELEASE: 09/24/2001 CIA-RDP86-00513R000515420002-2"

ACC NR: AP6035534

member. Several versions are briefly described or mentioned: a synchronous clutch for 150-atm pressure difference; a "star"-type-magnet clutch; a "bushing"-type-magnet clutch; a homopolar axial-magnet clutch for 20000 rpm, 30 kg·cm, 1.5 atm; a homopolar end-type axial-magnet clutch for 3000 rpm, 2 atm, 5 kw; a planetary-reducer-type clutch; a thrust-type clutch. "Engineer N. M. Rumyantsev took part in designing the clutches." Orig. art. has: 5 figures.

SUB CODE: 13, 09 / SUBM DATE: none / ORIG REF: 007

Card 2/2

TROYEPOL'SKIY, V.N., inzh.; GLUKHAREV, A.A., kand.

Welding cast iron in an atmosphere of water vapor. Svar. proizv. no.6:16 Je '63. (MIRA 16:12)

1. Proyektno-konstruktorskoye byuro Glavstroymekhanizatsii.

(Engineer, Colonel)

TITLE: Aerostats and airships

SOURCE: Aviatsiya i kosmonavtika, no. 1, 1965, 48-51

TOPIC TAGS: aerostat, airship, dirigible, air navigation

ABSTRACT: The latest developments in the chemistry of polymers, automatic controls, radio electronics, and meterology have been applied to the design and construction of lighter-than-air craft in a new perspective. The new aerostats will look like their prototypes; however, their payload will no longer include the ballast which had imposed certain limits to flight duration, altitude, and load-lifting capacity. The future aerostats will use liquid hydrogen, automatic flight controls, and improved envelopes. The envelopes are now being made essentially of durable polyethylene film measuring 30—60 μ in thickness and weighing 28—55 g per square meter. It can be safely predicted that coatings dozens of times as durable and only 5 μ thick

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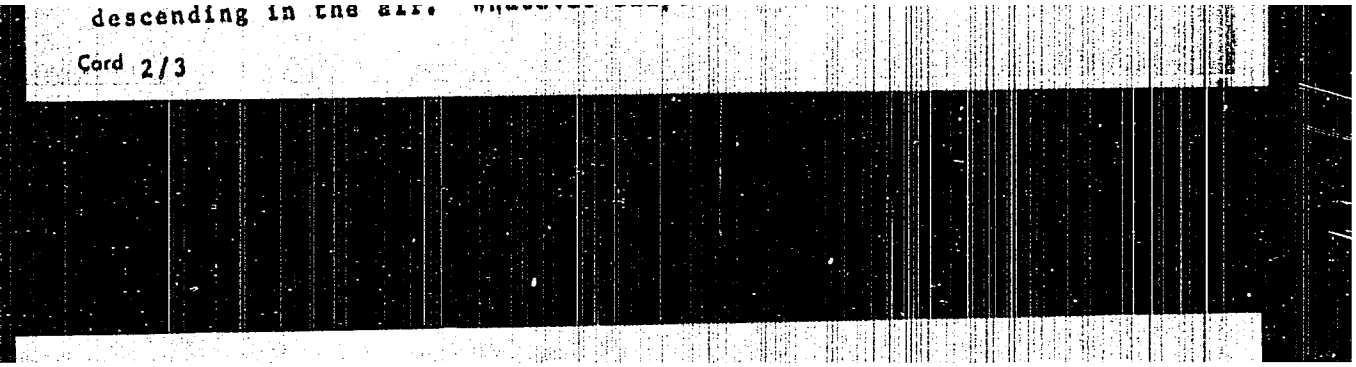
will soon be made. A great deal of interest has been aroused by the "helio-barge" project which combines the lift of an aerostat with the thrust of a helicopter. Tests have shown that a helicopter with a lift of 200 kg, when fitted out with a spherical 1000-m³ envelope (lift, 800 kg), can carry one additional ton at a speed of 25 km/hr. Besides the standard fuel, the hydrogen contained in the aerostat's



3 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: AC, SV

NO REF SOV: 000 OTHER: 000 ATD PRESS: 3169

Card 3/3

GLUKHAREV, A. G. (Major of the Medical Service)

"Making up Case Histories with Laboratory Examination Blanks."

Voyenno-Meditsinskiy Zhurnal, No. 6, 1961:

GLUKHAREV, A.G.; TOVSTOLES, K.F.

Methods for obtaining urine from rabbits. Lab. delo [7] no.4: 57-58 Ap '61. (MIRA 14:3)

1. Kafedra urologii (nach. - doktor meditsinskikh nauk G.S. Grebenshchikov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova.

(CATHETER) (URINE)

GLUKHAREV, A.G.

Study of kidney function in rabbits. Lab. delo 7 no.5:17-19 My '61.
(MIRA 14:5)

1.Kafedra urologii (nachal'nik - doktor meditsinskikh nauk G.S. Grebenshchikov) Voyenno-meditsinskoy ordena Lenina akademii S.M. Kirova.

