

POL'SHIN, D.Ye.; RUDNITSKIY, N.Ya.; TARASENKO, P.P.; REYNISH, V.P.

Testing elements of large-panel buildings on a compressed foundation. Osn. fund. i mekh. grun. 5 no.3:21-22 '63.

(MIRA 17:1)

1. Nauchno-issledovatel'skiy institut osnovaniy i podzemnykh sooruzheniy (for Pol'shin, Rudnitskiy). 2. Moskovskiy institut tipovogo i eksperimental'nogo proyektirovaniya (for Tarasenko, Reynish).

RUDNITSKIY, N. Ya. Cand Tech Sci -- (diss) " Study of ~~the~~ problems of ~~designing~~ ^{the planning of}
foundation plates ^{of} residential and civic buildings according to deformations. "
Mos, 1959. 19 pp with ^{drawings} ~~diagrams~~ (Acad of Construction and Architecture USSR.
Sci Res Inst of ^{Foundations} ~~Bases~~ and Underground Structures), 150 copies (KL, 52-59, 122)

RUDNITSKIY, N.Ya.

Initial datum point for measuring the sagging of the foundations
of structures. Osn., fund. i mekh. grun. 7 no.3:27-28 '65.
(MIRA 18:6)

RUDNITSKIY, N.Ya.

Collapsing of ceilings of unfinished buildings caused by frost
action under foundations. Osn. fund. i mehh. grun. no.4:27 '59.
(MIRA 12:10)

(Foundations) (Frozen ground)

POTINTSEV, V.Ya., kand. tekhn. nauk; RUDNITSKIY, N.Ya.; SARGANOV A.S.

Collapse of an industrial building caused by the loss of
stability of the foundation. Prom. stroi. 43 no.10:22-25
'65. (MIRA 18:11)

POI'SHIN, D.Ye.; HUDNITSKIY, N.Ya.; DYKHOVICHNIYY, Yu.A.; MICHURIN, V.F.

Significant increase in the pressure on soil foundations of large-
block buildings. [Trudy] NII osn. no.49:60-67 '62. (MIRA 15:12)

1. Upravleniye po proyektirovaniyu zhilishchno-grazhdanskogo i
kommunal'nogo stroitel'stva g. Moskvy (for Dykhovichnyy, Michurin).
(Soil mechanics) (Foundations)

ZAKHAROV, A.F.; VECHER, N.A.; LEBONTSEV, A.N.; RUDNITSKIY, P.M.;
SINICALNEK, L.N.; TSUKERNIK, Z.G.; ARYASOV, N.I., inzh.,
patsentent; DOVGOPOL, V.I., red.; DUBROV, N.P., red.;
GETLING, Yu., red.

[Vanadium of the Kachkanar deposit] Kachkanarskii vanadii.
Sverdlovsk, Sredne-Ural'skoe knizhnoe izd-vo, 1964. 302 p.
(MIRA 18:11)

RUDNITSKIY, P.M.

Economics of slag utilization. Review of the book by V.I.Kovgopol.
Metallurg 10 no.4:5 Ap '65. (MIRA 18:7)

RUDNITSKIY, P.M.

Find of siderites in the northeastern margin of the Kuznetsk
Ala-Tau. Trudy Gor.-geol.inst.zap.-Sib.fil.AN SSSR no.17:
169-171 '56. (MIRA 13:5)
(Kuznetsk Basin--Siderite)

MIKHALEV, Mikhail Semenovich; RUDNITSKIY, P.M., inzh., retsenzent;
KOVALENKO, A.V., inzh., red.; DUGINA, N.A., tekhn. red.

[Low-alloy instead of carbon steels] Nizkolegirovannye stali
vzamen uglerodistykh. Pod red. A.V.Kovalenko. Moskva, Mash-
giz, 1961. 32 p. (MIRA 15:2)

(Steel alloys)

SOV/137-59-5-9718

Translation from: Referativnyy zhurnal, Metallurgiya, 1959, Nr 5, p 33 (USSR)

AUTHORS: Burdakov, D.D., Rudnitskiy, P.M.

TITLE: New Rise in Ferrous Metallurgy

PERIODICAL: Prom.-ekon. buyl. Sovnarkhoz Sverdl. ekon. adm. r-na, 1958,
Nr 7, pp 11 - 15

ABSTRACT: The author presents a brief review on the development of ferrous metallurgy in the Sverdlovsk economical district after the re-organized management of the industry and construction, including outlooks on the period from 1959 to 1965. In the enterprises subordinated to the Administration of ferrous metallurgy, 120,000 workers, technical personnel and employees are occupied. The coefficient of useful volume utilization of blast furnaces was 0.78 in 1957, (the most efficient furnace attendants of the Serov Plant brought it to 0.64); steel yield was 7.6 ton per 1 m². The use of O₂ at the Nizhne-Tagil'skiy Metallurgical Combine raised steel production, by 15 - 20%. The Institute of Ferrous Metals together with the Verkh-Isetskiy and Severskiy

Card 1/2

New Rise in Ferrous Metallurgy

SOV/137-59-5-9718

Plants developed a technology of continuous casting of transformer steel, they are now developing a technology for continuous casting of rimming steel for tin. Automation of the rail-structural mill with the use of digital computers was developed at the Nizhne-Tagil'skiy Combine. A number of other technical achievements are described and outlooks of further technical progress are outlined. ✓

D.P.

Card 2/2

Further, ... "The person ... hauling
in the collection ...", Rednckov. *Sovetsky Izhnag*, no. 3, 1948, p. 40-44.

So: C-3801, 14 April 1949, (*Isopis Zhurnal Inye Statey*, no. 12, 1949).

BELOTSERKOVSKIY, Artem Markovich; RUDNITSKIY, P.S., otvetstvennyy redaktor;
KOLOMIYTSEV, A.D., redaktor izdatel'stva; ~~BEKKER, O.G., tekhnicheskiy~~
redaktor

[Scraper equipment for coal stockpiles] Skrepernoe oborudovanie
ugol'nykh skladov. [Moskva] Ugletekhizdat, 1957. 216 p.
(Coal-handling machinery) (MIRA 10:11)

RUDNITSKIY, P.V.

Ukrainian distilling industry prepares for the 22d Congress of the
CPSU. Spirt. prom. 27 no.6:7-8 '61. (MIRA 14:9)
(Ukraine--Distilling industries)

RUDNITSKIY, P.V.

Towards a further improvement of the efficiency in alcohol production.
Farm. i spirt.prom. 31 no.5:21-24 '65.

(MIRA 18:8)

1. Ukrainskiy nauchno-issledovatel'skiy institut spirtovoy i
likero-vodochnoy promyshlennosti.

RUDNITSKIY, P. V.; GLEKHOV, I. G.

Urgent problems in the production of vitamins and their use in
the animal industry. Trudy UkrNIISF no.9:120-130 '64.

(MIRA 17:10)

RUDNITSKIY, P.V. [Rudnyts'kyi, P.V.]

For a further improvement of food production. Khar. prom.
no.4:9-13 O-D '65. (MIRA 18:12)

RUDNITSKIY, P.V.

Potentials of the efficient utilization of capital assets.
Ferm. i spirt. prom. 31 no.2:18-25 '65. (MIRA 18:6)

1. Ukrainskiy nauchno-issledovatel'skiy institut spirtovoy i
likero-vodochnoy promyshlennosti.

RUDNITSKIY, P. V.

Methods of determining production costs in the cases of complete
utilization of raw materials in the distilling industry. Spirt.
prom. 26 no.3:24-30 '60. (MIRA 13:10)
(Distilling industries--Costs)

RUDNITSKIY, P.V. [Rudnyts'kyi, P.V.]

Bring the research work to the level of present-day tasks.
Khar.prom. no.3:3-7 J1-S '62. (MIRA 15:8)

1. Predsedatel' Nauchnogo soveta pishchevoy promyshlennosti
Gosudarstvennogo komiteta Soveta Ministrov UkrSSR po koordinatsii
nauchno-issledovatel'skikh robot.
(Ukraine--Food research)

RUDNITS'KIY, P.V.

