"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.M. Kandidat tekhnicheskikh nauk.

Developing the technology of power capacitor construction. Vest. elektroprom. 28 no.1:49-56 Ja '57. (MIRA 10:4)

1. Kondensatornyy zavod Ministerstvo elektrotekhnicheskoy promyshlennosti.

(Condensers (Electricity))

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

Morozov, M.M.

94-1-1/24

AUTHOR: Morozov, M.M., Candidate of Technical Sciences.

TITLE: Capacitors for Series and Series-parallel Connection (Kondensatory dlya skhem posledovatel'nogo i parallel'no-posledovatel'nogo soyedineniya)

PERIODICAL: Promyshlennaya Energetika, 1958, No.1. pp. 1 - 4 (USSR)

ABSTRACT: Individual capacitors can be built for voltages of up to only 1 kV; therefore, for operating voltages of 3, 6 and 10 kV, it is necessary to use series-parallel banks. Capacitor installations are most easily protected when the capacitors contain only paralleled units with internal fuses. It is thus of considerable interest to use for power-factor improvement high-voltage capacitors, type КПМ 0.6-50-1, as developed for the series compensation of the 400 kV Kuybyshev-Moscow transmission line. In the notation used for this and other capacitors in the article, the first figure, 0.6 kV, refers to the operating voltage of the capacitor, the second, 50 kVAR to the capacitance and the last to the number of phases. The capacitors, as exemplified in Fig.1, are hermetically sealed and the oil in them is at a pressure slightly above atmospheric at the lowest permissible ambient temperature. Expansion is taken up by the elasticity of the case. The capacitor is designed for

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long-term operation at ambient air temperatures from - 40 to + 35 °C. The dielectric thickness is 30 μ; dimensions and weights are given. With these units, the minimum capacitance of high-voltage installations is rather large and can be increased only in quite large steps. Thus, with an operating voltage of 10.5 kV, the least capacitance is 1 500 KvAR. The use of this type of capacitor offers great advantages; they can be installed outdoors, no external fuses are required and the operating temperature range is wide.

The capacitor works has recently developed a new range of capacitors, illustrated in Fig.2. Separate versions will be produced for indoor and outdoor installations, hermetically sealed and with metallised porcelain insulators. Technical data relating to these capacitors are tabulated. They are known as type KMA, and, unlike capacitors type KПМ, the class of insulation corresponds to the rated voltage. Therefore, in a high-voltage installation, they must be insulated from earth. The unit sizes are much smaller than those of type KПМ; the first size gives up to 12 kVAR in a bank and the second 22 kVAR.

The protection of capacitor banks against short-circuit

 currents is usually based on using the voltage of asymmetry

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Capacitors for Series and Series-parallel Connection 94-1-1/24

between the neutral point and earth resulting from disturbances of normal operation. A possible protective circuit when the bank is divided into two symmetrical parts is given in Fig.3. There are advantages in building up outdoor power-factor correction installations from units, type KПМ 0.6-50-1. Although the capacitors themselves are somewhat more expensive, as will be seen from Table 2, no assembly work is required and they are very reliable as compared with ordinary capacitors. Similar advantages apply to capacitors type KMA.
There are 3 figures, 2 tables and 4 Slavic references.

ASSOCIATION: Capacitor Works (Kondensatornyy zavod)

AVAILABLE: Library of Congress

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

SOV/110-59-6-1/24

AUTHOR: Morozov, M.M., Candidate of Technical Sciences

TITLE: The Production of Power Capacitors and Tasks for 1959-1965 (Proizvodstvo silovykh kondensatorov i zadachi na 1959-1965 gg)

PERIODICAL: Vestnik elektropromyshlennosti, 1959, Nr 6, pp 1-7 (USSR)

ABSTRACT: Until quite recently the main application of capacitors was for power-factor correction but now there are all sorts of new uses for them. For example, in 1958 compensation by means of series capacitors compensation was applied to the 400-kV Kuibyshev-Moscow transmission line. The capacitor installation was rated at 500000 kVA and it is the largest in the world. The capacitors were type KPM 0.6-50-1 of 50 kVAR, an example of which is shown in Fig 1. The work on controlled thermo-nuclear reactions that gained a Lenin Premium in 1958 made use of the recently-developed power impulse capacitors of various types, examples of which are shown in Fig 2 and 3. It no longer suffices to classify capacitors as being intended for a.c. or d.c. and it is proposed to classify them as follows:

1) industrial power-factor correction type KM;

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SOV/110-59-6-1/24

The Production of Power Capacitors and Tasks for 1959-1965

2) electric furnace capacitors type EMB for frequencies up to 10 kc/s;
3) power-frequency series-compensation capacitors type KPM;
4) impulse capacitors type IM;
5) electric traction filter capacitors type FMT;
6) damping and equalising capacitors types VM and VMF;
7) communications and high-frequency protection capacitors and also capacitors for tapping power from high-voltage transmission lines, types SMR and OMR.

Power-factor-correction capacitors are the most widely used type and by 1965 about 30 million kVAR of them will be required together with many other types of power capacitors. The main efforts of capacitor manufacturers should be directed to considerably increasing the output without capital expenditure on new construction. This can be achieved by improving capacitor design and cutting production time. Paper will remain the most important material in capacitor construction and strenuous efforts should be made to improve it. Mineral oil will also

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continue to be widely used as an impregnant and its properties should be improved. In 1958, the chemical industry commenced to deliver Sovol, a chlorinated diphenyl. The usual advantages and disadvantages of this dielectric are discussed. In 1958, improvements in manufacture led to the introduction of low-voltage power-factor-correction capacitors with dielectric of reduced thickness. Their physical size has been reduced to 1.5 dm^3/kVAR as against the former value of 2.44 dm^3/kVAR. A great deal can be done to reduce capacitor drying and impregnation times. The output of two Soviet power-capacitor factories exceeds the combined capacitor output of West Germany, France, England, Sweden, Switzerland and Italy. With production on such a scale, mechanisation and automation become most important. The following improvements in production methods were introduced in 1958: capacitors were dried by infra-red on a conveyor after painting; large capacitor containers were made by deep-drawing; high-frequency methods were introduced to solder the insulators to the containers and welding procedures were developed for

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sealing the containers. As a result of the various improvements a new series of power-factor-correction capacitors has been developed; their main technical characteristics and dimensions are given in Table 1 and a photograph in Fig 4. For comparison Table 2 presents comparable data for capacitors manufactured by leading foreign firms. Data about certain impulse capacitors are given in Table 3. It will be noticed that Soviet power-factor-correction capacitors had the best characteristics of oil/paper capacitors. It will be seen from Table 3 that the characteristics of capacitor type IM 100-0.1 are considerably better than those of IM 100-0.02. This is because they have a rectangular container of vinylplast instead of a cylindrical bakelite container, whereby better use can be made of the space and there is no need for metal lids. Capacitor type INS-6-200, also mentioned in the Table, is impregnated with Sovol containing alphanitronaphthalene, which increases the permittivity to a value greater than 7. It also uses the very high working stress of 80 kV/mm.

