

TYNIEC, T.

Skoczylas-Ciszewska, K. Tourmaline pegmatite from the Flysch around Zegocina.  
p. 187.

ARCHIWUM MINERALOGICZNE, Warszawa, Vol. 18, no. 2, 1954 (published 1955).

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, no. 10, Oct. 1955,  
Uncl.

TYNIEC, T.

"Tourmaline Pegmatite from the Western Pre-Carpathian Mountains." p. 277  
(ROCZNIK. Vol. 22, No. 3, 1952 (published 1954); Krakow, Poland.)

So: Monthly List of East European Accessions, (EEL), LC, Vol. 4, No. 4,  
April 1955, Uncl..

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5

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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5"

TYNISSON, E.[Tinisons, E.]; GRAUDONIS, Ya.[Graudonis, J.]

Excavations of Livonian burial mounds in Krimulda. Vestis Latv ak  
no.10:37-54 '61.

1. Akademiya nauk Latviyskoy SSR, Institut istorii.

(Krimulda region--Excavations(Archaeology))  
(Krimulda region--Antiquities)

MELLER, K.Yu., inzh.; TYNISSON, Yu.I.

Improved measures for testing the insulation of electric equipment. Energetik 9 no.1:21-25 Ja '61. (MIRA 16:7)

(Electric insulators and insulation--Testing)

ACCESSION NR: AR3000548

S/0031/63/000/001/0426/0429

SOURCE: RZh. Khimiya, Abs. 7M184

AUTHOR: Tynissco, A. Kh.; Kreis, U. I.

TITLE: Waterproofing of exterior walls of foamed kukermite and foamed silicalcite with organosilicon compounds

CITED SOURCE: Sb. Issled. po str-vu. 2. Tallin, 1961, 174-204

TOPIC TAGS: waterproofing with organosilicon compounds; kukermite; silicalcite

TRANSLATION: For the protection of exterior walls of buildings, made of foamed Kukermite and foamed silicalcite, against atmospheric humidity, it is proposed to waterproof them with organic silicon compounds. A 10% solution of GKZh-94 in kerosene was found to be the most effective, because their first increments form a waterproof film on the

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ACCESSION NR: AR3000548

material, thus preventing further treatment. In the case of a specimen of material treated with a kerosene solution of GKZh-94, the water absorption -- during the different periods of hardening -- was reduced by several times in comparison with the controls (immersion depth of the specimens, in water, was 1.5 cm; the immersion depth of 9 cm, specified by the Standard, yields distorted results due to the action of hydrostatic pressure). The waterproofing properties of the GKZh-94 coating were retained for a period from more than or equal to 3.5 years to 4.5 years. A slight absorption of water by the items increases their frost resistance. However, the determination of frost resistance according to the Standard gives greatly understated results, because the presence of a waterproofing coating alters the nature of water-saturation of the specimens. Waterproofing of the surface of honeycomb concrete results in a considerable lowering of its cohesion with mortar, for which reason the waterproofing of the exterior of buildings should be carried out after completion of all finishing work. Experimental waterproofing of the walls of buildings has demonstrated the superior waterproofing characteristics of GKZh-94. The rate of application of the solution, with two coats, is 500 g/sq meter; prime cost of 1 square meter

Card 2/3

ACCESSION NR: AR3000548

of coating is 0.25 - 0.27 kopecks. K. Popov

DATE ACQ: 21May63

ENCL: 00 SUB CODE: 00

Card 3/3

Physical Chem. Crystals

Abs Jour : Ref Zhur - Khimiya, No 7, 1957, 22140

ing the concentration of Co, there appear quickly peaks in  
ZnS - (Cu, Co) at -130° and -60° and more slowly peaks of  
Copper (-5.0° and 20°), and new peaks appear at 50 and 80°.

B-5

Card 2/2

-54-

DEGTYAREV, V.I.; MAGAZINER, V.V.; TYNYANOV, V.N.; FIL'KIN, I.N.;  
VOLKOVITSKIY, V.F., kand. tekhn.nauk, retsenzent; SIROTIN,  
A.I., inzh., red.izd-va; DEMKINA, N.P., tekhn. red.

[Operation of forging presses] Ekspluatatsiya goriacheshtam-  
povochnykh pressov. Moskva, Mashgiz, 1963. 76 p.  
(MIRA 16:5)  
(Power presses)

L 30362-66 EWT(d)/T/EWP(1) IJP(c) BB/GG/GD  
ACC NR: AT6008311 SOURCE CODE: UR/0000/65/000/000/0014/0019

AUTHOR: Svenson, A. N. (L'vov) (Candidate of technical sciences); Tynnaya, N. T. (L'vov) 42  
ORG: none 8x/  
TITLE: Code-pulse decoder with error correction 16

SOURCE: AN UkrSSR. Elementy sistem otbora i peredachi informatsii (Elements of systems for selecting and transferring information). Kiev, Naukova dumka, 1965, 14-19

TOPIC TAGS: digital decoder, error correcting code

ABSTRACT: In the case of error correcting codes, the decoder must work out not only the particular code word but also those words differing from the given one by one, two, or more letters. Since the pyramidal or matrix decoders require usually a large number of elements, the authors outline the feasibility of the construction of code-pulse error correcting decoders for codes transmitted by sequential or parallel pulses. They analyze the possible solution for such decoders for a varying number of correcting errors and discuss their operation as a function of the parameters of the circuitry. One of the solutions can decode both parallel and sequential signals. Another is constructed from standard cells. Orig. art. has: 5 formulas and 3 figures.

SUB CODE: 09/SUBM DATE: 6Nov65/ ORIG REF: 003/ OTH REF: 002

Card 1/1 JG

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Card 1/2

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Card 2/2

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5"

ACC NR: AT7001498

SOURCE CODE: UR/0000/66/000/000/0212/0217

AUTHOR: Svenson, A. N. (L'vov; Candidate of technical sciences); Tynnaya, N. T. (L'vov)

ORG: none

TITLE: Discrete-analog decoders with error correction

SOURCE: AN UkrSSR. Teoriya i praktika ustroystv dlya preobrazovaniya elektro-izmeritel'noy informatsii (Theory and practice of devices for the conversion of electrical measuring information) Kiev, Naukova dumka, 1966, 212-217

TOPIC TAGS: error correction, error correcting code, data transmission, *analog decoder, computer circuit, computer component, Zener diode*

ABSTRACT: Error detecting decoder circuits are analyzed which issue a signal whenever the difference between a received code word and a reference code exceeds a preassigned number of allowable errors. Two types of decoders are studied: series (Fig. 1a) and parallel (Fig. 1b). The switches in both types close whenever the code and reference words match. The number of switches in both types of error detection circuit is equal to the code work bit length. The series decoder uses Zener diodes to establish a level corresponding to the maximum number of allowable errors. If this level is exceeded the current starts to flow through the load. In the parallel decoder, output voltage depends on the number of closed switches (i.e. the number of correctly received code word bits). An amplitude discriminator is normally used in conjunction with the parallel decoder to determine the number Card: 1/2

ACC NR: AT7001498

of allowable errors. The author formulates the relationships between the relative accuracy of supply voltages, the manufacturing spread in  $R_{\text{sh}}$ ,  $r$  resistors, the dynamic Zener diode resistances, and the maximum number of error which may be detected and corrected successfully. It is shown that when the relative spreads in parameters applicable to the serial decoder are equal to 0.1, the maximum number of correctable errors is 3. This assures an ample margin for widely used single-error detection codes. Parallel decoders are not recommended for codes whose word length is greater than 10 even when the precision of components is high. Any number of errors may be corrected, however, when the code words are short. Two practical parallel decoder circuits (one using transistor switches and the other using ferrite cores) are illustrated. In conclusion the author states that the given decoders use fewer components than tree-type decoders. Orig. art. has: 2 figures and 10 formulas.

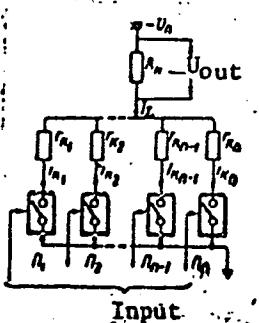


Fig. 1. Error detection decoder circuits

a - Series decoder; b - parallel decoder.

SUB CODE: 09/ SUBM DATE: 23Jul66/  
ORIG REF: 002/

Card 2/2

KREYN, Ye.P.; TYNAYA, N.T., inzh.

Interference rejection of multiple-frequency control devices for distributed objects. Von. pered. inform. 3:104-106 '64.

