"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.A., kandidat tekhnicheskikh nauk; GOLOVIN, S.Ya., inzhener, zav. redaktsiyey; POPOVA, S.M., tekhnicheskiy redaktor.

Survey of metallurgical equipment. Nauchno-tekhnicheskaia informatsiia no.21: 3-46 '54. (MLRA 7:11)
(Metallurgy--Apparatus and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.A.

USSR/ Engineering-Dynamics

Card : 1/1

Authors : Morozov, B. A., Cand. of Tech. Sciences

Title : About the determination of dynamic strains during a period of inconstant operation of some machines.

Periodical : Vest. Mash. 34/5, 26 - 27, May 1954

Abstract : Formulas are presented and explained in order to provide a better method of determining dynamic loads or strains acting on any mechanism at the moment of starting or braking, since the author finds that the use of the average speed for such calculations is fallacious. Two Russian references, latest 1951. Graphs; drawings.

Institution : ....

Submitted : ....

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B. A., Cand. [illegible] Sciences; [illegible], A.A. (Engr.)

"Errors in Measuring Deformations in Metallurgical Equipment Part [illegible]. Rolling Mills; Studies, Calculation, Design and Operation [illegible]. Moscow, Mashgiz, [illegible]. [illegible]

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B. A., Cand. of Tech. Sciences.

"Use of Photoelastic Method in the Study of Manufacturing Processes in Metal Rolling," Rolling Mills; Studies, Calculation, Design and Operation, [illegible], Moscow, Mashgiz, 1956. [illegible] p.

Articles by Anisifirov, V. M.; Korolev, A.A.; Morozov, B.A.; [illegible], A. A.; and Lavrov, A.A. [illegible] the results of research in the [illegible] of [illegible]-bility and efficiency of metallurgical machinery. There are [illegible] references of which [illegible] are Soviet, [illegible] USA, [illegible] German.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOV/137-57-6-9901

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 83 (USSR)

AUTHOR: Morozov, B.A.

TITLE: The Compensating Properties of Couplings (Kompensiruyushchiye svoystva soyedinitel'nykh muft)

PERIODICAL: V sb.: Prokat. stany. Nr 6. Moscow, Mashgiz, 1956, pp 124-172

ABSTRACT: Bibliographic entry

Card 1/1

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

AID P - 4479

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 6/29

Author : Morozov, B. A., Kand. Tech. Sci.

Title : Stresses in shafts and bearings rising from connecting couplings.

Periodical : Vest. mash., #4, p. 25-30, Ap 1956

Abstract : In heavy machinery shafts are often coupled by toothed couplings. In the toothed coupling, usually not all the teeth fit tightly simultaneously. Therefore only some of them carry the load, which causes special additional stresses in the shaft. The author analyses those additional stresses, presents formulae for their calculation, shows photos of their distribution and makes some suggestions for their reduction.

Institution : None

Submitted : No date

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOV/137-57-6-9891

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 82 (USSR)

AUTHORS: Tokarskiy, A.P., Morozov, B.A.

TITLE: Cutting Blooms on TsKBMM-1000 Shears (Rezanive blumov na nozhnitsakh TsKBMM-1000)

PERIODICAL: V sb.: Prokat. stany. Nr 6. Moscow, Mashgiz, 1956, pp 7-29

ABSTRACT: An investigation is made of the magnitude of the forces (F) arising in the working parts of shears in the cutting of metal. The investigations are run in 1000-t shears of TsKBMM design on which it is possible to cut a section measuring 400x400 mm^2 or 200x900 mm^2. The stroke of the shears is 500 mm, and the number of strokes per minute is from 6 to 20. The shears are driven from 2 model MP-490-500 electric motors of 360 kw each. The following measurements are made in this investigation: The cutting and clamping F, the F of displacement and the speeds of the knives, clamps and shock-absorbers, the stress imposed on the motor armature, the current on the armature and the rpm thereof. The presence of alloying additions in the steel at 1000°C and more has no significant effect on the magnitude of the cutting F. Dulling of the cutting edge

Card 1/2

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOV/137-57-6-9891

Cutting Blooms on TsKBMM-1000 Shears

of the knife and an increase in the clearance between the knives of up to 5% of the thickness of the metal being cut has no significant effect upon the magnitude of the unit cutting F. It is noted that, a) the magnitude of the unit actuating F depends upon the same factors as the magnitude of the unit cutting F; b) the presence of a clamp has no significant effect upon the magnitude of the unit cutting F.

B.Ye.

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

124-58-6-7263

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 6, p 130 (USSR)

AUTHOR: Morozov, B.A.

TITLE: Application of an Optical Polarization Method to the Study of Rolling-mill Production Processes (Primeneniye polyarizatsionno-opticheskogo metoda dlya izucheniya protsessov prokanogo proizvodstva)

PERIODICAL: V sb.: Prokatn. stany. Nr 8, Moscow, Mashgiz, 1956, pp 225-247

ABSTRACT: A description of the construction of a rolling mill is given, wherein the rolling process is investigated by letting polarized light pass through the driving rolls and the rolled material. The rools for three-dimensional analysis were prepared from organic glass with phenolic inserts. Use was made of the optical polarization set-up of the PPU-4 type of LGU design.

Card 1/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

Application of an Optical Polarization Method (Cont.) 124-58-6-7263

Lead anti[illegible] was the material used in the rolled strip, since it affords a sufficiently accurate optical picture with a large number of lines and a sufficient length of the arc [illegible] gagement. During a steady-state rolling operation, the picture [illegible] the lines remains [illegible], therefore isochromatic and is[illegible] [illegible] tures can be taken consecutively for various angles of [illegible] and analyzer orientation without reporting to cinemat gra[illegible]. [illegible] measurement of the transverse deformations in rolls was made with special measuring organic-glass calipers. Experiments [illegible] performed on the cutting of rectangular lead strips [illegible] having parallel phenolic blades; the investigation [illegible] drawing process employed a draw plate made out of [illegible] and having a phenolic insert along its meridian as [illegible]. [illegible] pictures were obtained allowing the stress dist[illegible] estimated in the contact area between the instrument and the material being processed.

G.A. [illegible]yak

Card 2/2 1. Rolling mills--Performance 2. Rolling mills--Test meth[illegible]
3. Rolling mills--Testing equipment 4. Light--Applicati[illegible]

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOV/124-58-8-9300

Translation from Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 133 (USSR)

AUTHORS: Polezhayev, A.A., Morozov, B.A.

TITLE: On Certain Errors in the Measurement of the Deformations Undergone by Various Components of Metallurgical Equipment (O nekotorykh oshibkakh izmereniya deformatsiy detaley metallurgicheskogo oborudovaniy)

PERIODICAL: V sb.: Prokatn. stany. Nr 8. Moscow, Mashgiz 1956, pp 248-254

ABSTRACT: The authors contend that the method of using resistance type strain-gage pickups to measure deformations in order to determine the magnitudes and directions of the principal stresses involves certain errors, and they analyze these errors. They adduce formulae for the principal stresses for rosettes characterized by angles of 45° and 120°. The errors relative to the directions of σ_1 and σ_2 at different σ_1/σ_2 ratios are graphed. It is shown that in the case of σ_1 the greatest error obtains whenever the difference in the readings for ϵ_x and ϵ_y does not exceed the rated error allowance

Card 1/2

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SOV/124-58-8-9300

On Certain Errors in the Measurement of the Deformations (cont.)

between the strain-gage measurements and the true magnitude of the deformations. The authors underscore that in calculating the principal stresses and their respective directions from the measured deformations in rosettes great care must be exercised whenever the principal-stress ratios $\varepsilon_1/\varepsilon_2 < 2$, in this case the error in the stress may be as much as double that obtaining in the deformation measurement, while the angular error may be -90°.

A.M. Sivukov

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

TOKARSKIY, A.P.; MOROZOV, B.A., kandidat tekhnicheskikh nauk

Cutting blooms with TSKBMM-1000 shears. [Trudy] TSNIITMASH no.78:7-9 '56. (MLRA 10:1)

(Shears (Machine tools)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, M.A., kandidat tekhnicheskikh nauk.

Compensating properties of connector couplings. [Trudy] TSNIITMASH no.78:124-173 '56. (MIRA 10:1)

(Couplings)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.A.