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SOV/110-59-6-1/24

The Production of Power Capacitors and Tasks for 1959-1965

Problems requiring solution include: the production of paper capacitors with reduced dielectric loss; the supply of non-polar and polar dielectric films in rolls; the development of various new types of Sovol; the organisation of production of metallised porcelain and glass insulators with terminal inserts; the use of large rectangular plastic casings for capacitors-and other general problems. There are 4 figures, 3 tables and 1 Soviet reference.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

AID P - 3005

Subject : USSR/Electricity

Card 1/1 Pub. 29 - 20/28

Author : Morozov, M. N., Eng.

Title : Small size photostating apparatus

Periodical : Energetik, 6, 30-31, Je 1955

Abstract : The author describes a small scale blueprinting and photostating apparatus, weighing 20 kg and using 150 w. Two diagrams.

Institution : None

Submitted : No date

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M. N.

FA 48/49T78

USSR/Mining
Coal

Apr 49

"Sinking Cassions by Drilling," M. N. Morozov, 5 pp

"Ugol'" No 4

Use of drilling in building of caissons is a relatively new technique in Soviet mining technology. Method has proved particularly effective in regions where the geologic formation is varied and contains strata of shifting sands and gravel. Describes reamers used to widen shaft to a diameter of 6.3 meters. Photograph shows a 3-meter-radius reamer. Briefly [redacted]

48/49T78

USSR/Mining (Contd)

Apr 49

describes operation, from initial drilling to pouring of concrete for the top cager.

[redacted]

48/49T78

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M. M.

Coal Mines and Mining

Strengthening mine shafts sunk under complicated hydrogeological conditions with tubings. Ugol' 27 no. 5 (1952)

9. Monthly List of Russian Accessions, Library of Congress, August 1952, Uncl.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

AID P - 4025

Subject : USSR/Power

Card 1/1 Pub. 26 - 14/31

Author : Morozov, M. N., Eng.

Title : Power trench digger.

Periodical : Elek. sta., 11, 43-44, N 1955

Abstract : The author reports on the power-driven trench-digger that he designed and tested. Data on this machine are given in detail. Two photos.

Institution : None

Submitted : No date

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

Litvin, A.Z., inzh.; MOROZOV, M.N., inzh.; FEDUYKIN, V.A., kand. tekhn. nauk

Reviews and bibliography. Shakth. stroi. 9 no.6:32 Je '65.

(MIRA 18:

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

SHCHUKAREV, S.A.; MOROZOV, M.P.; KAN KHO-YN

The strotium - antimony system and the heats of formation of strontium - antimony compounds. Zhur.ob.khim. 27 no.7:1737-1740 Jl '57. (MIRA 10:10)

1. Leningradskiy gosudarstvennyy universitet.
(Strontium compounds) (Antimony compounds)
(Systems (Chemistry))

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.P.; ATRUSHKEVICH, L.G.; GUTOROV, V.G.; KONDRASHOV, A.M.; MOROZOV, K.S.; NIKITENKO, I.S.; TATARENKO, V.A.; USHAKOV, P.N.; ZHILYAYEV, A.V., otv.red.; VOLKOVA, V.A., red.izd-va; IL'INSKAYA, G.M., tekhn.red.

[Regulations for the construction and safe operation of steam boilers and air tanks in industrial locomotives] Pravila ustroistva i bezopasnoi ekspluatatsii parovykh kotlov i vozdushnykh rezervuarov parovozov promyshlennykh predpriiatii. Obiazatel'ny dlia vsekh ministerstv, vedomstv i sovnarkhozov. Moskva, Ugletekhizdat, 1958. 25 p. (MIRA 12:7)

1. Russia (1917- R.S.F.S.R.) Komitet po nadzoru za bezopasnym vedeniyem rabot v promyshlennosti i gornomu nadzoru.
(Locomotives)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.P., inzh.

Safe operation of units subject to boiler inspection.
Bezop.truda v prom. 4 no.7:1-4 Jl '60.
(MIRA 13:8)

1. Komitet Gosgortekhnadzora RSFSR.
(Boilers--Safety measures)
(Pressure vessels--Safety measures)
(Cranes, derricks, etc.--Safety measures)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.P., inzh.

Preventing accidents involving steam boilers. Bezop.truda v prom. 4 no.12:18-20 D '60. (MIRA 14:1)
(Boilers—Safety measures)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.P.; TOLMACHEVA, L.I.

New wage-scale qualification handbook for enterprises of the alcohol, and liqueur and vodka industry. Spirt. prom. 25 no.7:48 '59. (MIRA 13:2)

(Liquor industry)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.P.

Production of a ferment compound at the Staraya Russa juice extraction plant. Spirt.prom. 26 no.3:41-43 '60. (MIRA 13:10)
(Staraya Russa--Fermentation--Equipment and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.P.; MITROFANOVA, Z.A.

Production costs of ferment preparations. Spirt.prom.27 no.4:28-30 '61. (MIRA 14:6)

(Enzymes)
(Fermentation--Costs)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.V.; KAMENITSER, S.Ye., professor, retsenzent.

[Organization and planning in enterprises of the fishing industry] Organizatsiia i planirovanie predpriiatii rybnoi promyshlennosti. Moskva, Pishchepromizdat, 1953. 283 p. (Fisheries) (MLRA 7:7)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Mikhail Vasil'yevich; KAMENITSER, S.Ye., spetsredaktor; AKIMOVA, L.D., red.; MUSTAFIN, A.M., tekhn.red.

[Organization and planning in enterprises of the fish industry] Organizatsiia i planirovanie predpriiatii rybnoi promyshlennosti. Moskva, Pishchepromizdat, 1957. 422 p. (MIRA 11:5)
(Fisheries)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Mikhail Vasil'yevich; KAMENITSER, S.Ye., doktor ekon.nauk, spetsred.; MOROZOVA, I.I., red.; SOKOLOVA, I.A., tekhn.red.