(KIDNEYS)

GLUKHAREV, A.G., mayor meditsinskoy sluzhby

Forming the history of an illness with blanks from laboratory investigation. Voen.-med. zhur. no.6:81 Je '61. (MIRA 14:8)
(MEDICAL RECORDS)

GLUKHAREV, A.G.; TOVSTOLES, K.F.

Method for intravenous urography in rabbits. Biul.eksp. biol. i med. 51 no.1:116-118 Ja '61. (MIRA 14:5)

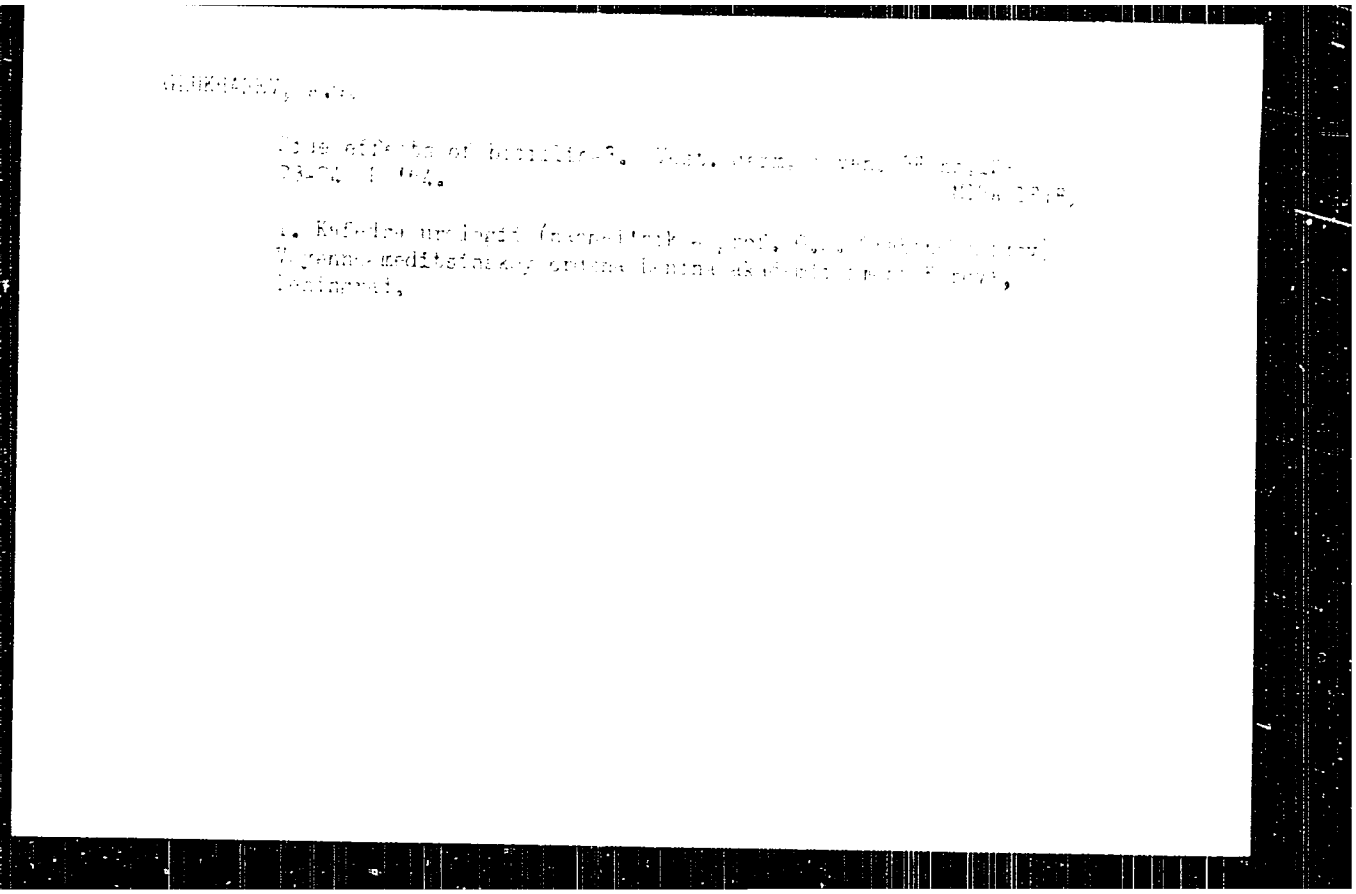
1. Iz kafedroy urologii (nachal'nik - doktor med. nauk G.S.Grebenshchikov) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova, Leningrad. Predstavlena deystvitel'nym chlenom AMN SSSR V.V.Parinym.
(KIDNEYS--RADIOGRAPHY)

