

SHPAK, G.Z.; ARTEMOV, P.G., sotrudnik

Work of the central laboratory of the Leningrad "Konsol'mkma  
prava" Plastic Factory. Sav.lab. 26 no.12:1434-1435 '60.  
(MIRA 13:12)

1. Nachal'nik Tsentral'noy laboratorii Leningradskogo zavoda  
plastmass (for Shpak). 2. Leningradskiy elektrotexnicheskii  
institut svyazi imeni Bench-Bruyevicha (for Artemov).  
(Leningrad--Plastics)

S/028/61/000/005/001/004  
D210/D306

AUTHOR: Artemov, P.G.

TITLE: Grips for tensile testing of specimens made in plastic material

PERIODICAL: Standardizatsiya, no. 5, 1961, 25-28

TEXT: In Fig. 1, a specimen is shown which is recommended by GOST 4646-49 for determining the modulus of elasticity, the limit of proportionality in tension and the percentage elongation on fracture; Fig. 2 shows a specimen recommended by GOST 4649-55 for determining the UTS in tensile testing. For these specimens, the standard recommends a grip construction as shown in Fig. 3.

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Fig. 1

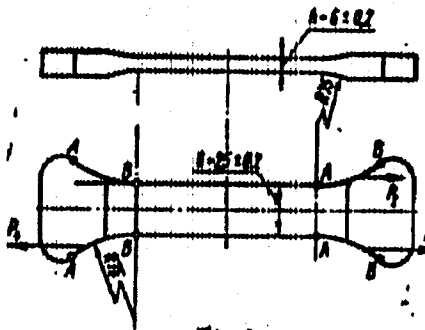


Fig. 1  
Part 1

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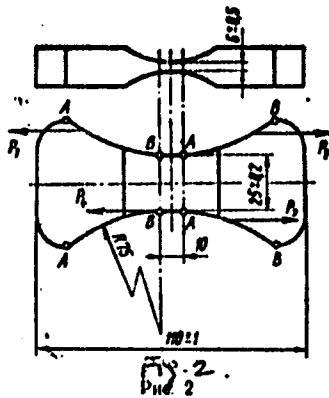


Fig. 2

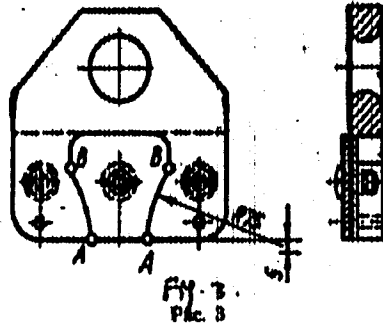


Fig. 3

It is very difficult to make specimens of laminar materials so that close contact between the specimen and the grips along the entire portion of curve A-B are ensured, and for pressed materials the position is even worse as specimens deform on cooling and contact with Card 2/9

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the grip is accomplished only through a number of separate points along A-B. These points are also displaced along the width of the specimen, and, therefore, regulation by screws (Fig. 3) cannot lead to desirable results (Fig. 4).

In this connection, the resultant P of all forces applied to the specimen will not pass through its center of gravity, but will have some eccentricity (Fig. 4), and fracture of the specimen will take place not due to simple, but rather off-center tension. Therefore the UTS ( $\sigma_v$ ) should be

determined not by the recommended formula  $\sigma_v = \frac{F}{F}$ , where F = cross sectional area of the specimen

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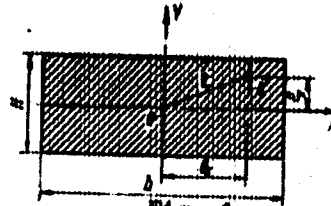


Fig. 4  
Pnc. 4

O - центр тяжести сечения; O' - точка приложения результирующей силы P; P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub> - дисперсионные силы; e - эксцентриситет приложения силы

Fig. 4. O - center of gravity of the cross section; O' - point of application of resultants P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub> and P; e - eccentricity of application of force.

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in mm<sup>2</sup>, but by the formula for the general case of off-center tension,

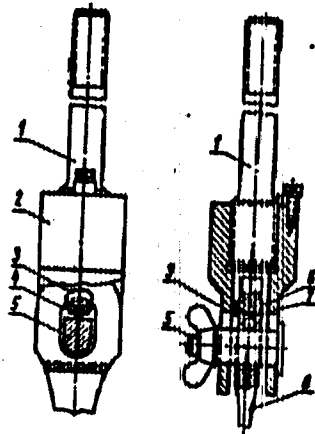
$$\sigma_v = \frac{P}{F} + \frac{P e_x}{W_y} + \frac{P e_y}{W_x}$$
 , where  $W_x$  = the momentum of resistance of the cross section along the axis X, mm<sup>3</sup>;  $W_y$  = the momentum of resistance of the cross section along the axis Y, mm<sup>3</sup>. The eccentricity e can be located in any quarter of the coordination system X and Y (Fig. 4) and for each specimen can have a different value which cannot be determined. This shortcoming of existent grips is particularly serious in the comparative testing of specimens made of various plastic materials, since the result of determining  $\sigma_v$  will depend not only on the physical properties of a given material, but also on its ability to be deformed after having cooled down, and on the accuracy of the dye. Therefore, in order to exclude, or reduce to a minimum, the eccentricity obtained, a new shape of specimen head and grip for it is required. In Fig. 5, a proposed grip construction is shown.

