

VOROB'YEV Ye. L. and KOZLOVA, A. V.

"The Clinic and Treatment of Injuries Caused by the Explosion of an Atomic Bomb)

Medgiz Publishing House, Moscow, 1956; 96 pages, price 2 rubles, 55 kopecks.
(Library Accession Card No 56-GB-524, State Library of USSR imeni Lenin)

Sum 985

Klinika i Lecheniye Povrezhdeniy Voznikayushchikh pri Varyvo
Atomnoy Bomby (Clinical Aspects and Therapy of Injuries
Caused by the Explosion of an Atomic Bomb), by Prof A. V.
Kozlova and Ye. I. Vorob'yev, Moscow, Medgiz, 1956, 96 pp

The authors discuss the basic problems of the injurious effect of an atomic blast, the clinical picture of the injuries, basic methods of treating the injured, and principles of protection from the shock wave and the light and ionizing radiation resulting from an atomic explosion. Included is a section (pp 72-82) dealing with the treatment of burns covering 20-70% of the surface of the body.

The book is based on a critical analysis of Soviet and foreign literature (about half of the sources are Soviet). "The authors do not claim to give complete coverage of the problems discussed concerning injuries and treatment of injuries resulting from the explosion of an atomic bomb." (U)

Sum. 1360

VOROB'YEV, Yevgeniy Ivanovich; BURNAZYAN, A.I., red.

[Injurious effect of radioactive substances; prevention and treatment of radiation sickness] Porazhailushobee deistvie radioaktivnykh veshchestv; profilaktika i lechenie luchevoi bolezni. Moskva, In-t sanitarnogo prosv., 1959. 75 p.

(RADIATION SICKNESS)

(MIRA 13:11)

VOROB'YEV, Ye.I.; POBEDINSKIY, M.M.

Problems in medical radiology discussed at the Seventh All-Union
Congress of Roentgenologists and Radiologists, Saratov, October
1958. Med.rad. 4 no.1:91-96 Ja '59. (MIRA 12:2)
(RADIOLOGY, MEDICAL)

VOROB'YEV, Ye. I.

PHASE I BOOK EXPLOITATION SOV/5330

Bibergal', Anatoliy Viktorovich, Usher Yakovelevich Margulis, and Yevgeniy Ivanovich Vorob'yev

Zashchita ot rentgenovskikh i gamma-luchey (Protection From X- and Gamma Rays) 2d ed., rev. and enl. Moscow, Medgiz, 1960. 273 p. 10,000 copies printed.

Ed. (Title page): K. K. Aglintsev, Professor; Ed.: D. M. Alekseyev; Tech. Ed.: N. I. Lyudkovskaya.

PURPOSE : This book is intended for the general reader who has no special training in physics, and for those who are working near radiation sources.

COVERAGE: The authors discuss an important phase of the theory of protection against radiation, i.e., against the harmful effects of x-rays and γ -rays. The preface contains a brief introduction to atomic physics. Material on dosimetry and the monitoring of protection against x-rays and γ -rays necessary to an understanding of problems of protection is also included.

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Protection From X- and Gamma Rays

SOV/5330

The book focuses main attention on protection problems themselves, dealing in detail with the passage-mechanism of x-rays and γ -rays through matter, principles of design, and the properties of materials used for protection. Protective structures and installations are also described, and examples of design and design nomograms are given. There is also some information on the biological effects of radiation. The present work represents an attempt to collect, systematize, and present in detailed and orderly fashion the considerable number of articles on problems of radiation protection which have appeared in the periodical literature to date. The second edition is an improvement over the first edition, inasmuch as the material has been reworked and supplemented with new material, and some material of a general character has been eliminated. Ch. I to III and Section 4 of Ch. IV were written by U. Ya. Margulis; A. V. Bibergal' wrote Ch. IV (excepting Section IV), V, VI, and VII; Ye. I. Borob'yev wrote Ch. VIII; A. V. Bibergal' and U. Ya. Margulis selected and compiled the material for the appendices. There are 65 references: 38 Soviet (including 5 translations), 26 English, and 1 German.

Card-2/8

VOROB'YEV, Ye.I.

Organization of radiological services for the public. Mad. rad.
5 no.5:3-10 '60. (MIRA 12312)
(RADIOLOGY, MEDICAL)

VOROB'YEV, Ye.I.; SELETSKAYA, T.S.

Personnel training for radiotherapy departments and radiological
laboratories. Med. rad. 6 no.2:3-7 '61. (MIRA 14:3)
(RADIOLOGY, MEDICAL--STUDY AND TEACHING)

VOROB'YEV, Ye.I.; MOISEYTSEV, P.I.

New rules for working with radioactive substances in institutions under the Ministry of Public Health. Med.rad. no.3:85-88 '62. (MIRA 15:3)

(RADIATION PROTECTION)

S/241/63/008/001/001/006
D296/D307

AUTHORS: Vorob'yev, Ye.I. and Funshteyn, L.V.

TITLE: Results of research in the field of radiobiology in Public Health Institutions in 1961

PERIODICAL: Meditsinskaya radiologiya, v. 8, no. 1, 1963, 38-45

TEXT: The authors review the results of research in the field of radiobiology carried out in 1961. Most of the topics were concerned with the pathogenetic mechanisms underlying the development of radiation sickness, e.g. changes in the plasma proteins, and in tissue metabolism. Some of the authors reviewed, however, studied the carcinogenetic effects of different types of radiation; changes in the immunological response; and in the hormone and vitamin balance after exposure to radiation. The article underlines the wide range of problems covered by the investigations, the high technical standards and the highly developed cooperation between the different departments. Among the shortcomings the authors criticize the inadequate attention paid to the quantitative aspects of radiobiology and

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Results of research ...

S/241/65/008/001/001/006
D296/D307

the fact that none of the departments concerned applied kibernetical methods to the elucidation of radiobiological problems. No specific references are quoted.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut meditsinskoy radiologii Ministerstva zdravookhraneniya SSSR (Central Scientific Research Institute of Medical Radiology, Ministry of Health of the USSR)

SUBMITTED: September 22, 1962

Card 2/2

GRODZENSKIY, D.E.; GORIZONTOV, P.D.; VOROB'YEV, Ye.I.; MANOYLOV, S.Ye.;
FEDOROVA, T.A.; PAVLOVA, M.N.; GABUNIYA, R.I.

Second International Congress on Radiation Research in England,
Aug. 5-11, 1962. Med. rad. 8 no.3:83-92 Mr '63. (MIRA 17:9)

VOROB'YEV, Ye.I.; FUNCHTEYN, L.V.

Resolution of the Central Committee of the Communist Party of the Soviet Union and Council of Ministers of the U.S.S.R.
"On measures for further development of biological science and improving its relation to practice" and prospects in the development of biology. Med. rad. 8 no.9:3-7 S'63. (MIRA 17:4)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo rentgeno-radiologicheskogo instituta Ministerstva Zdravookhraneniya SSSR.

VOROB'YEV, Ye.I.; LYALIN, Ye.A.

Readers' conference. Mod. rad. 9 no.1:92 Ja '64. (MIRA 17:9)

L 23782-66 (m)

ACC NR: AP6015185

SOURCE CODE: UR/0241/65/010/003/0090/0092 40

AUTHOR: Vorob'yev, Ye. I.; Mil'man, N. Ya.; Lyalin, Ye. A. 34
B

ORG: none

TITLE: Clinical and experimental investigations in the field of radiation therapy 19

SOURCE: Meditsinskaya radiologiya, v. 10, no. 3, 1965, 90-92

TOPIC TAGS: rat, tumor, radiology, radiotherapy, chemotherapy, bremsstrahlung, radiation biological effect, medical conference, x ray irradiation, bone marrow, radiation dosimetry

ABSTRACT: A scientific session that dealt with clinical and experimental problems pertaining to radiation therapy was held on 1-3 Jun 1964 at the Central Scientific Research Roentgeno-Radiological Institute of the Ministry of Health USSR at Leningrad.

Among the reports presented, one by A. S. Morozov contained data indicating that combined treatment of P135 lymphosarcomas of rats with sarcolysin and local irradiation was more effective than chemotherapeutic or radiation treatment alone. The same conclusion was arrived at by Ye. I. Orlova with respect to treatment of experimental lymphosarcomas of rats with ribonuclease and by applying local X-ray irradiation. The biological effects of bremsstrahlung of 25 mev were discussed by V. I. Gordon. Prof. L. V. Funshtoy'n and E. I. Shcherban' found that Fe accumulated in various tissues and organs in amounts depending on the radiation dose applied in the treatment of malignant tumors. The Card 1/2 UDC: 615.849-07(063)

L 23782-66

ACC NR: AP6015185

6

luminescence of the blood also changed in a regular manner with the dose of radiation. It was proposed that data on the accumulation of Fe and the luminescence of the blood be used in evaluating the effectiveness of radiation therapy. According to a report by G. Ye. Reznik, inhalation of O₂ alleviated some harmful effects produced by radiation in connection with the radiation therapy of lung cancer. Several reports were presented on the autotransplantation of bone marrow from a bone shielded during irradiation. This method was applied both experimentally and in clinical work and found effective in the prophylaxis and therapy of radiation injuries to the blood-forming system. L. A. Mel'nikov, A. V. Kantin, and A. I. Starshinin reported on application of Au¹⁹⁸ in the treatment of cancers of the breast and of the tongue. A considerable amount of time at the session was devoted to problems of clinical dosimetry. Dosimetry in connection with the application of solutions containing Au¹⁹⁸ and P³² was discussed. A. A. Gabelov and L. M. Stukova presented a report on some clinical dosimetry prerequisites for the use of a linear accelerator in the treatment of cancer of the cervix. After the scientific session a colloquium on physical fundamentals of clinical dosimetry was held on 3-6 Jun 1964. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 2/2

VOROB'YEV, Ye.I.; MIL'MAN, N.Ya.