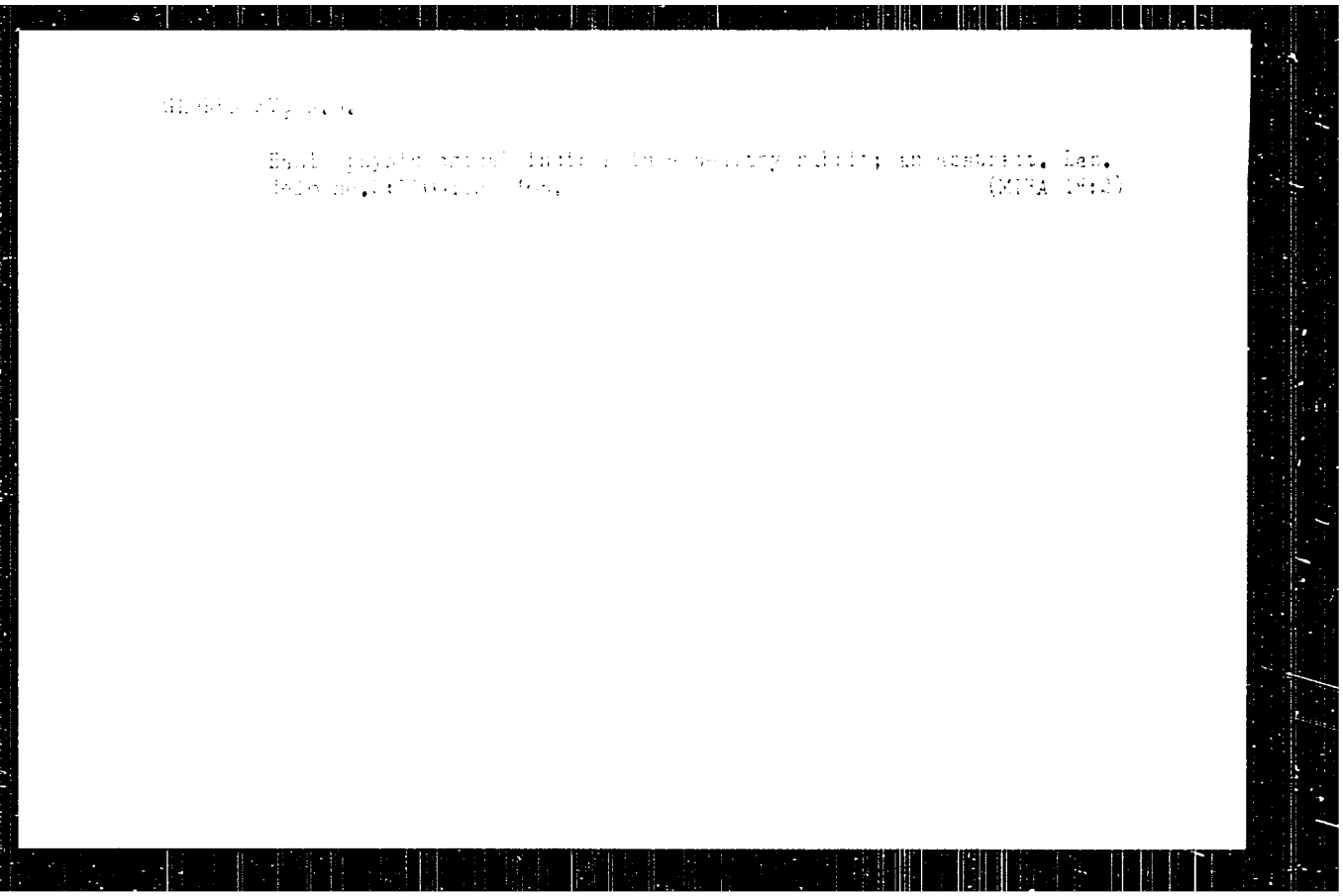
GLUKHAREV, A.G., kand.med.nauk

Results of treating acute gonorrhea by the use of bicillin-3.
Vest. derm. i ven. 38 no.9:65-67 S '64.

(MIRA 18:4)

1. Urologicheskaya klinika (nachal'nik - prof. G.S.Grebenshchikov) Voyenno-meditsinskoy ordena Lenina akademii imeni Kirova.





GLUKHAREV, A.G.

Effect of unithiol on the functional capa[illegible] of the [illegible]neys. Farm. i toks. [illegible] no.1:87-89 Ja-F '65.

([illegible] 18:12)

1. Kafedra [illegible] (nachal'nik [illegible] prof. G.S.Greben[illegible]kov) Voyenno-meditsinskoy ordena Lenina akademii imeni [illegible], Leningrad. Submitted August 16, 1963.

ACC NR: AP7009097 SOURCE CODE: UR/0413/67/000/003/0070/0070

INVENTOR: Glukharev, A. I.; Foygel', L. A.; Sushinkin, Ye. I.; Gerashchenko, V. A.

ORG: None

TITLE: An oxygen flow indicator. Class 30, No. 191046

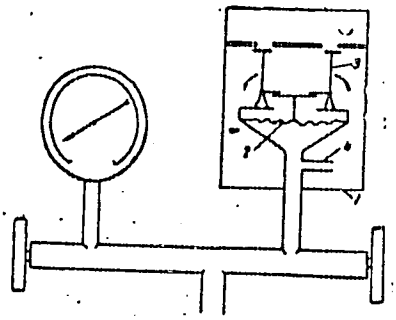
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1967, 70

TOPIC TAGS: flow meter, oxygen, medical equipment

ABSTRACT: This Author's Certificate introduces an oxygen flow indicator containing a housing with a diaphragm which interacts with indicator flags. The instrument may be used at relatively high oxygen pressures. The cavities above and below the diaphragm are connected through a hydraulic resistor which may be made in the form of a tube with a small inside diameter.