STARCHENKO, V.F., glavnyy red.; KANEVS'KIY, O.P., red.; RUDNITS'KIY, P.V.
red.; LUTSENKO, F.G., red.; BILOZUB, V.G., red.; PAVLENKO, M.K., red.;
SVISTEL'NIK, A.N., red.; KHOTENKO, M.P., red.; ZADONTSEV, A.P., red.;
POPOV, F.A., red.; DANILYUK, O.T., red.; TRITINCHENKO, A.P., red.;
AKS'ONOV, G.G., tekhn.red.

[Agricultural manual for administrative personnel of province and
district organizations, directors of machine-tractor stations,
chairmen of collective farms and agricultural specialists]

Posibnik po sel's'komu hospodarstvu dlia kerivnykh pratsivnykh
oblasnykh i raionnykh organizatsiy, dyrektoriv MTS, holiv
kolhospiv i fakhivtsiv sil's'koho hospodarstva. Skladenyi za red.:
V.F.Starchenka [and others] Holovnyi red. V.F.Starchenko. Kyiv,
Derzh.vyd-vo sil's'kohospodars'koi lit-ry URSS. Book 1. 1946.
1269 p. (MIRA 11:1)

1. Chlen-korrespondent akademii nauk URSS (for Starchenko).
(Agriculture)

~~RUDNITSKIY, P.V.~~ [RUDNYTS'KIY, P.V.]; GAK, D.V., kand.ekon.nauk, red.; LISENKO,
F.K., red.

[Odessa economic administrative area] Odes'ki ekonomichnyi
administratyvnyi raion. Kyiv, 1958. 54 p. (Tovarystvo dlia
poshyrennia politychnykh i naukovykh znan' Ukrain's'koi RSR.
Ser.2, no.9) (MIRA 12:3)
(Odessa Province--Economic conditions)

RUDNITSKIY, P. V.

Make comprehensive use of labor productivity potentials in the industry. Spirt. prom. 29 no.3:27-32 '63. (MIRA 16:4)

1. Ukrainskiy nauchno-issledovatel'skiy institut spirtovoy i likero-vodochnoy promyshlennosti.

(Distilling industries—Labor productivity)

RUSDNITSKIY, P.V.

Review of foreign and domestic experiences in the utilization
of molasses obtained in the processing of sugar beets and
sugar cane. Trudy UkrNIISP no.9:3-14 '64.

(MIRA 17:16)

RUDNITSKIY, V., inzh.

Design of a new dredge for small rivers. Rech. transp.
24 no. 10:48-49 '65. (MIRA 18:12)

1. Gor'kovskiy institut inzhenerov vodnogo transporta.

RUDNITSKIY, V. (Leningrad)

Radio receiver using P-13 and P-14 transistors. Radio no. 7:46
J1 '62. (MIRA 16:6)

(Transistor radios)

RUDNITSKIY, V., inzh.

Portable superheterodyne receiver. Radio no. 9:40-41 S '65.
(MIRA 19:1)

RUDNITSKIY, Viktor Ivanovich; TIGAY, Akiva Bentsionovich; LUPANDIN,
I.V., red.; MATUSEVICH, S.M., tekhn. red.

[Toothed and worm gears; stress analysis] Zubchatye i cherviach-
nye peredachi; raschet na prochnost'. Kiev, Gostekhizdat USSR,
1962. 161 p. (MIRA 15:11)

(Gearing)

RUDNITSKIY, V.I., kand.tekhn.nauk, dotsent

Effect of lubrication on the fatigue strength of gears. Vest.
mash. 41 no. 5:40 My '61. (MIRA 14:5)
(Lubrication and lubricants) (Gearing)

RUDNITSKIY, V.I., dotsent

~~██████████~~
Designing chain transmissions. Izv.vys.ucheb.zav.; mashinostr. no.7:
13-17 '60. (MIRA 13:11)

1. Khar'kovskiy politekhnicheskiy institut.
(Chains)

W.D. FRONIK, V. I.

W.D. FRONIK, V. I. - "Investigation of the effect on the fatigue resistance of gear wheels of the curve of the teeth, the locations of the point of load application, and surface-active materials." Khar'kov, 1955. Min Higher Education Ukrainian SSR. Khar'kov Polytechnic Inst imeni V. I. Lenin. (Dissertations for degree of Candidate of Technical Sciences.)

SO: Knizhnaya letovka, No 48. 26 November 1955. Moscow.

122-3-3/30

AUTHOR: Rudnitskiy, V.I., Candidate of Technical Sciences.

TITLE: The Effective Stress Concentration Factor in the Root of Gear Teeth (Effektivnyy koeffitsiyent kontsentratsii napryazheniy v korne zub'yev zubchatykh kolez)

PERIODICAL: Vestnik Mashinostroyeniya, 1957, No.3, pp. 17-18 (USSR).

ABSTRACT: The results of tests carried out with specially-cut gear wheels of normalised 0.45% C steel are reported. The surface finish corresponded to the 6th grade and was inspected by a binocular microscope. Different root radii were obtained by shifting the tool in the hobbing machine. The tests were carried out in a pulsating inertia type of fatigue testing machine, where the engagement of the gear wheel with a rack was simulated. Stress versus number of reversals curves are given for different ratios of tooth root radius to tooth thickness and of tooth engagement heights to tooth thickness. An empirical formula is developed from these curves in which the effective stress concentration factor is expressed as an exponential function of these variables. The stress concentration factor is plotted in a graph against the number of teeth for different tooth correction factors. There are 3 graphs and 2 Slavic references.

Card 1/1

AVAILABLE: Library of Congress.

Rudnitskiy, V.I.

32-11-44/60

AUTHOR: Rudnitskiy, V.I.

TITLE: A Device for the Testing of Fatigue in Gears (Ustanovka dlya ispytaniya zubchatykh koles na ustalost')

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 11, pp. 1383-1384 (USSR)

ABSTRACT: In order to avoid trouble in operation caused by the breaking of gears in gear-couples as a result of fatigue, gear testing plants are used, one of which is described by this paper. Such a device makes it possible to detect any kind of asymmetry, be it in the form of faults in production or in form of a bending of the gears or of wear. Such a device is, in principle, based upon a device that makes it possible to imitate the real conditions of the toothing of the pair, and thus to control the toothing. The pair of gears to be investigated is mounted on two shafts located opposite to each other at a certain distance, and at the sides they are fixed by plugs, which are fastened to the base plate and protrude between the gears. Into the space between this pair of gears the aforementioned testing device is introduced, so that it occupies a "weight-balancing" position while it rests on both sides against the gears. The device itself consists of a T-shaped head, the upper ends of which are formed in such a manner that they can easily

Card 1/3

A Device for the Testing of Fatigue in Gears

32-11-44/60

enter between the teeth of the two gears. Their position with respect to the horizontal can be adjusted to any angle by means of a special device. The entire testing apparatus is attached to a shaft which is adjustably arranged in a position that is transversal to that of the pair of gears. At the lower part of the testing device there is a flywheel, on the edge of which an exchangeable weight is fitted (because of the centrifugal force). The flywheel is driven by belt drive by a transmission shaft arranged in a somewhat lower position up to 3000 revs. per minute. The centrifugal force occurring on this occasion exercises its influence on the tooth of the pair of gears to be investigated. By suitable selection of the weight on the flywheel and/or by adjusting it in the direction of the axis of the flywheel, it is possible to create different moments of stress acting upon the tooth, which may lead to its breaking out (if damaged). For such a case a device is provided by means of which the testing apparatus is automatically switched off. By suitable selection of the aforementioned moments of stress and by means of a suitable adjustment of the points of the test apparatus it is possible to obtain an impression of the asymmetry in the pair of gears under investigation and to determine the operation characteristic of this pair. The apparatus described in this

Card 2/3

A Device for the Testing of Fatigue in Gears

32-11-44/60

paper consists of 4 such testing devices arranged in a row, together with a common massive and well fastened base plate (because of vibration). For measuring the moments of stress each of the testing devices is provided with an electric device for measuring resistance consisting of a ferroresonance stabilizer, a rectifier, an amplifier, an oscillograph, and a vibrator, which are connected with the four-armed bridge indicator mounted on the head of the testing apparatus. There are 2 figures.