Results of improving the qualifications of roentgenologists
and radiologists in Leningrad. Med. rad. 10 no.4:82-84 Ap '65.

(MIRA 18:7)

1. Tsentral'nyy nauchno-issledovatel'skiy rentgeno-radiologicheskiy
institut Ministerstva zdравookhraneniya SSSR, Leningrad.

L 28894-66 EHT(m)/T DJ

ACC NR: AP6019167

SOURCE CODE: UR/0380/65/000/003/0050/0055

AUTHOR: Vorob'yev, Yo. I. (Moscow)

24
E

ORG: none

TITLE: Effect of the parameters of a cam mechanism on the wear of the cam profile under plastic contact conditions

SOURCE: Mashinovedeniye, no. 3, 1965, 50-55

TOPIC TAGS: mechanical engineering, plastic deformation

ABSTRACT: The nature of the contact in machine parts, and, in particular, in a cam mechanism depends on the specific pressure, the microgeometry, and the properties of the material. Plastic deformations on friction surfaces have also been noted by many authors, even in quenched steels.

Formulas are derived in the paper for the wear of a cam mechanism with several different types of contact.

The formulas were verified directly by experiments on operating cam mechanisms.

The formulas obtained support the basic conclusion of the paper that the normal wear of a cam profile is proportional to the loading acting on the higher kinematic pair of the cam mechanism, to a power greater than 1.5.

Orig. art. has: 2 figures and 11 formulas. [JPRS]

SUB CODE: 13, 20 / SUBM DATE: 22Jan65 / ORIG REF: 008

Card 1/1 CC UDC: 539.375:621.835

ACC NR: AP6036162

(N)

SOURCE CODE: UR/0188/66/000/005/0022/0029

AUTHOR: Vorob'yev, Ye. M.

ORG: Department of Mathematics (Kafedra matematiki)

TITLE: Asymptotic behavior of the eigenfunctions of a two-dimensional scalar wave equation with boundary conditions on equidistant curves

SOURCE: Moscow. Universitet. Vestnik. Seriya III. Fizika, astronomiya, no. 5, 1966, 22-29

TOPIC TAGS: eigenfunction, eigenvalue, wave equation, boundary value problem, geometric optics, waveguide propagation, millimeter wave propagation

ABSTRACT: A method is presented for constructing the asymptotic behavior of the eigenfunctions of the equation $\Delta u + k^2 n^2(x, y)u = 0$ with boundary conditions on equidistant curves, based on the approximation of geometrical optics for large values of k . This equation is of importance in the theory of waveguide and resonator systems operating in the millimeter and optical bands. The procedure used to develop this method is based on work by V. P. Maslov (DAN SSSR v. 123, no. 4, 1958). The region considered is bounded either by two closed equidistant curves or by two equidistant curves and two normals to them, and represents the cross section of a regular waveguide or a coaxial-waveguide transmission line. The method consists of expressing the differential equation in question in the so-called quasiclassical representation in terms of curvilinear coordinates and determining the eigenfunctions in the form of a series of

UDC: 530.145

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ACC NR: AP6036162

successive approximations. An advantage of the method is that it can be used to determine eigenfunctions and eigenvalues of transverse cross sections, for which the variables cannot be separated. An example wherein the method is used for the simpler equation ($\Delta u + k^2 u = 0$) is presented and it is shown that the result coincides with that obtained by separation of variables. Orig. art. has: 36 formulas.

SUB CODE: 09, 12/ SUBM DATE: 13Apr65/ ORIG REF: 004/ OIH REF: 001

Card 2/2

SEROSHTAN, Nikolay Antonovich; YOROB'YEV, Yevgeniy Mikhaylovich;
LETICHEVA, I.D., red.

[Important source for the increase of national wealth]
Vazhnyi istochnik rosta obshchestvennogo bogatstva.
Khar'kov, Prapor, 1964. 33 p. (MIRA 18:1)

VOROB'YEV, Ye.N., starshiy prepodavatel'.

~~XXXXXXXXXXXXXXXXXXXX~~
Cementation of steel in casting molds. Nauch. trudy MPI 30(44):
137-142 '55. (MLRA 9:11)
(Cementation (Metallurgy)) (Steel castings)

VOROB'YEV, Ye.P.

Manufacture more high-quality cloths for the paper industry.
Bum. prom. 36 no.11:6-7 N '61. (MIRA 15:1)

1. Direktor kombinata tonkikh i tekhnicheskikh sukon im.
Tel'mana.

(Paper industry)

VOROB'YEV, Ye.V.

Experience with operating a station for biological purification of phenolic waste waters. Vod.1 san.tekh. no.4:20-21 Ap '56.
(MLBA 9:8)

(Sewage--Purification)

VOROB'YEV, Yu.

KROTKOV, N.; MCHEDLOV.-PETROSYAN, O, doktor tekhnicheskikh nauk (g.Khar'kov)

~~VOROB'YEV, In.~~ inzhener (g.Khar'kov)

Letters and suggestions. Stroi.mat. 3 no.1:31 Ja '57. (MLRA 10:3)

1. Predsedatel' zavodskogo komiteta zavoda im. Boykova (for Krotkov)
(Serpentinites) (Rewards (Prizes, etc.))

VOROB'YEV, Yu.

~~VOROB'YEV, Yu.~~

Return photographs. Sov.foto 17 no.8:76 Ag '57.
(Photography)

(KLEA 10:9)

VOROB'YEV, Yu. A.

25(6)

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PHASE I BOOK EXPLOITATION

SOV/1328

Nauchno-tekhnicheskoye obshchestvo mashinostroitel'noy promyshlennosti.
Leningradskoye oblastnoye pravleniye

Vzaimozamenyayemost', tochnost' i metody izmereniya v mashinostroyeni
(Interchangeability, Accuracy and Measuring Methods in Machine
Building) Moscow, Mashgiz, 1958. 251 p. (Series: Its: Sbornik,
kn. 47) 6,000 copies printed.

Eds.: Kutay, A.K., Candidate of Technical Sciences, Docent; Puzanova,
V.P., Candidate of Technical Sciences; Kempinskiy, M.M., Engineer;
Rubinov, A.D., Candidate of Technical Sciences; Turetskiy, I. Yu.,
Candidate of Technical Sciences; and Abadzhi, K.I., Engineer; Ed.
of Publishing House: Simonovskiy, N.Z.; Tech. Ed.: Sokolova, L.V.;
Managing Ed. for Literature on Machine Building Technology (Leningrad
Division, Mashgiz); Naumov, Ye. P., Engineer.

PURPOSE: This book is intended for plant engineering, scientific and
technical personnel and production innovators. It may also be

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Interchangeability, Accuracy and Measuring Methods (Cont.) SOV/1328

useful to students of higher technical institutes.

COVERAGE: This collection of articles deals with the topics discussed at the Third Leningrad Scientific and Engineering Conference on Interchangeability, Accuracy, and Inspection Methods in Machine-building and Instrument-making, held March 18-22, 1957. The book consists of three parts: 1) interchangeability in machine-building and instrument-making 2) manufacturing accuracy and quality control 3) engineering measurements. The first part deals with basic principles of interchangeability, establishment of the system and calculation of tolerances. The second part deals with calculation and analysis of the accuracy of manufacturing processes, machine subassemblies and quality control. The third part consists of articles dealing with improvements in measuring instruments and methods. Special emphasis is placed on the measurement of large parts. A new method of calculating accuracies of measuring instruments is discussed in the article by M.M. Kempinskiy.. There is no bibliography.

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Interchangeability, Accuracy and Measuring Methods (Cont.) SOV/1328

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AVAILABLE: Library of Congress

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Card 9/9

VOROB'YEV, Yu.A.

Ranges of nitrogen and beryllium ions in air. Zhur. eksp. i
teor. fiz. 35 no.5:1306-1307 N '58. (MIRA 12:3)

1. Moskovskiy gosudarstvennyy universitet.
(Nitrogen) (Beryllium)

VOROB'YEV, Yu.A., inzh.

Calculating tolerances for molding dimensions. *Izv. vys. ucheb. zav.; mashinostr.* no.6:172-177 '58. (MIRA 12:8)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche in. Baumana. (Tolerance (Engineering)) (Molding (Founding))

VOROB'YEV, Yu. A.