MOROZOV, B.A., kandidat tekhnicheskikh nauk.

Using the optical polarization method for the study of metal rolling processes. [Trudy] TSNIITMASH no.33:225-247 '56. (MLRA 10:9)
(Rolling (Metal work)) (Polarization (Light))

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

POLEZHAYEV, A.A., inzhener; MOROZOV, B.A., kandidat tekhnicheskikh nauk.

Certain errors in measuring the deformation of metallurgical equipment parts. [Trudy] TSNIITMASH no.83:24-254 '56. (MLRA 10:7)
(Deformations (Mechanics)--Measurement) (Strain gauges)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.A., inzh. (Moskva)

The T15/30 pipe laying machine. Stroi.pred.neft.prom. 2 no.8:28-29 Ag '57. (MIRA 11:1)

(Pipelines)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

Morozov, B.A.

137-12-12/26

AUTHORS: Morozov, B.A., Timoshuk, L.T., Candidates of Technical Sciences, and Tarutorin, B.I., Engineer.

TITLE: An Increase in the Loading Capacity of Stands for Plate Mills (Povysheniye nagruzochnoy sposobnosti stanin listoprokatnykh kletey)

PERIODICAL: Stal', 1957, No.12, pp. 1107 - 1110 (USSR).

ABSTRACT: An investigation of the strength of stands of static and dynamic load carried out by TsNIITMASh and TsNIICHM is described. The distribution of main stresses on the surface of a working stand is shown in Fig.3, the dependence of the working ability of stands of typical and improved designs on the value of a pulsating load - Fig.6, the dependence of deformation of parts of stands of mills 2180(a) and 1680(b) on the positioning of the screw down screw in Fig.7. Conclusions: 1) The weakest spots in housing stand of sheet rolling mills are cross beams, particularly when they possess openings for screw down screws. 2) In order to increase load carrying capacity of stands of operating mills, it is necessary; a) to change the design of the nut of the screw down screw, transferring the supporting surface of the nut to the bottom surface of the cross beam (Fig.4b) or at least into the zone of compressing stresses; b) to increase transition radii in the most stressed points

Card1/2

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133-12-12/26

An Increase in the Loading Capacity of Stands for Plate Mills.

at the stand, A, B, V (Fig.4). If the latter is impossible the corresponding places should be work-hardened (treatment with rollers or shot peening). 3) The quality of casting of the cross beam of the stand should be particularly watched. Therefore, when an increase of load on the stand is expected, untreated surfaces of the cross beam in the stretched parts should be machined. 4) The weight of stands should be decreased by about 18% by changing the cross-section area of stands (Fig.4b) by about 30% which does not deteriorate the strength and rigidity of the stand. There are 7 figures and 3 Slavic references.

ASSOCIATION: TsNIITMASh

AVAILABLE: Library of Congress

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.A., kand.tekhn.nauk

Increasing the load capacity and reduction of the required precision of machining of some machine parts. Izv.vys.ucheb.zav.; mashinostr. no.5:149-155 '59. (MIRA 13:4)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche im. Baumana (MVTU).
(Machinery) (Metalwork)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SHATALOV, A.Ya.; MOROZOV, B.A.

Structure of the surface of aluminum during anodic treatment in neutral solution. Trudy VGU 57:101-106 '59.
(MIRA 13:5)

(Aluminum)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

83689

15.8110 also 2209

S/032/60/026/009/014/018
B015/B058

AUTHORS: Shchegolevskaya, N. A., Morozov, B. A., Skoryy, I. A., Kopytov, V. D., Sokolov, S. I.

TITLE: The Use of Epoxy Resin of the Type Epoxy-CHS-2200 for the Polarization-optical Method

PERIODICAL: Zavodskaya laboratoriya, 1960, Vol. 26, No. 9, p. 1149

TEXT: An optically active synthetic resin was obtained by using the Czechoslovakian epoxy resin of the type Epoxy-CHS-2200 with phthalic anhydride as hardener. The resin mentioned differs from the much used epoxy resins of the type Э40 (E40) and ЭД6 (ED6) by having a lower viscosity, and a homogeneous mass being nevertheless obtained with phthalic anhydride. The molten anhydride (40 g) is added to the epoxy resin (100 g) heated to 120°C, the mass is carefully mixed, poured into preheated molds, and left in the thermostat for 24 hrs at 100°C and then for 21 hrs at 120°C. The properties of the resin are tabulated. There are 1 table and 1 Soviet reference.

Card 1/2

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83689

The Use of Epoxy Resin of the Type Epoxy-CHS-2200 for the Polarization-optical Method

S/032/60/026/009/014/018
B015/B058

ASSOCIATION: Moskovskiy institut khimicheskogo mashinostroyeniya (Moscow Institute of Chemical Machine Construction). Vsesoyuznyy nauchno-issledovatel'skiy institut metallurgicheskogo mashinostroyeniya (All-Union Scientific Research Institute of Metallurgical Machine Construction). Moskovskiy gosudarstvennyy universitet (Moscow State University)

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B. A., Doc Tech Sci -- (diss) "Investigation of the work potential of machines and equipment in metallurgical plants." Moscow, 1960. 29 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Moscow Order of Lenin and Order of Labor Red Banner Higher Technical College im N. E. Bauman); 250 copies; price not given; list of authors' works on pp 28-29 (25 entries); (KL, 25-60, 130)

Abstract in Vest Mash. 1 '96 p 26-27

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

L 16765-63 EWP(r)/EWT(m)/BDS AFFTC

S/124/63/000/004/063/064

53

AUTHOR: Morozov, B. A.; Makeyev, I. M.

TITLE: Determination of initial stresses in large machine parts under operational conditions 27

PERIODICAL: Referativnyy zhurnal, Mekhanika, no. 4, 1963, 74, abstract 4V615 (Tr. Vses. n.-i. proyektno-konstrukt. in-ta metallurg. mashinostr., 1960, sb. 1, 254-257.)

TEXT: The author describes a procedure for the experimental determination of residual stresses in large elements of machine units. He presents a scheme for a device for drilling a circular groove and gives a method for labeling the sockets of resistometers and their temperature compensation. He notes the great accuracy of the measurements of residual stresses by the method in question in comparison with other methods.

[Abstracter's note: Complete translation.]

Card 1/1

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

L 15751-63 EPR/EWP(j)/EPF(c)/EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD
Ps-4/Pc-4/Pr-4/Pf-4 RM/WW/JD/HW

ACCESSION NR: AR3002692 S/0124/63/000/005/V076/V076

80

SOURCE: Rzh. Mekhanika, Abs. 5V613

AUTHOR: Makeyev, I.M.; Morozov, B.A.

TITLE: Strain gauge for measurement of static deformations under conditions of elevated temperatures

CITED SOURCE: Tr. Vses. n.-i. proyektno-konstrukt. in-ta metallurg. mashinostr., sb. 1, 1960, 258-263

TOPIC TAGS: strain gauge, static deformation, strain at elevated temperatures

TRANSLATION: Techniques are presented for the development of wire strain gages designed to operate at elevated temperatures (up to 150°). Methods of preparing the backing, the wire lattice and the drying curve of the strain gage are given. The maximal drying temperature is 180°. For preparing the backing, thin parchment and high quality BF-4 glue is recommended.