ASSOCIATION: Khar'kov Polytechnical Institute imeni V.I.Lenin (Khar'kovskiy politekhnicheskij institut im. V.I.Lenina)

AVAILABLE: Library of Congress

Card 3/3

RUDNITSKIY, V.I., kandidat tekhnicheskikh nauk.

Effective coefficient of stress concentration in gear teeth roots.
Vest.mash. 37 no.3:17-18 Mr '57. (MIRA 10:4)
(Strains and stresses) (Gearing)

SOV/122-58-7-11/31

AUTHOR: Radnitskiy, V.I., Candidate of Technical Sciences

TITLE: On the Fatigue Scale Factor Applied to Gear Wheels
(O mashtabnom faktore primenitel'no k zubchatym kolesam)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 7, pp 39-40 (USSR)

ABSTRACT: An attempt is made to determine in the first approximation the scale factor expressing the effect of size on the fatigue strength of gear teeth. The statistical theory of Afanas'yev, N.N. ("The Statistical Theory of the Fatigue Strength of Metals" published by Ac.Sc.Ukrainian SSR, 1953) postulates the constant value of the product of the cross-sectional area of the specimen and the k-th power of the stress for infinite endurance. A tooth is considered similar to a notched test piece of rectangular cross-section. The stress distribution across the weak cross-section is assumed to follow a parabolic law with some exponent of the parabola. The scale factor derived on this basis is equal to the k-th root of the product of two ratios. The first ratio is that of the squares of the modules, the second is the ratio of the tooth widths expressed as multiples of the modules. The value of k for gear teeth has been determined by fatigue tests on a special test rig simulating the engagement of the gearwheel.

Card1/2

SOV/122-58-7-11/31

On the Fatigue Scale Factor Applied to Gear Wheels

with a rack (described by the present author in Vestnik Mashinostroyeniya, 1957, Nr 3) and found to be about 10 as illustrated in Figure 2 showing the drop of the tooth fatigue strength with a rising module. A gearwheel with 4 mm module teeth, 10 mm wide, is suggested as a suitable standard wheel for fatigue tests. It follows that the size factor for fatigue strength is the 10th root of the quotient of 40 divided by the square of the module in mm and by the relative gear width. There are 6 figures and 3 Soviet references.

Card 2/2

AUTHOR: Rudnitakiy, V.I.

32-24-4-53/67

TITLE: A Device for Fatigue Tests of Not Round Samples (Prisposobleniye dlya ispytaniya nekruglykh obraztsov na ustalost')

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol. 24, Nr 4, pp. 492-493 (USSR)

ABSTRACT: A simple device was developed to be used with the machine of the Veler types, which makes it possible to examine samples of different cross section with respect to their bending fatigue for any coefficient of the asymmetry of the stress cycle. Investigations were carried out in the regime of deformation constance. From the schematical drawing it may be seen that, instead of the pincers for round profiles, two eccentrics are screwed on, and that the necessary total eccentricity can be attained by revolving the lower of them. Modification of cycle asymmetry is attained by changing the position of the sample by means of ground bases. Stress can be measured in two ways: by means of a clocklike indicator or by means of wire resistance cells which are pasted on to the sample. In accordance with the increase of stress bending is carried out in one of the two ways mentioned. The number of cycles is measured by means of a rotation counter. The device

Card 1/2

A Device for Fatigue Tests of Not Round Samples

32-24-4-53/67

suggested is of simple construction and, as was shown by the investigation, sufficiently reliable in operation. There is 1 figure.

ASSOCIATION: Khar'kovskiy politekhnicheskij institut im. V.I. Lenina
(Khar'kov Polytechnic Institute imeni V.I. Lenin)

1. Materials--Fatigue
2. Materials--Testing equipment
3. Materials--Stresses

Card 2/2

RUDNITSKIY, V. I., kand.tekhn.nauk, dotsent

Effect of the correction for toothng on the fatigue and breaking
strength of teeth of spur gear wheels. Vest.mash. 40 no.11:36-38:
N '60. (MIRA 13:10)

(Gearing, Spur)

RUDNITSKIY, V.I., kand. tekhn. nauk, dotsent

Fatigue caused by the bending of gear wheels with nonstandard
initial shapes. Vest. mashinostr, 44 no.6:42-45 Je '64.
(MIRA 17:8)

S/122/61/000/005/006/013
D221/D304

AUTHOR: Kudnitskiy, V.I., Candidate of Technical Sciences,
Docent

TITLE: Effect of lubrication on the fatigue resistance of
gears

PERIODICAL: Vestnik mashinostroyeniya, no. 5, 1961, 40

TEXT: The cause of lowering the fatigue limit should be considered as due to adsorption easing of deformation on account of adsorption of surface active substances by the metal surface. Investigations on adsorption fatigue indicated in literature have revealed a reduction of fatigue limit by 10 - 20 %. Furthermore, it is established that the above media also produce the so-called cooling effect which results in an increase in the zone of limited fatigue. Most known experiments were carried out, however, with plain cylindrical specimens which had marked stress concentrations (deep undercutting). The effect of surface active medium on fatigue resistance of components with various cross sections in conditions of

Card 1/3

S/122/61/000/005/006/013
D221/D304

Effect of lubrication on the ...

relatively small concentration of stresses (effective coefficient of stress concentration of the order of 1.2 - 1.5) has not as yet been clarified in literature. This led the author to carry out comparative tests on fatigue of gears without lubrication and with the use of "Solidol L" and "Avtol 6". Gears were made of normalized steel 45, module $m = 8$ mm, number of teeth $z = 25$, and width of 10 mm. Specimens were thoroughly rinsed in petrol to remove film of grease, dirt and dust, and then dried. During experiments fluid lubricant was fed by a drop feeder and uniformly spread over the whole width of tooth by a wick. Solidol covered the teeth surface with a sufficiently thick layer, and was maintained by its viscosity as well as the surface adherence to the metal. There was no additional activation of lubricant (for example by introduction of olein acid). Specimens were tested in a machine with inertia type loader and a frequency of stressing of 50 cycles. Imitation of meshing between a gear and rack took place during the experiments. Curves of adsorption fatigue, obtained in tests with surface active medium have similar to curves obtained during experiments in air, a clearly expressed section, which asymptotically approaches a line

Card 2/3

Effect of lubrication on the ...

S/122/61/000/005/006/013
D221/D304

parallel to axis of abscissae. A run in "Solidol L" resulted in a 5 % reduction of fatigue limit as compared with tests without lubricant, whereas in the case of "Avtol 6" the drop was about 15 %. The zone of limit fatigue, i.e. endurance at a number of cycles $N < 10^7$ in the presence of lubricant seems to be somewhat greater than in the case of dry run. This may be due to cooling effect. There are 1 figure and 2 Soviet-bloc references.



Card 5/3

S/122/60/000/011/007/020
A161/A127

AUTHOR: Rudnitskiy, V. I., Docent, Candidate of Technical Sciences

TITLE: The effect of tooth correction on the fatigue endurance failure of spur gears

PERIODICAL: Vestnik mashinostroyeniya, no. 11, 1960, 36 - 38

TEXT: The numerical evaluation of the tooth correction effect yields only very relative data as quoted in the existing sources of technical literature, and the data obtained, are contradictory in nature. Referring to a previous article by the author (Ref. 3: Vestnik mashinostroyeniya, No. 3, 1957) he states in this article that experimental results made it possible to illustrate through curves the dependence of the effective stress concentration factor K_{σ} on the gear tooth number z of the cut gear and the cutting rack displacement factor ξ , applicable to 8 - 12 accuracy class gears with only one pair of teeth in the mesh, and where the load at the tooth addendum may be considered as the point of load application. By approximating the curves we obtain an empirical formula for the K_{σ} factor of 8 - 12 accuracy class gears (also applicable to class 7 with
Card 1/5

The effect of tooth correction on the fatigue ...