PHASE I BOOK EXPLOITATION

SOV/5304

Soveshchaniye po teorii liteynykh protsessov. 5th, 1959

Tochnost' otlivok; trudy soveshchaniya (Accuracy of Castings; Transactions of the Fifth Conference on the Theory of Founding Processes) Moscow, Mashgiz, 1960. 206 p. 3,500 copies printed.

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

Ed. (Title page): B. B. Gulyayev, Doctor of Technical Sciences, Professor; Ed. of Publishing House: G. N. Soboleva; Tech. Ed.: A. F. Uvarova; Managing Ed. for Literature on Hot-Processed Metals: S. Ya. Golovin, Engineer.

PURPOSE: This book is intended for scientific and technical personnel at scientific research institutes, factories, and schools of higher education.

COVERAGE: The book contains 19 reports read at a conference on the accuracy of castings. The conference was organized by the

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Accuracy of Castings (Cont.)

SOV/5304

Committee on Processing in Machine Building and sponsored by the Institut mashinovedeniya AN SSSR (Institute of the Science of Machines of the Academy of Sciences USSR). The reports, presented by leading specialists, science workers, and production personnel, discuss the present state of the problem of the accuracy of castings and methods of solving the problems involved. There are 58 references, mostly Soviet.

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3

SOV-28-58-4-17/35

AUTHORS: Vorob'yev, Yu. A. and Sidorov, V.D., Engineers

TITLE: Determination of Tolerances on Dimensions of Non-Ferrous Alloy Casts (Ustanovleniye dopuskov na razmery otlivok iz tsvetnykh splavov)

PERIODICAL: Standartizatsiya, 1958, Nr 4, pp 56 - 58 (USSR)

ABSTRACT: The setting up of a tolerance system for non-ferrous casts was preceded by expanded investigations. Obtained results were subjected to statistical analyses and full values of tolerances were calculated. As a result, a standardization project was elaborated determining tolerances for dimensions of casts from non-ferrous metals and alloys produced by different means. Series of precision tolerances for different cast dimensions are given in tables. There are 3 tables, 1 diagram and 2 Soviet references.

1. Castings--Standards

Card 1/1

VOHOBYEV, Yu.A.

Dimensional tolerances for castings. Lit. proizv. no.1:22-23 Ja
'58. (MIRA 11:2)

(Founding)

SOV/56-35-5-49/56

21(8)

AUTHOR:

Vorob'yev, Yu. A.

TITLE:

The Ranges of the Ions of Nitrogen and Beryllium in Air
(Probegi ionov azota i berilliya v vozdukhe)

PERIODICAL:

Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1958,
Vol 35, Nr 5, pp 1306-1307 (USSR)

ABSTRACT:

The author determined the above mentioned ranges within the velocity interval of from $8 \cdot 10^8$ cm/sec to $11.5 \cdot 10^8$ sec by means of a cloud chamber filled with a mixture of air and steam. The ions N_{14}^{3+} , N_{14}^{4+} , N_{15}^{3+} and Be_9^{2+} were accelerated on a 72 cm cyclotron up to various energy values and were deflected by the magnetic field of a focusing magnet. They passed through a cellulose film and then entered the operation space of a cloud chamber. For the purpose of determining ion velocity the laboratory data for gauging the focusing magnet were used. Besides nitrogen- and beryllium ions, also molecular deuterium ions D_2^+ were accelerated. By comparing the ranges of nitrogen- and beryllium ions with those of deuterons produced in the de-

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SOV/56-35-5-49/56

The Ranges of the Ions of Nitrogen and Beryllium in Air

By the study of molecular deuterium ions it was possible to determine the ranges of nitrogen- and beryllium ions in air at standard pressure. The measured range values of the ions N_{14} , N_{15} and Be_9 in air are given by a table. The greater range of beryllium ions (as compared to nitrogen ions) is apparently due to the special structure of the electron shell of the beryllium atom. The author thanks the team operating the cyclotron (among them Engineer-Physicist G. V. Koshelyayev and the laboratory workers A. A. Danilov, V. P. Khlapov and M. S. Merkulov for their participation in the work carried out. There are 1 table and 4 references, 1 of which is Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 26, 1958

Card 2/2

BEZHELUKOVA, Ye.F., inzh.; VOROB'YEV, Yu.A., kand. tekhn. nauk;
VORONTSOV, L.N., kand. tekhn. nauk; ZYABREVA, N.N., kand.
tekhn. nauk; LYANDON, Yu.N., kand. tekhn. nauk; TISHCHENKO,
O.F., doktor tekhn. nauk, prof.; FEDOROV, A.D., kand. tekhn.
nauk; YAKUSHEV, A.I., doktor tekhn. nauk, prof.; GOSTEV, V.I.,
inzh., retsenzent; KUBAREV, V.I., inzh., red.; GARANKINA,
S.P., red.izd-va; UVAROVA, A.F., tekhn. red.

[Handbook on allowances, fits, and linear measurements for
inspectors at machinery plants]. Spravochnik kontrolera ma-
shinostroitel'nykh zavodov; po dopuskam, posadkam, i lineinym
izmereniam. Pod red. A.I. Iakusheva. Leningrad, Mashgiz,
1963. 723 p. (MIRA 16:5)
(Production control) (Measuring instruments)
(Interchangeable mechanisms)

KUPANEVICH, Yevgeniy Grigor'yevich, kand. tekhn. nauk., VOROB'YEV, Yu. A. inzh.
red.; EL'KIND, V. D., tekhn. red.;

[Precision of parts made in metal forms] Technost' detalei,
izgotovliaemykh v metallicheskiykh formakh. Moskva, Gos. nauchno-
tekhn. izd-vo mashinostroyt. lit-ry, 1958. 201 p. (MIRA 11:9)
(Molding (Founding))
(Plastics--Molding)

VOBOBYEV, Yu. A., kand. tekhn. nauk; KOPANEVICH, Ye.G., kand. tekhn.
nauk, red.; SIROTIN, A.I., inzh., red.izd-va; GORDEYEVA,
L.P., tekhn. red.

[Accuracy of parts obtained from nonferrous alloys and
plastics by casting and pressing] Tochnost' detalei, polu-
chennykh lit'em i pressovaniem iz tsvetnykh splavov i plast-
mass. Moskva, Mashgiz, 1963. 173 p. (MIRA 16:6)
(Metalwork) (Plastics--Molding)

Card
VOROB'YEV, Yu. A.: Master Tech Sci (diss) -- "Investigation of the precision
of producing castings from nonferrous alloys". Moscow, 1958. 16 pp (Min Higher
Educ USSR, Moscow Order of Lenin and Order of Labor Red Banner Higher Technical
School im Bauman), 150 copies (KL, No 1, 1959, 119)

18(5), 25(5)

SOV/128-59-8-7/29

AUTHOR:

Vorob' yev, Yu.A., and Sidorov, V.D., Engineers

TITLE:

Standardization of Tolerances on Size of Non-Ferrous Castings

PERIODICAL:

Liteynoye proizvodstvo, 1959, Nr 8, pp 15 - 17 (USSR)

ABSTRACT:

There are no standard norms (GOST) in USSR for processing non-ferrous metals. In the MVTU imeni Bauman (MVTU imeni Bauman) together with the NII (Scientific Research Institute) 30,000 measurements of 500 different components cast from non-ferrous metals were carried out and the size tolerances were determined statistically. As the basis for the system of tolerances the following formulas are given: For components smaller than 500mm - $i = 0.1 (\sqrt{N+0.03 N+2})$; and for parts larger than 500 mm - $i = 0.004 N + 1.9$. The allowance is to be found from $\delta = i \cdot a$, where i = tolerance unit in mk, N = normal dimension in mm, δ = size of tolerance, a = quantity of tolerance units equal to the consecutive series from 1 to 9:64 - 100 - 160 - 250 - 400 - 640 - 1000 - 1600 and 2500 respectively. There are 9 tables, 1 graph, and 6 Soviet references.

Card 1/1

AUTHOR: Vorob'yev, Yu.A.

30V/ 119-58-7-10/10

TITLE: On the Tolerances of Non-Corresponding Measures (O dopuskakh na neotvetstvennyye nesopryagayemyye razmery)

PERIODICAL: Priborostroyeniye, 1958, Nr 7, pp. 32-32 (USSR)

ABSTRACT: The article by A.C.Smirnov, Priborostroyeniye, 1957, Nr 7 is based upon conceptions which the author does not accept.

- 1.) The term "free measures", it is true, is usual among machine-building engineers, but it cannot be accepted. Thus, it has also been eliminated by GOST-713-55 although it is still being replaced there by longer or shorter phrases. It is suggested that this term be replaced by "measures which cannot be made to agree".
- 2.) The symmetric field distribution of the error limits of the "free measures" suggested by Smirnov invites criticism, because unilateral field distribution of error limits was already adopted in the USSR in 1951.
- 3.) With respect to the problem of the systematic distribution of error limits over any methods of working metal it is not possible to agree with the opinion expressed by Smirnov.