(MIRA 18&1)

KREYN, Ye.D.; MIKHAYLOVSKIY, V.N.; TYNHAYA, N.T.

Interference rejection of the frequency selection networks of remote control devices for distributed objects. Vop. pered. inform. 1;  
116-124 '62. (MIRA 16:6)

(Remote control)

KARPENKO, G.V., otv. red.; LEONOV, M.Ya., doktor fiz.-mat. nauk, zam.  
otv. red.; KRIPYAKEVICH, R.I., kand. tekhn. nauk, red.;  
MAKSIMOVICH, G.G., kand. tekhn. nauk, red.; PANASYUK, V.V.,  
kand. fiz.-mat. nauk, red.; PODSTRIGACH, Ya.S., kand. fiz.-  
mat. nauk, red.; STEPURGENKO, V.T., kand. tekhn. nauk, red.;  
TYNNYI, A.A., kand. tekhn. nauk, red.; CHAYEVSKIY, M.I., kand.  
tekhn. nauk, red.; YAKOVLEV, S.Ya., kand. tekhn. nauk, red.;  
REBENNIK, T.K., red. ied-va; LISOVETS, A.N., tekhn. red.

[Machines and devices for testing metals] Mashiny i pribory dlia  
ispytenii metallov. Kiev, Izd-vo Akad.nauk USSR, 1961. 132 p.  
(MIRA 15:2)

1. Akademiya nauk URSR, Kiev. Instytut mashinoznavstva i avtoma-  
tyky. 2. Chlen-korrespondent Akad. nauk USSR(for Karpenko).  
(Testing machines)

KORNILOV, G.I., inzh.; TYNHYY, A.N., kand.tekhn.nauk

Wear resistance of worm gears made of titanium-copper cast iron.  
Vest.mash. 40 no.12:26-29 D '60. (MIRA 13:12)  
(Gearing, Worm)

L 01118-66 EWT(n)/EWP(w)/EPP(c)/EWA(d)/T/EWP(t)/EWP(b) JD/WB

ACCESSION NR: AP5019656

UR/0369/65/001/003/0312/0316

AUTHOR: Tynnyy, A. N.; Soshko, A. I.

22

20

8

TITLE: Mechanism of fracture of brittle materials exposed to surface-active media

SOURCE: Fiziko-khimicheskaya mehanika materialov, v. 1, no. 3, 1965, 312-316

TOPIC TAGS: fracture mechanism, brittle material, organic glass, surface active medium, tensile stress, fracture stress, crack type defect, crack formation, surface energy, free diffusion, macroscopic crack, crack propagation, surface diffusion

ABSTRACT: The authors present the results of an investigation of the effect of certain surface-active media (water, alcohol) on the strength characteristics and mechanism of fracture of organic glass. The effect of a vacuum ( $10^{-6}$  mm Hg), air, water, and ethyl alcohol on the strength characteristics of organic glass in the presence of momentary tensile stresses was investigated on using a tensile testing machine with attachment assuring the performance of tests in liquid media. It was found that in the presence of surface-active media (water, alcohol) the fracture stress is 20 and 40% lower, respectively, than in the presence of a vacuum or air.

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L 01118-66

ACCESSION NR: AP5019656

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and the surface of the organic glass specimens is covered by a much smaller number of cracks. The small number of cracks forming on the surface of the specimen is a characteristic sign of the selective nature of the action of the surface-active medium on the development of the crack-type defect, whether this defect may have been rooted or has arisen in the process of deformation of the specimen. On the basis of these findings the mechanism of fracture in the presence of surface-active media may be qualitatively described as follows: the tensile stresses acting on the specimen reduce the interatomic bonds in the crack apex. The surface-active medium, which, through the mechanism of free diffusion, enters the crack apex, reduces the surface energy (by virtue of the action of the process of physical adsorption). The decrease in the free surface energy under the action of the surface-active medium is the greater the more surface-active the medium is. Together, these two factors intensify crack development. As the stress exerted is increased, one of the cracks (or several cracks combining into one) develops into a macroscopic crack which grows at a fixed rate until an instant when the level of the stress acting on the apex of the crack becomes adequate for its growth. This process, depending on the ratio between the rate of crack propagation and the rate of the surface diffusion of the medium, is of an intermittent rather than continuous nature. Orig. art. has: 5 figures.

Card 2/3

L 01118-66

2

ACCESSION NR: AP5019656

ASSOCIATION: Fiziko-mekhanicheskiy institut AN UkrSSR, L'vov (Physicomechanical Institute, AN UkrSSR)

SUBMITTED: 06Mar65

ENCL: 00

SUB CODE: MT

NO REF SOV: 012

OTHER: 001

Card 373

GULYANITSKIY, A.A.; M.KITISHIN, N.I.; TYNNY, A.N.; KOVAL', Ya.V.

Machine for testing materials for wear and antiseizing properties.  
Nauch.zap.JMA AN URSR.Ser.mashinoved. 10:143-147 '64.

(MIRA 17:10)

GULYANITSKIY, A.A.; TYNHYY, A.N.; BARAN, M.I.; MIKITISHIN, S.I.; VASILENKO, I.I.

Antiseizing and antifriction properties of metals in engine-pump parts. Nauch.zap. IMA AN URSR.Ser.mashinoved. 10:148-151 '64.

(MIRA 17:10)

Effect of heat treatment of the blades of hydraulic pumps on their wear. Ibid.:158-164

SOSHKO, A.I.; TETERSKIY, V.A.; TYNNYY, A.N.; KHOMITSKIY, Yu.N.; STEFYUK, T.Yu.

Methods of investigating the effect of ionized gas atmospheres on the properties of metals. Vliian. rab. sred na svois. mat. no.3:40-47 '64.  
(MIRA 17:10)

TYNYYY, A.N.; VASILENKO, I.I.; MIKITISHIN, S.I.

Investigating the changes in electric resistances and micro-hardness of workhardened materials at low-temperature annealing.  
Vop. mekh. real. tver. tela no.3:174-178 '64.  
(MIRA 17:11)

S/735/61/000/000/002/014

AUTHORS: Chayevskiy, M.I., Tynnyy, A.N.

TITLE: A machine for cyclic torsional testing with simultaneous or separate application of a constant torque and a constant tension force.

SOURCE: Akademiya nauk Ukrainskoy SSR. Institut mashinovedeniya i avtomatiki. Mashiny i pribory dlya ispytaniy metallov. Kiyev, 1961, 11-18.

TEXT: A testing machine constructed by the authors and its electric control circuitry are described. Some test data are adduced. The specific problem examined is that of the interrelation of normal stresses in the theory of fatigue failure. The point of departure of the current work is the study of the effect of stress range on the fatigue strength of metals by I.O. Smith (Univ. of Ill. Bull., v.39, no.26, Engrg. Exp. Sta. Bull., ser. no. 334, 17 Feb. 1942), who concluded that the tensile-compressive fatigue strength of brittle metals depends to a smaller degree, on the value of the mean stress, and that in cyclic torsional tests the presence of a constant tangential stress the fatigue strength of brittle metals was severely affected by the magnitude of the mean tangential stress, whereas plastic metals remain almost unaffected. There remained to be ascertained the effect of a tensile stress on the cyclic-torsion fatigue strength, particularly to verify the statements of other authors (Stulen, F., et al.).

Card 1/2

A machine for cyclic torsional testing ...

S/735/61/000/000/002/014

A failure criterion for multiaxial fatigue stresses, Am. Soc. f. Test Mat's, Proc., v. 54, 1954; Ponomarev, S.D., et al., Osnovy sovremennoykh metodov rascheta na prochnost' v mashinostroyenii. Moscow. Mashgiz, 1952) and to investigate further the effect of residual stresses on fatigue strength. The machine designed therefor includes exposure to various surface-active and corrosive liquid media at normal and elevated temperatures. An electrically shaft-driven 20-50-cps oscillator of given moment of inertia and spring-controlled stiffness transmits a specified angular range and strain-gage-measured torque into a clamp holding one end of the specimen. The other end of the specimen is held by a shaft coaxial with the oscillator; said shaft is subjected to a tensile force via a weight-loaded hinged lever and to a practically constant torque via a weight-loaded thread wound around a large and heavy seismic-mass disk with a proper cycle of  $1 \text{ sec}^{-1}$ , thereby eliminating any effect of specimen creep at high temperatures and intense loads. Details of the compensation-type electronic regulator are explained in the author's paper "Machine for fatigue testing with a hermetic chamber," in the same compendium as the present paper, pp. 54-61 (abstract S/735/61/000/000/007/014). The automatic cut-off device actuated upon failure of the specimen is described. The electric motor and heater are fed by an autotransformer. The temperature control is effected by an ЭПВ-01 (EPV-01) electronic potentiometer. There are 4 figures and 6 references (4 Russian-language Soviet and 2 English-language U.S. as cited in the abstract).