S/122/60/000/011/007/020
A161/A127

minor errors):

$$K_{\sigma} = 1.54 - \frac{5.7}{z} + \frac{1.4 \xi}{3 \sqrt{z}}$$

The factors have been taken from the work by V. V. Bolotin (Ref. 4: Ob otsenke dolgovechnosti pri statsionarnykh sluchaynykh nagruzkakh [Estimation of life longevity in cases of occasional stationary loads], Izv. vyshey shkoly. Mashinostroyeniye, No. 8, 1959). The data are true for spur gears cut by a standard rack-shaped tool and subjected to normalization or improvement without heat-treatment. Knowing the factor K_{σ} value, the effect of correction on the fatigue resistance can be calculated in accordance with the known formula

$$Q = y \pi m b [\sigma_u] = y \pi m b \frac{\sigma_{-1}}{n K_{\sigma}}$$

where y = tooth shape factor, b = tooth length, m = the module, n = the safety factor. By designating the values, relating to the tooth mesh correction, with the corresponding letters with the index ξ we obtain a relative change of the

Card 2/5

The effect of tooth correction on the fatigue

S/122/60/000/011/007/020

A161/A127

flexural tooth strength, expressed in %, with the following formula:

$$\delta_Q = \frac{Q_{\xi} - Q}{Q} \cdot 100 = 100 \left(\frac{y_{\xi} K_{\sigma}}{y K_{\sigma} \xi} - 1 \right).$$

The results calculated in accordance with this equality for gears with various tooth numbers of the 8 - 12 accuracy class are plotted in the curves of Figure 2, and for gears of the 1 - 7 accuracy class in the adjacent table. When comparing the curves with each other it can be noticed that an increase of the positive displacement of the rack-shaped cutting tool for the case of single-pair mesh of gears with a low tooth number, $z = 9 + 20$, leads to a considerable rise in tooth strength (of the order between 15 - 40 %); at a tooth number $z = 30 + 50$ the tool displacement has practically no effect, and finally at a tooth number $z = 70 + 100$ a slight decrease in strength can be noticed. From the data given in the table it can be concluded that gears in two-pair mesh, corrected according to both systems of the TsKBR, show a sharp increase of the flexural tooth strength at a small tooth number rate ($z = 10 + 12$) as compared to uncorrected gears; however, this increase is diminished by a rising transmission ratio. At $z = 15 + 20$ the increase in strength is insignificant at a low transmission ratio; it grows, however, with a growing ratio. At tooth number ($z > 30$) the

Card 3/5

The effect of tooth correction on the fatigue

S/122/60/000/011/007/020
A161/A127

positive tool displacement practically does not affect the tooth strength. In spite of the positive results for gears with a low tooth number ($z \leq 20$) it is not advisable to increase the displacement of the rack-shaped cutting tool above 0.8, a value obtained in practice and demonstrated in Figure 2. Besides that, other limiting factors have to be considered: the sharpness limit of the tooth addendum, the module etc. As also shown in Figure 2, a negative displacement of the cutting tool reduces the flexural tooth strength, however, to an essential degree, only for gears with a tooth number $z < 50$. At $z \geq 50$ this decrease does not exceed 8 %, even at a value of $\xi = -0.6$. At $z = 100$ (the upper left curve in Figure 2) the decrease in strength may be neglected in general since it does not exceed 2 - 3 %. There are 2 figures, 1 table and 4 Soviet-bloc references.

Card 4/5

RUDNITSKIY, V.P. [Rudnyts'kyi, V.P.]

Travel-time curve for refracted waves in a two-layer medium
with a sloping interface. Dop. AN URSR no.8:1047-1050 '64.
(MIRA 17:8)

1. Institut geofiziki AN UkrSSR. Predstavleno akademikom
AN UkrSSR S.I. Subbotinym.

KRYUCHOK, G.M., elektromekhanik; BUDNITSKIY, V.P., elektromekhanik;
TIRABSHEV, I.I., elektromekhanik

Improve the BC7A apparatus. Avtom., telem. i sviaz' 2 no.9:26 S '58. |
(MIRA 11:10)

1. Debal'tsevsckaya distantsiya signalizatsii i svyazi Donetskoy dorogi.
(Telephone, Automatic--Apparatus and supplies)

RUDNITSKIY, V.P.

Method for studying surface conditions using sondes. Geofiz.sbor. no.2:
73-79 '62. (MIRA 16:3)

1. Kiyevskaya geofizicheskaya razvedochnaya ekspeditsiya tresta
"Ukrgeofizrazvedka".

(Seismic prospecting)

RUDNITSKIY, V.P.

Vertical hodograph of refracted waves for a two-layered medium with inclined interface. Geofiz. sbor. no.7:54-66 '64. (MIRA 17:11)

1. Institut geofiziki AN UkrSSR.

MAMIN, A.Ye.; RUDNITSKIY, V.T.; SAZONOV, V.V., red.; SAYTANIDI, L.D.,
tekh. red.

[Experiences of Vladimir Province workers] Opyt vladimirtsev.
Moskva, Izd-vo M-va sel'.khoz.RSFSR, 1960. 95 p.

(MIRA 14:12)

(Vladimir Province--Agriculture)

RUDNITSKIY, Vitaliy Valerianovich; KHVOSTOVA, D.M.,redaktor; RAKOV, S.I.,
tekhnicheskiy redaktor

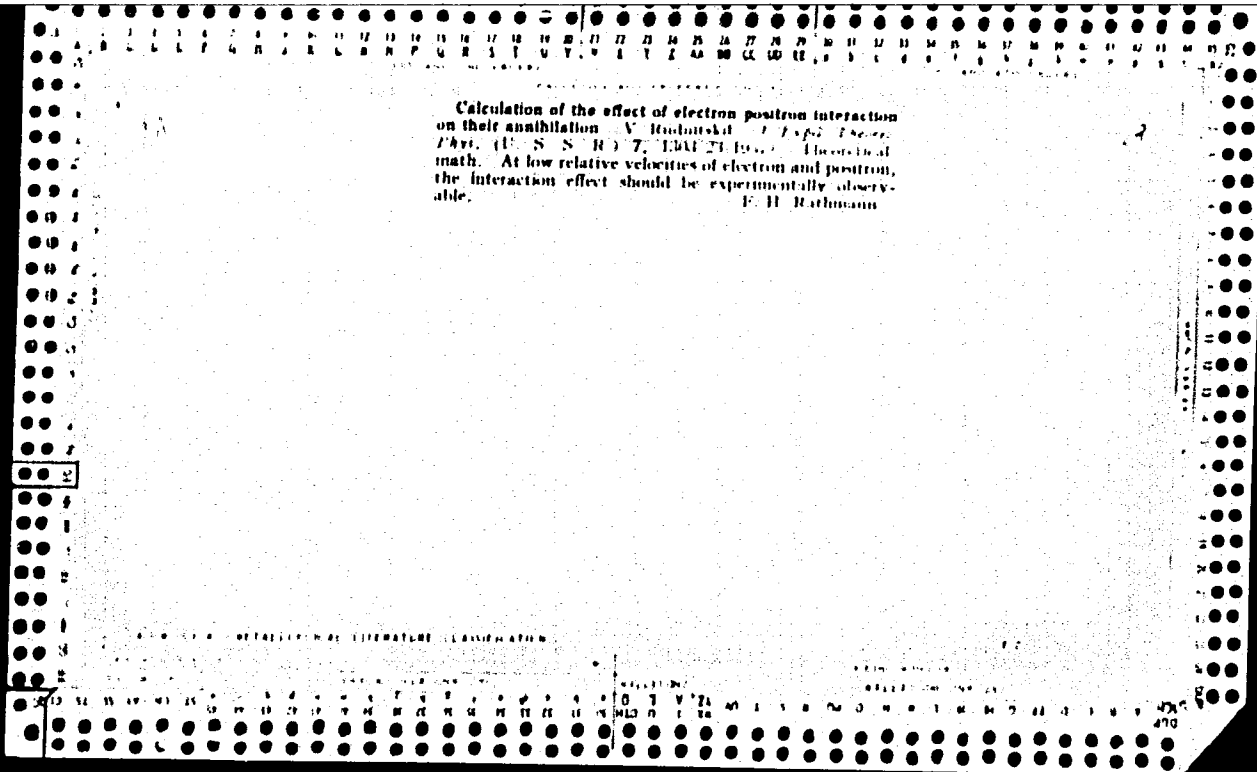
[Overall work organization on all construction jobs] Kompleksnuiu
organizatsiiu truda na vse stroiki. Moskva, Izd-vo VTsSPS Profizdat,
1957.46 p. (MLRA 10:5)
(Construction industry)

