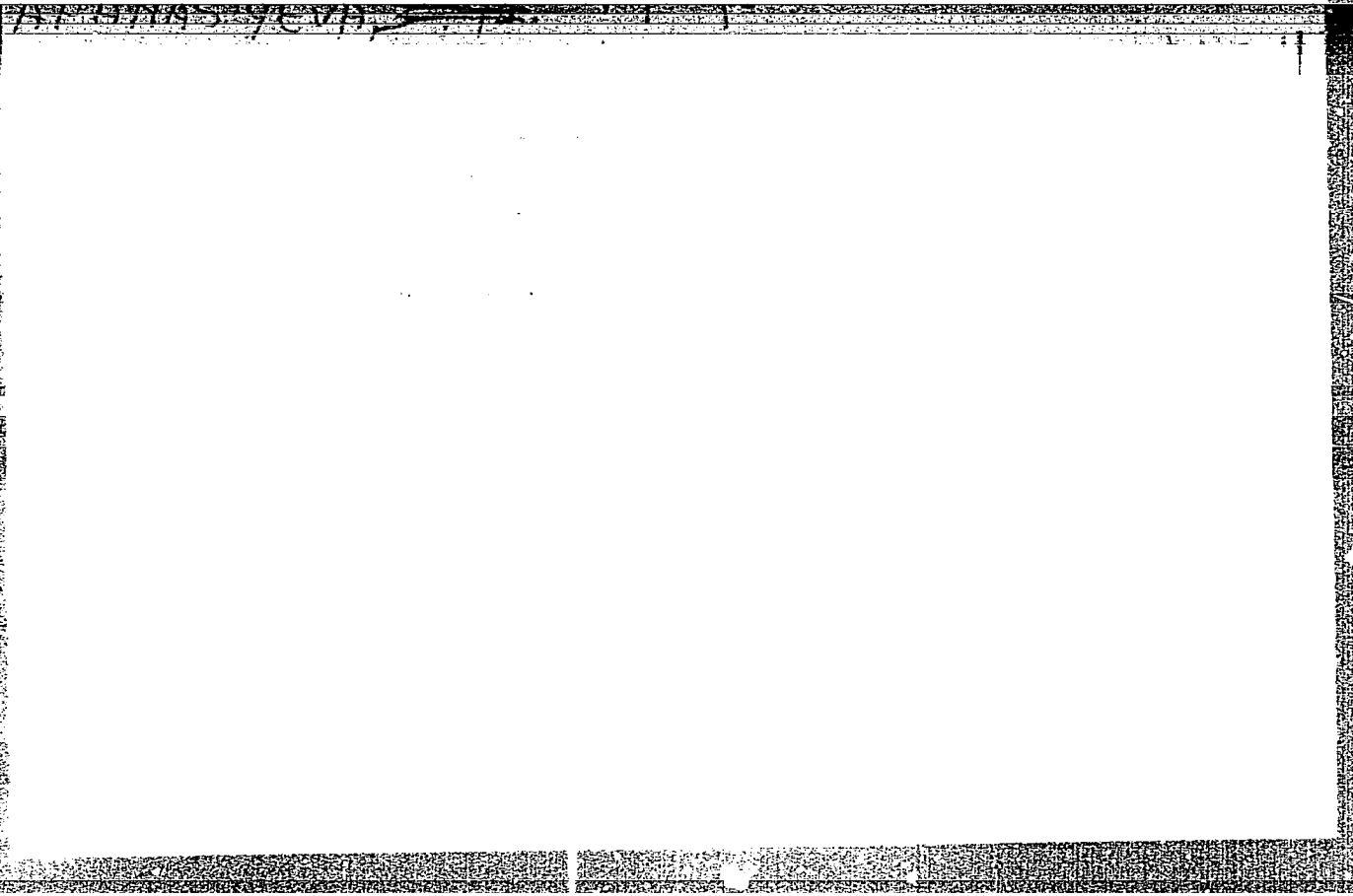


"APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000100420007-7



APPROVED FOR RELEASE: 06/05/2000

CIA-RDP86-00513R000100420007-7"

AFANAS'YEVICH, Pavel Semenovich, kand. tekhn. nauk; KULIKOV, I.V.,  
kand. tekhn. nauk, nauchnyy red.; RYCHEK, T.I., red.;  
TOKER, A.M., tekhn. red.