ASSOCIATION: None given.

Card 2/2

11C52

S/676/62/009/000/005/010  
A006/A101

11.9600

AUTHORS: Tynnyy, A. N., Chayevskiy, M. I., Teterskiy, V. A.

TITLE: On the possibility of using liquid metallic melts as lubricants

SOURCE: Akademiya nauk Ukrayins'koyi RSR. Instytut mashynoznavstva i avtomatyky, L'viv. Nauchnyye zapiski. Seriya mashinovedeniya. v. 9, 1962, Voprosy mashinovedeniya i prochnosti v mashinostroyenii, no. 8, 41 -146

TEXT: The authors suggest the use of liquid metallic melts as lubricating materials. When salt melts, containing sulfur and chlorine, are used, modified wear-resistant surface layers are formed during the operation of the parts, as a result of friction. This leads to the suggestion that conventional structural and alloyed metals might be used for units operating at high temperatures. Experiments were carried out with a special worm reducer and Wood's alloy (50% Bi, 12.5% Cd, 25.0% Pb, 12.5% Sn) as a lubricant. The bearings in the reducer assemblies were designed in such a manner that the liquid metallic melt greased only the worm thread and the teeth of the worm gear. The bearings were greased

Card 1/2

On the possibility of using...

with mineral oil. The tests show that the use of Wood's alloy as a lubricant prevents galling of the operational surfaces. The new method will eliminate special devices for the cooling of friction parts in units operating at 500 to 1,000°C and will raise the efficiency of friction pairs. There are 2 figures.

S/676/62/009/000/005/010  
A006/A101

SUBMITTED: June 22, 1961

Card 2/2

S/137/62/000/009/016/033  
A006/A101

AUTHOR: Tynnyy, A. N.

TITLE: Properties of a sulfonated layer and their effect on metal wear

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1962, 60 - 61, abstract  
91377 ("Nauchn. zap. In-ta mashinoved. i avtomatiki, AN UkrSSR.  
Ser. mashinoved", 1961, v. 8, 170 - 176)

TEXT: Information is given on a comprehensive method of estimating the properties of a sulfonated layer. The method includes investigations of wear resistance, anti-galling properties, metallographic and roentgenographic analyses, and the method of radioactive tracers. In sulfonating, the chemical composition and the physical and mechanical properties of the surface layer change substantially; this must definitely affect phenomena occurring during the friction of metallic surfaces. Investigations of anti-galling properties show that the surface layers formed during sulfonation have lower mechanical properties than the base metal. Sulfonation has a positive effect upon improving the finish of friction surfaces. Heating of sulfonated specimens in an electric furnace up to

Card 1/2

Properties of a sulfonated layer...

S/137/62/000/009/016/033  
A006/A101

830°C for 15 minutes causes a reduction of the S content in the surface layer by 70 - 80%; at 300 - 400°C the Si content in the surface layer does practically not change. Being good adsorbents, the sulfides adsorb the air oxygen and other surface-active substances much more than pure metals. Besides the properties of a strong adsorbent, the sulfides show a better mechanical strength than the base metal and can be removed from the metal surface much easier than base metal particles. The preservation of a sulfonated layer on the surface for an extended period of time promotes the formation of strong films at a definite rate.

T. Rumyantseva

[Abstracter's note: Complete translation]

Card 2/2

ACCESSION NR: AT4023781

8/2723/63/000/002/0138/0143

AUTHOR: Sokolov, Ye. P.; Soshko, A.I.; Ty\*nnny\*y, A.N.

TITLE: Effect of normal pressure and sliding rate on the lubricating properties of rubber packing

SOURCE: AN UkrRSR. Insty\*tut mashy\*noznavstva i avtomaty\*ky\*, L'viv. Vliyaniye rabochikh sred na svoystva materialov (Effect of active media on the properties of materials), no. 2, 1963, 138-143.

TOPIC TAGS: friction, lubrication, rubber packing, rubber packing pressure, rubber packing sliding

ABSTRACT: The laws of external friction, reflecting the relationship between frictional forces and normal pressures for smooth hard surfaces, are generally used without change for rubber-metal friction pairs. These laws do not take into account the effect of such important factors as the variable sliding rate, the wide range of normal pressures, the type of lubricant, and the properties of the rubber. G. M. Bartenev (DAN SSR, 103, No. 6, 1017, 1955) first showed that a relationship can be derived, depending on many factors (see Fig. 1 of the enclosure), for the friction between rubber and a solid surface. Investigations of the effect of sliding and pressure on friction were performed on the MI friction

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ACCESSION NR: AT4023781

machine (for rotary motion) and on the IMA-T machine (for reciprocal motion). Oil-proof rubber packings were tested. It was established that the sliding of rubber over steel leads both to an increase in friction due to the greater adhesion and to a decrease in friction due to a decrease of the contact area. Friction increases at the same rate as pressure up to a certain value, above which the rubber is destroyed. The increase in friction does not depend on the type of lubricant. Orig. art. has: 4 figures.

ASSOCIATION: Instytut mashynoznavstva i avtomatyky AN UkrRSR, Lvov (Institute of Machine Technology and Automation, AN UkrRSR)

SUBMITTED: 00

DATE ACQ: 10Apr84

ENCL: 01

SUB CODE: MT

NO REF SOV: 007

OTHER: 002

Card 2/3

ACCESSION NR: AT4023781

ENCLOSURE: 01

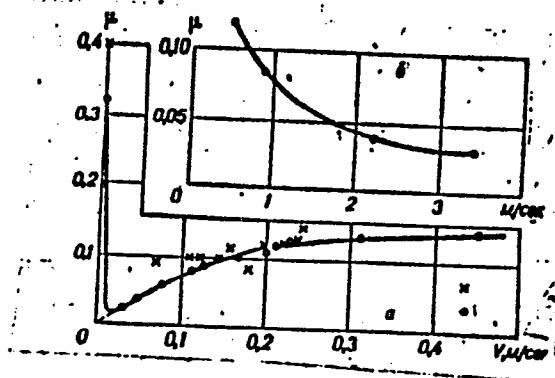


Fig. 1. Dependence of the coefficient of friction on the sliding rate:  
a - according to the data of Bartenev for a viscous lubricant and a  
standard pressure of  $80 \text{mn/m}^2$ ; b - according to the data of Shannikov during water lubrication.

Card 3/3

S/123/62/000/019/003/010  
A006/A101

AUTHOR: Tynnyy, A. N.

TITLE: Sulfonation and sulfocyanation, being methods of raising the service life of machine parts.

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 19, 1962, 28, abstract 19B150 ("Nauchn. zap. In-ta mashinoved. i avtomatiki, AN UkrSSR, Ser. mashinoved." 1961, .8, 177 - 183)

TEXT: The author studied the wear resistance and anti-galling properties of metal surfaces sulfonated in baths no. 2/6 NIIKHIMMASH and no. 2 MAZ. Fatigue curves were plotted for 45 grade steel specimens which were sulfonated in the aforementioned baths and subjected to symmetrical bending tests in air, tap water, 3%-NaCl solution in water, and in hydrosulfide water (85 mg/l H<sub>2</sub>S). An analysis of these curves shows that in spite of a slight reduction of the corrosion resistance, sulfonation increases the durability of steel not only in air but also in corrosion media. On the basis of the investigations performed the conclusion is drawn that sulfonation and sulfocyanation are promising methods

Card 1/2

Sulfonation and sulfocyanation, being methods of... S/123/62/000/019/003/010  
A006/A101  
to raise the service life of machine parts, if the limiting conditions of application are correctly determined.

T. Kislyakova

[Abstracter's note: Complete translation]

Card 2/2

S/123/62/000/019/003/010  
A006/A101

AUTHOR: Tynnyy, A. N.

TITLE: Sulfonation and sulfocyanation, being methods of raising the service life of machine parts.