RUDNITSKIY, Vitaliy Valerianovich, deputat Verkhovnogo Soveta RSFSR;
PRAVKIN, G.A., red.; KUZNETSOVA, G.I., tekhn.red.

[Work teams on construction jobs] Komplekanye brigady na
stroikakh. Moskva, Izd-vo "Sovetskaya Rossiya," 1958. 29 p.
(Building) (MIRA 12:4)

RUDNITSKIY, V.

Mem., Ural Physio-Tech. Inst., Sverdlovsk, -1938-39-. Mem., Ural Affil., Acad. Sci., 5.
1939-41-. "On the Hall Effect in Ferromagnetic Bodies," Acta. Phys. 1, No. 3, 1939;
"Cyclomagnetic Effect in Supra-Conductors," Zhur. Eksper. i Teoret. Fiz., 9, No. 3, 1939;
"The Hall Effect in Ordered and Unordered Solid Solutions," ibid., 9, No. 2, 1939;
"On the Ferromagnetic Properties of Alloys," ibid., 10, No. 1, 1940;
"Motion of Electrons and Neutrons in a Meson Field," ibid., 11, No. 4, 1941;
"On the Transformations of Elementary Particles," ibid.; "On the Participation of d-Electrons
of Ferromagnetics in the Electric Conductivity," ibid., 12, Nos. 5-6, 1942; "On the
'Antiferromagnetisms'," ibid., 12, Nos. 11-12, 1942.



MAMIN, A.Ye.; RUDNITSKIY, V.T.; SAZONOV, V.V., red.; SAYTANIDI, L.D.,
tekh.n.red.

[Practices of Vladimir people] Opyt vladimirtsev. Moskva,
Izd-vo M-va sel'.khoz.RSFSR, 1960. 95 p.

(MIRA 14:2)

(Vladimir District--Stock and stockbreeding)

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

RUDNITSKIY, V. Ye

PROCESSES AND PROPERTIES INDEX

M

Gyromagnetic Effect in Superconductors. Ya. Frenkel and V. Rudnitsky
 (Zhur. Eksp. Teor. Fiziki, 1939, 9, (3), 290-291; Sci. Abs., 1939, 1A).
 42, 453). [In Russian.] From the experiments of Kikoin and Ginzburg (*Compt. rend. (Doklady) Acad. Sci. U.R.S.S.*, 1938, 19, 219; *Met. Abs.*, 1940, 7, 281),
 F. and R. conclude that the large diamagnetism of superconductors is due to
 free motion of electrons in orbits in the crystal lattice, as if the electrons were free
 in the sense of having effective mass and charge equal to the ordinary free
 values.

43-514 METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52

100 AND 8TH OBJECT

RUDNITSKIY V. [Ye] PROCESSES AND PROPERTIES INDEX

SA A 54
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3799. Hall Effect in Ferromagnetics. V. Rudnitsky. *J. of Exp. and Theor. Physics, U.S.S.R.* 9. 3. pp. 262-266, 1939. *In Russian.* /

The author discusses the formation of a transverse p.d. due to the interaction of the electrons with the magnetic field of the current. This difference of potential is found to be independent of the external magnetic field and proportional to the intensity of magnetisation, as is the case in the Hall effect in ferromagnetics. D. S.

ASU SCA METALLURGICAL LITERATURE CLASSIFICATION

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LIST AND THE ORDER OF PROCESSES AND PROPERTIES MORE

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ca

Hall effect in ordered and unordered solid solutions. V. E. Rudnitskii. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 9, 1066-72(1936); cf. *C. A.* 33, 7632; 34, 2222. — Math.-theoret. The formation of a Brillouin zone in the transition from the unordered to an ordered state of a solid soln. is considered. The formation of addnl. zones is explained by a change in the Hall const. as found in the transition of the alloy Cu₃As. F. H. Rathmann

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

EIGHT SYMBOLS

1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8

REF ID: A66781

PROCESSES AND PROPERTIES INDEX

1ST AND 2ND ORDERS 180 AND 17th ORDERS

CA

2

Ferromagnetic properties of alloys. V. Rudnitskii.
Exptl. Theoret. Phys. (U. S. S. R.) 10, 63-6(1940).—
 The Heisenberg method (cf. C. A. 24, 4348) of treatment
 of the problem of ferromagnetism is applied to alloys. The
 usual formula of Heisenberg's theory contg. the av. value
 of exchange integral is obtained. The Curie point is detd.
 by the av. value of exchange integral and consequently de-
 pends on the degree of order in alloys. As an example the
 case of Ni₃Mn is discussed. In the state of disorder the
 Curie point is: $\theta = 273^\circ\text{K}$. If Ni₃Mn is cooled slowly
 (i. e., brought to order) its Curie point rises to $\theta = 768^\circ\text{K}$.
 The increase of θ for the states of higher degree of order
 can be explained as a result of larger distances between the
 atoms of Mn. The ferromagnetic alloys do not differ, in
 general, from the ferromagnetic elements especially for
 higher temps. Roksalana Gamow