Card 1/2 UDC: 612.22.02-087

ACC NR: AP7009097



1—housing; 2—diaphragm; 3—flags; 4—hydraulic resistor

SUB CODE: 14, 06 SUBM DATE: 15Mar65

Card 2/2

GLUKHAREV, A.I., inzh. (Engel's); FOYGEL', L.A. (Engel's); GEL'MAN, M.B., inzh. (Engel's)

Calculation of current in an R-L circuit with half-wave rectification. Elektrichestvo no.5:58-60 My '60. (MIRA 13:9)

(Electric current rectifiers)
(Electronic circuits)

Glukharev, A.N.

86-58-3-19/37

AUTHOR: Agamirov, V.L., Engr Lt Col; Glukharev, A.N., Engr Maj; Antipov, V.P., Engr Capt; Morozov, D.P., Engr Capt

TITLE: Automatic Aerostats (Avtomaticheskiye aerostaty)

PERIODICAL: Vestnik vozdushnogo flota, 1958, Nr 3, pp 50-54 (USSR)

ABSTRACT: The article gives a general description of automatic (pilotless) aerostats as well as of their equipment which is used for scientific research of the upper atmosphere. The authors distinguish two types of automatic aerostats: aerostats whose envelope bursts after a given task is accomplished and whose instruments are detached either automatically or by a radio signal from the ground and then descend by parachute; and aerostats whose envelope can be converted automatically into a parachute. According to the authors, extensive use of automatic aerostats for directed long-distance flights was made possible by the successful exploration of jet streams in the atmosphere. One photo, 1 diagram.

AVAILABLE: Library of Congress

Card 1/1

KONYUKHOV, B.V.; GLUKHAREV, D.M.

Study of strain-specific antigens in A and C57BL strains of mice. Biul.eksp. biol. i med. 51 no.1:97-101 Ja '61. (MIRA 14:5)

1. Iz kabineta nasledstvennosti (zav. - kandidat biologicheskikh nauk B.V.Konyukhov) Instituta eksperimental'noy biologii (dir. - prof. I.N.Mayskiy) AMN SSSR, Moskva. Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.
(ANTIGENS AND ANTIBODIES)

KONYUKHOV, B.V.; GLUKHAREV, D.M.

Genetic and morphological characteristics of a strain of mice with microphthalmia (blind mutation). Biul. eksp. biol. i med. 52 no.12:100-104 D '61. (MIRA 14:12)

1. Iz kabineta nasledstvennosti (zav. - kand.biologicheskikh nauk B.V.Konyukhov) Instituta eksperimental'noy biologii (dir. - prof. I.N.Maysskiy). Predstavlena deystvitel'nym chlenom AMN SSSR N.N. Zhukovym-Verezhnikovym.

(MICE AS LABORATORY ANIMALS)
(EYE--DISEASES AND DEFECTS) (HEREDITY)

GLUKHAREV, I.V.

Results of investigation of surrounding air during painting of facades with perchlorovinyl lacquer PKHV-54. Gig. sanit., Moskva no.9:50-52 Sept 1951. (CLML 21:2)

1. Author.

TSAGOLOV, N.A., prof., doktor ekon.nauk; BLYUMIN, I.G., prof., doktor ekon.nauk [deceased]; KUMYANTSEV, A.M., prof.; KUCHUMENKO, A.A., dotsent, kand.ekon.nauk; SHNEYERSON, A.I., prof., doktor ekon.nauk; LIF, Sh.B., prof., doktor ekon.nauk; SHVEDKOVA, G.M., kand.ekon. nauk; FISHELVSKIY, Ya.K.; DVORKIN, I.N., doktor ekon.nauk; SIDOROV, I.F.; KHAFIZOV, R.K., kand.ekon.nauk; NIKOLAYEV, A.B., kand.ekon. nauk; AVRAMCHUK, F.P., kand.ekon.nauk; ALYTEE, L.B., doktor ekon. nauk; BOYARSKIY, A.Ya., prof., doktor ekon.nauk; BREGEL', E.Ya., prof., doktor ekon.nauk; ARZUMANYAN, A.A.; VOLODIN, V.S., dotsent, kand.ekon.nauk; MIKSHA, L.S., kand.ekon.nauk; BUNKINA, M.K., dotsent, kand.ekon.nauk; ZEVREVSKOV, A.V., kand.ekon.nauk; FADEYEVA, T.A., kand.ekon.nauk; KOLGANOV, M.V., prof., doktor ekon.nauk; KHROMUSHIN, G.B., kand.ekon.nauk; MOSHENSKIY, M.G., kand.ekon.nauk; IVANOV, N.N., kand.ekon.nauk; GUTTSAYT, M.G., dotsent, kand.ekon. nauk; ABOLTIN, V.Ya., prof., doktor ekon.nauk; KOLLONTAY, V.M., kand.ekon.nauk; GLUKHAREV, L.I., kand.ekon.nauk; POKROVSKIY, A.I., kand.ekon.nauk; DADASHEV, G.A., dotsent, kand.ekon.nauk; ALESHINA, I.V., kand.ekon.nauk; ZHAMIN, V.A., dotsent, kand.ekon.nauk;

(Continued on next card)

TSAGOLOV, N.A.--(continued) Card 2.