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The bolt (1) attaches the grip to the machine on which the testing of the specimen is carried out, and is connected to the sleeve piece (2). The rectangular portion of the second bolt (5) passes through an oval hole in the head of the test specimen (8). Contact between the grip and test specimen is accomplished by means of a ball (4), pressed into the collar (3), which is firmly placed on the specimen head (8). Hence the force will be transmitted from the grip to the specimen through the point of contact between the ball (4) and the bolt (5). In order that the



Pat. 5

Fig. 5

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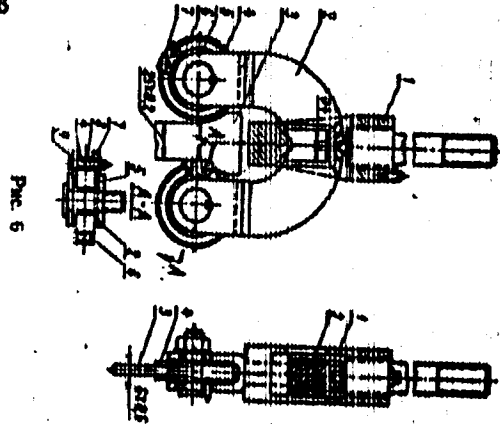
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force transmitted to the specimen should be distributed along the largest possible surface of the specimen, the ball transmits this force through a soft lining (7), which is glued to the oval surface of the collar (3). A tight fit between the collar and the specimen head is ensured by means of linings (6) made of foil and packed between the edges of the collar and the surface of the head. For this reason, the distance between the edges of the collar is made 0.2 mm greater than the width of the specimen head. This also enables the collar to be centered with the ball along the width of the specimen. In order to prevent displacement of the ball (4), it is placed into a special groove (1 mm/diameter, 0.5 mm/depth) made in the bolt (5). The cross sectional area of the specimen head is 3.6 times greater than the cross sectional area of the working part of the specimen, and the stresses developing at the contact surface between the collar (3) and the specimen (8) are considerably less than those permissible for this case. All this is confirmed by the fact that during testing, the specimen fractures along the cross section of the working part, and not along the cross section of the head. For specimens prepared according to GOST 4646-49, it is recommended that Card 6/9

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the accepted % elongation at the fracture be determined. Hence, the UTS can be determined in these specimens simultaneously. In Fig. 6, a second variant of grips is shown which enables the work Fig. 6 to be carried out with a specimen recommended by GOST 4646-49, without changing it in any way. From the prism of the sleeve piece (1), a balance arm (2) is freely suspended, at the ends of which there are rollers consisting of self-aligning ball bearings (5) with races (6) and rubber rings (4), of approximately 1 mm thickness. Catches (7) with linings (9) are attached to the races (6) by means of screws (8). Before setting up the test



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specimen (3), the rollers are turned in such a way that the catches occupy a position shown at the left end of the balancing arm. This enables the test specimen to be freely inserted between the rollers. When the test specimen is set up, the rollers are turned in such a way that both catches (7) should occupy a position shown at the right end of the balancing arm. The specimen will be gripped between the rollers and at the same time by the internal surfaces of the catches; it will also be centered in relation to the axes of the rollers and of the balancing arm. The distance between the internal surface of the catches is 0.5 mm greater than the width of the specimen head. Therefore the positioning of the specimen along its width is carried out automatically by the turning of the catches. If the specimens are to be tested, the heads of which have a different width from that of the specimen heads made according to GOST 4646-49, where  $H = 10$  mm, the distance between the internal surfaces of the catches is regulated by means of new linings (9), or else new catches are used, the width of which is selected in such a way as to ensure free positioning of the specimen between the surfaces of the catches. When the grips

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suggested are used, the frictional force decreases considerably, since the balancing arm (2) (Fig. 6) transmits the force from the machine to the specimen through a prism. In existent grips, this force is transmitted through a bolt connecting the grip with the machine, in which the test is carried out, and the frictional force at the surface of the bolt distorts the reading of the force actually applied to the specimen. There are 6 figures. [Abstractor's note: This is essentially a complete translation.]

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ARTEMOV, P.G.

Clamps used in tensile testing of plastic specimens. Standartizatsia  
25 no. 5:25-28 My '61. (MIRA 14:5)  
(Testing machines)

S/D32/61/027/004/017/028  
B103/B201

**AUTHORS:** Artemov, P. G., Shpak, O. Z., and Simankov, V. V.

**TITLE:** Problem of determining mechanical properties of synthetics under torsion

**PERIODICAL:** Zavodskaya laboratoriya, v. 27, no. 4, 1961, 459-461

**TEXT:** It is pointed out here that the methods serving for the determination of the mechanical properties of metals under torsion, are applicable in the case of synthetics as well. A machine intended for brittle materials has been redesigned for the purpose. The authors were urged to do so considering that standard methods for synthetics were not available. Principles applying to synthetics differ only inconsiderably from such for metals and other substances. The authors, therefore, made use of them to a certain extent in the torsional deformation of synthetics. The fact is stressed that most thermoplastic and thermosetting synthetics employed in machine- and instrument construction exhibit a brittle failure. Machines available at present for the determination of mechanical characteristics in the torsion of materials (Fig. 1) are found to have the

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8/032/61/027/004/017/028  
B103/B201

following drawbacks: (1) The guiding and the guided shafts 1 - 2 are not precisely coaxial, which fact causes sample 3 to bend. Additional strains arise as a result, that do not belong to those due to torsional deformation. (2) Pendulum 4, which serves as a counterweight of the torsional moment acting upon the sample, permits the latter to turn through a very large angle, while the torsion angles of the sample, which are to be determined, are very small. This gives rise to a considerable error source when determining small values from the difference of two large values. (3) The moment acting upon the sample is determined from the deviation of the pendulum and of the transmitting mechanism connected therewith. The test results are considerably distorted by the imperfect work of these mechanisms as well as by friction. The centers mentioned in the Association have jointly determined the yield strength  $\sigma_B$  and the modulus  $G$  of tangential elasticity for

synthetics: Monolith no. 1, fiber plastic, and organic glass. G. F. Gorskaya, laboratory assistant, and V. I. Shumilov, mechanic, took part in the work. To eliminate defects (1) - (3) of the machine, the latter was remodeled in the following manner: sample 3 was connected by means

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of links to shafts 1 and 2. Defect (1) was thus suppressed. Furthermore, a pulley 6 was mounted on shaft 1 to hold weight 9, hanging from steel band 7. Both the diameter of the pulley and the size of the weight, thus also the magnitude of the moment applied can be predetermined with sufficient accuracy. When measuring the torsion angle  $\varphi$ , shaft 2 was clamped, and the accuracy of results was considerably increased thereby. Angle  $\varphi$  was determined on one length of sample 1 by means of Martens' mirror device [Abstracter's note: not described in the text]. An additional mirror 10 was used for the purpose. To obtain a diagram in coordinates "torsional moment; torsion angle  $\varphi$ ," shaft 2 must be tied up and pendulum 4 must be actuated. Samples 120 x 15 x 10 mm. ГОСТ 4648-56 (GOST 4648-56) have been tested by the authors.  $\varphi$  was first determined, and thence, G was found. G was rechecked on steel samples (type 40), 5 x 7.5 mm for a control. There are 2 figures and 1 table.