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 19, 1962, 28, abstract 19B150 ("Nauchn. zap. In-ta mashinoved. 1 avtomatiki, AN UkrSSR, Ser. mashinoved." 1961, .8, 177 - 183)

TEXT: The author studied the wear resistance and anti-galling properties of metal surfaces sulfonated in baths no. 2/6 NIIKHIMMASH and no. 2 MAZ. Fatigue curves were plotted for 45 grade steel specimens which were sulfonated in the aforementioned baths and subjected to symmetrical bending tests in air, tap water, 3%-NaCl solution in water, and in hydrosulfide water (85 mg/l H<sub>2</sub>S). An analysis of these curves shows that in spite of a slight reduction of the corrosion resistance, sulfonation increases the durability of steel not only in air but also in corrosion media. On the basis of the investigations performed the conclusion is drawn that sulfonation and sulfocyanation are promising methods

Card 1/2

Sulfonation and sulfocyanation, being methods of... S/123/62/000/019/C03/010  
A006/A101

to raise the service life of machine parts, if the limiting conditions of application are correctly determined.

T. Kislyakova

[Abstracter's note: Complete translation]

Card 2/2

18.7400

S/123/61/000/006/005/020  
A004/A104

AUTHORS: Tynnyy, A. N.

TITLE: Depth and wear resistance of sulfurized layers forming as a result of the sulfurization of grade 45 steel and cuprotitanic cast iron in samples no. 2 of MAZ and 2/6 of NIIKhIMMASH

PERIODICAL: Referativnyy zhurnal, Mashinostroyeniye, no. 6, 1961, 73-74, abstract 6B612 ("Nauchn. zap. In-ta mashinoved. i avtomat. AN UkrSSR, 1960, v. 7, 75-80)

TEXT: The author investigated the penetration depth of sulfur into grade 45 steel and cuprotitanic cast iron during their sulfurization in samples no. 2 of MAZ and 2/6 of NIIKhIMMASH. The treatment in these samples yields a different sulfur saturation of the metal surface layer which affects the increase of their resistance to wear in a different way. There are 6 figures and 10 references.

N. Il'ina

[Abstractor's note: Complete translation]

Card 1/1

TYNYY, A.N., kand.tekhn.nauk

Effect of sulfurization on the wear of metals. Metalloved. i term.  
obr. met. no.8:15-18 Ag '61. (MIRA 14:8)

1. Institut mashinovedeniya i avtomatiki AN USSR.  
(Protective coatings) (Mechanical wear)

"APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5

TYNYY, A.N.

Characteristics of a sulfided layer and their effect on metal wear.  
Nauch.zap. IMA AN URSR. Ser.mashinoved. 7 no.7:170-176 '61.

(Case hardening)

(MIRA 15:1)

APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5"

TINNYIY, A.N.

Sulfidation and sulfo-cyaniding increase the durability of machine parts. Nauch.zap.IMA AN URSR. Ser.mashinoved. 7 no.7:177-183 '61.  
(MIRA 15:1)

(Case hardening)

TYUNYY, A.N.

Depth and wear resistance of sulfidized layers originated by  
the sulfidization of the 45 steel and titanium-copper cast iron  
in compositions MAZ No.2 and NIIKhIMMASH 2/6. Nauch.zap. IMA AN  
URSR. Ser.mashinoved 7 no.6:75-80 '60. (MIRA 13:8)

(Steel--Testing) (Protective coatings) (Cast iron--Testing)

TYNNYY, A.N.

Investigating scratch-hardness properties of sulfidized surfaces.  
Nauch.zap. IMA AN URSR. Ser.mashinoved. 7 no.6:81-90 '60.  
(MIRA 13:8)

(Steel--Testing) (Cast iron--Testing)  
(Protective coatings)

74 N N Y Y, A.N.  
 PAGE 1 BOOK REPRODUCTION 50% 2610

S(1) Academy of Sci. Ukrayins'koy RSR. Institute of Metallurgy 1a

Ukrainian Physico-Mechanical Institute  
 (Physical, Chemical, and Mechanical Properties of Metals)  
 Kyiv, 1978. 242 p., 1,000 copies printed.

Sup. Ed.: V.V. Karpeko, Doctor of Technical Sciences, 2d. of  
 Publishing House: V.V. Pashchenko (Kyiv). Transl.: V.I. Turchynov.

PURPOSE: The collection is intended for metallurgical engineers desiring information on fatigue and corrosion.

CONTENTS: The collection of 15 articles is Ukrainian compiled by 9 authors engaged in fatigue and corrosion research, is devoted to the subject of engineering practices in testing the fatigue properties of metals, mainly steel, with a particular emphasis on the phenomena of corrosion fatigue and the effect of various liquid media upon their fatigue. Methods of investigation are described and the results evaluated. The collection is dedicated to the sixtieth anniversary of the Academy of Peter Glazkovych (the Aleksandrovich Rabinovich, an eminent scientist and engineer).

The tests were conducted at the Institute of Metallurgy (Structural Mechanics Institute), Kiev Institute of Technology (Metallurgical and Automotive Institute), Kiev Polytechnic Institute, Institute of the Ukrainian Academy of Sciences, and Institute of the Polytechnic University (Polymer Institute), Kiev, Sov. Ukr.

REFERENCE: Follow each article.

Zhitrun, A.F. Absence of Direct Relationship Between the Fatigue Strength and Corrosion Resistance of Steel. 73

Karpeko, V.V. and P.P. Turchynov. Effect of the Thyroline Temperature of Metal Steel Upon Its Corrosion Resistance and its Corrosion-Fatigue Strengths. 83

Stepanenko, V.Z. Corrosion Resistance of "45" Steel. 88

Stepanenko, V.Z. Corrosion-Fatigue Strength of "45" Steel in Hydrocarbons Solutions [acid]. 97

Turchynov, P.P. Nature of Fatigue Failure of Induction-hardened Specimens of "45" Steel with Steels Raisen "Chelyuskinit" and Chelyabinsk Steel. 106

Chernyshchuk, S.S. Brittleness of Low-carbon Steel Caused by the Action of Hydrogen. 112

Chernyshchuk, M.T. Effect of Molten Tin Upon the Fatigue Strength of Steel. 116

Fominy, A.I. Effect of Sulphur by the KTC [Kirov Motor-Vehicle Plant] Method on the Wear-resistance of Iron and Steel. 123

Glayev's VTS-1A Machine for Fatigue Testing in Corrosive Liquid Media. 129

Izotyuk, A.I., V.V. Stepanenko, and P.P. Turchynov. Methods of Investigating the Fatigue Strength of Metals in Aggressive Liquid Media with the TU Testing Machine. 136

AVAILABILITY: Library of Congress (2465.4A2)

TYNYY, A.N.; CHAYEVSKIY, M.I.; TETERSKIY, V.A.

Possibility of the use of liquid metals as lubricants. Nauch.  
zap. IMA AN URSSR. Ser. mashinoved. 9:41-46 '62. (MIRA 15:12)  
(Liquid metals)  
(Lubrication and lubricants)

ACCESSION NR: AT4023780

8/2723/63/000/002/0128/0133

AUTHOR: Gulyanitskiy, A. A.; Mikitishin, S. I.; Ty\*nnny\*y, A. N.; Vasilenko, I. I.

TITLE: The effect of sulfur and dichloramine B additions to oil on the interaction between the friction surfaces

SOURCE: AN UkrRSR. Insty\*tut mashy\*noznavstva i avtomaty\*ky\*, L'viv. Vliyaniye rabochikh sred na svoystva materialov (Effect of active media on the properties of materials), no. 2, 1963, 128-133

TOPIC TAGS: oil additive, lubrication, adhesion, seizing sulfur additive, dichloramine, oil, sulfuric acid, dichloramine B, scoring

ABSTRACT: In publications by A. K. Zaytsev and by S. Ya. Veyler and V. I. Likhtman, it was shown that the introduction of sulfur into oil prevents adhesion and seizing. The aim of the present investigation was to determine the influence of oil additives on score prevention and working in of metal rods used for hydraulic pumps, as well as to study the effect of working in on ultimate work capacity. Bronze, different types of cast iron, and lead-coated steel were tested on AIMI-160 friction machines, operating in industrial oil 20. The favorable influence of additives such as sulfur and dichloramine B was explained by the action of iron sulfides and chlorides on the contacting surfaces, resulting

Card 1/2

ACCESSION NR: AT4023780

in low shear-strain resistance. Dichloramine B was particularly effective since it saturates the surface layer and ensures high anti-seizing action even when the oil continues to work without additives. Dichloramine B is considered preferable to other existing additives. Orig. art. has: 2 figures and 2 tables.