KOZLOV, A.P.; TIKHOMIROV, I.F., kand.istor.nauk; ALEKSEYEV, A.M., dotsent, kand.ekon.nauk; PLATOVA, Ye.M., dotsent, kand.ekon.nauk. Prinimali uchastiye: VOLKOV, F.K., kand.ekon.nauk; KHRCHUSHIN, G.B.; VOZNESENSKIY, L.A., nauchnyy sotrudnik; SPERANSKAYA, L., red.; CHEPELEVA, G., tekhn.red.

[Criticism of present-day bourgeois, reformist, and revisionist economic theories] Kritika sovremennykh burzhuaznykh, reformistskikh i revizionistskikh ekonomicheskikh teorii. Pod red. N.A.TSagalova. Moskva, Izd-vo Sotsial'no-ekon.lit-ry, 1960. 388 p. (MIRA 13:5)

1. Moscow. Universitet. 2. Chlen-korrespondent AN SSSR (for Arzumanyan).

(Economics)

GLUKHAREV, Leonid Ivanovich; OZIRA, V.Yu., red.; YERMAKOV, K.S., tekhn. red.

[France; some special characteristics of economic development] Frantsiia; nekotorye cherty ekonomicheskogo razvitiia. Moskva, Izd-vo Mosk. univ., 1961. 45 p. (MIRA 14:10)
(France—Economic conditions)

BESSONOV, S A.; VASIL'KOV, N P., kand. ekon. nauk, VLASOV, V A., kand. ekon. nauk, GLUKHAREV, L.I. kand ekon. nauk, DANILEVICH, M.V., doktor ekon. nauk, ZHAMIN, V A., doktor ekon. nauk, prof.; ZAKHMATOV, M I., kand. ekon. nauk, KURAKIN, N.A., kand. ekon. nauk, PANOV, V P., SMIRNOV, G V., kand. ekon. nauk, dots.; TRIFONOV, V.I., kand. ekon. nauk, TYAGAY, Ia Ya., FAMINSKIY, I P.; KHODOV, L G., SHMIDT, G A. kand. ekon. nauk, dots.; SHMIGOL', N N. kand ekon nauk dots., MATSUK, R.V. red., GARINA, T D. tekhn. red.

[The economy of foreign countries, the capitalistic system of the world economy after the Second World War]Ekonomika zarubezhnykh stran, kapitalisticheskaia sistema mirovogo khoziaistva posle Vtoroi Mirovoi voiny. Pod red. V.A.Zhamina. Moskva, Vysshaia shkola, 1962. 632 p. (MIRA 16:1)
(Economic history)

POLYANSKIY, F.Ya., prof., SHEMYAKIN, I.N., prof.; GLUKHAREV, L.I., dots.; ROMANCHENKO, L.N., kand. ekon. nauk; KAYYE, V.A., kand. ekon. nauk; MOTUS, P.P., kand. ekon. nauk; TYUSHEV, V.A., kand. ekon. nauk; ROMANCHENKO, L.N., kand. ekon. nauk; AVDAKOVA, Yu.K., kand. ekon. nauk, dots., red.; SPERANSKAYA, L., red.; VOSKRESENSKAYA, T., red.; NEZNANOV, V., mladshiy red.; NOGINA, N., tekhn. red.

[Economic history of capitalist countries]Ekonomicheskaia istoriia kapitalisticheskikh stran, kurs lektsii. Moskva, Sotsekgiz, 1962. 634 p. (MIRA 16:2)

(Economic history)

GLUKHAREV, YE. G.

Dissertation: "Strength and Durability of Conveyor Belts." [illegible], Leningrad Inst of Engineers of Water Transport, Leningrad, 195[illegible]. (Referativnyy Zhurnal--Mekhanika, Moscow, Apr 54)

SO: SUM 2[illegible], 19 Oct 195[illegible]

GLUKHAREV, Ye.G., kandidat tekhnicheskikh nauk.

Determining flexural stresses in layered rubberized conveyer belts. Stroi.i dor.mashinostr. 2 no.9:33-34 Ag '57. (MLRA 10:9)
(Belts and belting) (Strains and stresses)

GLUKHAREV, Ye.G., kand.tekhn.nauk

Designing lock fastenings for gas-turbine blades. Energomashinostroenie 4 no.7:23-25 Jl '58. (MIRA 11:10)
(Gas turbines)

GLUKHAREV, Ya.G., kand.tekhn. nauk

Some data on the operation of gear transmission in British ships.
Sudostroenie 24 no. 6:67-68 Je '58. (MIRA 11:8)
(Great Britain--Marine engineering)

S/111/60/000/011/003/0[illegible]
E194/E484

26.2120

AUTHOR: Glukharev Ye.G., Candidate of Technical Sciences

TITLE: The Flexibility and Shape of the Teeth of Fir-Tree Roots of Turbine Blades