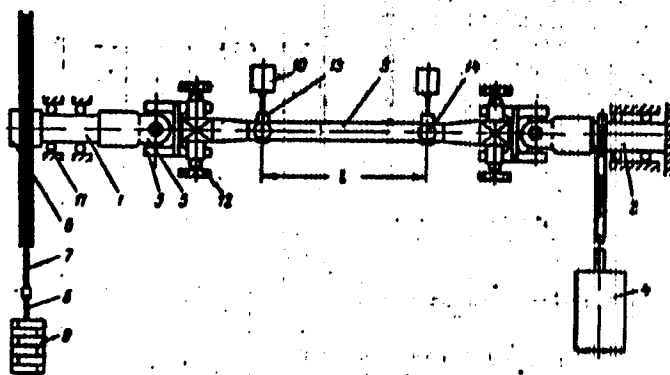
ASSOCIATION: Zavod izdeliy plastmass im. "Komsomol'skoy pravdy"  
(Factory for Synthetic Products imeni "Komsomol'skaya pravda");  
Leningradskiy institut tochnoy mekhaniki i optiki  
(Leningrad Institute of Precision Mechanics and Optics)

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Legend to Fig. 1: 11) ball bearing, 12) screw, 13) clamp, 14) screw.  
For other denotations, see the text.



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ARTEMOV, P.G.; SHPAK, G.V.; SIMANKOV, V.V.

Determination of elastic constants  $E$ ,  $G$ , and  $\mu$  for thermosetting  
isotropic plastics. Plast.massy no.5:58-59 '62. (MIRA 15:4)  
(Plastics--Testing)



ARTEMOV, P. I.; KOCHEMAZOV, M. I.; PIOTRASHKO, Yu. M. (Krybyshew)

Change in the standards for dispensary and polyclinical care and  
for the number of patients at a territorial medical center.  
Zdrav. Ros. Feder. 6 no.6:8-13 Je '62. (MIRA 15:7)

(HOSPITALS—OUTPATIENT SERVICES)  
(MEDICAL CARE)

ARTEMOV, P.I.; ZINOV'YEV, G.A.; STEGUNIN, S.I. (Kuybyshev)

Diseases of the circulatory organs among the population of  
Kuybyshev (as revealed by extensive study of disease incidence  
in 1958). Sov.sdrav. 21 no.8:47-50 '62. (MIRA 15:11)

1. Iz kafedry organizatsii sdravookhraneniya i istorii meditsiny  
(sav. - prof. I.M.Bulayev) Kuybyshevskogo meditsinskogo instituta.  
(KUYBYSHEV—CARDIOVASCULAR SYSTEM—DISEASES)

ARTEMOV, P.I. (Kuybyshev)

Public health planning. Sov.zdrav. 16 no.7:45-51 J1 '57.  
(PUBLIC HEALTH, (MIRA 10:11)  
planning (Rus))

ARTEMOV, P.I.

Organizing medical and hygienic services for workers in Kuybyshev  
industry. Zdrav. Ros. Feder. 2 no.11:28-33 N '58 (MIRA 11:12)

1. Iz kafedry organizatsii zdoravookhraneniya i istorii meditsiny  
(sav. - prof. I.M. Bulayev) Kuybyshevskogo meditsinskogo instituta  
(KUYBYSHEV---INDUSTRIAL MEDICINE)

ARTIMOV, P.I., vrach

Sanitation day in industry. Gig. i san. 23 no.1:45-47 Ja '58.  
(MIRA 11:2)

1. Iz Knybyshevskogo gorsdrevotdela  
(INDUSTRIAL HYGIENE  
establishment of sanitary day in Russia)

ARTEMOV, P.I. (Kubyshev).

Organization of public health or social hygiene. Sov. zhurn. 18  
no.3:28-34 '59. (ICIRA 12:3)

(PUBLIC HEALTH,  
in Russia (Rus))  
(SOCIAL HYGIENE,  
in Russia (Rus))

ARTEMOV, P.I.; DURNOV, I.A.

Dispensary service for patients in a nonconsolidated polyclinic.  
Zdrav. Ros. Feder. 7 no.5414-18 My'63. (MIRA 16#6)

1. Iz kafedry organizatsii zdavookhraneniya i istorii meditsiny  
(ispolnyayushchiy obyazannosti zaveduyushchego kafedroy -dozent  
S.I.Stegunin) Kuybyshevskogo meditsinskogo instituta I Kuyby-  
shevskogo gorodakogo otdela zdavookhraneniya (nav. T.A.Drobinina).  
(KUYBYSHEV---HOSPITALS---OUTPATIENT SERVICES)

АИСТЕНА, П.С.; СТЕГУНИН, С.И.

Basic problems of dispensary follow-up of patients. Sov. med. 28  
no.4:127-129 Ap '64. (MIRA 17:12)

1. Kafedra organizatsii zdravookhraneniya i istorii meditsiny  
(zav. - dotsent S.I. Stegunin) Kuybyshevskogo meditsinskogo  
instituta.



ARTEMOV, P. Ia., kand. tekhn. nauk

Determining initial parameters with the aid of graphs of the  
load function. Sbor. nauch. trud. VNI no. 10: 387-406 '57.  
(MIRA 11:12)  
(Strains and stresses) (Wood--Testing)

SOV/124-58-2-2234

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 2, p 102 (USSR)

AUTHOR: Artemov, P. Ya.