[Economics, organization, and production planning in the fish industry] Ekonomika, organizatsiia i planirovanie proizvodstva v rybnoi promyshlennosti. Moskva, Pishchepromizdat, 1960. 237 p. (MIRA 14:3)

(Fisheries)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

BILLIK, Abram Markovich; POZIN, Mark Markovich, kand. ekon. nauk; LOVIKOV, Petr Fedorovich; KAMENITSER, S.Ye., prof., doktor ekon. nauk, retsenzent; MOROZOV, M.V., kand. ekon. nauk, retsenzent; MESHKOV, Yu.K., kand. ekon. nauk, red.; MASLOVA, Ye.F., red.; BRODSKIY, M.F., tekhn. red.

[Organization and planning in refrigeration enterprises] Organizatsiia i planirovanie kholodil'nykh predpriiatii. Moskva, Gos. izd-vo torg. lit-ry, 1961. 276 p. (MIRA 14:10)
(Refrigeration and refrigerating machinery)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

ACCESSION NR: AT4031126 S/2648/63/000/010/0194/0196

AUTHOR: Morozov, M. V.; Romanov, N. N.

TITLE: The growth of well-developed cumulus clouds

SOURCE: Tashkent. Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut. Trudy*, no. 10(25), 1963. Voprosy* aviatsionnoy meteorologii (Problems in aviation meteorology), 194-196

TOPIC TAGS: meteorology, aviation meteorology, cloud, cumulus cloud, cloud physics, atmospheric condensation

ABSTRACT: It usually is assumed that the upward development of cumulus and cumulonimbus clouds occurs smoothly and continuously, without significant disruptions, but such a concept is based on ground observations. Discontinuous development at the top of the cloud can be observed when the cloud is viewed horizontally from an aircraft at the height of the cloud top. It can be noted that a light hazy shroud appears at certain times at a small distance above the compact cloud mass. It has the same configuration as the cloud top. The gap between the shroud and the cloud top is some tens of meters to 200-300 meters and this space remains completely clear for 1-2 seconds. The gap then is filled in

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ACCESSION NR: AT4031126

solidly and the shroud becomes denser. A new shroud appears several seconds later and the same process is repeated. The process is shown schematically in Fig. 1 of the Enclosure. During the lifetime of the cloud the process is repeated several tens of times. The phenomenon has been observed independently by different observers, mostly in mountainous country but also over plains. The phenomenon apparently can be attributed to nonuniform vertical condensation of moisture over cloud tops; the described effects apparently are manifested best during strong convection and when there are strong winds above the cloud tops. It is not clear why the condensation occurs at some distance above the cloud top, not immediately at the cloud boundary. It is emphasized that this phenomenon should not be confused with the cloud variety Cumulus congestus pileus. Orig. art. has: 1 figure.

ASSOCIATION: Sredneaziatskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, Tashkent (Central Asian Hydrometeorological Scientific Research Institute)

SUBMITTED: 00 DATE ACQ: 10Apr64 ENCL: 01

SUB CODE: ES NO REF SOV: 001 OTHER: 000

Card 2/3

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

ACCESSION NR: AT4031126

ENCLOSURE: 01

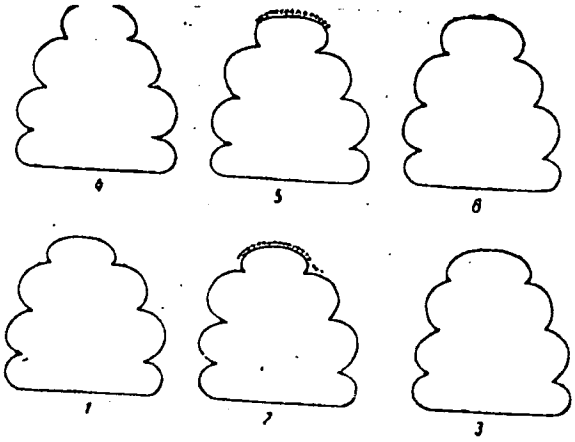

Fig. 1. Discontinuous growth of the upper boundary of a well-developed cumulus cloud. The figures denote successive stages in growth of the upper part of the cloud.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

AFANAS'YEV, I.N.; MOROZOV, M.V.; TETEL'BAUM, A., red.

[Diagnostics and specialization in the maintenance and repair of motor vehicles; from the work practice of automotive transportation units of the Latvian S.S.R.] Diagnostika i spetsializatsiia v tekhnicheskom obsluzhivanii i remonte avtomobilei; iz opyta raboty avtokhozialstv Latviiskoi SSR. Riga, Latviiskoe gos. izd-vo, 1964. 118 p. (MIRA 18:4)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Mikhail Vasil'yevich; DOLGKOV, V.Ye., retsenzent; BRONSHTEYN, L.B., retsenzent; KUZ'MINA, V.S., red.

[Organization and planning of production in fishing industry enterprises] Organizatsiia i planirovanie proizvodstva na predpriiatiiakh rybnoi promyshlennosti. 2. izd. perer. i dop. Moskva, Pishchevaia promyshlennost', 1965. 442 p. (MIRA 19:1)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Mikhail Yakovlevich; SOKOLOV, Leonid Ivanovich; TESHCHUK, A.Ye., redaktor; MELEYEV, A.S., redaktor izdatel'stva; TIKHONOVA, Ye.A., tekhnicheskiy redaktor

[Repair of ship equipment] Remont sudovykh ustroistv. Moskva, Izd-vo "Morskoy transport," 1957. 211 p. (MLRA 10:9)
(Ships--Maintenance and repair)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Mikhail Yakovlevich; SOKOLOV, Leonid Ivanovich; REUT, N.I., red.; KHLOPOVA, L.K., tekhn. red.

[Analysis of damage to marine engine crankshafts and methods to correct them] Analiz povrezhdenii kolenchatykh valov sudovykh dvigatelei i metody ikh ispravlenii. Moskva, Izd-vo "Morskoi transport," 1962. 68 p. (MIRA 15:7)
(Marine engines) (Cranks and crankshafts)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MEGRABOV, Grayr Artem'yevich; MOROZOV, Mikhail Yakovlevich; SOKOLOV, Leonid Ivanovich; BALYAKIN, Oleg Konstantinovich; KEPKE, L.M., red.; FEDOROV, V.P., red. izd-va; LAVRENOVA, N.B., tekhn. red.