The results of tests on the gages are assembled. During tests under laboratory conditions, the reliability of the temperature compensation was

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

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verified upon heating beams, together with strain gages up to 160°. Their sensitivity and linearity by loading them at the operating temperature (in the interval from 60 to 160°) was also verified. L.C. Magaziner

DATE ACQ: 14Jun63 SUB CODE: ML ENCL: 00

Card 2/2

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

S/122/60/000/005/001/017
A161/A130

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

TITLE: Raising the load capacity and reducing the required machining accuracy of some machine parts

PERIODICAL: Vestnik mashinostroyeniya, no. 5, 1960, 3-9

TEXT: The article presents the results of an experimental investigation at VNIIMETMASh. A special test device was used, that reproduced the work conditions of a single tooth of heavy machine lock, flanges and other heavy-duty machine components with stepped surfaces. Stress distribution was examined on transparent models. Metallographic examination proved that restrained deformation produces other metal properties than uniaxial stress. High pressure flattended surfaces increasing the real contact area. It is recommended to make one of two contact surfaces slightly convex (Fig. 2, right) with 0.3-0.5 mm height difference between the surface end points (depending on the part dimensions), for the surface will be flattened under repeatedly applied surplus load in usual acceptance tests of heavy-duty machines, and in further normal operation stress in contact will be lower. Stress patterns in transparent models of angle connections and data of

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

optical stress examinations are summarized in graphs. The line of optimum transition curve in Fig. 9 is OAF. The dotted OGM line presents the line that raises stress up to double, but is frequently used by designers wanting to increase the contact area. Stress was reduced in a lock connection (Fig. 2) 65% only by making one contact surface 0.5 mm convex. Conclusions: Machine parts of certain class can work reliably at compressive stresses close to the yield limit without any considerable increase of the contact surfaces; the load bearing capacity can be raised 30-100% on account of reduced bending stress in the fillet when higher compressive stresses are allowed in the contact surfaces, the proper transition curve shape is chosen, and pressure in contact distributed evenly by plastic deformation. Less accurate machining will be needed (particularly for statically indeterminate structures) when machining inaccuracy will be compensated by plastic deformation. This can be done for raising the load capacity of large stationary thread connections and other parts with protruding contact surfaces on which plastic deformation is possible to arrange. There are 10 figures, 1 table and 2 Soviet-bloc references.

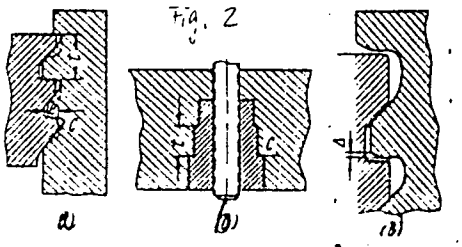

Figure 2:

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

Raising the load capacity ...

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A161/A130

Fig. 9, d:

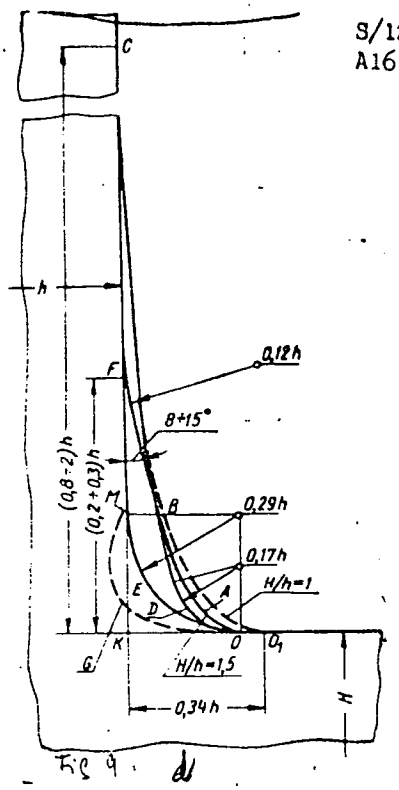

Fig 9. d

Card 3/3

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.A.; VASIL'YEV, V.V.; LYUBIMOV, V. Ya.

Increasing the strength of fillet joints of cylinders and flanges. Kuz.-shtam. proizv. no.4:31-32 Ap '61. (MIRA 14:3)
(Flanges)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

[illegible]

AUTHORS [illegible]

TITLE [illegible]

PERIODICAL [illegible]

TEXT Experience has shown that [illegible] of threads on some components drastically reduces their [illegible] the strength of screws can be increased by [illegible] the thread instead of cutting it, but the rolling process becomes difficult [illegible] 30 mm [illegible] such cases [illegible] vibrating rollers [illegible] Vaxodryatse. [illegible] final fatigue strength [illegible] on the reduction of diameter. In a [illegible] thread [illegible] was increased from [illegible] kg mm² [illegible] mm² [illegible] 0.1 mm and [illegible] kg mm² [illegible] mm of diameter [illegible] mm [illegible] and the [illegible]

[illegible]

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D244/D301

A new thread form [illegible]

high stress concentration factors [illegible] at the thread roots [illegible] carried out at [illegible] showed that by choosing an optimum thread form root stresses can be [illegible] several times. The results are given diagrammatically and in [illegible] forms. Flat models of the threads were used with an [illegible] σ [illegible] kg/cm^2. There are 1 figures and 1 table and 5 [illegible] references.

Card 2/2

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.A., doktor tekhn. nauk; ROZANOV, B.V., kand. tekhn. nauk, retsenzent; BULATOV, S.I., inzh., red.izd-va; UVAROVA, A.F., tekhn. red.

[Modeling and strength of metallurgical machinery] Modelirovanie i prochnost' metallurgicheskikh mashin. Moskva, 1963. 286 p. (MIRA 17:3)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

S/122/63/000/002/004/012
D262/D308

AUTHORS: Artyukhov, V. P., Engineer, and Morozov, B. A., Doctor of Technical Sciences

TITLE: Investigation of large heavily loaded threaded joints

PERIODICAL: Vestnik mashinostroyeniya, no. 2, 1963, 34-36

TEXT: The article describes a series of experiments with 4 types of threads in order to increase the loading capacity of large columns (300 - 1000 mm dia) for presses and other heavily loaded machines. To determine all factors affecting the stress conditions in the thread fillets, tests were carried out on models made of optically active material, employing the photo-elasticity method. For fatigue tests, models to scale 1:7, made of steel, were subjected to cyclic loading ($P_{min} \approx 0.1\ P_{max}$). The results of the experiments show that the new thread profile of VNIIMETASh, version 2, allows an increase of the loading capacity of joints without deteriorating their constructional and exploitation qualities. There are 4 figures and 1 table.

Card 1/1

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

M[illegible], B.A., [illegible]; [illegible], V.[illegible], inzh.

Investigating the water hammer and starting conditions of pumping equipment. Gor.zhur. no.12:45 D '64. (MIRA 18:1)

1. Sredneaziatskiy filial Gosudarstvennogo nauchno-issledovatel'skogo instituta tsvetnykh metallov, Almalyk.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

TSELIKOV, A.I., akademik; MOROZOV, B.A., doktor tekh. nauk; SHUSTOROVICH, V.M., inzh.; GARTSMAN, S.D., inzh.

Selecting the optimum diameter for the supporting rolls of four-high rolling mills. Vest.mashinostr. 45 no.9:24-26 S '65. (MIRA 18:10)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

YEFIMOV, A.S.; MOROZOV, B.A.

Method for eliminating the edge effect in an optically active material on the basis of ED-6 epoxy resin. Zav. lab. 31 no.11: 1389-1390 '65. (MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktorskiy institut metallurgicheskogo mashinostroyeniya.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

L 37667-66

ACC NR: AP6028838 SOURCE CODE: UR/0095/66/000/004/0038/0039

AUTHOR: Morozov, B. A.; Tumanyan, O. M.

ORG: "Gazstroymashina" Special Design Office (SKB "Gazstroymashina")

13

B

TITLE: Installation for applying gunite to reservoirs and a unit for drying sand

SOURCE: Stroitel'stvo truboprovodov, no. 4, 1966, 38-39

TOPIC TAGS: reinforced concrete, industrial development, mineral industry, gunite

ABSTRACT: The authors describe the ASP unit for drying sand and the UTS installation for applying Gunite to reinforced concrete reservoirs. The UTS installation is mounted on a sledge and consists of a tank unit, a hydraulic system with a 2KM6 pump and an RN-2 hand pump. The unit also contains an S-630A spray applicator with nozzle and hoses for feeding the dry material mixed with air, an elevator and a ladle with telescoping hopper, a drive for raising the elevator etc. The unit is hitched to a tractor for transportation. The dry material (cement, sand, grit and gravel) are mixed with water and a sodium silicate solution at the nozzle immediately before application to the surface being treated. The basic parameters of the installation are given. The unit measures 5.735 x 2.6 x 3.26 meters and weighs 5.5 tons. The ASP sand dryer is a continuous-action machine mounted on runners. The drying drum is supported by four rollers at an angle of 3 degrees to the horizontal and contains a paddle system. At one end of the drum is a spray burner with a gas filter for removing atmospheric dust. The sand is