TITLE: Application of the Principle of the Independent Action of Forces to the Search for the Initial Parameters (Primeneniye printsipa nezavisimosti deystviya sil k otskaniyu nachal'nykh parametrov)

PERIODICAL: Sb. nauchn. tr. Belorussk. politekhn. in-t, 1957, Nr 56, pp 62-104

ABSTRACT: Bibliographic entry

Card 1/1

14(10)

PHASE I BOOK EXPLOITATION

80V/2045

Ruditsyn, M. N., P. Ya. Artemov, and M. I. Lyuboshits

Spravochnoye posobiye po soprotivleniyu materialov (Handbook on the Strength of Materials) Minsk, Gos. Izd-vo BSSR, 1958. 508 p. Errata slip inserted. 20,000 copies printed.

Ed. (Title page): M. N. Ruditsyn; Ed. (Inside book): I. Chernyak; Tech. Ed.: N. Stepanova.

**PURPOSE:** The handbook is intended for design and manufacturing departments of machine-building plants and for students of technical schools.

**COVERAGE:** The book presents basic principles, working formulas, charts, and tables. It includes information on deformations and stresses in tension, compression, bending, torsion, and shearing, as well as on designs of beams, thick-walled cylinders, and thin-walled columns with open cross sections. The stability of elastic systems, the design of statically indeterminate systems, and elasto-plastic bending and torsion are discussed. Cyclical stresses and dynamic loading are explained. Data on the mechanical

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Handbook on the Strength of Materials

SOV/2045

properties of materials are presented. The use of formulas and tables is illustrated by examples. The author thanks A. P. Akishchenko, Candidate of Technical Sciences. There are 38 Soviet references.

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GO/ma  
8-20-59

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 10, p 137 (USSR) SOV/124-58-10-11677

AUTHOR: Artemov, P. Ya.

TITLE: Tables and Graphs for Determining the Initial Parameters of the Elastic Curve of a Beam (Tablitsy i grafiki dlya opredeleniya nachal'nykh parametrov uprugoy linii balki)

PERIODICAL: Sb. nauchn. rabot Belorussk. lesotekhn. in-t, 1958, Nr 9, pp 227-243

ABSTRACT: Bibliographic entry

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PHASE O BOOK EXPLOITATION

SOV/3042

Artemov, P. Ya., M.I. Lyuboshits, and M.N. Ruditsyn

Raschet tonkostennykh sterzhney otkrytogo profilya (Analysis of Thin-Walled Bars With Open Cross Section) Minsk, Red.-izd-vo otdel BPI imeni I.V. Stalina, 1959. 138 p. Errata slip inserted. 3,000 copies printed.

Sponsoring Agency: Belorusskiy pol'tekhnicheskiy institut. Kafedra "Soprotivleniye materialov."

Ed. (Title page): M.N. Ruditsyn; Ed.: G.A. Kuz'michenko; Tech. Ed.: Ye.I. Yarith.

PURPOSE: This textbook is intended for students in advanced courses on the strength of materials.

COVERAGE: This book presents in concise form the theory of stresses in thin-walled bars with open cross sections as well as the procedures used in stress and stability analysis. Included are cases of constrained torsion, bending torsion, and the eccentric application of longitudinal forces. A

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## Analysis of Thin-Walled Bars (Cont.)

SOV.3042

number of calculation examples are presented to illustrate the application of the theory to particular problems. The authors thank Professor A.A. Kravtsov and Docents V.M. Shirshov and A.A. Cheche. There are 12 Soviet references.

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NOV/3042

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AG/gmp  
2-26-60



24(6)

PHASE I BOOK EXPLOITATION SOV/3144

Artemov, Pavel Yakovlevich

Tablitsy dlya rascheta na prochnost' i zhestkost' balok i sterzhney  
(Tables for Calculating Strength and Rigidity of Beams and Bars)  
Minsk, Gos. izd-vo BSSR, 1959. 278 p. Errata slip inserted.  
3,000 copies printed.

Ed.: I. Chernyak; Tech. Ed.: N. Stepanova.

**PURPOSE:** This book is intended for workers in planning organizations and students of schools of higher technical education.

**COVERAGE:** Methods for computing the initial parameters of equations of the elastic curve of a beam and equations for fastening and loading arrangements are presented. These methods, widely used in practice, eliminate the necessity of formulating and simultaneously solving the equations. In the tables and graphs numerical values of effect functions are given. The tables and the graphs permit, by means of summing tabular data multiplied by the corresponding force factor, the determination of initial parameters

Card 1/6

Tables For Calculating (Cont.)

SOV/3144

in any case of loading and fastening of a beam. This enables the immediate description in final form of the equation of the elastic curve of a beam, of a beam on an elastic base, of the elastic curve of a bar subjected to longitudinal and transverse bending, and of the elastic angle of torsion during constrained torsion. By means of successive differentiation of these equations it is easy to find all the remaining geometric and force factors necessary for the calculation of rigidity and strength. No personalities are mentioned. There are 11 references, all Soviet.

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80V/3144

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AVAILABLE: Library of Congress (T0350.A7)

Card 6/6

AC/os  
3/16/60

ARTEMOV, P.Ya., dotsent, kand.tekhn.nauk

Tables and formulae for determining cross sections in de-  
signing continuous beams. Sbor.nauch.trud.Bel.politekh.inst.  
no.76:49-56 '59. (MIRA 13:6)  
(Girders)

RUDITSYN, M.N.; ARTEMOV, P.Ia.; LYUBOSHITS, M.I.; CHERNYAK, I., red.;  
STEPANOVA, N., tekhn. red.

[Reference manual on the strength of materials] Spravochnoe  
posobie po soprotivleniyu materialov. Pod obshchei red. M.N.  
Ruditsyna. 2. ispr. izd. Minsk, Gos.isd-vo BSSR, Red,  
nauchno-tekhn.lit-ry, 1961. 515 p. (MIRA 15:1)  
(Strength of materials)



27-6-8/29

**AUTHOR:** Artemov, V., Director of Odessa Technical School Nr. 1

**TITLE:** The Way to Skill (Put' k masterstvu)

**PERIODICAL:** Professional'no Tekhnicheskoye Obrazovaniye, 1957, Nr. 6(145)  
pp 10 - 11 (USSR)

**ABSTRACT:** The Odessa Technical School Nr. 1 graduates lathe operators, fitters, molders, electricians, draftmen-designers and senior inspectors "OTK" ( - Otdel tekhnicheskogo kontrolya - Office of Technical Control). In practical training the students manufacture such articles as milling machine parts for the plant imeni Kirov. The article describes the equipment of the school. Under the direction of their instructors the students have made an operating press model for manufacturing pressed-wood panels. The article contains 6 photos.