[Technology of ship repairs] Tekhnologiia sudoremonta. Moskva, Izd-vo"Morskoi transport," 1962. 440 p. (MIRA 15:5)
(Ships--Maintenance and repairs)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.Ye. ; TKACHENKO, G.K.

Indications for surgery in pulmonary tuberculosis. Trudy Inst. klin. i eksp. khir. AN Kazakh. SSR 4:84-86 '58. (MIRA 12:4)
(TUBERCULOSIS) (LUNGS--SURGERY)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.Ye.; AKINYAN, M.M.

Treatment of pulmonary tuberculosis with artificial pneumothorax and pneumoperitoneum in combination with antibacterial preparations. Zdrav. Kazakh. 22 no.9:21-25 '62. (MIRA 17:2)

1. Iz kafedry tuberkuleza (zav. - prof. V.I. Zyuzin) Kazakhskogo meditsinskogo instituta.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M Ye.

ANTONOV, I.A., kand.tekhn.nauk; ANTOSHIN, Ye.V., inzh.; ASINOVSKAYA, G.A., inzh.; VASIL'YEV, K.V., kand.tekhn.nauk; GUZOV, S.G., inzh.; DEYKUN, V.K., inzh.; ZAYTSEVA, V.P., inzh.; KAZHEKOV, P.P., inzh.; KARAN, Yu.B., inzh.; KOLTUNOV, P.S., kand.tekhn.nauk; KOROVIN, A.I., inzh.; KRZHECHKOVSKIY, A.K., inzh.; KUZNETSOVA, Ye.I., inzh.; MATVEYEV, N.N., tekhnik; MOROZOV, M.Ye., inzh.; NEKRASOV, Yu.I., inzh.; NECHAYEV, V.D., kand.tekhn.nauk; NINBURG, A.K., kand.tekhn.nauk; SPEKTOR, O.Sh., inzh.; STRIZHEVSKIY, I.I., kand.khim.nauk; TESMENITSKIY, D.I., inzh.; KHROMOVA, TS.S., inzh.; TSEUNEL', A.K., Inzh.; SHASHKOV, A.N., kand. tekhn.nauk, dots.; SHEIEKHNIK, M.M., inzh.; SHUKHMAN, D.Ya., inzh.; EDEL'SON, A.M., inzh.; VOLODIN, V.A., red.; UVAROVA, A.F., tekhn.red.

[Machines and apparatuses designed by the All-Union Institute of Autogenous Working of Metals] Mashiny i apparty konstruktsii VNIIAvtogen. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroitel'noi lit-ry, 1957. 173 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'skii institut avtogennoi obrabotki metallov, no.9)
(Gas welding and cutting--Equipment and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M. Ye., inzh.

Mechanism of the effect of compressed air on metal atomization in a gas metallizing apparatus. Trudy VNIIAvtogen no.6:102-109 '60. (MIRA 13:8)

(Metal spraying)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.Ye., inzh.

Investigating and developing methods of calculating sprayer heads for gas metallizing equipment. Trudy VNIIAvtogen no.7:187-206 '60. (MIRA 13:7)
(Metal spraying--Equipment and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M. YE., CAND TECH SCI, "DEVELOPMENT OF WAYS FOR INCREASING THE PRODUCTIVITY ~~CAPACITY~~ OF THE PROCESS OF PULVERIZATION OF METALS IN A GAS FLAME." MOSCOW, 1961. (INST OF METALLURGY IMENI A. A. BAYKOV). (KL-DV, 11-61, 221).

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

S/193/63/000/003/003/003
A004/A101

AUTHORS: Morozov, M. Ye., Candidate of Technical Sciences, Klyuyeva, K. D.

TITLE: Type МГП-3 (MGP-3) spray gun for the application of high-melting coatings

PERIODICAL: Byulleten' tekhniko-ekonomicheskoy informatsii, no.3, 1963, 24 - 26

TEXT: The Vsesoyuznyy nauchno-issledovatel'skiy institut avtogennoy obrabotki metallov (All-Union Scientific Research Institute of Oxyacetylene Welding and Cutting of Metals) (VNIIAvtogen) has developed the MGP-3 spray gun for the application of high-melting coatings, which is to replace the MGP-1 model. The new MGP-3 spray gun uses for these coatings specially manufactured ceramic rods (aluminum oxide, zirconium dioxide), wires (molybdenum, nichrome) or flexible cored strings produced from a mixture of fine-grained material to be sprayed on (~ 75%) and a thermoplastic binder (~ 25%). The spray guns operates on an oxyacetylene gas mixture which makes it possible to apply coatings of materials having a melting point of up to 2,800°C. The following technical data are given: capacity, g/hour: coatings of Al-oxide - 200-250, zirconium dioxide - 150-170,

Card 1/2

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S/193/63/000/003/003/003
A004/A101

Type МГП -3 (МГР-3) spray gun for the...

molybdenum - approx. 1,400; rotation speed of the pneumatic rotation motor - up to 12,000 rpm; feed rate mm/min - from 90 to 850; diameter of blanks of material to be sprayed on: rods - 3±0.1, flexible strings - 3±0.1, wires - 3; operating gas pressure, kg/cm^2: acetylene - 1.0-1.1, oxygen - 3-4, air - 3-4; gas consumption, l/hour: acetylene - 1,800-2,300, oxygen - 1,100-1,250; air consumption, m^3/min - 0.5-0.6; total weight of spray gun (without hoses), kg - 1.8. There is 1 figure.

Card 2/2

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

VASIL'YEV, K.V., kand. tekhn. nauk; MOROZOV, M.Ye., kand. tekhn. nauk; SEGALOVA, O.I., inzh.

Heat exchange in water-cooled nozzles. Trudy VNIIAvtogen no.11:110-116 '64. (MIRA 18:3)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, M.Ye., kand. tekhn. nauk, PEREVYAT'KO, I.I., inzh., [illegible], inzh.

Maximum limit of the increase in the output of electrometallization equipment. Trudy VNIIAvtogen no.11:117-130 '64. (MIRA 18:2)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N. A.

Morozof, N. A. - "Development of plant housing construction in theUSSR," Trudy Lesotekhn. akad. im. Kirova, No 65, 1949, p. 25-32

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal 'nykh Statey, No. 25, 1949).

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kandidat tekhnicheskikh nauk.

Automatic production lines for woodworking. Der.i lesokhim.prom. 2 no.11: 3-5 N '53. (MLRA 6:11)
(Woodworking machinery)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A.