PERIODICAL: Energomashinostroyeniye, 1960, No.11, pp 11-13

TEXT: On the basis of a previous article by Grubin, A.N. (Trudy Kuybyshev Industrial Inst. 1957, Vol.7) and one by the present author (Energomashinostroyeniye, 1958, No.7) it is stated that the load distribution between the teeth of the fir-tree root of a turbine blade depends very much on their flexibility, the load being the more uniform the more flexible they are. Fig.1 gives curves of the load distribution along the depth of the blade root as function of the flexibility of the teeth K. Fig.1a does not allow for temperature strain; Fig.1b does. In the previous article the deflection was determined as the sum of deflections obtained by integrating the differential equation of deflection of an overhung beam with appropriate loading. This method requires improvement both in respect of discovering the actual stress condition of the teeth and in applying more accurate methods of determining strain. Tangential stresses play the most important

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The Flexibility and Shape of the Teeth of Fir Tree Roots of Turbine Blades

part in tooth deflection and, accordingly, it is natural to determine them more accurately than is possible by application of the elementary methods of strength of materials and in particular to satisfy the boundary conditions. For teeth of the widely used anvil shape, illustrated in Fig.2, the boundary conditions are then stated and it is shown that the principal stresses operating in the tooth are the normal and the tangential stresses. Eq.(4) and (5) are derived for the normal stresses and Eq (6) and (7) for the tangential. Castigliano's method is then used to determine the deflection of the teeth, see Eq.(8). It is recommended to use methods of numerical integration to determine the deflection. The approximate Eq.(10) may be used for the tooth flexibility; it is based on an approximate method of determining the deflection due to tangential stresses alone which are considered to be distributed over the tooth section according to the usual parabolic law. The relative flexibility of teeth of different shapes, particularly anvil shape and trapezoidal, is then considered see Fig.3. The comparison is only possible provided that allowance is made for the boundary conditions in determining the law of tangential stress

The Flexibility and Shape of the Teeth of Fir-Tree [illegible] the Blades

distribution. Eqs.(13) and (14) are derived for the tangential stresses in the two cases and stress distribution diagrams are plotted in Fig.3. On the basis of the tangential stresses alone the trapezoidal tooth is 11% more flexible than the anvil shape, but if normal stresses are also allowed for the trapezoidal tooth is 9.5% more flexible. Thus from the standpoint of external load distribution in the elastic condition of operation of the blade root, the trapezoidal tooth shape is to be preferred. There are 3 figures and 3 Soviet references.

Card 3/3

GLUKHAREV, Ye.G., kand. tekhn. nauk

Efficient selection of the number of conveyor belt plies and the importance of conveyor drum diameters. Stroi. i dor. mash. 9 no.6:21-23 Je '64. (MIRA 18:11)

GLUKHAR.VA, A. P.

Works of the Central Peat Experimental Station. (M'n of Agric, RSFSR)

Volume 9, 1939, 91 pages.

"The Drying Collecti n and Storage of Peat Stable litter." by F. Usenko, A. P. Glukharves, A. M. Mitorfanova.

SO: Botanicheskiy Zhurnal, Vol XXXV, No 1, pp 109-110, Jan-Feb 1950, Russian Bimo ser, Moscow/Leningrad (U-3511, 12 Feb 1954)

27836
S/032/61/027/010/012/022
B104/B102

55500

AUTHORS: Rychkov, R. S., and Glukhareva, N. A.

TITLE: Application of the radioactivation analysis to the determination of microimpurities in semiconductor materials

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 10, 1961, 1246 - 1250

TEXT: I. D. Berkutova, A. K. Gofman, N. A. Glukhareva, G. A. Kuznetsova, R. S. Rychkov, and N. B. Smirnova have worked out a method for the activation analysis of Ge, Si, SiO_2, SiC, $SiCl_4$, Al, C, and GaAs to determine the content of Au, Cu, Sb, Zn, and other impurities. Such microimpurities were successfully excited in a reactor and could thus be exactly identified from their γ-spectrum. The measurements were made with a multi-channel scintillation spectrometer whose NaI(Tl) crystal had a size of 40·40 mm. ФЭУ-29(FEU-29) and ФЭУ-1Б(FEU-1B) photomultipliers as well as 50-АИ-1(50-AI-1) and АИ-100(AI-100) analyzers were used in the electronic device. The specimens were carefully purified from surface contaminations and subsequently irradiated in quartz or polyethylene ampoules together with standards. After the irradiation the specimens were carefully

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purified once more. Na, Ta, Cr, Fe, Zn, Sb, Co, and Sc were determined directly from the γ-spectrum, if the specimens to be examined contained only insignificant amounts of impurities, and if one and the same specimen did not contain several impurities at the same time. Otherwise the specimens were decomposed by various chemical methods, and the interfering elements were removed. The microimpurities in the preparations thus obtained were determined from their γ-spectra which were compared with those of the standards. Practical tests have proved the method described here to be useful, both in technical and economic respect. Finally, security measures to be followed in the irradiation of specimens and standards in a reactor are briefly discussed. There are 1 table and 13 references: 3 Soviet and 10 non-Soviet. The three most recent references to English-language publications read as follows: G. H. Morrison. Anal. Chem., v. 26, no. 3 (1956). G. H. Morrison. Anal. Chem., v. 27, no. 5 (1955); A. A. Smales, Mapper. Atomic energy research establishment (1957).