ASSOCIATION: Insty\*tut mashy\*noznavstva i avtomaty\*ky\* AN UkrRSR, Lvov  
(Institute of Machine Technology and Automation, AN UkrRSR)

SUBMITTED: 00

DATE ACQ: 10Apr64

ENCL: 00

SUB CODE: OC, FP

NO REF SOV: 004

OTHER: 000

2/2

Card

GUYANITSKIY, A.A.; MIKITISHIN, S.Y.; TINYYY, A.N.; VASILENKO, I.I.

Effect of sulfur and dichloramine B additives to lubricants on  
the character of the interaction of friction surfaces. Vliian. rab.  
sred na svols. mat. no.2:128-133 '63. (MIRA 17:10)

TYNNYY, A.N.; SOSHKO, A.I.; SOKOLOV, Ye.F.

Certain factors having an effect on the friction of rubber. Viliian.  
rab. sred na svois. mat. no.2:134-137 '63. (MIRA 17:10)

Effect of normal pressure and the rate of slipping on the anti-friction properties of rubber packings. Ibid.:138-143

Wear resistance of rubber packings working in couple with metal surfaces. Ibid.:144-151

TYNNYY, A.N.; VASILENKO, I.I.; MIKITISHIN, S.I.

Changes in the structure of surface layers caused by wear. Nauch.zap.  
IMA AN URSR.Ser.mashinoved. 10:152-157 '64.  
(MIRA 17:10)

TYNNYY, A. N.: Master Tech Sci (diss) -- "Investigation of the wear-resistance  
of sulfided surfaces". Kiev, 1958. 13 pp (Acad Ukr SSR, Inst of Construction  
Mechanics), 150 copies (KL, No 7, 1959, 126)

CHAYEVSKIY, M.I.; TYNYY, A.N.

Machine for testing specimens for cyclic torsion and their  
simultaneous axial tension. Zav. lab. 23 no.9:1128-1131 '62.  
(MIRA 16:6)

1. Institut mashinovedeniya i avtomatiki AN UkrSSR.  
(Testing machines)

Tynnyy, A.N.

AUTHOR: Karpenko, G.V., Doctor of Technical Sciences, Professor,  
and Tynnyy, A.N., Babey, Yu.I., Engineers. 122-2-13/25

TITLE: On the depth of the sulphur-enriched layer in the sulphid-  
iding of steel and cast iron (O glubine sloya, obogashch-  
ennogo seroy pri sul'fidirovani stali i chuguna)

PERIODICAL: "Vestnik Mashinostroyeniya" (Engineering Journal),  
1957, No.2, pp. 61 - 62 (U.S.S.R.)

ABSTRACT: Medium temperature (540 - 570 C) sulphidation in a solid,  
liquid or gas medium has been claimed by the Minsk Motorcar  
Plant (Minskiy Avtozavod) to produce sulphur diffusion to a  
depth of up to 0.3 mm and to yield a better wear resistance  
in tools and machine components. These claims were examined  
by the use of the radio-active S35 having a beta radiation of  
0.17 MeV. The test technique is described. 0.0021% of radio-  
active FeS was added to the FeS in the sulphidation bath (con-  
taining 13.2% FeS). The tests show sulphur penetration to a  
depth of 16  $\mu$  in steel and 30  $\mu$  in cast iron. The wear res-  
istance due to the anti-friction and anti-seizure properties  
of sulphur is restricted to this thin layer.

Card 1/1 There are 2 figures, including 1 graph and 4 Slavic references.

AVAILABLE: Library of Congress

*YNNYV A.N.*  
AUTHOR

TITLE

PERIODICAL

ABSTRACT

Tynnyy, A.N.  
On a Method of Testing Materials as to their Tearing  
Strength.  
(O metodike ispytaniy materialov na stoykost' protiv  
zadira.)  
Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8,  
pp. 1007-1007 (USSR)  
(Re.: Publication by I.E. Bekker in Za. Laboratoriya, 1948, Nr 1  
Academy of Science of the Ukrainian SSR and Automatics of the  
carried out with a view of determining the research work was  
such as: titanium copper crude cast iron - steel 45;  
titanium copper-sulfidized cast iron - sulfidized steel 45;  
pair: babbitt metal - steel 45. Investigations showed that the  
results with respect to resistance against tearing stress  
but nevertheless it is a known fact that bearings cast  
of such material showed excellent results. The same  
result was obtained also with respect to the pair  
titanium copper-sulfidized cast iron - sulfidized steel  
45, but it is known that in the case of certain stresses  
and if oil lubrication is used, this pair proved to be

AS:

CARD 1/2

AVAILA  
CARD 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001757720007-5  
Academy of Sciences of the USSR  
Institute for Problems of Friction and Lubrication  
Central Institute for Machine Design  
Library of Congress.

TYRNY, A. N.

Wear Resistance and the Antiseizure Properties of Lubricated Machine Parts.

Fovsheniye iznosostoykosti i sroka sluzhby mashin. t. 2 (Increasing the Wear Resistance and Extending the Service Life of Machines. v. 2) Diyev, Iz.-vo AN UkrSSR, 1960. 290 p. 3,000 copies printed. (Series: Its: Trudy, t. 2)

Sponsoring Agency: Vsesoyuznoye nauchno-tehnicheskoye obshchestvo mashinostroyitel'noy promyshlennosti. Tsentral'noye i Kiyevskoye oblastnoye pravleniya. Institut mehaniki AN UkrSSR.

Editorial Board: Resp. Ed.: B. D. Grozin; Deputy Resp. Ed.: D. A. Bravgor; M. F. Braun, I. D. Faynerman, I. V. Kregel'skiy; Scientific Secretary: M. L. Barabash; Ed. of v. 2: Ya. A. Samokhvalov; Tech. Ed.: N. I. Rakhlina.

COVERAGE: The collection contains papers presented at the Third Scientific Technical Conference held in Kiyev in September 1957 on problems of increasing the wear resistance and extending the service life of machines. The conference was sponsored by the Institut str'ital'noy mehaniki AN UkrSSR (Institute of Kiyevskaya oblastnaya organizatsiya nauchno-tehnicheskogo obshchestva mashinostroyitel'noy promyshlennosti (Kiyev Regional Organization of the Scientific Technical Society of the Machine-building Industry).

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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5"

S/122/60/000/012/006/018  
A161/A130

AUTHORS: Kornilov, G. I., Engineer; Tynnyy, A. N., Candidate of Technical Sciences

TITLE: Wear resistance of titanium-copper cast iron worm gears

PERIODICAL: Vestnik mashinostroyeniya, no. 12, 1960, 26 - 29

TEXT: The purpose of described experiments was testing Ti-Co cast iron worm gears as possible replacement for the costly tin bronze gears. Special grey cast iron grades are already being used for light-load slow transmission gears, as well as alloy cast irons including Ti-Co cast iron, but no data are available on its wear resistance. The tested 1.5 hp reducers had CT.5 (St.5) steel worm and Ti-Co cast iron worm gear. The chemical composition of this cast iron is: (%) 3.4 C, 2.3 Si, 0.63 Mn, 0.45 Cr, 0.4 Ni, 0.2 P, 0.12 S, 0.4 Ti, 0.25 Cu. A special test rig was used, with a special electric motor producing load. It was stated that sulfurization raised the wear resistance, and the best results were obtained when both the worm and wheel were sulfurized in bath 2/6 of NIIKHIMMASH; bath no. — 2 of the Minsk Automobile Plant had a less good effect. The comparative wear of the worm gears per hour at 1,210 and 1,750 kg/cm<sup>2</sup> contact pressure was 0.01 and ✓

Card 1/2

S/122/60/000/012/006/018

Wear resistance of titanium-copper cast iron worm gears A161/A130

0.014 mm on non-sulfurized gears, 0.003 and 0.006 mm on gears sulfurized in bath no. 2 of MAZ, and 0.0017 and 0.0025 mm on gears treated in bath 2/6 of NIIKhIMMASH and working in couple with also sulfurized worm. The tests lasted 70 h. The wear rate increased after 100 h running in such conditions. Sulfurization obviously reduced friction, prevented jamming in contact, and made the work surfaces smooth after running-in. The conclusion was made that worm gears of Fe-Co cast iron can bear 25 - 30% higher contact load than worm gears of C4 15-32 (SCh 15-32) and C4 18-36 (SCh 18-36) grey cast iron at equal sliding velocity. There are 3 figures, 1 table and 1 Soviet-bloc reference.