Card 1/2

UDC: 621.642:624.012.4:002.2

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

L 37667-66

ACC NR: AP6028338

dried as it moves in the rotating drum against the flow of the hot gases. The unit has a capacity of 5.0-7.5 t/hr, measures 5.07 x 2.05 x 3.3 meters and weighs 3.9 tons. Orig. art. has: 2 figures. [JPRS: 36,581]

SUB CODE: 11, 05 / SUBM DATE: none

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

L 41330-66 EWT(d)/EWT(m)/EWP(w) IJP(c) EM

ACC NR: AP6019926 (N) SOURCE CODE: UR/0122/66/000/006/0016/0021

AUTHOR: Zhukovskiy, V. S. (Candidate of technical sciences, Lecturer); Surkov, A. I. (Candidate of technical sciences); Morozov, B. A. (Doctor of technical sciences)

ORG: None

TITLE: Using the net-point method for determining stresses in parts with complex shapes

SOURCE: Vestnik mashinostroyeniya, no. 6, 1966, 18-21

TOPIC TAGS: stress analysis, stress concentration, stress distribution

ABSTRACT: Expressions are given for calculating stresses in parts of various configurations. The net-point method is used for calculating stresses in flat parts. An example is given for using this method to calculate stresses in a blooming mill frame. The frame was assumed to be loaded only vertically, horizontal forces being disregarded as insignificant. The stress curves obtained by the net point method are compared with results for a flat frame model studied by the photoelastic method. The two methods show satisfactory agreement. Although the net-point method is normally used for calculations where the parts are uniform in thickness, it may be used for approximate stress determination in parts of nonuniform thickness as well. Orig. art. has: 6 figures, 1 table, 8 formulas.

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 001

Card 1/1 llb

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

ACC NR: AP6033519 SOURCE CODE: UR/0413/66/000/018/0154/0155

INVENTOR: Khabarov, A. V.; Kozlov, V. S.; Morozov, B. A.; Myrsov, V. K.; Shevchenko, B. P.; Tomilin, A. A.; Votyakov, I. A.; Surkov, A. I.

ORG: None

TITLE: A hydraulic press with weight distribution on the base components. Class 58, No. 186283 [announced by the Kolomna Heavy Machine Tool Building Plant (Kolomenskiy zavod tyazhelogo stankostroyeniya)]

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 154-155

TOPIC TAGS: hydraulic equipment, metal forming press

ABSTRACT: This Author's Certificate introduces a hydraulic press with weight distribution for the base components. The installation contains a stand in the form of columns connected by crossbeams, a movable frame of similar construction located inside the stand, a lower working cylinder mounted in the lower crossbeam of the movable frame, and an upper working cylinder. Misalignment of the press under the effect of eccentric loads is prevented by mounting the upper working cylinder in the upper crossbeam of the stand with rigid connection of the plunger for this cylinder to the upper crossbeam of the movable frame.

Card 1/2 UDC: 621.226

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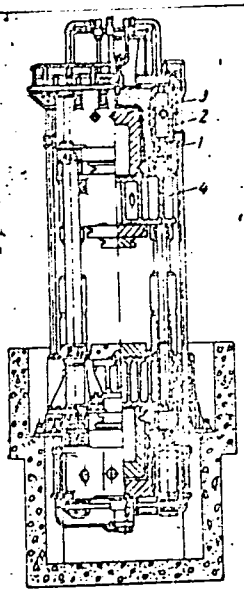
"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

ACC NR: AP6033519



1--upper working cylinder; 2--upper crossbeam of the stand; 3--plunger; 4--uppercrossbeam of the movable frame

SUB CODE: 13/ SUBM DATE: 06Aug65

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SHUSTOROVICH, V.M., inzh.; MOROZOV, B.A., doktor tekhn.nauk

Studying the strength of a 55 ton charge oxygen-blown converter under operating conditions. Stal' 25 no.5:404-407 My '65. (MIRA 18:6)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOKOLOV, Lev Dmitriyevich; GREBENIK, Viktor Mikhaylovich; TYLKIN, Mikhail Arkad'yevich; Prinimal uchastiye BAKLUSHIN, I.L.; SMIRNOVA, V.V., kand. tekhn. nauk, dots., retsenzent; ROKOTYAN, Ye.S., doktor tekhn. nauk, prof., retsenzent; MOROZOV, B.A., doktor tekhn. nauk, retsenzent

[Study of the equipment of rolling mills] Issledovanie prokatnogo oborudovaniia. Moskva, Metallurgiia, 1964. 487 p. (MIRA 17:11)

1. Moskovskoye vysshe'ye tekhnicheskoye uchilishche im. N.E. Baumana (for Smirnova).

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.D. (Odessa)

Topography of the skin temperature in endarteritis. Klin.med. 40 no.5:96-101 '62. (MIRA 15:2)

1. Iz kafedry fakul'tetskoy khirurgii lechebnogo fakul'teta (zav. - prof. M.P. Sokolovskiy) Odesskogo meditsinskogo instituta imeni N.I. Pirogova (dir. - prof. I.Ya. Deyneka).
(BODY TEMPERATURE) (ARTERIES--DISEASES) (SKIN)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.D.

Apparatus for the study of perspiration. [illegible] 58 no.8:1[illegible]-12[illegible] Ag '64.

[illegible]

1. Kafedra fakul'tetskoy khirurgii (zav. - prof. M.F. [illegible]) lechebnogo fakul'teta Odesskogo meditsinskogo instituta [illegible] rogova. Submitted April 29, 1963.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.F.; LEVINTER, M.Ye.; PANCHENKOV, G.M.

Kinetics of the formation of coke on various types of catalysts. Izv. vys. ucheb. zav.; neft' i gaz 8 no.3:55-60 '65. (MIRA 18:5)

1. Ufimskiy neftyanoy institut i Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti im. akademika Gubkina.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.F.

Homoplasty of fascial defects with frozen and lyophilized fasciae; experimental study. Ortop., travm. i protez. 26 no.1:56-60 Ja '65. (MIRA 18:5)

1. Iz patologoanatomicheskogo otdeleniya (zav. - zasluzhennyy deyatel' nauki prof. T.P. Vinogradova) Tsentral'nogo instituta travmatologii i ortopedii (dir. - chlen-korrespondent AMN SSSR prof. M.V. Volkov). Adres avtorov: Moskva A-299, ul. Priorova, d.2, TSentral'nyy institut travmatologii i ortopedii.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

AKHMETOV, I.G.; LEVINTER, M.Kh.; MOROZOV, B.F.

Calculating the material balance of light thermal cracking. Nefteper. i neftekhim. no.5:12-17 '63. (MIRA 17:8)

1. Ufimskiy nauchno-issledovatel'skiy institut neftekhimicheskoy promyshlennosti i Ufimskiy neftyanoy institut.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

GALIMOV, Zh.F., MOROZOV, B.F., [illegible] M.Ye.

Extent of the utilization of the inner surface of the particles of an aluminosilicate bead catalyst. Khim. i tekh. topliv i masel 9 no.9:10-15 S '64. (MIRA [illegible])

1. Ufimskiy neftyanoy nauchno-issledovatel'skiy institut.

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

PANOV, V.A.; GORULEVA, V.P.; MOROZOV, B.I.; RAYEVSKIY, V.G.; VOYUTSKIY, S.S.

Increasing the bonding strength of rubber and fabric by means of correcting the vulcanizing group. Kauch.i rez. 21 no.11:4-6 N '62. (MIRA 15:12)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

(Rubberized fabrics)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.; SKERDZHEV, A.

"Motorbus trains." Avt.transp.34 no.11:36-38 N '56. (MLRA 9:12)
(Europe, Western--Motorbuses)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B. I. Cand Tech Sci -- (diss) "Calculation of the movement of automobiles during continuous regulation of ~~motor~~ engine power and varying road slope ~~of the road.~~" Mos, 1957. 16 pp w/ drawings 22 cm. (Min of Higher Education USSR. Mos Motor Vehicle and Road Inst im V. M. Molotov), 120 copies (KL, 14-57, 86)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B., inzh.