Card 1/2

On the Tolerances of Non-Corresponding Measures

SOV/ 119-58-7-10/10

There are 2 Soviet references.

1. Machine tools--Design
2. Measurement--Standards

Card 2/2

USCOM-DC-55600

VOROB'YEV, Yu.A.

Proposed state standard on "Carbon steel castings prepared by the
melting-out process". *lit.proizv. no.2:45-46 F '60.*

(MIRA 13:5)

(Precision casting--Standards)

VOROB'YEV, Yu.A., inzh.

Bases for the standardization of dimension allowances for
nonferrous metal castings. Standartizatsiia 22 no.2:54-55 Hr-Ap
'58. (MIRA 11:5)

(Metal castings--Standards)

VOROB'YEV, Yu. A.

28-58-2-24/41

AUTHOR: Vorob'yev, Yu.A., Engineer

TITLE: The Basis of a Standard for Dimension Tolerances of Non-Ferrous Castings (Osnovy standarty dopuskov na razmery otlivok iz tsvetnogo lit'ya)

PERIODICAL: Standartizatsiya, 1958, Nr 2, pp 54-55 (USSR)

ABSTRACT: There are no Soviet state standards of tolerances and allowances for non-ferrous metal castings. The existing different systems developed by different industrial ministries for the use of their branches only, create misunderstandings and muddle. The author suggests a system that could be used as the basis for a state standard. The suggestion is illustrated by a chart of tolerances. There are 2 graphs, 1 table and 1 Soviet reference.

AVAILABLE: Library of Congress

Card 1/1

1. Non-ferrous castings-Standards
2. Castings-Standards
3. Standardization-USSR

VOROB'YEV, Yu. A.

None given
 A Conference on the Accuracy of Machine Building Castings
 Izvestiya Akademi tsekh SSSR. Otselennyye tekhnicheskikh
 nauk, Metallurgiya i toplivo, 1959, Nr 4, pp 235-250 (USSR)
 A conference on the above subject took place in the
 Institute of Machine Building of the Academy of Sciences
 of the USSR on 23-24th April, 1959. 200 representatives
 of scientific-research institutes, laboratories,
 universities and enterprises from 24 towns participated
 in the conference. The following papers were read:
 Yu. A. Vorob'yev "The present state of studies of the
 accuracy of castings"; I. A. Akhanyan "Tasks of
 investigations of the dependence of the accuracy of
 castings on technological factors"; N. P. Berks "Methods of
 analytical evaluation of dimensions of castings";
 Yu. A. Vorob'yev "Theoretical and experimental investigations
 of the accuracy of castings"; I. P. Prokhorov - "Some
 systems of allowances for mechanical working of castings";
 Ye. G. Kobzarevich "Methods for the determination of
 tolerances for dimensions of cast parts"; A. I. Zelenko
 "Tolerances for nonferrous castings produced by various
 methods of casting"; A. N. Zhukovskiy "Methods of
 controlling the cleanliness of the surfaces of castings";
 I. A. Konstantinov "The influence of stresses formed during
 casting on the accuracy of castings"; I. Ye. Kostov "The
 process of peeling of castings"; S. S. Zolotarev and
 S. G. Zhuravlin "Sources of errors in the dimensions
 of castings caused by specific features of operation of
 the pattern-mould boxes equipment"; A. M. Puzoskiy
 "Vibric deformation of casting moulds"; I. A. Zhukovskiy
 "Conditions of making accurate castings in sand";
 P. F. Leonyev "The influence of the chemical shrinkage
 iron on the accuracy of dimensions of castings";
 S. N. Frenchenko and G. M. Gulyayev "The accuracy of the
 accuracy of castings made in increasing the cleanliness
 Y. Y. Mezhenkov "Experiments in the accuracy of castings and
 accuracy of large castings"; A. N. Zhukovskiy and
 I. A. Zhukovskiy "The accuracy of castings made by the
 lost wax method"; I. A. Zhukovskiy "An investigation of the
 accuracy and by the lost wax method"; P. P. Malyukhin and
 G. M. Gulyayev "The formation of the contour of castings
 during casting under pressure"; I. A. Zhukovskiy,
 and A. N. Zhuravlin "An improvement in the surface quality
 of castings made under pressure by forming and casting
 the pressure moulds". It was established that casting
 too slowly mainly due to lack of uniformity in the
 research work and insufficient numbers of specialists in
 the field of mathematics, physics and electronics. In
 order to develop the theory and practice of casting processes
 accuracy, the following and systems of allowances for mechanical
 and alloy (at scientific research institutes and
 universities) were recommended: specialists and economists.

AUTHOR: None given
TITLE: A Conference on the Accuracy of Machine Building Castings
PERIODICAL: Izvestiya Akademi tsekh SSSR. Otselennyye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 4, pp 235-250 (USSR)
ABSTRACT: A conference on the above subject took place in the Institute of Machine Building of the Academy of Sciences of the USSR on 23-24th April, 1959. 200 representatives of scientific-research institutes, laboratories, universities and enterprises from 24 towns participated in the conference. The following papers were read: Yu. A. Vorob'yev "The present state of studies of the accuracy of castings"; I. A. Akhanyan "Tasks of investigations of the dependence of the accuracy of castings on technological factors"; N. P. Berks "Methods of analytical evaluation of dimensions of castings"; Yu. A. Vorob'yev "Theoretical and experimental investigations of the accuracy of castings"; I. P. Prokhorov - "Some systems of allowances for mechanical working of castings"; Ye. G. Kobzarevich "Methods for the determination of tolerances for dimensions of cast parts"; A. I. Zelenko "Tolerances for nonferrous castings produced by various methods of casting"; A. N. Zhukovskiy "Methods of controlling the cleanliness of the surfaces of castings"; I. A. Konstantinov "The influence of stresses formed during casting on the accuracy of castings"; I. Ye. Kostov "The process of peeling of castings"; S. S. Zolotarev and S. G. Zhuravlin "Sources of errors in the dimensions of castings caused by specific features of operation of the pattern-mould boxes equipment"; A. M. Puzoskiy "Vibric deformation of casting moulds"; I. A. Zhukovskiy "Conditions of making accurate castings in sand"; P. F. Leonyev "The influence of the chemical shrinkage iron on the accuracy of dimensions of castings"; S. N. Frenchenko and G. M. Gulyayev "The accuracy of the accuracy of castings made in increasing the cleanliness Y. Y. Mezhenkov "Experiments in the accuracy of castings and accuracy of large castings"; A. N. Zhukovskiy and I. A. Zhukovskiy "The accuracy of castings made by the lost wax method"; I. A. Zhukovskiy "An investigation of the accuracy and by the lost wax method"; P. P. Malyukhin and G. M. Gulyayev "The formation of the contour of castings during casting under pressure"; I. A. Zhukovskiy, and A. N. Zhuravlin "An improvement in the surface quality of castings made under pressure by forming and casting the pressure moulds". It was established that casting too slowly mainly due to lack of uniformity in the research work and insufficient numbers of specialists in the field of mathematics, physics and electronics. In order to develop the theory and practice of casting processes accuracy, the following and systems of allowances for mechanical and alloy (at scientific research institutes and universities) were recommended: specialists and economists.

Card 1/3

Card 2/3

VOROB'YEV, Yu. A.

PLANE I BOOK EXPLANATION

607/1206

Measur. *Isobroshirovaniye vyzhivaniya volnolubov*
Pul'sonnyy i volnolubnyy izmereniya i volnolubnyy (Interchangeability
and Measurement Techniques in Nonlinear Mechanics) Moscow, Mashtab, 1979.
312 p. (Series: *Mezhdunarodnyy sbornik. No. 2*) *Erva tshp* inserted. 3,000
copies printed.

Additional sponsoring agency: Moscow. *Spetsial'tsekhim'ul'nyy Institut* (Inst.)
I. V. Pavlov.

Abstracts: A. I. Zolotarev, Doctor of Technical Sciences, Professor;
Dr. I. Volodko, Candidate of Technical Sciences; and S. S. Gaidarov, Candidate
of Technical Sciences; Ed.: Yu. E. Lyubov, Candidate of Technical Sciences, Doctor
of the Natural Sciences, Professor; Moscow, MA, for *Itzhivaniya*. MA, of Publishing
Department Construction: S. V. Petrovskiy, Engineer.

Notes: G. F. Kobzarev; Tech. Ed.: A. P. Ovsyannikov.
Subject: This collection of articles is intended for scientific workers and
engineers. It contains a number of papers on the problems of interchangeability and technical
measurements in machine structures.

CONTENTS: The book deals with trends in the development of basic problems of
interchangeability. Existing scientific equipment in the USSR and other
countries is discussed. The design and utilization problems in the use of
conventional and automatic measuring devices are outlined. Experiments in
given on methods and further progress of parts. No personal files and
level of the problems and further progress of parts. No personal files and
level of the problems and further progress of parts.