**ASSOCIATION:** Odessa Technical School Nr. 1 (Odesskoye tekhnicheskoye uchi-lishche Nr. 1)

**AVAILABLE:** Library of Congress

Card 1/1

ARTEMOV, V.

Make way for ceramics. *Fron.koop.* 13 no.3:26-27 Mr. '59. (NIRA 12:4)

(Pottery)

ARTEMOV, V.

Bring beauty into the home. Mest. prom. i khud. promya. 3  
no.9:34-35 S '62. (MIRA 15:12)

1. Nachal'nik Glavnogo upravleniya khudozhestvennykh promyslov  
Gosudarstvennogo komiteta Soveta Ministrov RSFSR po delam mestnoy  
promyshlennosti i khudozhestvennykh promyslov.

ARTEMOV, V.

Ceramics and their prospects. Mast.prom. i khud.promys. 4  
no.4:31-32 Ap '63. (MIRA 16:10)

1. Nachal'nik Glavnogo upravleniya khudozhestvennykh promyslov.  
*admit / ph. d. TRADE*

ARTEMOV, V. A. and ZIMNYAYA, I. A. (Moscow)

"Spectra of Phonemes and Their Application in Machine Translations."

Theses - Conference on Machine Translations, 15 - 21 May 1958. Moscow.

ARTEMOV, V.A.

Interrelation of the physical characteristics, perceptible qualities, meaning, and sense content of speech. Vop.psikhol. 6 no.3:98-105 My-Je '60. (MIRA 14'5)

1. Kafedra psikhologii i Laboratoriya eksperimental'noy fonetiki i psikhologii rechi 1-go Moskovskogo gosudarstvennogo pedagogicheskogo institu' inostrannykh yazykov, Moskva.  
(Speech)

ARTEMOV, V.,

"Tone and intonation"  
(Section III)

To be submitted for the 4th International Congress of Phonetic Sciences, Helsinki,  
Finland, 4-9 Sep 1961

ARTEMOV, Vladimir Aleksandrovich, prof.; BELYAYEV, K.I., otv. red.; PROKOPENKO,  
M.I., red.; CHERNYANENKO, Ya.T., tekhnred.

[Course of lectures on psychology] Kurs lektsii po psikhologii.  
Isd. 2., dop. i perer. Khar'kov, Isd-vo Khar'kovskogo gos. univ.,  
1958. 420 p. (MIRA 12:2)

1. Zaveduyushchiy kafedroy psikhologii, nauchnyy rukovoditel'  
Laboratorii eksperimental'noy fonetiki i psikhologii rechi i-go  
Moskovskogo gosudarstvennogo instituta inostrannykh yazykov  
Ministerstva vysshego obrazovaniya SSSR (for Khar'kov).  
(Psychology)



ARMENLY, V. V.

"The intoneme."

report submitted for 5th Intl Cong of Phonetic Sciences, Muenster, W. Germany,  
16-23 Aug 64.

SOV/136-58-8-17/27

AUTHORS: Medvedev, V.K., Artemov, V.A. and Selivanov, I.A.

TITLE: Improvement of the Thermal Condition of the Reverberatory Furnace at the Kirovgrad Copper-Smelting Kombinat (Uluchsheniye teplovogo rezhima otrazhatel'noy pechi Kirovgradskogo medeplavil'nogo kombinata).

PERIODICAL: Tsvetnyye Metally, 1958, Nr.8, pp.70-72 (USSR)

ABSTRACT: A group of workers at the Kirovgrad Copper-smelting Kombinat proposed an improved burner construction for the reverberatory furnace. The old burners (Fig.1) ("Copper Queen", medium pressure) had a central fuel oil pipe and an annular air pipe (air at 150-200 mm Hg gauge). The new burner (Fig.2) has a further annulus fed with converter air (at 0.8-1 atm. gauge) to improve atomization and combustion. The addition of high-pressure air should have reduced drop size, according to Prof. Selivanov's calculations. Preliminary tests showed that the flame length (8.5 m) was within the optimal value recommended by I.D. Semkin and M.D. Shabli. Operating results have shown a fuel saving of 0.00396 tons/ton of charge.

Card 1/2

SUV/136-58-E-17/27

Improvement of the Thermal Condition of the Reverberatory Furnace  
at the Kirovgrad Copper-Smelting Kombinat

The fuel feed rate is 2.5-3.2 tons/hour, the converter-  
air flow being 36 nm<sup>3</sup>/min. There are 2 figures.

ASSOCIATION: Kirovgradskiy med'kombinat (Kirovgrad Copper-Smelting  
Kombinat).

1. Furnaces--Design
2. Furnaces--Equipment
3. Furnaces--Performance

Card 2/2

RANSKIY, B.N.; ARTEMOV, V.A.

Work practices of the Levikha Cementation Plant. TSvet.  
met. 34 no.11:81-82 N '61. (MIRA 14:11)  
(Levikha region--Cementation (Metallurgy))

ARTEMOV, V.A.

Kirovgrad Copper Smelting Combine reverberatory furnace is  
thirty years old. Tsvet. met. 35 no.3:31-33 Mr '62.

(Kirovgrad (Sverdlovsk Province)—Copper Industry) (MIRA 15:4)  
(Metallurgical furnaces)

ACC NR: AP6000988

SOURCE CODE: UR/0286/65/000/022/0060/0060

AUTHORS: Chuyko, A. A.; Pavlik, G. Ye.; Artemov, V. A.; Weymark, I. Ye.