Automobile trains. Za rul. 16 no.1:13-15 Ja '58. (MIRA 11:1)

1.Glavnyy instruktor konstruktorskogo byuro pirtsepov Gosudarstvennogo soyuznogo ordena Trudnovogo Krasnogo Znameni nauchno-issledovatel'skogo avtomobil'nogo i avtomotornogo instituta (for Skordzhev).
(Automobile trains)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.; MOROZOV, P.; MOROZOV, V.

Constructing a small car. Za rul. 16 no.3:9 Mr '58. (MIRA 13:3)

(Automobiles--Design and construction)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOV/113-59-4-8 12

12(2)

AUTHORS: Morozov, B.I., Candidate of Technical Sciences; Ilechin, I.K., Candidate of Technical Sciences; Khachaturov, A.A., Doctor of Technical Sciences; Chef, A.L., Candidate of Technical Sciences

TITLE: The Calculation of an Elastic Coupling Element By Means of an Electric Model

PERIODICAL: Avtomobil'naya promyshlennost', 1959, Nr 4, pp 18-21 (USSR)

ABSTRACT: The suitability of an automobile for pulling a trailer depends to a great extent on the correct selection of the elastic element parameters of the coupling. The elastic element has the purpose of eliminating impacts on the coupling. Since the existing methods of calculating such elastic elements do not consider all factors influencing the work of the coupling, the authors suggest using an electrical model. The application of the electrical model for solving problems of the motion of mechanical systems is based on the fact that an electrical process takes place in the model which is analogous to the mechanical process at the coupling. Measuring the electrical magnitudes (current, voltage, etc), information

Card 1/2

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOV/113-[illegible]

The Calculation of an Elastic Coupling Element By Means of an Electric Model

on mechanical magnitudes (force, speed, etc) may be obtained on the dynamic system under investigation. This means that the dynamic system is replaced by an equivalent electrical one. Figure 3 shows an electric equivalent of a dynamic system. In addition, the author describes, the sequence of operations for performing such an investigation. There are 1 circuit diagram, 1 diagram, 1 block diagram, [illegible] and 6 Soviet references.

ASSOCIATION: NAMI, Moskovskiy avtomobil'no-dorozhnyy institut (Moscow Automobile and Highway Institute).

Card 2/2

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.I., kand.tekhn.nauk; NAYDENOV, B.F.; SKERDZHEV, A.I.

Automobile trains for passenger-car transportation. Avt.prom. no.1:42-45 Ja '59. (MIRA 12:1)

1. Gosudarstvennyy soyuznyy ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut.
(Automobiles--Transportation)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.I., kand. tekhn. nauk; PCHELIN, I.K., kand. tekhn. nauk; KHACHATUROV, A.A., doktor tekhn. nauk; SHEF, A.L., kand. tekhn. nauk

Using electric modeling in designing springy parts of coupling devices. Avt. prom. no.4:18-21 Ap '59. (MIRA 12:5)

1.Nauchno-issledovatel'skiy avtomobil'nyy i avtomotornyy institut i Moskovskiy avtomobil'no-dorozhnyy institut.
(Electromechanical analogies)
(Automobiles--Apparatus and supplies)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.; SKERDZHEV, A.

Trailers for passengers cars. Za rul. 17 no.6:26-27 Je '59.
(MIRA 12:10)

1. Nauchnyy avtomotornyy institut.
(Automobiles--Trailers)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

L 05192-67 EWT(1)/EWT(m)/EWP(j) SCTB DD/RM

ACC NR: AP6012136 (N) SOURCE CODE: UR/0413/66/000/007/0056/0056

AUTHORS: Morozov, B. I.; Voronov, Ye. N.; Komarenkov, L. P.

ORG: none

TITLE: Demountable waterproof elastic joint for hollow polymer products such as divers' suits. Class 39, No. 180330

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 7, 1966, 56

TOPIC TAGS: rubber, hermetic seal, sealing device, underwater clothing

ABSTRACT: This Author Certificate presents a demountable waterproof elastic joint for hollow polymer products, such as divers' suits. The joint contains a demountable insert with one end connected to the edges of the material along the [illegible] opening of the product. To insure a proper hermetic seal and convenience of [illegible] also to broaden the application of the joint to various products such as [illegible] bags, the demountable insert is made in the form of a rubber sleeve (see Fig. 1). The free end of this sleeve is twisted into a spiral and pressed (during its vulcanization) into a flat roll which is prevented from unrolling by the holders of the valves. The holders are made of rubberized fabric and are fixed on the internal and external surfaces of the product.

Card 1/2 UDC: 678.06-46:62-762

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

L 05192-67

ACC NR: AP6012136

demountable joint in open position

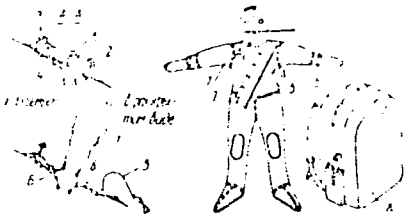

Fig. 1. 1 - rubber sleeve; 2 - roll of the rubber sleeve; 3 and 4 - holders; 5 and 6 - valves; 7 and 8 - products (diver's suit and duffle bag)

Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 09Mar64

Card 2/2 vmb

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

VYSHEGORODTSEV, Ya.S.; MOROZOV, B.I.; ZAYTSEV, Yu.A.; PYATAKHINA, T.T.; MIKHALEV, V.P.

Improving the packing system of the 280-11-1(2) centrifugal pump. Gaz. prom. 10 no.1:49-51 '65. (MIRA 18:1)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B. I.

124-11-12601

Translation from: Referativnyy Zhurnal, Mekhanika, 1957, N 11, p 40 (USSR)

AUTHOR: Morozov, B. I.

TITLE: Experimental Investigations of the Flow in a Turbine Stage. (Eksperimental'noye issledovaniye [illegible] v stupeni turbiny)

PERIODICAL: Tr. Mosk. Energ. in-ta, 1956, vyp. 28, 76-85.

ABSTRACT: Results of experimental investigations of the air-loss coefficients through the discharge openings in a turbine runner and the annular clearances formed between the stator and the turbine wheel at the roots of the working blades. The results of the experimentation can be applied to the calculation of the axial thrust applied to a turbine stage.

I. S. Simonov

Card 1/1

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

Morozov, B. I.

124-1957-10-11498 D

Translation from: Referativnyy zhurnal. Mekhanika 1957 Nr [illegible] USSR

AUTHOR: Morozov, B. I.

TITLE: Experimental Analysis of Leaks and Axial Stresses on a Steam Turbine Stage Model (Eksperimental'noye issledovaniye protechek i osevykh usiliy na modeli stupeni parovoy turbiny)

ABSTRACT: Bibliographic entry on the Author's dissertation for the degree of Candidate of Technical Sciences, presented to the Mosk. energ. in-t (Moscow Power Institute), Moscow, 1957

ASSOCIATION: Mosk. energ. in-t (Moscow Power Institute), Moscow

Card 1/1

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

MOROZOV, B.I.

SAMOYLOVICH, G.S., kandidat tekhnicheskikh nauk; MOROZOV, B.I.

Expenditure coefficients through unloading openings of turbine discs [with summary in English]. Teploenergetika 4 no.8:18-23 Ag '57. (MLRA 10:9)

1. Moskovskiy energeticheskiy institut.
(Turbines)

APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6"

"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

SOV/96-59-3-19/21

AUTHORS: Shkrob, M.E., Doctor of Technical Sciences
Morozov, B.I., Candidate of Technical Sciences

TITLE: Research Programmes for Improving the Economy of Thermal Power Stations in the USSR (Perspektivy razvitiya nauchnykh issledovaniy po povysheniyu ekonomichnosti teplovykh elektrostantsiy v SSSR)

PERIODICAL: Teploenergetika, 1959, Nr 3, pp 65-67 (USSR)

ABSTRACT: A great deal of research work is being done on the power industry because of its rapid development. The High-Pressure Steam Commission of the Power Institute Acad. USSR has been given the task of going into the work and coordinating the efforts of the Institutes of the Acad. USSR and of the Republican Academies of Science as well as other scientific research institutes and colleges. Moreover, the commission systematically coordinates the research work of these organisations on the problem of high steam conditions. A list is then given of the Institutes engaged in the work but they are however, nearly all identified only by their initials. Work done in 1958 to raise the economy of thermal power stations is

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SOV/96-59-3-19/21

Research Programmes for Improving the Economy of Thermal Power Stations in the USSR

then reviewed together with the Institutes working on these problems. A list is also given of the conferences that the commission organised on the subject. A similar list of research topics for 1959 is then given. The main ones are: drafting skeleton thermo-dynamic tables for water and steam; inventing and introducing new grades of heat-resistant steels of the pearlitic and austenitic classes for temperatures of 600-700°C; development of new grades of efficient and stable ion-exchange resins suitable for water treatment; increasing the efficiency of large turbines by improving the aerodynamics of the blading; developing new types of burners and auxiliary equipment for unit sets with output of 300-600 MW; seeking methods of raising the efficiency and reliability of boiler/turbine units; developing the automation of unit-type power stations; developing heat-supply systems for large towns; improving heat-exchange processes in boilers, atomic reactors and in the steam generators of atomic power stations. A list is then given of the conferences that will be called on the

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Research Programmes for Improving the Economy of Thermal Power Stations in the USSR

subject in 1959. In some cases detailed lists of papers are given. Other work that will be undertaken by the commission is also described.