Author: V. A. Vorob'yev, Methods of Calculating Tolerances
for Certain Problems of Sizing in Clearance Fits and Bridges 70

Editor: S. K. Kuznetsov. Numerical Computations for Deviations
in Fits of Spur Gearing 93

Editor: H. Yu. Kandidov of Technical Sciences. On the Use of
Additional Fits 106

Editor: I. I. Volodko, Candidate of Technical Sciences, Doctor. *Interpo-*
lacion of Surface Fits by Comparison With Samples 111

Editor: A. I. Zolotarev, Candidate of Technical Sciences, Doctor. On the
Problem of Vector Errors (Due to Eccentricity and Misalignment) 126

Editor: S. S. Gaidarov, Candidate of Technical Sciences, Doctor. On the
Calculation of Errors in Measurements With CIP, JIP, and HZ-Type
Optical-Mechanical Instruments 134

Editor: I. I. Volodko, Candidate of Technical Sciences. Investigation
of the Accuracy of Measurements of the Deviation of the
Profile of a Shaft With Circular Profiles 155

Editor: S. S. Gaidarov, Doctor. On the Application of the Principles of
Statistics in the Design of Devices for Control and Measurement
of the Accuracy of Measurements of Fits 176

Editor: H. Yu. Kandidov, Assistant Professor. On Methods of Dimensional
Control With Averaging of Measurements Data 197

Editor: V. A. Vorob'yev, Doctor. On the Accuracy of Measurements of
Clearance Fits 211

Editor: S. K. Kuznetsov, Doctor. A Bilateral Exchange Version
of the Design 230

AVAILABILITY: Library of Congress

YOROB'YEV, Yu.A., insh.

Tolerances for dimensions of nonferrous alloy castings. Vzaim. i
tekh.izm v mashinostr.; mezhvuz.sbor. no.2:160-184 '60.
(MIRA 13:8)

(Nonferrous alloys--Founding)
(Tolerance (Engineering))

VOROB'YEV, Yu. A.

РАБОТЫ И ДОКЛАДЫ
 1967/1968

Работы и доклады (научно-технические) и научно-технические материалы
 Института Проблем Технической Информации и Инженерных Исследований
 Механика, Динамика, Колебания, No. 2, Moscow, Nauka, 1968, 542 p.
 Errors also inserted, 5,000 copies printed.

№1: A.I. Ivanov, Doctor of Technical Sciences, Professor; Editorial Council:
 A.I. Ivanov (Chairman); B.A. Tyrov, Doctor of Technical Sciences, Professor;
 Ye. I. Rylov, Doctor B.S. Gusev, Doctor; P.M. Gorbunov, Doctor; and O. Ia.
 Yagor'ev (Scientific Secretary); Engineer: Professor N. Ye. Bogdanov, Doctor
 of Technical Sciences, Professor; Ed. B.A. Tyrov, Ed. Rylov, Ed. Gusev, Ed.
 of Technical Sciences, Doctor; B.S. Gusev, Ed. of Technical Sciences;
 Managing Ed. for Literature on Publishing Issues: G.F. Kochetov; Tech. Ed.:
 T.P. Koshova.

REMARKS: This collection of articles is intended for scientific and technical
 personnel dealing with problems of interchangeability and engineering measurements
 in the machine and instrument industries.

CONTENTS: Problems of Mutual Interchangeability with the Theoretical
 Probability Method 96

Tabachnik, G.F. [Candidate of Technical Sciences]. Calculation of
 Tolerances for Tolerated Deviations in Circles based on Over-Critical Conditions 111

Vorob'yev, Yu. A. and B.I. Lyubitskiy [Candidates of Technical Sciences].
 Principles for Determining Geometrical and Tolerances 135

Vorob'yev, Yu. A. [Engineer]. Dimensional Tolerances for
 Interchangeability Calculations 160

Kaluzhko, Y.A. [Candidate]. Basis for Selecting the Clearance
 between Compressor Cylinders and Pistons 185

SECTION II: ENGINEERING MEASUREMENTS

Tyrov, B.A. Basic Principles in the Selection of Accuracy of Measuring Devices 202

Tyrov, B.A. Analysis of the Errors of Various Determining Methods 225

Lyubitskiy, G.A. [Candidate of Technical Sciences]. Checking the
 Dimensional Accuracy of Precision Tolerated Deviations 245

Sokolov, I.L. [Engineer]. Measuring the Kinematic Error of
 Arrangement Deviations 270

Maruyev, B.M. [Candidate of Technical Sciences]. Master Deviation
 of Composite Gear Inspection 286

Lyubitskiy, G.A. [Candidate of Technical Sciences, Doctor]. Checking
 of Geometrical Errors of Cylinders 312

Vorob'yev, Yu. A. [Candidate of Technical Sciences, Doctor]. Methods for
 Checking Run-In and Clearances in Rolling-Contact Bearings 322

Cont'd b/7

SOV/159-58-3-20/31

18(5)
AUTHOR:

Vorob'yev, Yu.A.

TITLE:

The Accuracy Evaluation of Castings

PERIODICAL:

Nauchnyye doklady vysshey shkoly, Mashinostroyeniye i priborostroyeniye, 1958, Nr 3, pp 141-148 (USSR)

ABSTRACT:

This report was read at the inter-vuz scientific technological conference at MVTU imeni Baumana in January 1958. Increasing the accuracy of castings results in smaller tolerances for subsequent machining, lower weights of machines and in some cases machining is eliminated. The author first explains that the available standards for parts to be machined may not be applied for cast parts, citing formulae of Professor, Doctor of Technical Sciences, P.P. Berg and data of Professor, Doctor of Technical Sciences, N.N. Rubtsov. Scientific research work for determining the accuracy of castings made of non-ferrous metals was conducted at the MVTU imeni Baumana in cooperation with BOSN at MNII Gosudarstvennogo Kommiteta Soveta Ministrov SSSR po sudostroyeniyu (MNII of the State Committee of the

Card 1/3

The Accuracy Evaluation of Castings

SOV/159-58-3-20/31

USSR Council of Ministers for Shipbuilding). The research work was conducted under the guidance of Professor, Doctor of Technical Sciences, A.I. Yakushev and Professor, Doctor of Technical Sciences, N.N. Rubtsov, with participation of Engineer V.D. Sidorov and student I.B. Lavrov of MVTU imeni Baumana. This investigation lead to the conclusion that the molding process for castings is identical for all kinds of casting made of different alloys. In this way, all types of castings made of any alloy may be evaluated by a single accuracy criterion. As criteria, the following formulae may be used:

$i = 0.1 (\sqrt[3]{N} + 0.03N + 2)$ for dimensions up to 500 mm

$i = 0.004 N + 1.9$ for dimensions of 500 + 2,000 mm where by i - is tolerance in microns; N - nominal dimension in mm. These formulae coincide with those suggested by Professor P.P. Berg. The regularities found by means of the aforementioned formulae are

Card 2/3

The Accuracy Evaluation of Castings

SOV/159-58-3-20/31

also reflected in the works of Professor, Doctor of Technical Sciences, N.N. Rubtsov and other investigations (NIITavtoprom, 1954; Kazennov, 1956). Introducing the project "Tolerances for Dimensions of Castings Made of Non-Ferrous Metals and Alloys" under consideration of the peculiarities of the foundry industry will regulate accuracy evaluation problems and compare different types of casting with each other. The author presents tables which were used as the basic for developing the aforementioned project. There are 7 tables, 1 graph and 11 Soviet references.

SUBMITTED: February 28, 1958

Card 3/3

VOROB'YEV, Yu.A., kand.tekhn.nauk

Tolerances for plastic objects. Izv. vys. ucheb. zav.; mashinostr.
no. 3:109-117 '61. (MIRA 14:5)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.
(Plastics) (Tolerances (Engineering))

VOROB'YEV, Yu.A., kand. tekhn. nauk

Interchangeability of plastic parts. Standartizatsia 29
no.2:13-15 F '65. (MIRA 18:4)

1. Moskovskoye vyssheye tekhnicheskoye uchilishche imeni Baumana.

VASIL'YEV, S.S.; VOROB'YEV, Yu.A.; MIKHALEVA, T.N.; CHUPRUNOV, D.L.

Excitation functions for (p, p') on Al²⁷ with excitation of levels above 3.5 Mev. Vest. Mosk. un. Ser. 3: Fiz., astron. 20 no.1:87 Ja.-F '65. (MIRA 18:3)

1. Nauchno-issledovatel'skiy institut yadernoy fiziki Moskovskogo universiteta.

BIRKUN, A.A.; VOROB'YEV, Yu.A. (Simferopol')

Lymphogranulomatosis of the dura mater. Vop.neirokhir. ²⁴
no.5:50-52 S-O '60. (MIRA 13:11)

1. Kafedra patologicheskoy anatomii i neyrokhirurgicheskoy kliniki
Krymskogo meditsinskogo instituta. (HODGKIN'S DISEASE)
(DURA MATER--TUMORS)

VOROB'YEV, Yu.A., insh.; SIDOROV, V.D., insh.

Establishing allowances for dimensions of nonferrous metal castings.
Standartizatsia 22 no.4:56-58 JI-Ag '58. (MIRA 11:10)
(Molding (Founding))

YOROB'YEV, Yu.A. (Moskva)

Standardizing dimension tolerances for castings. [Izd.] LONITOMASH
47:7-10 '58. (MIRA 11:10)
(Metal castings--Standards)

VOROB'EV, YU. A.