Card 2/2

1.1800

<sup>26570</sup>  
S/129/61/000/008/003/015  
E073/E335

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

TITLE: Influence of Sulphiding on the Rate of Wear of Metals

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov,  
1961, No. 8, pp. 15 - 18

TEXT: The author investigated the resistance-to-wear and seizing of metallic surfaces which have been treated in baths so as to produce a coating consisting of a compound of the FeS-type with a slight saturation of nitrogen and carbon in one case and a layer saturated primarily with nitrogen, carbon and a small quantity of sulphur, which produces sulphides, in the other case. In investigating the seizing properties by means of a 4-roll test machine, it was found that even at a high load (210 kg) there was no disruption of the rubbing surfaces or plastic deformation penetrating into the depth of the metal. For comparison, specimens were also tested which had not been subjected to sulphidation; these showed intensive plastic deformation and a rough surface even at much lower loads (45 kg). The load-carrying capacity was found to increase with Card 1/4 

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S/129/61/000/008/003/015  
E073/E335

Influence of Sulphiding ....

increasing contents of sulphides in the surface layer. The wear-resistance under conditions of dry friction as well as friction with lubrication showed that the rate of wear was higher for sulphided specimens than it was for unsulphided ones. The time required for running-in was much shorter for sulphided specimens and after the running-in, the surface quality of the sulphided specimens was much higher. Under all friction conditions, the surface quality of unsulphided components which rubbed against sulphided components was higher. Better results are always obtained if both rubbing surfaces are sulphided. The products of wear of unsulphided surfaces consist of metallic particles of considerable size, whilst the products of wear of sulphided surfaces consist of oxides and of finer metallic particles. Consequently, sulphiding improves the surface quality of the rubbing pairs and leads to an increase in the area of contact, reducing the acting specific pressures and wear. The diffusion of the sulphided layer into the depths of the metal during the process of wear was determined by means of

S<sup>35</sup> which wa

Card 2/4

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E073/2335

Influence of Sulphiding ....

introduced into the sulphiding bath in the form of active salts. The results show that diffusion of the sulphur increases with increasing pressure. The sulphides in the surface layer are a good adsorbent and absorb oxygen and other surface-active substances much more intensively than pure metals. As a result of that, oxide films form which prevent direct contact between the metallic surfaces during dry friction. During friction with lubrication, the adsorption of surface-active substances from the lubricant also has a definite influence. In both cases, the surface-active substances reduce the energy of the metallic surfaces and facilitate dispersion of the metal and elastic flow of the surface layers. As a result, such a surface will have a higher ability to become finely disperse and, consequently, to wear away. However, the critical pressure of the beginning of intensive wear of such surfaces will increase. These factors have a strong influence at the initial moment of operation of the rubbing surfaces, i.e. during running-in, when high local specific pressures occur at the contact points. In addition to being strong adsorbers, the sulphides have a

Card 3/4

X

26570  
S/129/61/000/008/003/015  
E073/E335

Influence of Sulphiding ....

lower mechanical strength than the base metal and can be removed from the surface much more easily than particles of the base metal. This prevents plastic deformation and improves the quality of the rubbing surfaces. Thus, sulphidation ensures rapid running-in and a high surface quality after the running-in and high anti-seizing properties. The ability of sulphur to diffuse into the depth of the metal during the process of wear ensures that the sulphides are retained in the surface layer of the component over long periods during normal operation.

[Abstracter's note - This is an abridged translation.]  
There are 3 figures and 1 table.

ASSOCIATION: Institut mashinovedeniya i avtomatiki  
AN UkrSSR (Institute of Machine Science and  
Automation of the AS Ukrainian SSR)

Card 4/4

S/137/62/CCC/008/C56/065  
A006/A101

AUTHOR: Tynnyy, A. N.

TITLE: Sulfonation and sulfocyanation are methods to increase the service life of machine parts

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1962, 138, abstract 81945 ("Nauchn. zap. In-ta mashinoved. i avtomatiki , AN UkrSSR, Ser. mashinoved.", 1961, v. 8, 177 - 183)

TEXT: The author presents results of investigating the wear resistance, fatigue strength and scoring-resistant properties of Ti-Cu-cast iron in friction (dry and greased) on a 45-grade steel disk, and of other metals in delivery conditions that had been sulfonated in a no. 2/6 NIIKhIMMASH bath and sulfocyanated in a no. 2 MAZ bath. The sulfonated and sulfocyanated metal surfaces have a positive effect upon the increase of the service life of machine parts not only in friction but also during fatigue wearing operation, particularly in corrosion media. With higher corrosion attack of the medium the positive effect of sulfonation on the endurance strength increases considerably. The author points to

✓

Card 1/2

Sulfonylation and sulfocyanation are...

S/137/62/000/008/056/055  
A006/A101

the necessity of studying sulfonylation and sulfocyanation for the purpose of determining the extremal conditions in the use of these methods, since they do not always raise the wear resistance. The wear resistance is not raised in the case of sulfonated parts operating at high slip rates ( $> 7 \text{ m/sec}$ ). This is connected with the rates of the sulfide film formation and its removal from the surface. There are 7 references.

✓

A. Babayeva

[Abstracter's note: Complete translation]

Card 2/2

"APPROVED FOR RELEASE: 08/31/2001

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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5"

VASILENKO, I.I.; TYNYY, A.N.; MIKITISHIN, S.I.

Method of increasing the hardness of friction surfaces. Vifan. rab.  
sred.na svois. mat. no.3:151-154 '64. (MIRA 17:10)

MARKOVSKIY, Yevgeniy Adamovich, kand.tekhn. nauk; TIKHONOVICH,  
Vadim Ivanovich, kand. tekhn. nauk; TYNNY, A.N., kand.  
tekhn. nauk, retsenzent

[Radioactive testing of the wear of parts of internal  
combustion engines] Radioaktivnyi kontrol iznosa detalei  
dvigatelei vnutrennego sgoraniia. Kiev, Tekhnika, 1965.  
74 p. (MIRA 18:10)

SOSHKO, A.I.; TYNYY, A.N.; GUDIMOV, M.M.

Durability and fracture mechanism of polymethyl methacrylate  
under the effect of working media. Fiz.-khim. mekh. mat. 1  
no.5:507-511 '65. (MIRA 19:1)

1. Fiziko-mekhanicheskiy institut AN UkrSSR, L'vov. Submitted  
April 20, 1965.

L 13017-66 EWT(m)/EWT(w)/EWP(j)/T LJP(c)/RPI. WW/EM/RM  
ACC NR: APS028364 SOURCE CODE: UR/0369/65/001/005/0512/0515

AUTHOR: Soshko, A.I.; Tynnyy, A.N.

ORG: Physics-engineering Institute, AN UkrSSR, L'vov (Fiziko-mekhanicheskiy  
institut AN UkrSSR)

TITLE: The effect of residual stresses<sup>b</sup> on the nature of the failure of  
amorphous vitreous polymers in liquid media

SOURCE: Fiziko-khimicheskaya mehanika materialov, v. 1, no. 5, 1965, 512-515

TOPIC TAGS: amorphous polymer, polymer structure, solid mechanical property,  
polystyrene, mechanical stress, internal stress, compressive stress

ABSTRACT: The present article investigated the following: 1) the effect of<sup>c</sup>  
the technology of the preparation of polystyrene<sup>d</sup> and polymethylmethacrylate/<sup>e</sup>  
on the magnitude and nature of the residual stresses in these materials, and  
2) the effect of residual stresses in the process of failure of PS and PMMC  
subjected simultaneously to load and to working media. The tests showed that  
residual compression stresses appear in the surface layers of the PS speci-  
mens, and tension stresses inside the specimens. In all cases (about 100  
specimens were tested) the internal cracks propagate uniformly along the  
working part of the specimen, and with further application of the load brittle  
failure occurs (the tests were made at room temperature). Data on the

Card 1/2

L 13017-66

ACC NR: AP5028364

mechanical properties of the PMMC specimens show that the strength characteristics of specimens treated by special methods remain practically constant when tested in the air and in a medium. This may be attributed to the fact that the residual stresses of compression obtained on the surfaces of the specimens as a result of the heat treatment prevent the formation of cracks. Orig. art. has: 2 figures and 1 table.

SUB CODE: 11 / SUBM DATE: 10Apr65 / ORIG RBF: 007

2/2

Card

1. The plasma was produced by a pulsed discharge in a deuterium deuterium mixture at a pressure of 10<sup>-3</sup> torr. The plasma was produced in a cylindrical chamber with a diameter of 10 cm and a height of 10 cm.