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SOV/96-59-4-16/21

AUTHORS: Komarek, A., Engineer
Morozov, B.I., Candidate of Technical Sciences

TITLE: A Steam Turbine of 100 MW (Parovaya turbina moshchnost'yu 100 Mvt)

PERIODICAL: Teploenergetika, 1959, Nr 4, pp 84-86 (USSR)

ABSTRACT: The engineering works imeni Lenin in Plzen is manufacturing the first Czechoslovakian steam turbine of 100 MW for initial steam conditions of 135 atm and 555°C with reheat to 530°C. A cross-sectional drawing of this set is given in Fig.1, it will operate as a unit with a drum type boiler. The blading of the last stage is 585 mm long. The high pressure rotor is a solid forging and the discs of the first nine stages of the medium pressure cylinder are also forged integral with the shaft. The discs of the last four stages of the medium pressure cylinder and of the low pressure cylinder are fitted on the shafts. The twisted blades of the last two low pressure stages are stampings, all the others are machined forgings. Seven stage regenerative feed water heating is used to a temperature

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A Steam Turbine of 100 MW

of 230°C. For the sake of thermal flexibility the high pressure turbine casing has two walls, an inner and an outer, so that the cylinder wall can be made relatively thin and the horizontal flange is narrow. Steam from the forward gland is passed into the flange. The quantity of steam used is such that the flange heats up at practically the same rate as the cylindrical part of the framework The set is started up from the cold with reduced steam conditions, starting from the hot condition is also described. Lagging has been used to prevent the lower part of the frame from cooling more rapidly than the top. The turbine design was affected by the circumstance that for the first half of its life the set will take base load and will be kept as fully loaded as possible but after 1970 the base load will be taken by atomic power stations and this set will be used to cover variations in the load on the power system. It will, therefore, be necessary to stop the set every day and so austenitic steels cannot be used for large parts. In fact, austenitic steels were only used to make the

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A Steam Turbine of 100 MW

relatively thin superheater tubes. Brief data are given about the size of the power station buildings and other facilities. There are 2 figures and 2 Czech references.

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SOV/96-5[illegible]-13/[illegible]

AUTHORS: Komárek, A., Engineer, and Morozov, E.I., Candidate of Technical Sciences

TITLE: A Combined Steam-gas Installation. (Kombinirovannaya parogazovaya ustanovka)

PERIODICAL: Teploenergetika, 1959, Nr 7, pp 87, (USSR)

ABSTRACT: A combined steam-gas turbine installation of 4 [illegible] kW is now commencing to operate in Czechoslovakia. A schematic circuit diagram of the installation is given in figure [illegible]. A single-stage centrifugal compressor with radial blades compresses the air to a pressure of 2.8 atm. Another compressor operates on blast-furnace gas which is compressed in the combustion chamber to a pressure of 4. atm. The gas is mixed with sufficient air to ensure complete combustion. At the outlet from the combustion chamber the combustion products are mixed with an additional quantity of air sufficient to reduce the temperature to [illegible]. The gases are still further cooled on passing through a heat exchanger. At a temperature of 750° the gas flow

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A Combined Steam-gas installation

is delivered to a turbine, leaving it at a temperature of 568°C and a pressure of 1.03 atm. These exhaust gases pass to a boiler where they are cooled to 120°C. The boiler generates saturated steam, at a pressure of 25 atm heated to 600°C in a super-heater, which drives a steam turbine. The gas turbine works on the open cycle and has an efficiency of 27.3%. The main characteristics of the turbine are given. It has been calculated that when an additional combustion chamber has been installed between the gas turbine and the boiler the power station burning blast-furnace gas will operate with an efficiency of 32% and an output of 20 MW. The gas will be delivered to the turbine at a temperature of 700°C, and the steam conditions will be 40 atm and 500°C. The cycle described is suitable for installations of 20 - 50 MW.
There are 2 figures and 2 references, one of which is Soviet and 1 Czechoslovak.

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SOV/96-59-11-19/22

AUTHOR: Morozov, B. I., Candidate of Technical Sciences

TITLE: Discussion of the Problem of Increasing the Efficiency of Steam Turbine Blading

PERIODICAL: Teploenergetika, 1959, Nr 11, pp 89-90 (USSR)

ABSTRACT: A conference was held in Moscow to consider the results of investigations on turbine blading carried out in 1957-1958 and the plan of work for 1959-1961. The conference was called by the Steam Turbine Section of the High-Pressure Steam Commission of the Power Institute of the Academy of Sciences of the USSR. It was attended by representatives of the main turbine manufacturing works and by a number of research and teaching institutes. Work on turbine blading had expanded in 1958 and there were more experimental installations for the study of regulating and intermediate stages. The development of factory laboratories had been particularly important. The results of investigations on stages with long blades were described by the Moscow Power Institute and others. The results of the Moscow Power Institute have already been published in Teploenergetika, 1959, Nr 6. The results of tests with twisted blades were described in the report of the Neva

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Discussion of the Problem of Increasing the Efficiency of Steam Turbine Blading

Works, Leningrad. The report of the Ekonomayzer works described the method of calculating an axially symmetrical flow in turbines with long blades. Another report dealt with the distribution of flow parameters in cylindrical turbine stages allowing for radial velocity components. A further report considered an experimental investigation of a turbine stage with cylindrical boundaries. A number of reports were presented on the improvement of the aerodynamic properties of turbine exhausts. Other reports were made on regulating stages, and on the study of intermediate stages. There was also an account of the reconstruction of a number of imported turbines installed in power stations, which increased the efficiency by 4 - 7%. The conference noted that the results of work carried out in 1957-1958 has been successfully applied in turbine manufacture. The conference was in general satisfied with the work on further improvement in steam turbines, although a number of defects were also pointed out.

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Discussion of the Problem of Increasing the Efficiency of Steam Turbine Blading

In particular, not enough has been done to improve the efficiency of the low-pressure cylinder, and more attention should be given to stages operating on wet steam, to the design of regulating stages, and to the spatial flow of a viscous compressible fluid. There is not sufficient testing of turbines installed in stations. Further work is required on the improvement of test equipment and procedures It is considered necessary to prepare standards for the profiles of short blades in regulating and intermediate stages There is 1 Soviet reference.