USSR/Engineering - Standards

Card : 1/1

Author : Vorob'ev, Yu. A., Engineer

Title : The inadequacies of Government standards for molding

Periodical : Vest. Mash., 34, Ed. 6, 100 - 101, June 1954

Abstract : An analysis is made of the wording of the Government Standards, GOST 1855-45 and GOST 2009-43, in order to show that they do not limit the allowances for the dimensions in molding. Five suggestions are made which the author claims will make these standards adequate.

Institution : ...

Submitted : ...

VOROB'YEV, Yu.A., inzhener

On tolerances and allowances for casting. Standartizatsia
no.1:61-62 Ja-F '55. (MIRA 8:6)
(Founding--Standards)

VOROB'YEV, Yu. A.

VOROB'YEV, Yu. A.

Use of L.G. Bogomolova's hemostatic sponge in the treatment of
liquorrhea. Vop.neirokhir. 19 no.4:60 J1-Ag '55.(MLRA 8:10)

1. Iz neyrokhirurgicheskoy kliniki Krynskogo meditsinskogo
instituta imeni I.V.Stalina

(CEREBROSPINAL FLUID,

liquorrhea, ther., hemostatic sponge)

(HEMOSTATICS,

hemostatic sponge, ther. of liquorrhea)

VOROB'YEV, Yu.A., kand. tekhn. nauk, dots.; BRAGINSKIY, V.A.,
inzh.;

[Allowances and fits for plastic parts; technical directions RTM ML 1-62] Dopuski i posadki detalei iz plastmass; rukovodiashchie tekhnicheskie materialy RTM ML 1-62. Leningrad, TSentr. biuro tekhn. informatsii. Pt.1.[Precision of the manufacture of plastic parts by die casting and pressing (engineering allowances)] Tochnost' izgotovleniia detalei iz plastmass lit'em pod davleniem i pressovaniem (tekhnologicheskie dopuski). 1962. 88 p. (MIRA 16:12)

1. Moscow. Moskovskoye vyssheye tekhnicheskoye uchilishche. Kafedra metrologii i vzaimozamenyayemosti.

AP6002859

SOURCE CODE: UR/0286/55/000/024/0009/0009

AUTHORS: Vorob'yev, Yu. A.; Grigor'yan, B. N.

ORG: none

TITLE: Oil well indicator. Class 5, No. 176844

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 9

TOPIC TAGS: well drilling machinery, vibration measurement, measuring instrument, magnetic device

ABSTRACT: This Author Certificate presents a drill-hole indicator located in a hermetically sealed case. To provide control of the lowering-raising operations and blowing-explosive work in the drill-hole, the indicator is constructed in the form of a multilayered spool. A magnet is suspended on a spiral spring above the end surface of the spool (see Fig. 1). This magnet performs periodic damped oscillations with each impact to the system.

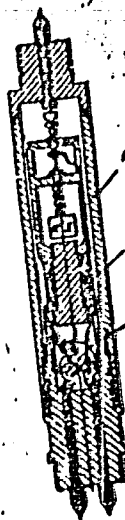
Card 1/2

UDC: 550.839

L 22735-66

ACC NR: AP6002859

Fig. 1. 1 - Inductive mechanical vibration transducer; 2 - electric cascade.



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 17Apr63

Card 2/2 *U-8*

KOPANEVICH, Ye.G., kand. tekhn. nauk; VOROB'YEV, Yu.A., kand.
tekhn. nauk, red.; SIROTIN, A.I., red. izd-va; EL'KIND,
V.D., tekhn. red.

[Precision in preparing billets] Tochnost' izgotovlenia za-
gotovok. Moskva, Mashgiz, 1963. 363 p. (MIRA 16:7)
(Metalwork)

VOROB'YEV, Yu.A., kand. tekhn. nauk; BEZHELUKOVA, Ye.F., kand.
tekhn. nauk; KABANOV, S.D., inzh., retsenzent; ZYABREVA,
N.N., kand. tekhn.nauk, red.

[Allowances and fits of plastic parts] Dopunki i posadki
detalei iz plastmass. Moskva, Mashinostroenie, 1964. 197 p.
(MIRA 18:1)

FRIDL'YANDER, I.N.; ROMANOVA, O.A.; ARCHAKOVA, Z.N.; GUR'YEV, I.I.;
DRONOVA, N.P.; PETROVA, A.A.; BYCHKOVA, Z.S.; Prinimali
uchastiye: FOMIN, K.N.; LEBEDEVA, N.S.; REZNIK, P.G.;
AVERKINA, N.; ZHELTOVSKAYA, L.S.; VOROB'YEV, Yu.A.;
TYURIN, N.N.

Manufacture and investigation of semifinished products from
high-strength and heat-resistant VAD23 aluminum alloys.
Alum. splavy no.3:194-200 '64. (MIRA 17:6)

L 24862-66 ENT(m)/ENP(j)/I/ETC(n)-6 IJP(c) WW/DJ/GS/RM

ACC NR: AT6008951

(A)

SOURCE CODE: UR/0000/65/000/000/0113/0122

52
51
B+1

AUTHORS: Vorob'yav, Yu. A.; Bezhelukova, Ye. F.

ORG: none

TITLE: The effect of operating conditions and clearance on the efficiency of polyamide slip bearings

SOURCE: Moscow, Institut mashinovedeniya, Plastmassy v podshipnikakh skol'zheniya; issledovaniya, opyt primeneniya (Plastics in friction bearings; research and experiment in application). Moscow, Izd-vo Nauka, 1965, 113-122

TOPIC TAGS: friction coefficient, antifriction material, antifriction bearing, polyamide, lubricating oil, static load test, temperature

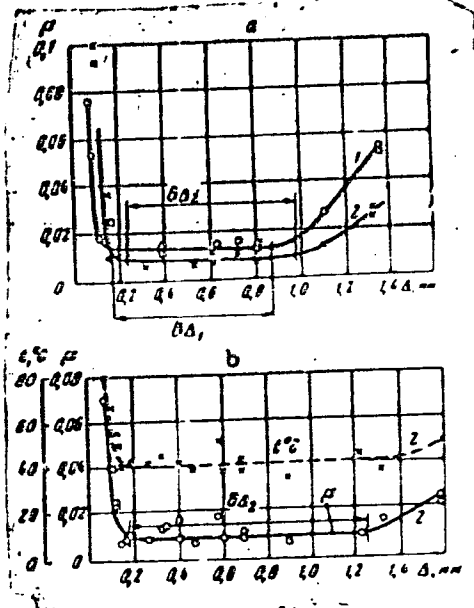
ABSTRACT: The effects of the rate of slip, pressure, lubrication, clearance between shaft and bearing, diameter and wall thickness and length of bushing, roughness of metal surface and of plastic surface, and the physicomachanical properties of the polyamides on efficiency are studied. It is found that the size of the clearance affects temperature, but that the temperature has a stable value for a definite speed and pressure within a certain range of clearances (see Fig. 1). With an increase in bearing length, the carrying power increases and then decreases (see Fig. 2). It is noted that functional fillers can considerably change the

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ACC NR: AT6008951

Fig. 1. Friction coefficient and temperature versus clearance. Bushing - initial caprone (a); initial caprone + 20% BaSO₄ (b) (S = 3 mm); shaft - steel 45 (V7, HRC = 50-55, $l = d = 40$ mm). Slip speed $v = 0.84$ m/sec. Lubricant - spindle oil (drops); 1 - $p = 3$ kg/cm²; 2 - $p = 10$ kg/cm².

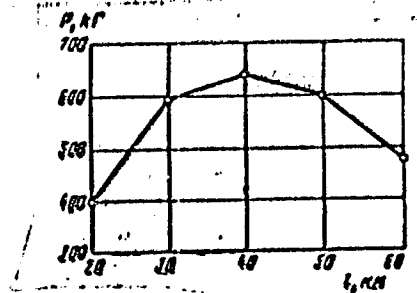


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ACC NR: AT6008951

Fig. 2. Carrying power (radial load) of bearing versus length of coupling. Bushing - initial caprone + 20% BaSO₄ (S = 3 mm); shaft - steel 45 (V 7, HRC = 50-55, $\lambda = d = 40$ mm, $\Delta = 0.25$ mm); slip speed $v = 0.84$ m/sec. Lubricant - spindle oil (drops).



physicomechanical properties of caprone and may improve its efficiency as a bearing material. Orig. art. has: 9 graphs and 3 tables.

SUB CODE: 11/ SUBM DATE: 31Jul65

Card 3/3 dda

L 46648-66
ACC NR: AR6021270

EWT(m)/EWP(j)/t WW/DJ/RM

SOURCE CODE: UR/0081/66/0001

AUTHOR: Vorob'yev, Yu. A.; Bezhelukova, Ye. F.; Slyudikova, N. N.