[Over-all automation in woodworking] Kompleksnaia avtomatizatsiia tekhnologicheskikh protsessov v derevoobrabotke. Moskva, Goslesbumizdat, 1954. 103 p. (MLRA 8:3)
(Woodworking machinery)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., dotsent, kandidat tekhnicheskikh nauk; OSADCHIYEV, V.G., kandidat tekhnicheskikh nauk, retsenzent; BASKAKOV, Ye.D., inzhener, retsenzent.

[Special products of the wood working industries] Spetsial'nye derevoobrabatyvaiushchie proizvodstva. Moskva, Goslesbumizdat, 1954. 356 p. [Microfilm] (MLRA 7:8)
(Woodworking industries)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A.

MOROZOV, N.A., kandidat tekhnicheskikh nauk; KALITEYEVSKIY, R.Ye., inzhener; KORSHUNOV, A.N., inzhener.

Automatic machine for sharpening wood cutters. Der.i lesokhim.prom. 3 no.3:8-10 Mr '54. (MLRA 7:3)

1. Leningradskaya ordena Lenina lesotekhnicheskaya akademiya im. S.M.Kirova. (Woodworking machinery)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kandidat tekhnicheskikh nauk.

Turret lathe for working wooden parts. Der. i lesokhim.prom.3 no.11:8-9 N '54. (MLRA 7:12)

1. NIIDREVMASh.
(Lathes)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kandidat tekhnicheskikh nauk.

Ways of developing the automatization of technological processes in woodworking. Der.prom. 4 no.10:15-17 O '55. (MLRA 9:1)

1.Nauchno-issledovatel'skiy institut derevoobrabatyvayushchego mashinostroyeniya.
(Woodworking machinery) (Automatic control)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

AID P - 4844

Subject : USSR/Engineering

Card 1/1 Pub. 103 - 4/26

Author : Morozov, N. A.

Title : Automation of woodworking processes

Periodical : Stan. i instr., 2, 14-16, F 1956

Abstract : With a few generalizations on automation in various industries, the author describes briefly two automatic installations in the woodworking industry: one for making parquetry, designed and put into operation by the Ukrainian Scientific Research Institute for Mechanical Processing of Wood, and the other, which is semi-automatic, for ski manufacturing, designed by the Scientific Research Institute for the Design of Woodworking Machinery (NIIDrevmash). Three photos.

Institution : As above

Submitted : No date

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Nikolay Aleksandrovich; BLINDER, Ye.N., red.; TSIRUL'NITSKIY, N.P., tekhn. red.

[Automatization of control operations in woodworking] Avtomatizatsiia kontrol'nykh operatsii v derevoobrabotke. Moskva, Vses. koop. izd-vo, 1957. (MIRA 11:1)

(Woodwork) (Automatic control)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand.tekhn.nauk

The automatization of the sawing and processing of lumber. Mekh. trud.rab. 11 no.7:28-32 Jl '57. (MIRA 10:11)
(Sawmills) (Automatic control)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Nikolay Aleksandrovich,; BAMM, A.I., inzh., retsenzent,; KALITEYEVSKIY, R.Ye., kand. tekhn. nauk, red.; MONASTYRSKAYA, A.M., red. izd-va,; GERASIMOVA, Ye.S., tekhn. red.; SOKOLOVA, T.F., tekhn. red.

[Automatic control of woodworking processes] Avtomatizatsiia derevoobrabotki. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1958. 242 p. (MIRA 11:12)

(Woodwork)
(Automatic control)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N. A.

118-58-5-2/18

AUTHOR: Morozov, N.A., Candidate of Technical Sciences

TITLE: Automation in the Drying Shops of Woodworking Enterprises (Avtomatizatsiya v sushil'nykh tsekhakh derevoobrabatyvayushchikh predpriyatiy)

PERIODICAL: Mekhanizatsiya Trudoyëmkikh i Tyazhëlykh Rabot 1,58, Nr 5 pp 6-9 (USSR)

ABSTRACT: The trans-loading and delivery of boards to the drying room and the control of the drying process is a labor consuming work in the woodworking enterprises. This work can be mechanized and automated. The author describes and illustrates how a US firm has organized this work by a conveyer system in an exemplary manner. The Nauchno-issledovatel'skiy institut derevoobrabatyvayushchego mashinostroyeniya (NIIDrevmash) (Scientific-Research Institute of the Woodworking Machine Construction) has designed mechanisms which can be used for the same purpose. A detailed description of such a device is given by the author. NIIDrevmash has also developed an automated device to handle the dried timber.

Card 1/2

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11[illegible]/18

Automation in the Drying Shops of Woodworking Enterprises

The automatic rejection of too-moist timber is based on an indicator which uses a directed flux of electromagnetic waves of centimeter-range. The operation of the indicator is based on the absorbing of the waves by the material. There are 6 drawings.

AVAILABLE: Library of Congress

Card 2/2 1. Wood-Drying 2. Wood-Processing 3. Electromagnetic waves-Applications

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand.tekhn.nauk; ZALKIND, I.S., inzh. LIFSHITS, N.M.

For progressive technology in lumber sawing. Gor.khoz.Mosk. 32 no.12:26-30 D '58. (MIRA 11:12)

1. Nachal'nik lesnogo otdela Upravleniya material'no-tekhnicheskogo snabzheniya Glavmosstroya (for Lifshits).
(Moscow--Sawmills)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N., kand.tekhn.nauk, dots.

Minor automation in woodworking. Prom.koop. 13 no.3:8-9 Mr '59. (MIRA 12:4)

1. Vysshaya shkola promkooperatsii.
(Woodworking industries)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.

Mechanical installation for waste transportation. Pozh.delo 6 no.1:8 Ja '60. (MIRA 13:5)

1. Pomoshchnik instruktor po profilaktike, Yaroslavskaya oblast'.
(Wood-using industries--Fires and fire prevention)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

KOBLIKOVA, A.G., kand.tekhn.nauk; MOROZOV, N.A., kand.tekhn.nauk; MATSKEVICH, T.S., inzh.

Box panel components made from wood particles. Der.prom. 9 no.10:7-8 O '60. (MIRA 13:10)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.
(Wood, Compressed)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Nikolay Aleksandrovich; GOLUBEVA, T.M., inzh., red.; FREGER, D.P., red. izd-va; GVIRTS, V.L., tekhn. red.