37  
B

ORG: none

TITLE: A method for obtaining cation exchangers containing carboxyl groups. Class 19, No. 176414<sup>P</sup>/announced by Institute for Physical Chemistry im. L. V. Piarshhevskiy, AN UkrSSR (Institut fizicheskoy khimii AN UkrSSR)

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 22, 1965, 60

TOPIC TAGS: ion exchange resin, polymer, copolymerization, copolymer, resin

ABSTRACT: This Author Certificate presents a method for obtaining cation exchangers containing carboxyl groups derived from methacrylic acid copolymers. To obtain thermostable and chemically stable products, methacrylic acid is copolymerized with a methacrylic acid-vinyl silicon dioxide copolymer. The synthesized products described above are used as active rubber fillers. 544,65

SUB CODE: 11/ SUBM DATE: 12Jul63

07/

Card 1/1 *AC*

000: 661.185.123.2.678.744.532.678.24

SERGOVANTSEV, V.T.; ARTEMOV, V.A.

Calculating the electric parameters of gas pipelines. Gas.prom.  
no.5:32-36 '63. (MIRA 16:6)  
(Gas, Natural---Pipelines)

SERGOVANTSEV, V.T.; ARTEMOV, V.A.; ZHERNOVOY, M.N.; MOROTSKIY, L.P.

Using the pipes of a gas pipeline as a remote-control channel.  
Gas.delo no.1:14-16 '64. (MIRA 17:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza i  
Minskoye upravleniye magistral'nykh gazoprovodov.



ACC NR: AT6012357

SOURCE CODE: UR/0000/66/000/000/0318/0323

AUTHOR: Artemov, V. A.; Sergovantsev, V. T.

ORG: none

48

B+1

TITLE: Gas pipeline as a tele-channel *Q*

SOURCE: Nauchno-tekhnicheskaya konferentsiya po sredstvam promyshlennoy telemekhaniki. Moscow, 1963. Prom; shlennaya telemekhanika (Industrial telemechanics); materialy konferentsii. Moscow, Izd-vo Energiya, 1966, 318-323

TOPIC TAGS: remote control system, telemetry system, pipeline

ABSTRACT: These results of experimental studies of gas-pipeline electric parameters are reported: (1) The gas pipeline used as an electric channel is highly reliable and stable, but has poor electric parameters; (2) Gas-pipeline attenuation varies from 0.07 to 2 nep/km, which determines an average transmission range of 10-20 km for the infrasonic frequency band; (3) Pipeline characteristic impedance varies within 0.03-1.5 ohms; input impedance of the pipeline-ground circuit is determined by the grounding resistance; (4) Power loss in the grounding resistance

Card 1/2

L 37676-66

ACC NR: AT6012357

reaches 1.5—2.3 nep; (5) The infrasonic through 100 cps band is best suited for tele-signal transmission; (6) An actual telemetry 27—44 cps, 10-km system using the gas pipeline as an electric channel was installed in Minsk; a one-year operation of the system is reported. Orig. art. has: 1 figure, 5 formulas, and 2 tables.

SUB CODE: 13, 09 / SUBM DATE: 08Jan66 / ORIG REF: 009

*2/2 no*

L 00733-57  
ACC NR: AP6024846 (A)

SOURCE CODE: III/10073/66/032/004/0371/0377

AUTHOR: Chuyko, A. A.; Pavlik, G. Ye.; Tertykh, V. A.; Chuyko, Ye. A.; Artemov, V. A.;  
Neymark, I. Ye.; Tsipenyuk, E. V.ORG: Institute of Physical Chemistry, AN UkrSSR (Institut fizicheskoy khimii AN  
UkrSSR) 45  
8TITLE: Carboxylorganosilicas - chemically active fillers for polymers. Report No. 1.  
Synthesis and adsorption properties of carboxylorganosilicas, and their use in the re-  
inforcement of vinylpyridine rubber 15SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 4, 1966, 371-377TOPIC TAGS: silica, graft copolymer, synthetic rubber, filler

ABSTRACT: Carboxyl derivatives of  $\text{SiO}_2$  were synthesized by copolymerization of methacrylic acid with vinyl silicas having various quantities of grafted vinyl groups on their surface. IR spectroscopic and ion exchange methods confirmed the grafting of methacrylic acid to the surface of vinyl silica. A study of the surface characteristics showed that methanol, diethylamine, and pyridine are chemisorbed on the acid functional groups of the carboxylorganosilicas, forming the corresponding surface compounds. Filling of a vinylpyridine polymer (SKMP-15) with carboxylorganosilicas caused a reinforcement of the polymer system, probably because of a chemical interaction between the carboxyl groups of the filler and the basic pyridine groups of the rubber macromol-

Card 1/2

UDC: 541.182.23

ACC NR: AP6024846

ecules, resulting in the formation of cross linkages. Orig. art. has 3 figures and 1 table. D

SUB CODE: 11/ SUBM DATE: 22Jul64/ ORIG REF: 006/ OTH REF: 006

Card 2/2 JC

ARTEMOV, VASILII FEDOROVICH

8pp  
.R92604

Pnevmozolonka Dlya Otkryvaniya Iyad KPL-1  
(Pneumatic Core For the Opening of KPL-1 Lids)  
Moskva, Ugletekhnizdat, 1955.

10 p. Diagr.

VODOP'YANOV, V.L.; BARKOVSKIY, V.M.; ARTEMOV, V.G.