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

E-2

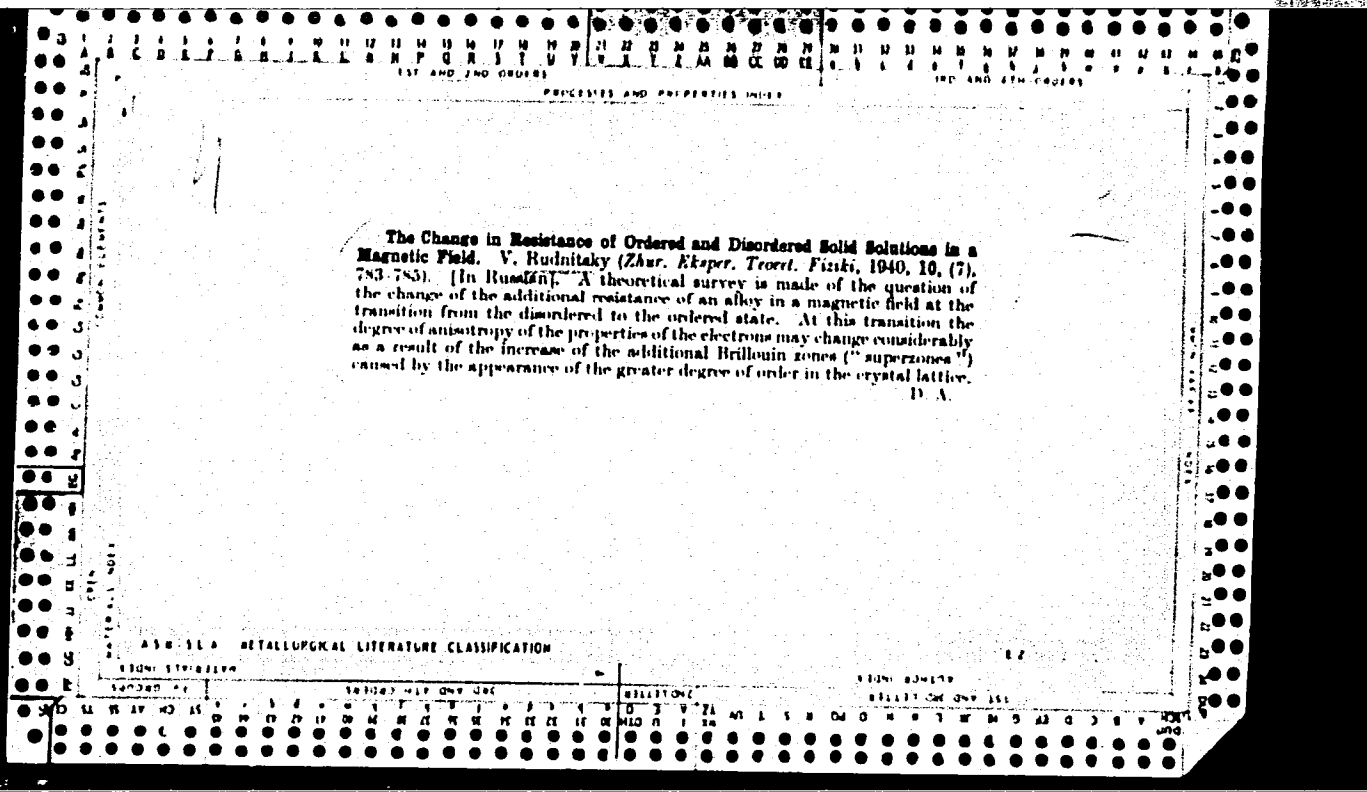
1ST AND 2ND ORDERS 180 AND 17th ORDERS

RUDNITSKIY, V. [Ye.]

Hall's Effect in Ferromagnetic Bodies. ZhETF 10. 743, 1940. J. of Phys.
1, 247, 1939.

RUOMITSEFIY, T. Ye.

The Change of Resistance of Ferromagnetics with the Change in True Magnetization. ZhETF 10, 780, 1940.



PRINTER'S AND PROPRIETOR'S MARK

100 AND 4TH STORIES

3

Motion of electrons and neutrinos in a meson field. V. Rudnitskii. *J. Exptl. Theoret. Phys.* (U. S. S. R.) 11, 377-81(1941).-- An equation is derived for the electron and neutrino wave-function in the presence of a meson field. The difference between the no. of electrons and the no. of neutrinos is a variable; the sum is a const. Equations are derived for an electron moving in a static neutron field, and for the energy of interaction of an electron and a neutron. Neutrinos and electrons always appeared or disappeared as pairs. P. H. Rathmann

A.S.U.S.A. METALLURGICAL LITERATURE CLASSIFICATION

SECTION 1-10 1-11 1-12 1-13 1-14 1-15 1-16 1-17 1-18 1-19 1-20 1-21 1-22 1-23 1-24 1-25 1-26 1-27 1-28 1-29 1-30 1-31 1-32 1-33 1-34 1-35 1-36 1-37 1-38 1-39 1-40 1-41 1-42 1-43 1-44 1-45 1-46 1-47 1-48 1-49 1-50 1-51 1-52 1-53 1-54 1-55 1-56 1-57 1-58 1-59 1-60 1-61 1-62 1-63 1-64 1-65 1-66 1-67 1-68 1-69 1-70 1-71 1-72 1-73 1-74 1-75 1-76 1-77 1-78 1-79 1-80 1-81 1-82 1-83 1-84 1-85 1-86 1-87 1-88 1-89 1-90 1-91 1-92 1-93 1-94 1-95 1-96 1-97 1-98 1-99 1-100

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C A

TRANSFORMATIONS OF ELEMENTARY PARTICLES. V. Rudin
 skii. *J. Exptl. Theoret. Phys. (U. S. S. R.)* 11, 382 (1941). - By use of the Yukawa hypothesis of meson disintegration, it is shown that the neutrino ought to exhibit a magnetic moment, the antineutrino a moment of opposite sign, and the neutrino and the electron ought to interact across the meson. Light particles should show this more than heavy particles. Such a theory then demands the existence of antiprotons and antineutrons, and the possible interconversion of neutrinos and photons. F. H. R. Chemical effects of positrons. Jack De Ment. *Mineralogist* 9, 405-8, 433(1941). - Review with 24 references. E. H.

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METALLURGICAL LITERATURE CLASSIFICATION

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RUDNITSKIY V. [Ye]

*Change in Thermal Conductivity of Metals in a Magnetic Field at Low Temperatures ($T < \theta$). V. Rudnitskiy (*Zhur. Eksp. Teoret. Fiziki*, 1941, 11, (4), 463-466).—[In Russian].—Mathematical treatment of the dependence of the change of thermal conductivity on the magnetic field and temp.—D. A.

METALLURGICAL LITERATURE CLASSIFICATION

RUDNITSKIY, V. Ye.

Participation of d-Electrons of Ferromagnetics in Conductivity

ZhETF 12, 207, 1942

PROCESSES AND PROPERTIES INDEX

1

The Problem of Anti-Ferromagnetism. V.E. Rudnitsky (Zhur. Eksper. Teoret. Fiziki, 1942, 12, 542-548; C. Abs., 1943, 37, 4281)
 .(In Russian) The theory of anti-ferromagnetism is rejected on theoretical grounds.

METALLURGICAL LITERATURE CLASSIFICATION

A S M - S L A

MATERIALS INDEX

INDEXING

INDEXING

RUDNITSKIY, Ya., sud'ya vsesoyuznoy kategorii

Together from takeoff to landing. Kryl. rod. 15 no.1:11
Ja '64. (MIRA 17:2)

RUDNITS'KIY, Yar. [Rudnyts'kyi, IAroslav Bohdan]

[Geographical names of Boikovia (Middle Carpathians)]
Geografichni nazvy Boikivshchyny. Druhe spravlene vydannia
pratsi: "Nazvy geograficzne Bojkowszczyzny" z 1939 r. Winnipeg,
Nakładow UVAN, 1962. 246 p. (Ukrains'ka Vil'na Akademia
Nauk. Serii: Nazvoznastvo, nos.23/24) (MIRA 15:1)
(Carpathian Mountain region—Names, Geographical)

AKHIEV, M.D., inzh.; BUDNITSKIY, Ya.N., inzh.; FAYERMAN, A.M., inzh.;
TUMBYKO, Yu.I., inzh.

Withdrawal and use of the gas of steel-smelting converters. Prom. energ.
19 no.11:2-6 N. 64. (MIR 18:1)

ANDON'YEV, S.M., doktor tekhn.nauk; TSELUYKO, Yu.I., inzh.; RUDNITSKIY, Ya.N.,
inzh.; KATSENELENOGEN, L.B., inzh.

Selection of an efficient grouping of complex installations for
evaporator, cooling and waste heat boilers for heating furnaces.
Stal' 24 no.7:664-667 .J1 '64. (MIRA 18:1)

ANDON'YEV, S.M., doktor tekhn.nauk; TSELYUKO, Yu.I., inzh.; RUDNITSKIY, Ya.M.,
inzh.; KATSENELENOGEN, L.B., inzh.; FAZERSHMEYN, A.D., inzh.;
KURUZHIYAK, I.S., inzh.

Investigating experimental contours with natural circulation of water
in the chimney of an oxygen-blown converter. Stal' 23 no.7:664-667
Jl '63. (MIRA 16:9)

1. Gosudarstvennyy institut po proyektirovaniyu predpriyatiy po
proizvodstvu stali i Krivorozhskiy metallurgicheskiy zavod.
(Converters--Cooling)

ANDON'YEV, S.M., doktor tekhn.nauk; TSELYUKO, Yu.M., inzh.;
KATSENELENOGEN, L.B., inzh.; MOSTITSKIY, A.V., inzh.;
RUDNITSKIY, Ya.N., inzh.; PEVKO, A.P., inzh.; TRUSH, V.I., inzh.