[New methods of log cutoff sawing] Novye metody raskroia pilovochnykh breven. Leningrad, 1961. 14 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Ser. Derevoobrabatyvaiushchaia promyshlennost', no.8) (MIRA 14:12)
(Sawmills)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand.tekhn.nauk

Need for the reorganization of the PLB semiautomatic production line. Der.prom. 10 no.2:3-4 F '61. (MIRA 14:3)
(Assembly-line methods) (Woodworking machinery)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand.tekhn.nauk

Works of the Central Scientific Research Institute of Plywood and Furniture in the field of furniture manufacture. Der.prom. 10 no.5: 7-8 My '61. (MIRA 14:5)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli. (Furniture industry)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

ARSEN'YEV, K.K., kand.tekhn.nauk; MOROZOV, N.A., kand.tekhn.nauk

Experimental manufacture of pressed chair frames. Der. prom. 10 no.8:19-21 Ag '61. (MIRA 14:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli.

(Chairs)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

ARSEN'YEV, K.K., kand.tekhn.nauk; MOROZOV, N.A.

Automatic four-plunger press for gluing parts of glued-bent furniture. Mekh.i avtom.proizv. 15 no.8:20-24 Ag '61. (MIRA 14:9)
(Furniture) (Power presses)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand. tekhn. nauk; ARSEN'YEV, K.K., kand. tekhn.nauk; POPOV, N.V., red.; SHENDAREVA, L.V., tekhn. red.; MILIKESOVA, I.F., tekhn. red.

[Manufacture of bent and glued blocks for furniture parts] Izgotovlenie gnutokleenykh blokov dlia detalei mebeli. Moskva, TSentr. in-t tekhn. informatsii i ekon. issl. po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1962. 34 p. (MIRA 16:4)

(Woodwork)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand.tekhn.nauk; USHERENKO, Z.I., inzh.; CHAYKOVSKIY, I.Ye., inzh.

Semiautomatic line for machining bent and glued parts in the manufacture of furniture. Mekh.i avtom.proizv. 16 no.8:10-14 Ag '62. (MIRA 15:9)

(Furniture industry)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand. tekhn. nauk; VOSKRESENSKIY, V.Ye., inzh.

Over-all mechanization of lay-out lines in woodworking.
Mekh. i avtom proizv. 18 no.4:24-27 Ap'64. (MIRA 1[illegible]:5)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

VLASOVA, K.N.; MOROZOV, N.A.; DOBROKHOTOVA, M.K.; NOSOVA, L.A.; IVANOVA, G.P.

Finely dispersed polyamides and antifriction coatings made from same. Plast.massy no.1:14-16 '64. (MIRA 17:6)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Nikolay Aleksandrovich, dots., kand. [illegible],
MOROZOV, Aleksandr Nikolayevich, inzh.; SABEV, V.I., red.

[Automation of loading and unloading operations for wood-working machines and machine lines] Avtomatizatsiia zagruzochno-razgruzochnykh operatsii na derevoobrabatyvaiushchikh stankakh i stanochnykh liniiakh. Moskva, Lesnaia promyshlennost', 1965. 120 p. (MIRA 18:2)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Nikolay Aleksandrovich, dots., kand. tekhn. nauk; KHABAROV, L.N., retsenzent; OSADCHIYEV, V.G., kand. tekhn. nauk, retsenzent; MEDVEDEVA, Ye.T., red.

[Technology of wood processing] Tekhnologiia obrabotki drevesiny. Moskva, Lesnaia promyshlennost', 1965. 333 p. (MIRA 18:4)

1. Trubchevskiy lesotekhnicheskiy tekhnikum (for Khabarov).
2. Moskovskiy lesotekhnicheskiy institut (for Osadchiyev).

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand. tekhn. nauk; VOSKRESENSKIY, V.Ye., inzh.; SHUSTAREV, Yu.N., inzh.

Formation of packets by means of flexible strings. Mekh. i avtom. proizv. 19 no.4:27-29 Ap '65.

(MIRA 18:6)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Nikolay Aleksandrovich, kand. tekhn. nauk; KRYUCHKOV, A.M., red.

[Automation of the conveying operations between machines in woodworking enterprises] Avtomatizatsiia mezhstanochnogo transporta na derevoobrabatyvaiushchikh predpriiatiiakh. Leningrad, 1965. 36 p. (MIRA 18:7)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, Nikolay Aleksandrovich, kand. tekhn. nauk; SHCHEDRO, David Abramovich, inzh.; MEDVEDEVA, Ye.T., red.

[Manufacture of one-piece compressed furniture with simultaneous finishing] Izgotovlenie tsel'nopressovannoi mebeli s odnovremennoi otdelkoi. Moskva, Lesnaia promyshlennost', 1965. 158 p. (MIRA 18:8)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A., kand. tekhn. nauk; USHTRENKO, Z.I., inzh.; CHAYKOVSKIY, I.Ye., inzh.

New machines for manufacturing bent and glued furniture parts. Mekh. i avtom. proizv. 18 no.1:18-23 Ja '64. (MIRA 17:2)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

[illegible], K.K., [illegible]

[illegible]

[illegible] mebel'nykh detalei [illegible] Tsentr. nauchno-issl. [illegible] Tsentral'nyi [illegible] mebeli.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N.A.; RUBERT, V.P.

Use of vat residues in the production of lubricant grease. Neftepper. i neftekhim. no.4:22-24 '63 (MIRA 17:7)

1. Rizhskiy neftemaslozavod.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

IVANOV, I.V.; MOROZOV, N.A.

Nonlinear properties of ferroceramics in strong ultrahigh frequency fields. Fiz. tver. tela 7 no. 12:3627-3630 D '65 (MIRA 19:1)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

KITAYEV, B.I., professor, doktor tekhnicheskikh nauk; KOKAREV, N.I., dotsent, kandidat tekhnicheskikh nauk; ZAOSTROVSKIY, F.P., dotsent, kandidat tekhnicheskikh nauk; ZAMOTAYEV, S.P., inzhener; CHIKIL'DIN, A.A., inzhener; MOROZOV, N.A., inzhener; LEVIN, L.I., inzhener.

Prolonging the life and improving the performance of Martin furnace regenerators. Trudy Ural.politekh.inst. no.53:42-55 '55. (MIRA 9:5)

(Open-hearth furnaces)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

ISAYEV, Aleksey Il'ich, doktor tekhn. nauk; MOROZOV, Nikolay Aleksandrovich, inzh.; MEDVEDEVA, Ye.T., kand. tekhn. nauk, ved. red.; TOLMACHEV, V.B., inzh., red.; PONOMAREV, V.A., tekhn. red.