Investigating the effect of filling on the stability of inter-chamber pillars by means of equivalent materials suitable for the conditions of Upper Kama mines. Nauch. trudy PermNEUI no.6: 131-139 '64. (MIRA 18:2)

5/193/60/000/006/001/015  
A004/A001

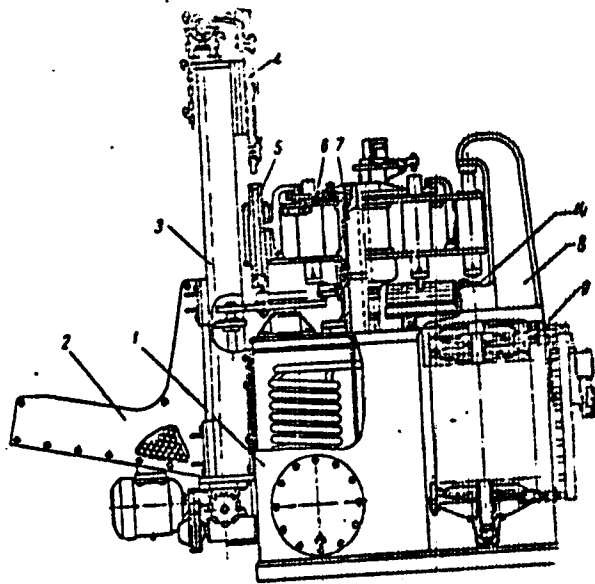
**AUTHOR:** Artemov, V.I.  
**TITLE:** The AЭ-5ш (AE-5sh) Electric Upsetting Automatic  
**PERIODICAL:** Byulleten' tekhniko-ekonomicheskoy informatsii, 1960, No. 6,  
pp. 7 - 10

**TEXT:** The Altayskiy nauchno-issledovatel'skiy i proyektno-tekhnologicheskii institut mashinostroyeniya (Altay Technological and Scientific Research and Planning Institute of Mechanical Engineering) has developed the AE-5sh upsetting automatic intended for the hot upsetting of heads of long cylindrical rods (member pins of caterpillar tractors and other machines). The automatic is composed of the hopper-magazine, conveyer, merry-go-round-type carriage, electrolyte bath, pneumatic press and shaking-out mechanism. All units and devices of the automatic are fitted on housing 1 whose hollow contains the electrolyte. The pin blanks (300 pieces) are placed in hopper-magazine 2 mounted on frame 3 of the chain conveyer. The conveyer grips transport the blanks to tipper mechanism 4 which turns the blanks through 90° and places them in setting bush 5 of carriage 6.

Card 1/3

The A3 -5 (AE-5sh) Electric Upsetting Automatic

S/193/60/000/006/001/015  
A004/A001



The carriage body has six such setting bushes to receive the pin blanks. The merry-go-round-type carriage revolves intermittently around axle 7. Conveyor travel and carriage movements are synchronized and actuated by an electric motor through a reducer and a ratchet gearing. While the carriage turns into the next position, the blank is clamped and conveyed to the electrolyte bath. The positive pole of the d-c generator is connected to the bath, while the negative pole is connected to the housing of the automatic, which is grounded. When the blank is passing through the electrolyte bath it is stopped twice. During

Card 2/3



The -5 (AE-5sh) Electric Upsetting Automatic

S/193/50/000/006/001/015  
AOO4/AOO1

the first stop it is preheated, and during the second stop finally heated to the forging temperature. The following turn of the carriage removes the blank from the bath and places it under the press. The press has a rigid bracket 8 under which a package of diaphragm cylinders 9 is fastened. The cylinder disks are fitted to a rod on whose upper face end punch 10 is mounted. Through a terminal switch closing the solenoid coil circuit of the pneumatic control valve of the press, the punch is actuated and presses the heated end of the blank, thus producing the pin head. The following technical specifications are given: output - 600 - 900 parts/hour; required d-c power - 30 - 40 kw; pressing force - 30 tons; overall dimensions (length x width x height) - 2,200 x 1,500 x 2,200 mm. In the course of 1958 and 1959 the AE-5sh automatics have been introduced at the Altayskiy traktorny zavod (Altay Tractor Plant), Khar'kovskiy traktorny zavod (Khar'kov Tractor Plant), "Avtotraktorodetal'" Plant in Kuybyshev and at the "Uralvagonozavod" in Nizhnyy Tagil. The introduction of this automatic has increased the quality of the manufactured items; additional mechanical tooling is eliminated and considerable metal savings are attained since the blank length is 6 mm shorter than before. The AE-5sh automatic made it possible to introduce an improved design of member pins of the  $\overline{M7}$ -54 (DT-54) caterpillar tractor made from a blank which is 12 mm shorter than the former one. There is 1 figure.

Card 3/3

~~SECRET~~  
ARTEMOV, V.L., red.; BELYAYEV, N.A., tekhn.red.

[Suez Canal; a collection of documents] Suetaki kanal; sbornik dokumentov. Moskva, 1957. 178 p. (MIRA 11:2)

1. Moscow. Institut mezhdunarodnykh otnosheniy (Suez Canal)

ADDITIONAL INFORMATION: ABB/APPEC Pr-a/Pc-1 ELM/WW

ACCESSION NO: AFD101225 3/0133/63/000/004/0001/0005

AUTHOR: Shatalov, V. P.; Gostav, M. M.; Kyr\*lova, I. A.; Aptemov, V. M.; Shestakova, O. G.; Korbanova, Z. N.; Slukin, A. D.; Sotnikoff, I. S.; <sup>77</sup> <sub>72</sub> ~~Tortinskiy, A. V.~~

TITLE: <sup>6</sup> Low-temperature polymerized butadiene-styrene rubber <sup>5</sup> with a carbon black-oil filler

SOURCE: Kauchuk i rezina, no. 4, 1963, 1-5

TOPIC TAGS: polymerization, carbon black filler, oil filler, butadiene rubber, styrene rubber

ABSTRACT: Studies were conducted on the preparation of stable dispersions of various types of carbon black, with and without surface-active substances. The latter included potassium rosinate, Leukanol, and ammonium caseinate. The dispersions were prepared in ball mills, in jet mills, and by means of a vibrator. The kinetic and aggregate stability of the dispersions were determined. Potassium rosinate and Leukanol produced dispersions which did not separate for several days. The oil emulsion was prepared with the aid of stearic acid and triethanolamine. The carbon black dispersion was mixed with the latex of butadiene-styrene rubber

Card 1/2

L 12589-06

ACCESSION NR: AP3001425

and into it was introduced the oil emulsion. The coagulation of this mass was best achieved by pouring it into a 9% solution of sodium chloride containing 7% sulfuric acid at 40C. It was found that the introduction of carbon black into the latex previous to coagulation had a favorable effect on the technological properties of the vulcanizates and permitted the processing of rubbers with a higher molecular weight. The KRAP brand of carbon black and the use of potassium permanganate as emulsifier produced vulcanized rubbers of superior strength and adhesive properties, with a higher modulus of elasticity and with a better adhesion to the cord. Pasyankov, N. V., Bondaryev, A. Ye., and Gergasovich, T. V. participated in the work. Orig. art. has: 3 tables.