Glukhareva, N.G.

USSR/Electronics - Electronic and Ionic Emission H-2

Abs Jour : Referat Zhur - Fizika, No 5, 1957, 12281

Author : Mendelev, B.G., Bebchuk, A.S., Glukhareva, N.G.
Inst : -
Title : Application of Sonic and Ultrasonic Vibrations in Technology of Manufacture of Cathodes and Heaters (Preliminary Information).

Orig Pub : Tr. N.-i. in-ta. M-vo radiotekhn. prom-sti SSSR, 1956, vyp 2-3 (30-31), 71-73

Abstract : It is reported that sonic and ultrasonic oscillations (in most cases 10 kc) have been used to obtain alundum and carbonate suspensions, for the purification of parts of electro-vacuum tubes, and in particular, for the purification of the internal surface of cathode tubes. The vibrations are produced with the aid of a magnetostriction setup with a nickel vibrator. Good results are obtained in the purification of cathode tubes. After 5 -- 7 minutes

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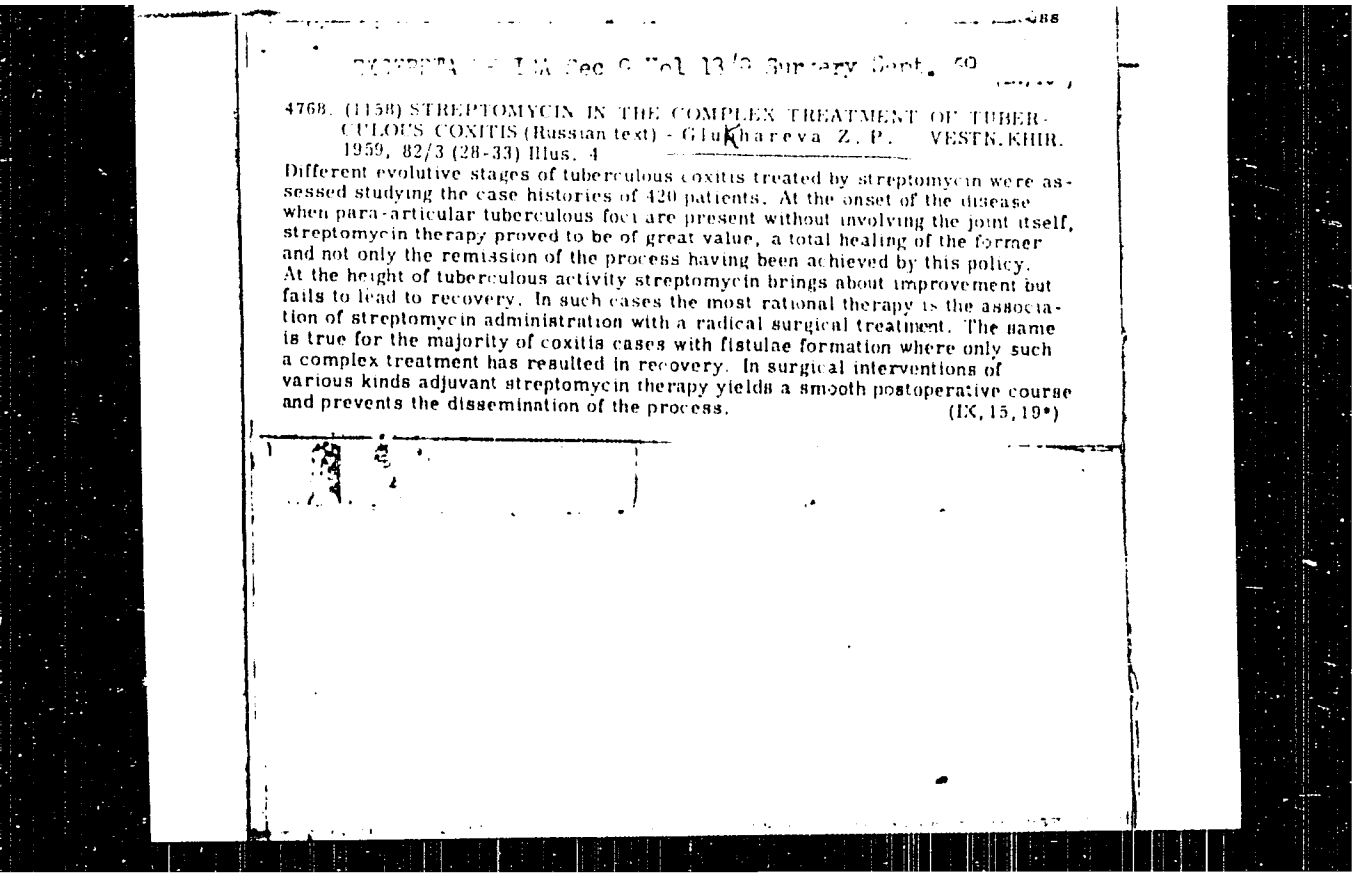