Investigating thermal processes in converter "caissons" and
chimneys. Stal' 22 no.2:173-176 F '62. (MIRA 15:2)

1. Gosudarstvennyy institut po proyektirovaniyu metallurgiches-
kikh zavodov i predpriyatiy.

(Bessemer process)
(Heat—Transmission)

ANDON'YEV, S.M., doktor tekhn. nauk; TSELUYKO, Yu.I., inzh.; RUDNITSKIY,
Ya.N., inzh.; KOTEN, M.G., inzh.

Lead-off of converter gases without burning them in the combustion
chamber. Prom. energ. 18 no.6:17-21 Je '63. (MIRA 16:7)

(Steel--Metallurgy)

TSELUYKO, Yu.I.; KATSELEBENOVEN, L.B.; RUDNITSKIY, Ya.N.

Calculation of heat absorption of hearth tubes in heating
furnaces. Stal' 21 no.8:753-757 Ag '61. (MIRA 14:9)

1. Gosudarstvennyy institut po proyektirovaniyu metallurgicheskikh zavodov i predpriyatiy.
(Furnaces, Heating)

AMETSKIY, Ye.M.; SHYAKH, G.S.

Oilfree high-vacuum apparatus with a magnetic electric-discharge
pump. Prib. i tekh. eksp. 8 no.6:121-123 Nov '69.
(MIRA 17:6)

ACC NR: AP0013510

BR/0120/06/000/02/0103/0112

AUTHOR: Vinogradov, M.I.; Rudnitskiy, Ye.M.

ORG: None

TITLE: Triode magnetic-discharge pump with cooled electrodes

SOURCE: Priboiy i tekhnika eksperimenta, no.2, 1966, 108-112

TOPIC TAGS: pump, vacuum pump, magnetic discharge pump / NEM-100-2 magnetic discharge pump

ABSTRACT: This paper is concerned with triode magnetic field / electric discharge high vacuum pumps with cooled electrodes. The topic of interest is the cooled electrodes feature. It is shown that the cooling of the pump decisively improves its performance. The pump then works stably and starts well at a higher fore-pressure, and attains a lower vacuum in a shorter time than the uncooled pump. An exploratory model of a cooled electrode pump was built first. Its magnetic field of 2 koe was supplied by an electromagnet; the cathode potential was 7 kv. With the electrodes cooled with liquid nitrogen, the pump delivered a limiting vacuum of 1.10^{-11} torr in 8 hours. In the uncooled state, the respective values were 2.10^{-10} and 48 hours. An experimental prototype pump was then constructed and tested. The basic pumping parameters were determined and are presented in the paper. Fig. 1. shows the load pressure as a function of time from start. 1 - for the uncooled pump and 2 - for the cooled electrodes pump.

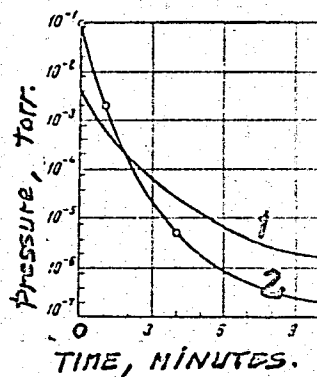
Card 1/2

UDC: 621.527

ACC N#: AP6013510

Parameters of the uncooled production magnetic-discharge pump NEM-100-2 are also given in a table. The magnetic discharge pumps are noted by their reliability which is re-

Fig. 1. The dependence of load pressure upon time, $P = f(t)$, after pump start. 1 - uncooled; 2 - cooled electrodes.



tained by the cooled electrode variant. The triode type magnetic discharge pumps require more power and have therefore a higher weight than the diode type pumps. Orig. art. has 7 figures and 3 tables.

SUB CODE: 13

SUBM DATE: 23Feb65

ORIG REF: 000

OTH REF: 005

Card 2/2

ZHABOTINSKIY, M.Ye.; RUDNITSKIY,  TSAPKIN, V.V.; ELLERT, G.V.

Transfer of excitation from a crystal lattice to rare earth ions. Zhur.eksp. i teor.fiz. 49 no.6:1689-1694 D '65.
(MIRA 19:1)
1. Institut radiotekhniki i elektroniki AN SSSR. Submitted June 14, 1965.

L 25696-66 EWT(1)/EWT(m)/I/EWP(t) IJP(c) AT/JD/JG

ACC NR: AF6002705

SOURCE CODE: UR/0056/65/049/006/1689/1694

AUTHOR: ZHobotinskiy, M. YE.; Rudnitskiy, YU. P.; TSapkin, V. V.; Ellert, G. V.

ORG: Institute of Radio Engineering and Electronics, Academy of Sciences SSSR (Institut radiotekhniki i elektroniki Akademii nauk SSSR)

TITLE: Transfer of excitation from the crystal lattice to rare earth ions

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 49, no. 6, 1965, 1689-1694

TOPIC TAGS: polycrystal, ion, cesium compound, uranium compound, rare earth element, excitation spectrum, activated crystal, luminescence spectrum, absorption band, crystal lattice energy

ABSTRACT: The authors have experimentally confirmed the possibility of efficient transfer of excitation energy from the crystal lattice to activator ions, and present the results of a study of such a transfer from uranyl cesium tetrachloride lattice to a rare-earth ion. Polycrystalline uranyl cesium tetrachloride was used, activated by rare earths (other than Ce and Gd) with concentration 0.1--0.5 mol.%. The luminescence spectra and excitation spectra were recorded and the lifetimes measured. The luminescence was excited both directly in the excitation bands of the ions themselves and through excitation of the lattice. The luminescence produced by Pr, Nd, Eu, Ho, Er, and Tm was quite strong, that of Sm weaker, and no luminescence of Tb and Dy was observed. Luminescence of Yb was observed only in the ir region on pumping in the ion absorption band. It is deduced from the excitation spectra that an efficient energy transfer exists between the lattice and the activator ions. Luminescence excited

Card 1/2

L 25696-66

ACC NR: AP6002705

through lattice pumping is much more intense than that induced directly in the ion absorption band. The energy transfer is accompanied by appreciable shortening of the lifetime of the excited state of the uranyl, indicating a nonradiative transfer mechanism. Orig. art. has: 6 figures.

SUB CODE: 20/ SUBM DATE: 14 Jun 65/ ORIG REF: 004/ OTH REF: 004

Card 2/2 *Y/C*

ACC NR: AT7002116

(A)

SOURCE CODE: UR/0000/66/000/000/0310/0314

AUTHOR: Rudnitskiy, Yu. S.

ORG: none

TITLE: An investigation of nonstationary thermoelastic stresses by an optical method based on polarization

SOURCE: Vsesoyuznaya konferentsiya po polyarizatsionno-opticheskomu metodu issledovaniya napryazheniy. 5th, Leningrad, 1964. Polyarizatsionno-opticheskiy metod issledovaniya napryazheniy (Polarizing-optical method of investigating stresses); trudy konferentsii. Leningrad, Izd-vo Leningr. univ., 1966, 310-314

TOPIC TAGS: thermal stress, stress analysis, optic method, polarization, thermal shock, thermal transducer, temperature measurement

ABSTRACT: Nonstationary elastic stresses due to temperature changes were investigated using polarization techniques. A model is illuminated by polarized light and the optical changes in the optically active material are recorded with a movie camera at 16 frames per second. The analysis of the polarization band images is made in the conventional manner. If the number of bands is small, a photometric method is applied to determine the fractional components of the bands. Since the temperature and stress distribution fields vary with time, certain dynamic effects could be expected, which

Card 1/2

ACC NR: AT7002116

would require high speed cameras for their recording and special methods for band analysis. It turns out that the dynamic tensions occur only due to a sudden (step-like) rise in surface temperature of the body and the ambient medium. These dynamic tensions (thermal shock) can be derived analytically, if the effects of the inertial terms in the thermal balance equations are considered and the time for the temperature rise in the body and the surrounding medium is set to zero, which is not possible under real conditions. Hence, temperature variations take place at a finite rate, a thermal shock is impossible, and therefore, the effect of the inertial terms can be neglected. It follows from these considerations that any nonstationary thermoelastic problem can be considered to be quasi-stationary. The application of the photoelasticity method to the solution of such problems is illustrated by an experiment involving temperature vs stress measurements in an epoxy ring. The temperature in various portions of the ring, which was heated along its external circumference, was recorded using thermistors and a recorder. Changes in temperature distribution with respect to time were measured and compared to stress variations evident through optical changes. Orig. art. has: 4 figures.