[Woodworking machinery] Derevoobrabatyvaiushchie stanki.  
2. izd., perer. i dop. Moskva, Vses. uchebno-pedagog. izd-  
vo Proftekhizdat, 1961. 403 p. (MIRA 15:2)  
(Woodworking machinery)

KADYROV, V.K.; NAYDICH, I.M.; AFANAS'YEVSKAYA, S.M.

Mine water in coal deposits in Kirghizistan. Izv. AN Kir. SSR.  
Ser. est. i tekhn. nauk 4 no.5:117-127 '62.

(MIRA 16:4)

(Kirghizistan--Mine water)

LYU SHI-TSI [Liu, Shih-Ch'i]; ILYUSHECHKIN, V.P. [translator]; MITBREYT,  
B.A. [translator]; OVDIYENKO, I.Kh. [translator]; TEREPT'YEVA,  
V.F. [translator]; VARENITS, Ye.T., red.; AFANAS'YEVSKIY, Ye.A.,  
red.; IOVLEVA, N.A., tekhn. red.

[Agricultural geography of China] Geografiia sel'skogo khoziaistva  
Kitaia Vstup. stat'ia i red. E.T. Varenitsa. Moskva, Izd-vo  
inostr. lit-ry, 1957. 402 p. (MIRA 11:10)  
(China—Agriculture)

CHZHU CHZHI-KHE [Chu Chih-he]; AZOVSKIY, I.P. [translator]; GALIMOV,  
A.A. [translator]; ZHEREBILOV, V.A. [translator]; AFANAS'YEVSKIY,  
Ye.A., red.; KLIMENKO, S.V., tekhn.red.

[Burma] Birma. Moskva, Izd-vo inostr.lit-ry, 1958. 228 p.  
Translated from the Chinese. (MIRA 13:2)  
(Burma)

BEREZINA, Yuliya Iosifovna; APANAS'YEVSKIY, Ye.A., otv.red.; ZAKHMATOVA,  
M.R., red.izd-va; KRASNAYA, A.K., tekhn.red.

[Fuel and power resources of the Chinese People's Republic]  
Toplivno-energeticheskaya baza Kitaiskoi Narodnoi Respubliki.  
Moskva, Izd-vo vostochnoi lit-ry, 1959. 139 p. (MIRA 12:8)  
(China--Fuel) (China--Electric power plants)

AFANAS'YEVSKIY, YE. A.

Dissertation defended at the Institute of Geography  
for the academic degree of Candidate of Geographical Sciences: 1962

"Ssuch'uan (Economico-Geographical Characteristics)."

Vestnik Akad Nauk No. 4, 1963, pp. 119-145

AFANAS'YEVSKIY, Yevgeniy Aleksandrovich; BEREZINA, Yu.I., otv. red.;  
YEYSENINA, Z.M., red. izd-va; TSVETKOVA, S.V., tekhn. red.

[Szechwan; economic and geographical study] Sychuan'; ekonomiko-geograficheskii ocherk. Moskva, Izd-vo vostochnoi litery, 1962. 266 p. (MIRA 15:2)  
(Szechwan--Economic geography)



SHAKHOV, A.I.; RETIN, P.Ya.; AFANAS'YEVSKIY, Ye.K., redaktor; MINYAYEVA, G.A.,  
redaktor.

[Laying out and marking off ships on the mold loft] Razbivka i razmetka  
sudov na plaze. [Leningrad] Gos. izd-vo sudostroit. lit-ry, 1953. 123 p.  
(MLRA 7:6)

(Shipbuilding)

L 01498-66 EWT(m)/EWP(i)/T/EWP(t)/EWP(b) JD

ACCESSION NR: AP5014741

UR/0201/65/000/001/0086/0092

AUTHORS: Afanas'yew, M. V.; Lyakhovich, L. S.; Kapel'yan, S. N.;  
Varashnin, L. R. *44,55* *49,55* *49,55* *35* *33* *B*

TITLE: Influence of pulsed pressures and temperatures on the diffusion process and mechanical characteristics of the hardened layer in the case of a spark discharge

SOURCE: AN BSSR. Izvestiya. Seriya fiziko-tekhnicheskikh nauk, no. 1, 1965, 86-92

TOPIC TAGS: spark discharge, surface hardening, pressure effect, temperature effect, surface diffusion *44,55, 16*

ABSTRACT: The article presents the results of a study of the influence of the interelectrode medium and of pulsed pressures on diffusion processes and on the change in the microhardness of a hardened surface layer in the case of a condensed spark discharge.