61
B

TITLE: Effect of operating conditions and amount of clearance on efficiency of sliding bearings of polycaprolactam

SOURCE: Ref zh. Khim, Part II, Abs. 45564

REF SOURCE: Sb. tr. Mosk. vyssh. tekhn. uch-shcha im N. E. Baumana, v. 4, 1964, 45-54

TOPIC TAGS: organic nitrogen compound, polymer, material deformation, friction, friction coefficient, bushing, bearing material, bearing stability

ABSTRACT: The effect of the amount of clearance, of radial pressure of the slide velocity, of the roughness of the metallic shaft surfaces, and of mechanical machining of filled polycaprolactam sliding bearings on their efficiency was studied. It was established that with clearances from 0.15 to 1.2 mm and radial pressures of 10 kg/sq cm the coefficient of friction of the slide is, on the average, 0.009, which assures normal operation of the joint. With clearances up to 0.12 mm and over 1.2 mm the shaft jams due to lack of compensation for thermal deformation in

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ACC NR, AR6021270

first case, and an increase in specific pressure causing plastic deformation in the second. Changing the radial pressure from 3 to 10 kg/sq cm increases temperature 10 - 15°. At 25 kg/sq cm pressure the temperature increases 30 - 35°, which is the limit for bearings with 4 and 5 mm wall thickness because of poor thermal conductivity of the plastic. On increasing sliding speed from 0.84 to 2.1 m/sec the coefficient of friction decreases and temperature increases from 30 to 40°. Further increase in slide velocity leads to wedging of the shaft and melting of the bearing. The coefficient of friction is stabilized when the shaft surface roughness is within the limits from ∇ 7 class fineness and higher. The coefficient of friction decreases after machining. In testing machined plastic bushings, the coefficient of friction is more stable than for bushings without machining; at the same time machining impairs the wear resistance of the surface of the piece and increases the change in the dimensions of the piece from water absorption. Z. Ivanova. [Translation of abstract].

SUB CODE: 11, 13

Card 2/2 *efj*

GLADKOV, I.A., doktor ekon. nauk; KOSSOY, A.I., kand. ekon. nauk;
VIDONOV, S.S., nauchn. sotr.; SAMOYLOVA, I.D., nauchn. sotr.;
GORBUNOV, E.P., kand. ekon. nauk; MAYEVSKIY, I.V., doktor
ekonom. nauk; CHEBOTAREV, V.A., kand. ekon. nauk; KAMUSHER,
L.N., nauchn. sotr.; STROYEVA, Z.N., nauchn. sotr.; FOMINA,
L.V., nauchn. sotr.; VOROBIEV, Yu.F., kand. ekon. nauk;
KRAYEV, M.A., doktor ekon. nauk; KAPLINSKIY, Ye.M., kand.
ekon. nauk; LAPINA, S.N., nauchn. sotr.; YAKOVITSEVSKIY, V.N.,
kand. ekon. nauk; ORLOV, B.P., kand. ekon. nauk; DIKHTYAR,
G.A., doktor ekon. nauk [deceased]; PLOTNIKOV, K.N.;
MALIKOVA, A.I., nauchn. sotr.; TOVMOSYAN, M.Ye., red. izd-va;
POLYAKOVA, T.V., tekhn. red.

[Socialist national economy of the U.S.S.R. in 1933 to 1940]
Sotsialisticheskoe narodnoe khoziaistvo SSSR v 1933-1940 gg.
Moskva, Izd-vo AN SSSR, 1963. 665 p. (MIRA 16:12)

1. Akademiya nauk SSSR. Institut ekonomiki. 2. Sektor istorii
narodnogo khozyaystva Instituta ekonomiki AN SSSR (for
Stroyeva, Fomina, Kaplinskiy, Lapina). 3. Chlen-korrespondent
AN SSSR (for Plotnikov).
(Russia--Economic conditions)

01813-67 EWT(m)/T

ACC NR: AP6035634

SOURCE CODE: UR/0089/66/020/005/0432/0434

AUTHOR: Vasil'yev, S. S.; Mikhaleva, T. N.; Vorob'yev, Yu. A.; Chuprunov, O. L.

ORG: none

TITLE: Utilization of fast charged particle inelastic scattering for analysis of composition of materials

SOURCE: Atomnaya energiya, v. 20, no. 5, 1966, 432-434

TOPIC TAGS: inelastic scattering, scintillation spectrometer, proton beam

ABSTRACT: The impurities in Al samples were analyzed by using a 6.6-Mev proton beam and a 100-channel scintillation spectrometer with Cs(Tl) as a proton recorder. The recording time for each angle of the scattered proton spectrum was 10 min at 2.0 to 6.5 Mev. The spectra obtained were then analyzed, and the proton elastic and inelastic scattering peaks from the Al nuclei were determined along with the scattering maxima of other nuclei. Impurities consisting of Ca, Mn, Si, and Na were found. The results were compared with neutron activation data on the Si impurity. Orig. art. has: 3 figures and 1 table. [NA]

SUB CODE: 20 / SUBM DATE: 18 Sep 65 / ORIG REF: 005 / OTH REF: 003

Card 1/1 fv

UDC: 539.106

0922 0036

L 25629-66 EWT(m)/EWP(j)/T DJ/RM

ACC NR: AP6015645 (A) SOURCE CODE: UR/0413/66/000/009/0055/0055

INVENTOR: Andrianov, K. A.; Vasil'yev, Yu. N.; Vorob'yev, Yui. F.; Kolesnikov, S. A.; Sigarev, A. M.; Khananashvili, L. M.

ORG: none

39
B

TITLE: Antifriction lubricant. Class 23, No. 181222

SOURCE: Izobreteniya, promyshlennyye obraztsey, tovarnyye znaki, no. 9, 1966, 55

TOPIC TAGS: molybdenum disulfide, solid lubricant, silicone lubricant

ABSTRACT: An Author Certificate has been issued for an antifriction lubricant based on molybdenum disulfide. To improve its quality, the lubricant is formulated to include petroleum coke, and polymethylphenylsiloxane and polyaluminophenylsiloxane resins. [SM]

SUB CODE: 11/ SUBM DATE: 06Mar65/ ATD PRESS: 4255

Card 1/1 FV

UNC: 621.893

2

YOROB'YEV., Yu.I., aspirant

Differential diagnosis of tumors of the upper and lower jaws
by radioactive tracers (P32) . Stomatologiya 37 no.5:37-43
8-0 '58 (MIRA 11:11)

1. Iz kafedry rentgenologii i radiologii (sav. - prof. I.A. Shekhter)
i kafedry khirurgicheskoy stomatologii (sav. - prof. A.I. Yevdokimov)
Moskovskogo meditsinskogo stomatologicheskogo instituta (dir. - dots.
G.N. Belatskiy).
(JAWS, --TUMORS)

VOROB'YEV, Yu. I.

EXCERPTA MEDICA Sec 14 Vol 13/8 Radiology Aug 59

1507. THE PROBLEM OF OSTEONECROSES DUE TO RADIATION THERAPY
(Russian text) - Vorobiev Yu. I. and Gorbushina P. M. - STOMA-
TOLOGIYA (Mosk.) 1958, 1 (39-42)

Radiotherapy of malignancy of the region of the jaws (including the cheeks) carries the risk of radiation osteonecrosis. In 7 cases showing osteonecrosis following radiotherapy, the clinical picture of the disease is described and the probable cause of the necrosis explained. Therapeutical measures are described separately.
Brückner - Paskov

VOROB'YEV, Yu. I.: Master Med Sci (diss) -- "Material on the use of P³² for
diagnosing tumors of the maxillo-facial area". Moscow, 1959. 15 pp (Min Health
RSFSR, Moscow Med Stomatological Inst), 200 copies (KL, No 10, 1959, 128)

VOROB'YEV, Yu.I., kand.med.nauk; KRITSKIY, A.A.

Decreasing the radiation dosage in intraoral roentgenograms.
Stomatologiya 41 no.5:30-31 S-O '62. (MIRA 16:4)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. I.A. Shekhter) Moskovskogo meditsinskogo stomatologicheskogo instituta.
(MOUTH--RADIOGRAPHY)

VOROB'YEV, Yu.I.; GORBUSHINA, P.M.; KRITSKIY, A.A.

X-ray data in hemangiomas of the mandible. Stomatologia 42
no.3:50-54 My-Je'63 (MIRA 17:1)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. I.A. Shekhtar) i kafedry khirurgicheskoy stomatologii (zav. - prof. A.I. Yevdokimov) Moskovskogo meditsinskogo stomatologicheskogo instituta.

SHEKHTER, I.A., prof.; VOROB'YEV, Yu.I., kand. med. nauk; KOTEL'NIKOV, M.V.

Importance of tomography in compound X-ray study of patients
with lesions of the maxillofacial region. Stomatologia 43
no.1:38-44 Ja-F'64 (MIRA 17:4)

1. Kafedra rentgenologii i radiologii (zav. - prof. I.A.
Shekhter) Moskovskogo meditsinskogo stomatologicheskogo insti-
tuta.

VOROB'YEV, Yu.I.; KOTEL'NIKOV, M.V.