[Effect of methods and conditions of metal finishing on the operational properties of gas-turbine blade alloys]Vliianie metoda i rezhima chistovoi obrabotki na ekspluatatsionnye kachestva gazoturbinnykh lopatochnykh splavov. Moskva, Filial Vses. in-ta nauchn. i tekhn. informatsii, 1958. 20 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 10. No.M-58-127/21) (MIRA 16:3)

(Heat-resistant alloys--Testing)
(Metals--Finishing) (Gas turbines--Blades)

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

8(6) SOV/143-59-11-17/19

AUTHOR: Morozov, N.A., Engineer

TITLE: On the Criterion of the Nonuniformity Degree of Temperature Distribution

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika, 1959, Nr 11, pp 127-132 (USSR)

ABSTRACT: This is a summary of calculations by which the author tries to find new methods for obtaining a criterion of the nonuniformity degree of temperature distribution not only during the stage of regular process, but also during the entire period of the process. In the latter case, the calculations will yield mean-integral values of the criterion. G.M. Kondrat'yev [Ref 1] is mentioned as having established somewhat different values for the criterion. There

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SOV/143-59-11-17/19

On the Criterion of the Nonuniformity Degree of Temperature Distribution

are 2 graphs and 2 Soviet references.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya (Central Scientific Research Institute of Technology and Machine Building)

SUBMITTED: July 6, 1959

Card 2/2

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PHASE I BOOK EXPLOITATION SOV/4804

Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya

Nekotoryye voprosy tekhnologii tyazhelogo mashinostroyeniya, chast' 2: Obrabotka metallov rezaniyem i kontrol' kachestva detaley (Some Problems in the Manufacturing Processes of Heavy Machinery, Pt. 2: Metal Cutting and Quality Control of Parts) Moscow, Mashgiz, 1960. 173 p. (Series: Its: [Trudy] kn. 99) 2,500 copies printed.

Sponsoring Agencies: Gosudarstvennyy komitet Soveta Ministrov SSSR po avtomatizatsii i mashinostroyeniyu; Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya.

Ed.: Ye.P. Unksov, Doctor of Technical Sciences, Professor; Managing Ed. for Literature on Heavy Machine Building: S.Ya. Golovin, Engineer; Ed. of Publishing House: G.N. Sobolova; Tech. Ed.: Z.I. Chernova.

PURPOSE: This book is intended for technical personnel in heavy-machinery plants and for scientific workers in factory laboratories and research institutes.

Card 1/4

COVERAGE: The book contains a summary of work conducted by the personnel of TsNIITMASh in the field of mechanical machining and quality control of parts. Included is a discussion on the correct combination of depth, feed, and speed in cutting with maximum capacity of the machine tool. Also considered are the development of machining methods in rough and semifinishing production, and the application of ultrasonic devices for flaw detection and measurement of wall thickness. No personalities are mentioned. References follow some of the chapters.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

AUTHORS: Isayev, A [illegible]
M. A., Engineer

TITLE [illegible]

PERIODICAL [illegible]

TEXT: [illegible]
of working [illegible]
turbine plant [illegible]
experiments with [illegible]
blades of [illegible]
of 700-[illegible]
finish of the [illegible]
practically [illegible]
were prepared [illegible]
temple's [illegible]
grinding [illegible]

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Investigation of [illegible]

low workhardening [illegible]
machining was stated [illegible]
surface layers was [illegible]
МИМ-3 (MIM-3) [illegible]
the plastic [illegible]
deformation [illegible]
grains at the surface [illegible]
in one direction [illegible]
Polishing [illegible]
the very surface [illegible]
tested for [illegible] ЖМ [illegible]
permitting [illegible]
bending with [illegible]
of turbine gas [illegible]
finish class 6 (∇6) had the high [illegible]
machining method [illegible]
Mechanical strength was [illegible]
ЭГТУ-85[illegible] [illegible]
turbine, with work temperature [illegible]

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

S/122/60/000/001/012/018
A161/A130

Investigation of the surface finish ...

actual gas turbine service: the blade temperature in critical section 750°, rotor velocity 7,000 rpm, gas flow speed over the blades work portion 250-300 m/sec. Strength of blades with turned and milled class 6 finish was not below the strength of blades with ground and polished class 8 and 9 surface. The changing surface finish was watched during strength tests, with a ПЧ-2 (PCh-2) profilometer, i.e., tests were interrupted for measurements. Generally, the surface smoothness deteriorated fastest from the highest finish. The conclusion was made that machining of blade work surface to finish class higher than 6th has no sense. There are 7 figures and 3 tables.

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

67816

~~24(8)~~ 24.5200

SOV/143-60-1-16/21

AUTHOR: Morozov, N.A., Engineer

TITLE: The Use of a Non-Uniformity Coefficient of Temperature Distribution for an Approximate Solution to Cooling and Heating Problems

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy: Energetika, 1960, Nr 1, pp 116 - 121 (USSR)

ABSTRACT The article describes three groups of procedures for approximate calculations. The first group includes processes for which two extreme values of the criterion ψ may be found and the correctness of the solution evaluated accordingly. To this group belong countercurrent cooling and cooling of pipes. The second group includes procedures for which the extreme values cannot be found, but which may be verified according to available theoretical solutions, as in solving an asymmetrical problem. The third group of solutions may be obtained by the juxtaposition of the criterion

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67816

The Use of a Non_Uniformity Coefficient of Temperature Distribution for an Approximate Solution to Cooling and Heating Problems

obtained for the stage of regular conditions and the same criterion from the heat-conductivity theory, as shown in example 4. The formula for the time taken by a body to reach a given mean temperature throughout its thickness is derived from Fourier' equations

$$\frac{\partial t}{\partial \tau} + a\left(\frac{\partial^2 t}{\partial x^2} + \frac{\partial^2 t}{\partial y^2} + \frac{\partial^2 t}{\partial z^2}\right) \qquad 1)$$

where t is the temperature; τ - time; a - coefficient of heat conductivity. Reference is made to the work of G.P. Ivantsov [Ref. 7]. Five examples of calculations are given, the last equation being

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SOV/143-58-[illegible]