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MJW/JD/HM/HM

ACCESSION NR: AP5007335 S/0135/65/000/003/0008/0011 35 31 B

AUTHOR: Lyubavskiy, K. V. (Doctor of technical sciences); Morozov, B. I. (Engineer); Nikitin, Yu. M. (Candidate of technical sciences); Timofeyev, N. M. (Candidate of technical sciences)

TITLE: The effect of non-uniformity in the strength characteristics of welded joint on their tendency toward local breakdown

SOURCE: Svarochnoye proizvodstvo, no. 3, 1965, 8-11

TOPIC TAGS: weld breakdown, weld seam strength, austenitic steel, steel welding, high temperature strength, bending strength, residual stress / 1Kh18N12T steel, 1Kh14M14V2M steel

ABSTRACT: This article reports the results of a study of the effect of lack of uniformity in the strength characteristics in different weld zones on the propensity of these welded joints toward local breakdown at high temperatures. The steels used in the tests were types 1Kh18N12T and 1Kh14N14V2M. Electrodes, providing for different degrees of alloying of the melted metal, were employed to measure the level of the strength characteristics. Samples of two types were studied, thus making it possible to estimate the effect of residual weld stresses and stresses developing when the welds are subjected to twisting on the tendency of such joints

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ACCESSION NR: AP5007335

toward localized failure when there are non-uniform strength properties present in the "base metal - weld metal" zone. These samples, and the method of their preparation, are described in some detail in the article. The breakdown tendency was studied both under conditions of slowly relaxing residual weld stresses and torque moments. The authors show that as the non-uniformity in strength properties in the various zones of the weld joint is increased, the working capacity of the weld decreases under the conditions described above. Specifically, the possibility of local breakdowns in austenitic steel welds under the influence of slowly relaxing residual weld stresses is confirmed. An increase in the strength characteristics in the seam metal and, correspondingly, in the residual stress level in the weld leads to accelerated local failure in the zone around the seam at high temperatures. Of the two austenitic steel types tested, type 1Kh18N12T shows a more marked tendency toward such breakdown throughout this zone under the influence of weld stresses. The authors also demonstrate the considerable effect of non-uniformity in the strength and plastic properties of the joint on its propensity toward local breakdown when subjected to torque forces. It is found that high-temperature austenization (1100 C) of the weld joint, equalizing the strength characteristics and sharply reducing the level of residual weld stresses, promotes enhanced operational reliability in welded joints under actual working conditions. "Bending

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tests at a constant rate of strain were carried out at TsKTI under the guidance of Dr. Tech. Sci. V. N. Zemzin." Orig. art. has: 4 tables and 5 figures.

ASSOCIATION: TsNIITMASh

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NO REF SOV: 004 OTHER: 000

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L 20655-67 EWT(d)/EWT(m)/EWP(c)/EWP(v)/T/EWP(t)/ETI/EWP(k)/EWP(l) IJP

ACC NR: AP6007788 (N) SOURCE CODE: UR/0114/66/000/002/0033/0035

AUTHOR: Morozov, B. I. (Engineer)

ORG: None

TITLE: Development of a method for machining metals

SOURCE: Energomashinostroyeniye, no. 2, 1966, 33-35

TOPIC TAGS: electroerosion machining, electrolyte, electrochemistry, sodium chloride, metal machining

ABSTRACT: The author describes an improved method for machining metals by electrochemical dissolution which may be used in place of turning, milling, grinding and other operations. The method is basically an electrolytic process in which the workpiece is the anode and the "tool" is the cathode. Cathode polarization is eliminated by using a rotating "tool". The electrolye is an aqueous solution of sodium chloride. A generalized diagram of the machining process is shown in the figure. The most efficient conditions for electrochemical finishing of metals and alloys are: 1. industrial current at 3-8 v; 2. a clearance between electrodes of 0.005-0.05 mm; 3. rotation of the polarized surface of the electrode at a peripheral speed of at least 3 m/sec; 4. the use of a 5-20% aqueous solution of sodium chloride as electrolyte. Fluid pressure may be used for automatically maintaining a constant clearance between electrodes. Erosion

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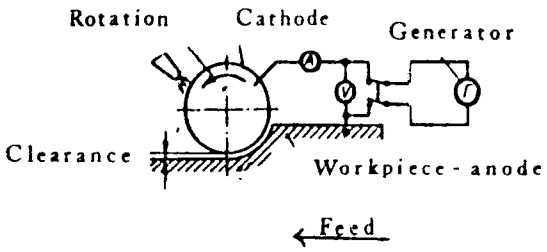
ACC NR: AP6007788

and burnout of the electrodes are completely eliminated by keeping the voltage below the arcing level. The proposed method may be used for machining structural, stainless and high-temperature steels and alloys to a finish of V7-V9 without intercrystalline corrosion, pitting or the formation of a converted layer. The temperature and concentration of dissolution products have no effect on the accuracy or surface finish. The machining process is not affected by the material, configuration or presence of radial grooves on the cathode "tool". Only slight modifications are required to convert any miller, drill, grinder or lathe with a spindle speed of at least 1500 rpm and less than 0.01 mm play to electrochemical machining. Any generator or semiconductor rectifier may be used as the power supply if it provides 6-8 v and a current strength of at least 50 a/cm^2. Orig. art. has: 4 figures.



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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

ACC NR: AP6035889 SOURCE CODE: UR/0413/66/000/020/0129/0129

INVENTOR: Torochkov, V. Yu.; Morozov, B. I.;

ORG: none

TITLE: Gyrotheodolite. Class 42, No. 187328. [announced by the Moscow Institute of Engineers of Geodesy, Aerial Photography, and Cartography (Moskovskiy institut inzhenerov geodezii, aerofotoc"emki i kartografii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 129

TOPIC TAGS: optic theodolite, surveying instrument, geodetic instrument, gyrotheodolite, theodolite

ABSTRACT: An Author Certificate has been issued for a gyrotheodolite. The device consists of a two-stage gyroscope mounted on two torsion supports, an autocollimation system, a theodolite, and a stopping system. To obtain a high precision reading of the geographic meridian, the sensitive element is hermetically sealed in a container

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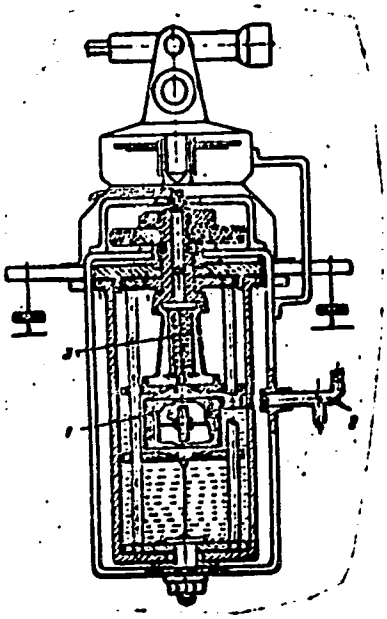

Fig. 1. Gyrotheodolite

1 - Sensitive element; 2 - autocollimation telescope; 3 - movable forks.

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suspended in fluid. This container is connected with two movable forks which limit the rotation angle of the torsion supports. This angle is transmitted through the autocollimation telescope to the reading system of the theodolite. (see Fig. 1). Orig. art. has: 1 figure.

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KIST'YANTS, L.K.; POPLAVSKIY, A.N.; OKHOTNIKOV, S.S.; MOROZOV, B.M.; FILIPPOVA, L.S., red.; KHITROVA, N.A., tekhn. red.

[Design of burners and spray burners for heating furnaces] Konstruktsii gorelok i forsunok dlia nagrevatel'nykh pechei. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va putei soobshcheniia, 1961. 43 p. (MIRA 14:6)
(Burners) (Furnaces, Heating)

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BSD/AFWL/SSD/AEDC(b)/AFMD(t)/ESD(t)
ACCESSION NR: AT4045686 S/2917/64/000/264/0020/0029

AUTHOR: Kulagin, L. V. (Candidate of technical sciences); Okhotnikov, S. S. (Engineer); Morozov, B. M. (Engineer)
TITLE: Selection of an efficient design pattern for a pneumatic sprayer

SOURCE: Moscow. Vsesoyuzny*y nauchno-issledovatel'skiy institut zheleznodorozhnogo transporta. Trudy, no. 264, 1964. Ratsional'ny*ye metody* szhiganiya zhidkogo topliva i prirodnogo gaza (Efficient methods of liquid fuel and natural gas combustion), 20-29

TOPIC TAGS: aerodynamics, propulsion, pneumatic sprayer, combustion chamber sprayer, air fuel ration, turbulent flow, whirl, flame angle, atomizer

ABSTRACT: The Tsentral'ny*y nauchno-issledovatel'skiy institut Ministerstva putey soobshcheniya (Central Scientific Research Institute of the Ministry of Communications) has conducted a series of tests, both on laboratory stands and under normal operating conditions, of sprayers used in heating furnaces, hearths, railroad heating systems, and combustion chambers of gas-turbine locomotives. It was found

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that droplets averaging 100—150 μ in size can be obtained with combustion-chamber and hearth sprayers. These sprayers also yielded good results when tested under operating conditions, though all of them showed a rather high rate of air flow (0.3—0.8 kg per 1 kg fuel). Air sprayers consuming a minimum of energy should meet the following requirements: 1) reduced fuel jet width; 2) maximum relative velocity at the fuel-air boundary; 3) increased surface contact between fuel and spray air; 4) optimum air jet thickness; 5) increased turbulence of air jets; 6) angular direction of the air flow towards the fuel flame; and 7) the possibility of establishing the flame angle needed. The authors believe that a sprayer that would meet these requirements should have fuel supplied between two air jets, and should make use of the centrifugal effect arising when an eddying fuel stream issues from the nozzle. Orig. art. has: 9 figures and 8 formulas.