SUB CODE: 20,13,14/ SUBM DATE: 14Jun66

Card 2/2

RUDNITSKIY, Yu.S. [Rudnyts'kyi, IU.S.]

Thermal shock along the outer contour of a ring allowing
for viscoelastic damping of vibrations in the material.
Dop. AN URSR no.11:1455-1460 '65.

(MIRA 18:12)

1. Kiyevskiy politekhnicheskii institut.

L 14432-66 EWT(m)/EWP(w)/ETC(m)-6 IJP(c) WW/EM
ACC NR: AP6002646

SOURCE CODE: UR/0021/65/000/011/1455/1460

60
B

AUTHOR: Rudnyts'kyy, Yu. S. -- Rudnitskiy, Yu. S.

ORG: Kiev Polytechnic Institute (Kyyivs'kyy politekhnichnyy instytut)

TITLE: Thermal shock along the outer contour of a ring with viscoelastic damping of oscillations

26

SOURCE: AN UkrRSR. Dopovidi, no. 11, 1965, 1455-1460

TOPIC TAGS: thermoelasticity, elasticity theory, shock wave oscillation

ABSTRACT: Starting from the heat conduction equation the author solves theoretically the two-dimensional dynamic axisymmetric problem of thermoelasticity. The thermal shock is applied along the outer contour of a ring immersed in a medium of constant temperature (at the initial instant of time the contour's temperature is raised suddenly to a specific temperature). The heat transferred through the inner contour of the ring is negligible compared to the heat transferred through the ring sides. The solution is derived within

Card 1/2

RUDNITSKIY, Z.A., inzh.

Two-phase chrome tanning using masking reagents in the first phase.
Izv.vys.ucheb.zav.; tekhn.prom. no.3:42-46 '61. (MIRA 14:7)

1. Rekomendovana kafedroy tekhnologii kozhi Kiyevskogo tekhnologicheskogo instituta legkoy promyshlennosti.
(Tanning)

RUDNITSKIY, Z.A., inzh.

Oxidation-reduction method for producing chromated sulfite waste liquor. *Izv.vys.ucheb.zav.; tekhn.prom. no.5:44-47 '60.*
(MIRA 13:11)

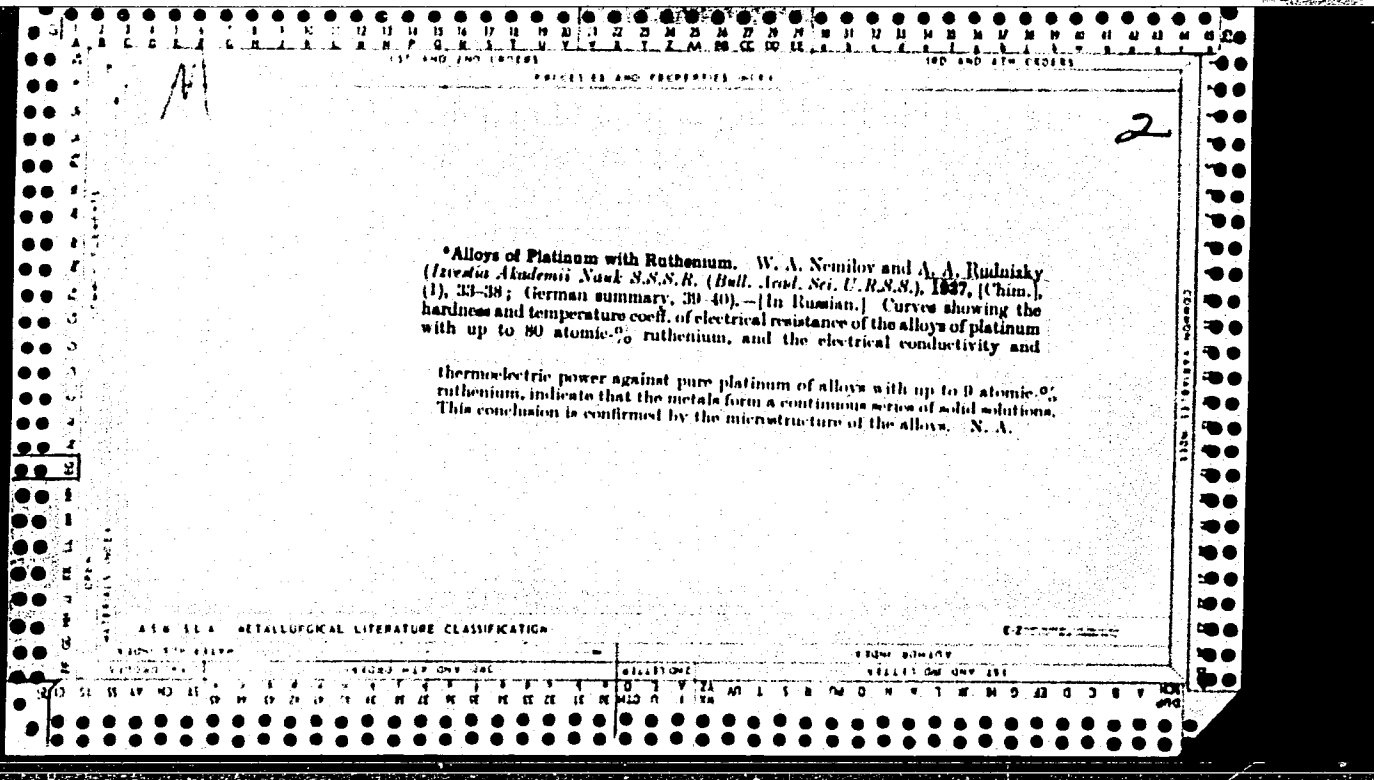
1. Rekomendovana kafedroy tekhnologii kozhi Kiyevskogo tekhnologicheskogo instituta legkoy promyshelnosti.
(Sulfite liquor) (Tanning materials)

ORLOV, V.; SOLOV'YEVA, Z.; RUDNOVA, A., inzhener-khimik; KOVALEV, N.;
KHAKHEL', L.

Draw ship repair plant laboratories into doing creative work.
Mor. flot 22 no.11:36-37 N '62. (MIRA 15:12)

1. Nachal'nik Tsentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Orlov).
2. Starshiy inzhener-fizik Tsentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Solov'yeva).
3. Starshiy tekhnik Tsentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Kovalev).
4. Starshiy laborant Tsentral'noy laboratorii Rizhskogo sudoremontnogo zavoda (for Khakhel').

(Ships--Maintenance and repair)



157 AND 158 ORDERS

PROCESSING AND PROPERTIES INDEX

159 AND 158 ORDERS

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*On the Hall Effect in Polymers. V. Rudnitskiy (*J. Physics* (U.S.S.R.)), 1959, 1, (8), 247-250).—[In English.] See abstract from a Russian source, *Met. Abs.*, 1960, 7, 65.

A.S.M.-I.S.A. METALLURGICAL LITERATURE CLASSIFICATION

GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00
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GLADKOVSKIY, A.K.; RUDNOVA, M.Ya.

Structure and composition of the weathering zone of bauxite deposits
in the Southern Ural Basin. Trudy Inst.geol. UFAN SSSR no.64:41-57
'64. (MIRA 17:12)