2. The plasma was produced by a pulsed discharge in a deuterium deuterium mixture at a pressure of 10<sup>-3</sup> torr. The plasma was produced in a cylindrical chamber with a diameter of 10 cm and a height of 10 cm.

3. The plasma was produced by a pulsed discharge in a deuterium deuterium mixture at a pressure of 10<sup>-3</sup> torr. The plasma was produced in a cylindrical chamber with a diameter of 10 cm and a height of 10 cm.

4. The plasma was produced by a pulsed discharge in a deuterium deuterium mixture at a pressure of 10<sup>-3</sup> torr. The plasma was produced in a cylindrical chamber with a diameter of 10 cm and a height of 10 cm.

5. The plasma was produced by a pulsed discharge in a deuterium deuterium mixture at a pressure of 10<sup>-3</sup> torr. The plasma was produced in a cylindrical chamber with a diameter of 10 cm and a height of 10 cm.

6. The plasma was produced by a pulsed discharge in a deuterium deuterium mixture at a pressure of 10<sup>-3</sup> torr. The plasma was produced in a cylindrical chamber with a diameter of 10 cm and a height of 10 cm.

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APPROVED FOR RELEASE: 08/31/2001

CIA-RDP86-00513R001757720007-5"

HOLUB, V. ; TYNKOVÁ, L.

Hormone therapy of hypsarrhythmia in childhood. Česk. neurol.  
27 no. 2:87-91 Mr'64.

1. Neurologické oddelení dětské fakultní nemocnice v Brně;  
vedoucí: MUDr. V. Holub.

\*

TYNNOVA, L.

CZECHOSLOVAKIA

HOLUB, V., MD; TYNNOVA, L., MD.

Neurological Ward of the Children's Faculty Hospital  
(Neurologické oddelení dětské fakultní nemocnice),  
Brno

Prague, Prakticky lekar, No 8, 1963, pp 301-305

"Brain Tumors in Children and Their Present Diagnosis."

CERNY, J.; DUBAC, Zd.; TYNKVA, L.

Psychic & nervous changes in a nonchoreic form of rheumatism. Cesk.  
pediat. 13 no.2:116-118 Mar 58.

1. Neurologicko-psychiatricke oddeleni Krajske detske nemocnice v  
Brne, prednosta prim. MUDr Vaclav Holub. J. C. Krajska det. nem.,  
Brno, Cernopolni 2.

(RHEUMATIC FEVER, compl.  
neurol. & psychic in nonchoreia type in child. (Cz))

HOLUB, V., MUDr.; TYNOWA, L., MUDr.

Hypoplasia muscularum universalis congenita of Krabbe.  
Cesk. pediat. 11 no.8:621-625 Aug 56.

1. Neurologicko-psychiatricke oddeleni Krajske detske  
nemocnice v Brne, predn. primar MUDr. Vaclav Holub.

(MUSCLES, dis.

hypoplasia, congen., clin. manifest. in child (Cz))

KALAB, Zd.; TYNKOVÁ, L.

Degeneration of the gray cerebrospinal matter in childhood. Česk. pediat. 16 no. 6: 489-495 Je '61.

1. Neurologické oddelení krajské dětské nemocnice v Brně, vedoucího MUDr. Václava Holuba.

(BRAIN dis)

*by mowski*

REC  
9E2.5 (W)

3918

669.112.227.342.5

Staub F., Tymowski J. The Effects of Tempering<sup>1</sup> on the Properties of Steel of Bainitic Structure.<sup>2</sup>

"Wpływ odpuszczania na właściwości stali o strukturze bainitycznej".  
Hutnik. No. 4-6, 1958, pp. 133-142, 28 figs., 1 tab.

The chemical composition of the steel grades covered by the investigation was as follows:

Grade of steel	COMPOSITION (per cent)							
	C	Mn	Si	P	S	Cr	Ni	Mo
40 H <sup>15</sup>	0.37	0.74	0.32	0.007	0.021	0.92	—	—
35 HM <sup>17</sup>	0.34	0.61	0.28	0.010	0.015	0.86	0.20	0.14
36 JINM <sup>16</sup>	0.42	0.77	0.35	0.011	0.012	1.19	1.37	0.16
37 HS <sup>18</sup>	0.37	0.40	1.02	0.022	0.012	1.38	0.12	—

Investigations on the structure, the strength, and other properties of the four steel grades after isothermal hardening followed by tempering, led to certain conclusions regarding the behaviour of these steels when the treatment was applied deliberately or accidentally; 1) when the hardness and the tensile strength of steel of bainitic structure after tempering is always reduced more rapidly than in the case of steel hardened to martensite, though the 37 HS steel does not, in these properties, differ greatly from martensite steel; 2) the limit of plasticity in bainitic structures is always lower than in tempered martensite or in sorbitic structures, and this condition is not changed by tempering; 3) after-hardening, the plasticity of steel as measured by elongation and

Sloub T., Tomaszki J.

the reduction of the cross-sectional area, increases together with the increase of the tempering temperature, although, at low tempering temperatures the reduction of cross-sectional area of bainitic structures is only very slightly better than that of tempered martensite steel; while higher isothermal treatment temperatures greatly worsen the reduction-of-area characteristic of bainitic steel; 4) tempering at temperatures of 350—450° C. may in some cases greatly reduce the impact strength of steel.

TYNOVSKIY, A.A. [Tynov'kyi, A.A.]

Quasi- L-analyticity of the class  $G_{\{M_m\}}^{DL}$ . Dop. AN URSR no.12:  
1548-1551 '61. (MIRA 16:11)

1. Chernovitskiy gosudarstvennyy universitet. Predstavлено  
akademikom AN UkrSSR Yu.A. Mitropol'skim [Mytropol's'kyi, IU.O.].

Tynovs'kyy, A. A.

SOV/21-59-7-4/25

16(1)

AUTHOR: Tynovs'kyy, A. A. (Tynovskiy, A. A.)

TITLE: A Generalization of Taylor's Formula

PERIODICAL: Dopovidi Akademii Nauk Ukrains'koi RSR, 1959, Nr 7,  
pp 708-711 (UkrSSR)

ABSTRACT:

The following formula is derived<sup>n-1</sup>  
 $f(\xi_0) = \sum_{\sigma=0}^{\infty} D^\sigma f(\xi_q) f_r(\xi_0, \xi_q) + \int \Psi [L^\sigma f(t),$   
 $L_{\xi_0}^\sigma \dots L_{\xi_1}^\sigma K(\xi_0, T)]_{t=\xi_q} - \sum_{r=1}^{\infty} \int_{\xi_0}^{\xi_{r+1}} L^\sigma f(t) L_{\xi_{r+1}}^\sigma \dots$   
 $\dots L_{\xi_0}^\sigma K(\xi_0, T) dt,$   
 which simultaneously generalized both the Taylor -  
 Rang formula  
 $f(x) = \sum_{\sigma=0}^{n-1} D^\sigma f(x_0) \frac{(x-x_0)^\sigma}{\sigma!} + R_q(x, x_0) (D = \frac{d}{dx}),$   
 and the L-formula of Taylor - M.K. Page

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SOV/21-59-7-4/25

## A Generalization of Taylor's Formula

$$R_q(x, x_0) = \int_{x_0}^x \frac{(x-t)^{q-1}}{(q-1)!} f^{(q)}(t) dt.$$

here is L an ordinary linear differential operator

$$L = D^n + p_{n-1}(x)D^{n-1} + \dots + p_0(x) \quad (D = \frac{d}{dx}),$$

$p_k(x)$  is k times continuously differentiable in  $(a, b)$

$(k = 0, 1, \dots, n-1)$ ;  $\xi_0, \dots, \xi_n$  in  $(a, b)$ ;  $K(x, t)$  is the Cauchy-Greene function of L;  $I^*$  is an integral operator

[with a conjugate kernel  $K^*(x, t) = K(t, x)$ ] inverse

to the conjugate operator  $L^*$  with zero initial values

at point  $\xi$ ;  $\Psi[y(x), z(x)]$  is the Langrange parenthesis of L

$$\int_a^b (z(x)Ly(x) - y(x)L^*z(x)) dx = \Psi[y(x), z(x)]_a.$$

The work was done under the supervision of M.K. Fage.  
There are 16 mathematic formulas and 2 Soviet references

Card 2/3

SOV/21-59-7-4/25

A Generalization of Taylor's Formula

ASSOCIATION: Chernivets'kyi derzhavnyi universytet (Chernovtsi  
State University)

PRESENTED: B.V. Gnedenko, Member AS UkrSSR

SUBMITTED: February 17, 1959

Card 3/3

KISELEV, T.; DIORDITSA, A.; TYNURIS, E.; CHOGOVADZE, G.; BEGMATOVA, S.; GAPUROV, M.; KAKHAROV, A.