[illegible] Sec C Vol 13/3 Surgery Cont. 60

4768. (1158) STREPTOMYCIN IN THE COMPLEX TREATMENT OF TUBERCULOUS COXITIS (Russian text) - Glukhareva Z. P. VESTN. KHIR. 1959, 82/3 (28-33) Illus. 4

Different evolutive stages of tuberculous coxitis treated by streptomycin were assessed studying the case histories of 420 patients. At the onset of the disease when para-articular tuberculous foci are present without involving the joint itself, streptomycin therapy proved to be of great value, a total healing of the former and not only the remission of the process having been achieved by this policy. At the height of tuberculous activity streptomycin brings about improvement but fails to lead to recovery. In such cases the most rational therapy is the association of streptomycin administration with a radical surgical treatment. The same is true for the majority of coxitis cases with fistulae formation where only such a complex treatment has resulted in recovery. In surgical interventions of various kinds adjuvant streptomycin therapy yields a smooth postoperative course and prevents the dissemination of the process. (IX, 15, 19*)

L 23020-66 EWT(m)/EWP(t)/EWP(k) IJP(c) JD/HW

ACC NR: AP6007658 SOURCE CODE: UR/0413/66/000/003/0016/0016

AUTHOR: Polyak, S. M.; Perper, F. A.; Glukhatkina, Ye. A.; Bakulin, V. I.

ORG: none

TITLE: Device for forming without the use of presses. Class 7, No. 178348

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 3, 1966, 16

TOPIC TAGS: die, metal forming

ABSTRACT: An Author Certificate has been issued for a device for forming without the use of presses; it consists of a concrete female die, which is enclosed in a metal housing duct for evacuating air from the working cavity, and drawing and holddown rings. In order to increase the durability of female dies for multiple dynamic loading, the upper base of the die and the drawing ring have an intermediate layer of rubber with 1-mm holes situated to fit the air ducts in the die; on evacuation the rubber adheres tightly to the female die (see Fig. 1). Orig. art. has: 1 figure. [LD]

Card 1/2 UDC: 621.7.044.2

L 23020-66
ACC NR: AP6007658

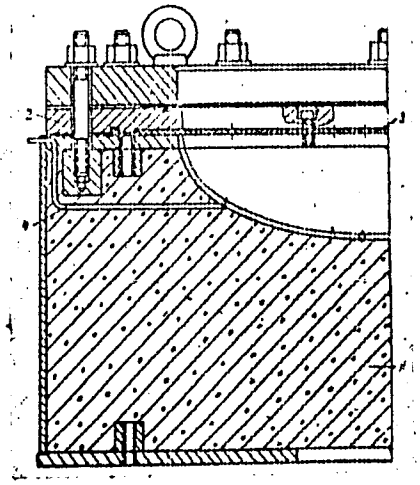

Fig. 1. Device for forming without a press. 1 - female die; 2 - drawing ring; 3 - rubber layer; 4 - ducts

SUB CODE: 11, 13/ SUBM DATE: 26Mar64/

Card 2/2 pla

GLUKHEN'KIY, B. T.

GLUKHEN'KIY, B. T. --"Clinical Significance of Protein Precipitation Test in the Treatment of Syphilis Patients." (Dissertations for Degrees in Science and Engineering Defended at USSR, Higher Educational Institutions). L'vov State Med Inst, L'vov, 1955

SO: Knizhnaya Letopis' No. 34, 20 August 1955

* For the Degree of Doctor of Medical Sciences

POBEGAYLO, V.M., mladshiy nauchnyy sotrudnik; GLUKHEN'KIY, B.T., mladshiy nauchnyy sotrudnik; VISHNEVKIN, M.S., ordinator

Treatment of gonorrheal urethritis with levomycetin. Vest. ven. i derm. no.3:58 My-Je '56. (MLRA 9:9)

1. Iz L'vovskogo kozhno-venerologicheskogo instituta.
(GONORRHEA) (CHLOROMYCETIN)

POBEGAYLO, V.M., mladshiy nauchnyy sotrudnik; GLUKHEN'KIY, V.T., maldshiy nauchnyy sotrudnik; KUNTS, S.A., ordinator

Chloromycetin emulsion for treating streptoderma. Vest.ven. i derm. 30 no.4:52 Jl-Ag '56. (MLRA 9:10)

1. Iz L'vovskogo kozhno-venerologicheskogo instituta.
(CHLOROMYCETIN) (SKIN--DISEASES)

GLUKHEN'KIY, T.T., dots., GLUKHEN'KIY, B.T., MAKOTRENKO, A.K.

Measures for reducing pustular and occupational diseases of the skin.
Vrach.delo no.7:725 (MIRA 11:9)

1. Nesterovskiy rayonnyy kozhno-venerologicheskiy dispanser (konsul'tant-dots. T.T.Glukhen'kiy) L'vovskoy oblasti.
(SKIN--DISEASES)