The Use of a Non-Uniformity Coefficient of Temperature Distribution for an Approximate Solution to Cooling and Heating Problems

$$\psi_{up} = \frac{\psi_1}{\psi_2} \psi_p \qquad (13)$$

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SOV/143-60-1-16/21

The Use of a Non-Uniformity Coefficient of Temperature Distribution for an Approximate Solution to Cooling and Heating Problems

where ψ_{up} is the criterion for the degree of non-uniformity of a complex body in an irregular stage; ψ_p - the same in a regular stage; ψ_1 - the same in an irregular stage of a simple body; ψ_p - the same in a regular stage of a simple body. There is 1 nomogram, 1 diagram and 4 Soviet references.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya (Central Scientific Research Institute for Technology and Machine Construction)

SUBMITTED: July 9, 1959

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

S/114/60/000/012/002/009
E194/E484

26.2122

AUTHORS: Isayev, A.I., Doctor of Technical Sciences, Professor
Morozov, N.A., Engineer

TITLE: Tests on Gas Turbine Blades With Various Classes of Surface Finish

PERIODICAL: Energomashinostroyeniye, 1960, No.12, pp.30-32

TEXT: Blades were tested at TsNIITMASh on an experimental gas turbine type ЭГТУ-850 (EGTU-850) which is an active stage of a gas turbine. The operating conditions of 800 to 850°C are close to actual operating conditions in industrial and transport gas turbines. The turbine rotor is overhung and the disc has 32 slots in which were installed 16 test and 16 ballast blades of which 8 served to measure the metal temperature by means of thermocouples. The shape and size of the blades, made of heat resisting alloy ЭИ-765 (EI-765) are shown in Fig.1. The gas used in the turbine was a mixture of the combustion products of diesel fuel grade ДТ (DT) and air, the gas temperature at the nozzles was 800°C. The blades were tested with a temperature in the dangerous section of 750°C, the rated speed of the rotor

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E194/E484

Tests on Gas Turbine Blades With Various Classes of Surface Finish

was 7000 rpm. The gas flowed over the working surfaces of the blades at a speed of 250 to 300 m/sec. In order to avoid bending stresses, special precautions were taken to install the blades radially. Five groups of blades were tested with different classes of surface finish according to standard ГОСТ 2789-51 (GOST 2789-51) the first group was turned to a surface finish of class 6 the second was milled to a surface finish of class 6 the third was ground to a surface finish of class 6 the fourth was ground to a surface finish of class 8, the fifth group was polished to a surface finish of class 9. Three blades of each group were used plus an extra blade of group 1 The blade temperature and stress conditions were checked automatically and during the tests the deviation of blade temperature did not exceed ± 5°C the speed was maintained constant at 7000 rpm ± 50 rpm Of the 16 blades tested 12 were run to failure that is until cracks occurred. Table 2 gives results of strength tests on the blades from which it will be seen that blade No 7 with class 8 ground finish failed first and blade No 27 with polished class 9 finish

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Tests on Gas Turbine Blades With Various Classes of Surface Finish

failed second. It is concluded that the strength of blades with class 6 finish is not less than that of blades with higher class of finish. Finishing the blades by turning, milling or grinding makes no difference to the strength under the conditions of the test. The cracked blades were submitted to metallographic examination to establish whether the cracks arise on grain boundaries or in the body of grains at places of shear formed by mechanical working. Typical photographs of microstructure are shown in Fig.3 and 4 and it is concluded that in blades operating in a gas turbine at 760°C, cracks leading to failure originate only on the grain boundaries and that cracks develop within the body of the blade only along grain boundaries. Shear that may occur in the surface layers during machining did not lead to crack formation. Previous work by other authors has shown that in service, turbine blades lose their high initial surface finish. In a previous article by the same authors, published in Energomashinostroyeniye, 1969, No.5, it was shown that in tests with gas and ash particles after 40 hours the blade surface

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E194/E484

Tests on Gas Turbine Blades Wi' Various Classes of Surface Finish

becomes of class 6 finish and with clean gas after 140 hours. However, hitherto no special observations have been made of changes in surface finish of actual blades installed in gas turbines. Accordingly, the changes in surface finish were observed in the present tests and the results are given in Table 3. It is found that blades which are initially finished to class 6 maintain their initial finish for 300 hours after which there is a small deterioration in surface finish. In blades ground to class 8 finish the deterioration in surface finish commences from the first few hours of operation and is most intensive after 100 hours operation. In polished blades with class 9 finish in the first few hours of operation there is intensive deterioration of the surface finish. Thus the results obtained in the previous work are fully confirmed. It is concluded that the rate of deterioration of surface finish is greater the higher the initial surface finish. There is no point in improving the surface finish above class 6. Polished blades have lower resistance to erosion than blades finished by turning or milling. Accordingly,

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S/114/60/000/012/002/009
E194/E484

Tests on Gas Turbine Blades With Various Classes of Surface Finish

it should be possible without loss, greatly to simplify the manufacture of turbine blading. There are 4 figures, 3 tables and 4 Soviet references.

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APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N. A., Cand. Tech. Sci. (diss) "Experimental and Theoretical Investigation of Accelerated Cooling of Some Types of Rolled Metal Products," Moscow, 1 61, 17 pp. (Moscow Bauman Higher Tech. School) 200 copies (KL Supp 1[illegible]-61, 271).

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

MOROZOV, N. A.

"Some regularities of Cooling Process Under the Conditions of High Temperatures and Motion of a Vibration Detail."

Report submitted for the Conference on Heat and Mass Transfer, Minsk, BSSR, June 1961.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220009-8

31115
S/590/61/[illegible]
D040/D[illegible]

26.2122

AUTHORS: Isayev, A.I., Doctor of Technical Sciences, Professor and Morozov, N.A., Engineer

TITLE: The effect of machining on the operational properties of gas turbine blades

SOURCE: Moscow. Tsentral'nyy nachno-issledovatel'skiy institut tekhnologii i mashinostroyeniya. [Trudy] v. 102. 1961. Issledovaniye tekhnologicheskikh protsessov v tyazhelom mashinostroyenii, 45-57.

TEXT: Turbine blades of ЭИ 765 (EI765) alloy with different surface finish were tested to reveal the effect of turning, milling, grinding and polishing on different classes of finish. The EI765 alloy is suitable for stationary and transport gas turbines. Tests were conducted on an ЭГТУ 850 (EGTU-850) experimental turbine, with a rotor speed of 7000 rpm, under conditions similar to the service conditions of industrial and transport gas turbines. The temperature in the critical blade section was maintained at 750°C. A [illegible] is shown in a drawing (Fig.1) Details of experimental techniques are given

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