Two cases of cranioclavicular dysostosis. Vest. rent. i rad. 39 no.4:
76-77 J1-Ag '64. (MIRA 18:7)

1. Kafedra rentgenologii i radiologii (zav. - prof. I.A.Shekhter) Moskov-
skogo meditsinskogo stomatologicheskogo instituta.

SHEKHTER^o, I.A., prof.; PAVLOV, A.S., dotsent; BENTSANOVA, V.M., dotsent;
VOROB'YEV, Yu.I., assistant

Results of radiotherapy for malignant tumors of the maxilla. Teor.
i prak.stom. no.6:148-155 '63. (MIRA 18:3)

1. Iz kafedry rentgenologii i radiologii (zav. - prof. I.A.Shekhter)
Moskovskogo meditsinskogo stomatologicheskogo instituta.

S/125/61/000/001/008/016
A161/A133

AUTHORS: Vorob'yev, Yu.K., Doronin, V.M., Klyuyev, M.M., Topilin, V.V.,
Shiryayev, N.A., Voynovskiy, Ye.V., Medovar, B.I., Latash, Yu.V.,
Maksimovich, B.I.

TITLE: The effect of electro-slag remelting on the quality of chrome-
nickel molybdenum 3M 847 (EI847) steel

PERIODICAL: Avtomaticheskaya svarka, no. 1, 1961, 52-56

TEXT: The authors present the results of experiments carried out with arc
furnace, vacuum furnace, and electro-slag processes. The chemical composi-
tion of the EI847 grade steel is (%): 0.10-0.15 C, 14-17 Cr, 14-16 Ni, 2.5-
3.5 Mo, 0.45-0.85 Nb, not over 0.8 Si; 0.8 Mn, 0.02 S and 0.03 P. It is
austenitic, is used mainly for seamless pierced and rolled tubes, and the
ductility at high temperature is of primary importance. The austenitic
structure of this steel is not subjected to $\gamma \rightarrow \alpha$ transformation at high
cold deformation or any heat treatment. The surplus component is carboni-

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The effect of electro-slag remelting ...

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A161/A133

tride. Cubic $Cr_{23}C_6$ carbide and the intermetallic $MoFe_2$ phase were revealed along with Nb carbonitride by X-ray analysis after long aging at $600-700^{\circ}C$. Aging for 500-7,000 hours at $550-700^{\circ}$ does not cause any tendency to inter-crystalline corrosion when EI847 steel is preliminarily hardened. The 100-hour strength limit for hardened EI847 steel is 25 kg/mm^2 at 650° , and 30 kg/mm^2 at 600° . In the tests electro-slag remelting was carried out in a P-909 (R909) unit, in a 250 mm diameter crystallizer; the consumable electrodes were forged rods 140 mm in diameter, cleaned with emery wheel. No defects of any kind were found in ingots prepared by electro-slag remelting (Fig.2). Ingots produced by arc remelting in the vacuum were nearly as sound. The presence of globular inclusions is apparently due to the high contamination of the initial metal before remelting. The steel produced by electro-slag and vacuum remelting had a higher ductility than steel melted by any arc furnace process (Fig.4); electro-slag remelted steel was less subject to overheating (its ductility remained at same level up to $1,300^{\circ}C$). Conclusions:
1) Purest (from nonmetallic inclusions) EI847 steel melted in arc furnaces was obtained in the process with a fresh charge with rimming and slag deoxidation by aluminum powder, and by employing Ni-Nb alloys, or ferroniobium with a low Si content. This process ensures the best ductility of the steel

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S/125/61/000/001/008/016
A161/A133

The effect of electro-slag remelting ...

at high and ordinary temperatures. 2) If very high purity is required the EI847 steel must be melted using either the electro-slag or vacuum arc remelting with consumable electrodes. Both these methods result also in the highest technological ductility. 3) Ingots produced with the electro-slag process differ from ordinary ingots by a more dense structure, absence of pipes, loose center structure, segregation and other defects. 4) The ultimate strength of EI847 steel slightly decreases after electro-slag remelting, and the yield limit increases. The higher yield limit is due to a decreased dendritic heterogeneity owing to the particular crystallization conditions in water-cooled copper ingot molds. There are 4 figures.

ASSOCIATION: Ordena Lenina zavod "Elektrostal'" im.I.F.Tevosyana (Order of Lenin "Elektrostal" Plant im.I.F.Tevosyan) - Yu.K. Vorob'yev, V.M. Doronin, M.M. Klyuyev, V.V. Topilin, H.A. Shiryayev, Ye. V. Voinovskiy; Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki im.Ye.O.Patona ("Order of the Red Banner of Labor" Electric Welding Institute im.Ye.O.Paton AS UkrSSR) - B.I. Medovar, Yu.V. Latash and B.I. Maksimovich

✓

Card 3/5 3

L 4502-66 EWT(1)/EWT(m)/EWA(h) GS
ACCESSION NR: AT5022844

UR/0000/65/000/000/0289/0292

41
40
3

AUTHOR: Granitskiy, L. V.; Neyermolov, A. F.; Vorob'yev, Yu. K.; Kononova, G. V.

TITLE: Automatic programmed counter 15

SOURCE: Vsesoyuznoye soveshchaniye po kosmofizicheskomu napravleniyu issledovaniy kosmicheskikh luchey. Ist, Yakutsk, 1962. Kosmicheskiye luchy i problemy kosmofiziki (Cosmic rays and problems in cosmophysics); trudy soveshchaniya. Novosibirsk, Redizdat Sib. otd. AN SSSR, 1965, 289-292

TOPIC TAGS: radiation counter, special purpose computer, radioactivity measurement

ABSTRACT: The automatic programmed counter described in the paper is intended for radioactive substances. It contains 2 counting channels, a time channel, a code converter, an output block, a programming device, a registering unit, and a power supply. The block diagram of the device is given together with a brief description of its operation. The maximum counting rate is 500 c/sec, the input pulse amplitude is 5 to 20 v, output resistance of the pulse source is not more than 10 k Ω , pulse rise time is not longer than 0.5 μ sec, the maximum channel capacity is 10⁷, the quartz generator instability is not larger than $\pm 5 \cdot 10^{-5}$, and the device can be put on every 2, 5, 10, 20 sec, 1, 5, 10, 20 min, and 1, 2 hr. Orig. art. has: 1 figure.

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09010056

L 4502-56

ACCESSION NR: AT5022844

ASSOCIATION: Institut neorganicheskoy khimii SO AN SSSR (Institute of Inorganic Chemistry, SO AN SSSR)

SUBMITTED: 29Oct64

NO REF SOV: 000

ENCL: 00

SUB CODE: NP, DP

OTHER: 000

PC

Card 2/2

S/133/61/000/012/004/006
A054/A127

AUTHORS: Vorob'yev, Yu.K.; Voynovskiy, Ye.V.; Doronin, V.M.; Klyuyev, M.
M.; Topilin, V.V.; Shirayev, N.A.

TITLE: The effect of the production technology on the quality of EI847
(EI847) steel

PERIODICAL: Stal', no. 12, 1961, 1,108 - 1,112

TEXT: Tests were carried out to establish the optimum technology for EI847 stainless steel smelted in 5-ton and 20-ton arc furnaces under various smelting conditions, applying also electroslag remelting and vacuum remelting. The EI847 steel contained 0.05 - 0.10% C, 14 - 17% Cr, 14 - 16% Ni, 2.5 - 3.5% Mo, 0.45 - 0.85% Nb, maximum 0.8% Si and Mn, maximum 0.02% S and maximum 0.03% P. This steel shows sufficient strength and a high ductility up to 700°C. In the various smelting processes soft iron, fresh ferro-alloys, carbon steel scrap [Y7 - Y12 (U7 - U12); 10 - 45], Armco iron, soft low-carbon iron, H-1 (N-1) nickel, Xp. 00000 (Khr. 00000) and Xp. 0000 (Khr. 0000) ferrochrome, molybdenum and manganese metal were used. Round 500-kg ingots were cast by bottom casting. To reduce the amount of nonmetallic inclusions in the metal and

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S/133/61/000/012/004/006

The effect of the production technology on the quality A054/A127

to improve its mechanical properties, the test steel was also subjected to electroslag remelting and vacuum-arc remelting. The former was carried out in the P-909 (R-909) type installation of the "Dneprospetsstal" Plant with a 250-mm diameter mold under the following conditions:

Slag	AHΦ -6 (ANF-6)	A (A)	AHΦ-1Π (ANF-1P)
Slag composition, %:			
CaF ₂	70	40	95
CaO	—	30	5
Al ₂ O ₃	30	30	—
Current density, amp/mm ²	0.20-0.34	0.23-0.29	0.21-0.31
Electric power consumption, kwh/ton	1,115	1,370	1,659
Output, kg/h	122.4	99.0	91.5

The ingots obtained by electroslag remelting are characterized by a compact structure and controlled solidification; the dendrite boundaries are less strongly marked than in ingots smelted under the standard conditions. The vacuum-arc remelting process was carried out in a furnace with a mold-diameter of 375 mm and a residual pressure of 10⁻¹ - 10⁻² mm Hg. 500-kg ingots were used

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