The entire country participates in foreign trade. Vnesh. torg. 43 no.12:  
6-12 '63. (MIRA 17:2)

1. Predsedatel' Soveta Ministrov Belorusskoy SSR (for Kiselev). 2. Predsedatel' Soveta Ministrov Moldavskoy SSR (for Diorditsa). 3. Zamestitel' Predsedatelya Soveta Ministrov Estonskoy SSR (for Tynuris). 4. Zamestitel' Predsedatelya Soveta Ministrov Gruzinskoy SSR (for Chogovadze). 5. Zamestitel' Predsedatelya Soveta Ministrov Kirgizskoy SSR (for Begmatova). 6. Predsedatel' Soveta Ministrov Turkmeneskoy SSR (for Gapurov). 7. Predsedatel' Soveta Ministrov Tadzhikskoy SSR (for Kakharov).

TYNYANKIN, I.I., inzh.-kapitan 1-go ranga

Status and ways of development of ship and aviation hydroacoustic  
equipment. Mor. sbor. 47 no.6:77-82 Je '64. (MIRA 18:7)

VERZHIKOVSKIY, Anatoliy Pavlovich; GABIS, Nikolay Vladimirovich;  
KITAYEV, Nikolay Mikhaylovich; TINYANKIN, Ivan Ignat'yevich;  
KHORBENKO, I.G., kapitan 2 ranga, red.; KUZ'MIN, I.F., tekhn.  
red.

[Concise dictionary on radio electronics] Kratkii slovar' po  
radioelektronike. Moskva, Voenizdat, 1964. 255 p.  
(MIRA 17:2)

TINYANYY, (G.D.)

PHASE I BOOK EXPLOITATION SOV/3947

Elektroshlakovaya svarka (Electroslag Welding) 2d ed., rev. and enl.  
Moscow, Mashgiz, 1959. 406 p. Errata slip inmextea. 6,500 copies printed.

Reviewer: I.I. Zaruba, Candidate of Technical Sciences; Ed. (title page):  
B.Ye. Paton, Laureate of the Lenin Prize, Academician, Academy of Sciences USSR;  
Eds. (inside book): P.G. Grebel'nik, Candidate of Technical Sciences, and G.D.  
Tinyanyy; Chief Ed. (Southern Division, Mashgiz): V.K. Serdyuk, Engineer.

PURPOSE: This book is intended for technical personnel studying the electroslag-welding process.

COVERAGE: The book contains information on the essentials, characteristic features, and advantages of electroslag welding. Thermal and metallurgical characteristics of the processes of electroslag welding and surfacing of steels and other metals are described. Also described are constructions of welding equipment and automatic-control systems for electroslag welding. The following persons participated in writing the book: Candidates of Technical Sciences G.Z. Voloshkevich, S.A. Ostrovskaya, D.A. Dudko, I.K. Pokhodnya, Yu. A. Sterenbogen, G.V. Zhemchuzhnikov, P.I. Sevbo, B.I. Medovar, and D.M. Rabkin; Engineers I.N. Rublevskiy,

Card 1/7

**Electroslag Welding**

SOV/3947

and I.V. Novikov, O.O. Rozenberg, V.P. Didkovskiy, G.S. Tyagun-Belous; and B.Ye. Paton, Academician, Doctor of Technical Sciences, Laureate of the Lenin Prize. There are 92 references: 86 Soviet, 5 German, and 1 English.

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KOSTETSKIY, Boris Ivanovich; PREYS, G.A., kand.tekhn.nauk, retsenzent;  
GOLEGO, N.L., kand.tekhn.nauk, red.; TINYANIY, G.D., red.

[Wear resistance of machine parts] Soprotivlenie iznashiveniu  
detalei mashin. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.  
lit-ry, 1959. 478 p. (MIRA 13:4)  
(Mechanical wear) (Machinery)

TYN'YANOV, N.Z., kand. tekhn. nauk

Relation between the productiveness of the stoping block and  
the labor consumed in the underground operations of mining ore.  
Nauch. soob. IGD 15:44-48 '62. (MIRA 17:2)

TYN'YANOV, N. Z., CAND TECH SCI, "INVESTIGATION OF  
BREAKING BY MEANS OF ~~EXPLOSIVE~~ <sup>blast</sup> wells <sup>the</sup> of  
BODIES OF ~~medium~~ <sup>example</sup> AVERAGE THICKNESS ON THE ~~order~~ <sup>order</sup> OF THE MINE  
IM MATROSOV (MAGADANSKAYA OBLAST)." MOSCOW, 1961.  
(MIN OF HIGHER AND SEC SPEC RSFSR, Krasnoyarsk Inst  
of Nonferrous Metals im M. I. Kalinin). (KL, 3-61,  
221).

TYNKANOV, V.N., inzh.; FILIPPOV, A.N., inzh.

Selecting the diameter of a turret feed socket. [Nauch. trudy]  
ENIKMASHa 3:109-116 '60. (MIRA 14:1)  
(Power presses)

MAGAZINER, V.V.; TYNYANOV, V.N.; FIL'KIN, I.N.; MAKOVSKIY,  
G.M., inzh., retsenzent; ZLOTNIKOV, S.L., red.

[Operation of single-crank single-acting presses] Eks-  
pluatatsiia odnokrivoshipnykh pressov prostogo deistviia.  
Moskva, Mashinostroenie, 1964. 124 p. (MIRA 17:7)

TYNYANOV, V.N.

Characteristics of selecting gear ratio corrections for two-  
and four-crank presses. Kuz.-shtam. proizv. 4 no.3:24-35  
Mr '62. (MIRA 15:3)  
(Power presses) (Gearing)

Moscow. Experimental'nyy nauchno-issledovatel'skiy institut mashinostroyeniya  
mashinostroyeniya.

*1951-62-100-2-14*

Progressivnaya tekhnologiya i voprosy avtomatizatsii mashinostroeniya i tsvetnoy metalloobrabotki  
pri vyrabotke (Advanced Processing and Problems of Automation of Die-Punching  
Operations). Moscow, Mashgiz, 1960. (Series: Tsvetnaya metalloobrabotka,  
No. 3) 5,500 copies printed.

Sponsoring Agency: Gosudarstvennyy komitet Soveta Minister SSSR po avtomatizatsii  
i mashinostroyeniyu.

Editorial Council: N.M. Vasil'yev, V.P. Vysokin, V.I. Davydov, P.Ia. Durov, A.P.  
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A.I. Marzovich, I.B. Matveyev, S.I. Mikhalev, L.A. Ponomaryuk, V.I. Popov, B.S.  
Pavlovichuk, O.V. Protopopov, G.K. Rokter, L.V. Rubtsev, A.P. Silayev,  
B.I. Ushakov, P.M. Vorobyov, B.A. Chudakov, and B.K. Shvabrov. Chief Ed.: A.I. Zolotarev. Ed. of Publishing House: G.M. Scholnikov. Tech. Ed.: O.Y.  
Sal'mova; Managing Ed. for Literature on Heavy Machine Building: B.M. Golovin.  
Editor: .

PURPOSE: This collection of articles is intended for personnel engaged in production  
working and for students in mechanical-engineering schools of higher education.

CONTENTS: The following problems in advanced processing by pressworking are re-  
viewed: Clamshell drop forging; multipass forging; cold extrusion; hole  
piercing instead of drilling; small-radius bending of metal sheets; straightening  
of tubularized tubes; and embossing. Methods are given for selecting roller-feed  
parameters and hole size for rotary feed on crank presses. No personalities are  
mentioned. References accompany each article. There are 57 references:  
56 Soviet and 1 English.

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AVAILABILITY: Library of Congress (61-1450465)	

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6-25-63

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(P)

TYNYANOV, V.N.

Greater accuracy in calculating the contact strength of transmission  
gears on mechanical power presses. Kuz.-shtam. proizv. 4 no.5:  
26-30 My '62. (MIRA 16:5)  
(Power presses) (Gearing--Tables, calculations, etc.)

TYMANOV, V.N.

Calculating the shape and size factor for the engagement of gear drives  
of two- and four-crank presses. Kuz.-shtam. proizv. 5 no.1:14-18  
Ja '63. (MIRA 16:3)

(Power presses)

(Gearing—Tables, calculations, etc.)