ASSOCIATION: Voronezhskiy zavod sinteticheskogo kauchuka i Voronezhskiy shirmyy zavod (Voronezh Synthetic Rubber Plant and Voronezh Tire Plant)

SUBMITTED: 00

DATE ACQ: 30May63

ENCL: 00

SUB CODE: 00

NO REF SOV: 002

OTHER: 002

Card 2/2

L 40297-66 INT(m)/RUP(t) UJ(c) JND/EM

ACC NR: AR6014589 (A)

SOURCE CODE: UR/0081/65/000/021/8091/8091

AUTHORS: Gostev, M. M.; Artemov, V. M.; Kovrizhko, L. P.54  
13TITLE: Development of a method for the preparation of petroleum-black filled stereospecific cis-1,4-polybutadiene rubber. Report 1. Stabilization of the hydrocarbon dispersion of carbon black 15

SOURCE: Ref. zh. Khimiya, Abs. 218566

REF SOURCE: Yt. Labor. khimi vysokomolekul. sovedineniy. Voronezhsk. un-t, vyp. 3, 1964, 209-212

TOPIC TAGS: rubber chemical, chemical dispersion, oil, stabilizer, carbon black, synthetic rubber / HAF carbon black, PN-6 oil, OP-10 stabilizer

ABSTRACT: Conditions for the preparation of stable dispersions (D) of carbon black (type HAF) in benzene, p-xylene, ethylbenzene, isopropylbenzene, cyclohexane, and "bentol" (mixture of 30% benzene, 66% toluene, and 4% ethylbenzene) were studied. Resin and its soaps, fatty acids, OP-10, cis-1,4-polybutadiene (I), drying oil, talloil (TM), and oil PN-6 were employed as stabilizers for D. System of 20 parts by weight of TM, 10 of resin soap, 30 of I, and 15 of drying oil (calculated per 100 parts by weight of carbon black) yielded a kinetically and aggregatively stable, mobile hydrocarbon D of carbon black which does not separate within 24 hours. With increased concentration of carbon black, cross-linking of D is increased. Consider-

Card 1/2

L 40297-64

ACC NR: AR6014589

able increase in viscosity of D results from a small increase in concentration. Mechanisms of D stabilization with TM and resin soaps are the same, consisting of formation of an adsorption layer of the stabilizer on the surface of the carbon black particle. Stabilization with I consists of preventing the sedimentation of carbon black particles along with long polymeric chains of rubber. F. Kantor [Translation of abstract]

SUB CODE: 11,07

Card 2/2 MLP

ACC NR: AR6016971 (A) SOURCE CODE: UR/0081/65/000/G24/S077/S077

AUTHOR: Gostev, M. K.; Artemov, V. M.; Shatalov, V. P.; Pasyukov, N. V.

TITLE: Stabilizing aqueous dispersions of carbon black with tallow oil soap, and properties of carbon black-oil filled butadiene styrene rubbers based thereon

SOURCE: Ref. zh. Khimiya, Abs. 248546

20  
B

REF SOURCE: Tr. Labor. khimii vysokomolekul. soedineniy. Voronezhsk. un-t, vyp. 3, 1964, 181-185

TOPIC TAGS: butadiene styrene rubber, carbon black, filler, chemical dispersion

ABSTRACT: Aqueous dispersions of carbon black stabilized with the K-soap of tallow oil (I) blend well with SKS-30 ARK latex, oil emulsions and their mixtures. Mixtures of carbon black-oil filled rubbers obtained by coagulating mixtures consisting of latex, PN-6, oil emulsions (17.6 weight/parts of oil on the polymer), aqueous dispersions of carbon black NAF stabilized with I (50 parts by weight of carbon black on oil filled rubber), have better properties in comparison to carbon black-oil filled rubber in which the carbon black is added on the rolls.

D. Krasteleva. [Translation of abstract].

SUB CODE: 11, 07

MALYCHEV, S.V., red.; ARTEMOV, V.N., red.; YARISH, Ye.I., tekhn.red.

[Progress of White Russia during 40 years; a statistical manual]  
Dostizhenia Sovetskoi Belorussii za 40 let; statisticheski  
sbornik. Minsk, Gos.stat.isd-vo, 1958. 203 p., 32 diagrs.  
(MIRA 12:6)

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vibration theory. pliancy calculation shaft speed, resonance vibration

friction and parts connected

SECRET

ACC NR: AP6011790

SOURCE CODE: UR/017/66/000/001/0100/0107

AUTHOR: Artemov, Ye. A.

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B

ORG: none

TITLE: <sup>24</sup> Vibrations of an unbalanced rotor with hydraulic dampers on elastic supports <sup>24</sup>

SOURCE: IVUZ. Aviatsionnaya tekhnika, no. 1, 1966, 100-107

TOPIC TAGS: turbine rotor, compressor rotor, vibration damping, forced vibration

ABSTRACT: A method is proposed for using the natural frequencies and forms of vibrations to analyze the amplitudes and forms of forced vibrations with friction in a rotor with arbitrarily distributed dampers on  $n$  elastic supports. The effects of rotor configuration, arbitrary loads and gyro-moments are considered. It is assumed that deformation of the rotor shaft is linear and that hydraulic dampers are used with friction proportional to rate of vibration. Analytical equations are derived both for external loads and for loads due to natural vibration, assuming (from the standpoint of dynamic equilibrium) that viscosity during rotation of the system is an external force. For the case of forced vibrations with friction, this expression reduces to a system of two load equations in planes  $x$  and  $y$ . The relative error of the method depends on the accuracy of calculating the natural forms and frequencies of the vibrations during dynamic

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analysis of a given system. Orig. art. has: 1 figure, 23 formulas. O

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