ASSOCIATION: none

SUBMITTED: 00 ATD PRESS: 3104 ENCL: 00

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S/142/60/003/004/007/013
E192/E382

AUTHOR: Morozov, B.N.

TITLE: Some Problems in the Propagation of Electromagnetic Waves in Bent Waveguides Which are Loaded with Periodic Structures

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Radiotekhnika, 1960, Vol. 3, No. 4, pp. 493 - 500

TEXT: The waveguide considered is shown in Fig. 1. It is formed of two cylindrical waves which are infinitely long in the direction of the axis z. The space between the cylinders is filled with air. The concave surface of the outer cylinder and the convex surface of the inner cylinder are in the form of periodic structures. All the walls of the system are assumed to be ideally conducting. The solution of the problem is based on the methods normally used in the investigation of such problems (Refs. 3, 4, 5). The field components in the interaction space and in the resonator space can be determined independently from each other and then the two solutions are "compared" at the surfaces $r = R \pm a$. This is equivalent to comparing the impedances of the resonator space and the

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Some Problems in the Propagation of Electromagnetic Waves in Bent Waveguides, Which are Loaded with Periodic Structures

interaction space. Only the propagation in the azimuthal direction is considered. Since the field is constant in the direction of the axis z a field component can be represented

$$L = f(r)e^{jp\varphi} e^{j\omega t}$$

where $f(r)$ is a function of the coordinate r and p is the azimuthal propagation constant. Only the waves for which $E_z = 0$ are considered. The electric field components can be expressed by

$$E_r = j \frac{1}{\omega\varepsilon r} \frac{\partial H_z}{\partial \varphi}, \quad E_\varphi = j \frac{1}{\omega\varepsilon} \frac{\partial H_z}{\partial r} \qquad (1)$$

while the magnetic field component can be found from

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Some Problems in the Propagation of Electromagnetic Waves in Bent Waveguides, Which are Loaded with Periodic Structures

$$\frac{\partial^2 H_z}{\partial r^2} + \frac{1}{r}\frac{\partial H_z}{\partial r} + \left(k^2 - \frac{p^2}{r^2}\right) H_z = 0 \qquad (2)$$

where $k^2 = \omega^2 \varepsilon\mu$ and $\sqrt{\mu/\varepsilon} = 120\pi$.

In the region 1 (the interaction space having the dimension 2a in the radial direction) the solution of Eq. (2) is in the form of Eq. (3a), while the electric field components are given by Eqs. (3б) and (3B); here I_p and N_p are the Bessel and Neumann functions of the order p. In the resonator space the magnetic field component can be expressed by Eq. (4), where index 2 refers to those resonators which are situated along the concave surface and the index 3 relates to the resonators situated along the convex surface; m is the number of half-periods of the field in each resonator.

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Some Problems in the Propagation of Electromagnetic Waves in Bent Waveguides Which are Loaded with Periodic Structures

If the boundary conditions at the surface $r = R + a + h_2$ and $r = R_a \cdot h_1 - a$ are taken into account, the electromagnetic field components for the concave surface are given by Eq. (5) and for the convex surface they are expressed by Eqs. (6). By comparing the expressions for the field components in Eqs. (3), (5) and (6) at $r = R + a$ and $r = R - a$, the amplitude coefficients A, B, C, and D can be eliminated and the scattering equation of the system is obtained. This is in the form of Eq. (7). This expression gives the functional dependence between the propagation constant p and the radius R, the wavelength and the geometrical parameters of the system. For gently bent waveguides, the scattering equation can be simplified and written as Eq. (9). The numerical results obtained from Eq. (9) are illustrated in Fig. 2. This shows the dependence of the relative height kh of the diaphragm on the relative radius of curvature kR for various values ka, which

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Some Problems in the Propagation of Electromagnetic Waves in Bent Waveguides Which are Loaded with Periodic Structures

represents the relative half-width of the interaction space for in-phase and anti-phase waves. It is seen that the slowing-down of the waves is constant and equal to unity From the graphs it is seen that the effect of the bend becomes more pronounced as 2a/R is increased Further curves are shown in Fig. 3 From these it is concluded that the effect of the bends is different in the case of in-phase waves from the case of anti-phase waves The former are "accelerated" while the latter are slowed down The above analysis of the physical properties of the unlimited waveguide are quantitatively valid for a waveguide which is limited by two conducting planes in the direction of the axis z . This is due to the fact that the scattering equation for the limiting waveguide is similar to Eq. (7), provided the parameter k is replaced by

$$x = \sqrt{k^2 - \left(\frac{n}{b}\right)^2}$$

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Some Problems in the Propagation of Electromagnetic Waves in Bent Waveguides, Which are Loaded with Periodic Structures

A limited waveguide is illustrated in Fig. 1. It is shown that the scattering equation for this system is in the form of Eq. (11). The curves calculated from Eq. (11) for two waveguides of different heights are shown in Fig. 5. from these graphs it can be concluded that Eq. (7) is indeed qualitatively applicable to the limited waveguide. However, the effect of the bend on the phase velocity in the limited waveguide is more pronounced than in the case of the unlimited system. The author expresses his gratitude to Doctor of Technical Sciences Professor A.A. Vorob'yev for suggesting this subject and to P.R. Cherep and A.N. Didenko for valuable advice. There are 5 figures and 10 references: 2 English and 8 Soviet.

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Some Problems in the Propagation of Electromagnetic Waves in Bent Waveguides Which are Loaded with Periodic Structures

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SUBMITTED: September 16 1959, initially April 4, 1960, after revision.

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MOROZOV, B.N.; PADUSOVA, Ye.V.

Dispersion equations for bent diaphragmed wave guides with a rectangular cross section. Izv. TPI 105:227-239 '60. (MIRA 16:8)

1. Predstavleno nauchnym seminarom radiotekhnicheskogo fakul'teta Tomskogo ordena Trudovogo Krasnogo Znameni politekhnicheskogo instituta imeni Kirova.
(Wave guides)

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S/194/62/000/011/050/062
D413/D308

9,1310

AUTHOR: Morozov, B. N.

TITLE: Contribution to the theory of the curved septate waveguide

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 11, 1962, 59, abstract 11-7-118k (In collection: Elektron. uskoriteli, Tomsk, Tomskiy un-t, 1961, 139-144)

TEXT: A solution is given of the electrodynamic problem for a curved septate waveguide by the 'field suture' method. Losses in the waveguide walls and septa are not taken into account. The derivation of the dispersion equations is given in detail. 10 references. [Abstracter's note: Complete translation.]

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"APPROVED FOR RELEASE: 07/12/2001 CIA-RDP86-00513R001135220001-6

9.1300 (also 1127)

S/109/61/006/009/008/018
D201/D302

AUTHOR: Morozov, B.N.

TITLE: The influence of a bend on the properties of a rectangular periodical septate waveguide

PERIODICAL: Radiotekhnika i elektronika, v. 6, no. 9, 1961, 1496 - 1500

TEXT: The properties of phased-in LE waves are given special attention in the study of ridged slow wave systems. This is so because their coupling impedance is much larger than that of waves in an anti-phase. This is not, however, true for uniformly bent slow wave systems and the influence of such bend on the properties of wave of magnetic mode is the subject of the present article. In a uniformly bent septate waveguide (Fig. 1) the analogue of LE waves are magnetic H_{mp} type waves. For the case when the diaphragms are close enough to each other (i.e. $\lambda \gg \theta R$) the field components of H_{mp} waves are given by

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