Card 1/3

L 01498-66

ACCESSION NR: AP5014741

The investigations were carried out in air, water, and supersaturated water solution of borax. The pulse pressure was produced by the discharge itself, initiated between iron electrodes (one in the form of a point and the other in the form of a plane) situated in a sealed chamber filled with liquid. The discharge was produced at 2000 volts by a 2000  $\mu$ F capacitor bank. The microhardness data were processed statistically. The results showed appreciable differences between the pressure indentations of the hardness measuring machine differ. The high-pressure chamber was described elsewhere (DAN BSSR, no. 2, 1964). The microhardness in air was practically doubled to 200  $\text{kg}/\text{mm}^2$ . In the case of a discharge in water with open surface, further increase in microhardness is observed, to 275  $\text{kg}/\text{mm}^2$  for the cathode and 460  $\text{kg}/\text{mm}^2$  for the anode. For a discharge in water contained in the sealed chamber, the microhardness increased to 300  $\text{kg}/\text{mm}^2$ . In the borax solution, the corresponding microhardnesses were 340--400  $\text{kg}/\text{mm}^2$  for the open surface, and 500 and 700  $\text{kg}/\text{mm}^2$  for the cathode and anode, respectively, in the

Cord 2/3

L 01498-66

ACCESSION NR: AP5014741

27 6 2  
sealed chamber. The thickness of the borated layer was 100--150  $\mu$  for the open surface of borax solution, and 150--200  $\mu$  in the case of the closed chamber. The time during which the metal was in the molten state was estimated from the reaction diffusion formulas to be 530  $\mu$ sec. The results obtained are discussed from the point of view of the pulsed pressures, cooling conditions, and alloying. Orig. art. has: 3 figures and 3 formulas.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 00

SUB CODE: MM

NR REF SOV: 007

OTHER: 003

Card 3/3 DP

L 3908-66 EWT(m)/EWP(t)/EWP(k)/EWP(b) JD

ACCESSION NR: AP5022944

UR/0201/65/000/002/0065/0071

3/  
B

AUTHOR: Afanas'yev, N. V.; Kapel'yan, S. N.

TITLE: Effect of static pressure on the magnitude of electrical erosion of metal in a condensed spark discharge

SOURCE: AN BSSR. Vestsi. Seryya fizika-tekhnichnykh navuk, no. 2, 1965, 65-71

TOPIC TAGS: erosion, electric discharge, metal property

ABSTRACT: An earlier investigation (N. V. Afanas'yev, Z. F. Vorobey, Ye. P. Kuznetsova, DAN BSSR, no. 2, 1964) indicated that the electrical erosion of certain metals during spark discharges in hermetically sealed liquid containers is considerably larger than in open discharge chambers. To check various hypotheses attributing these erosion variations to pressure pulses affecting the molten metal, the present author constructed a device for the production, within the discharge region, of high pressure pulses (not less than 2000 atm) exceeding those produced naturally during the discharge process. In addition, the static pressure could be varied within the 1 - 250 atm limits by means of a hydraulic press. Results are summarized in Table 1 of the Enclosure. The article also presents data (obtained from oscillograms) about the discharge current, applied voltage, energy and instantaneous power of the discharge as a function of the discharge duration (in  $\mu$ sec), data (from high-speed motion pictures) concerning the evaporated gas bubble radii, bubble surface velocity, Card 1/3

L 3908-66

ACCESSION NR: AP5022944

and bubble pressure, and photographs of the eroded electrodes. A comprehensive discussion of the results and an explanation of the observed events are given. Orig. art. has: 4 formulas, 4 figures, and 3 tables. 0

ASSOCIATION: None

SUBMITTED: 00

ENCL: 01

SUB CODE: MM, EM, ME

NO REF SOV: 006

OTHER: 000

Card 2/3

J. 3908-66

ACCESSION NR: AP5022944

ENCLOSURE: 01

Table 1. Magnitude of the total electrical erosion of electrodes during various discharge conditions (per one discharge pulse)

Electrode material	In air		In transformer oil		In transformer oil at different static pressures applied, $\Delta w_p$ at					
	$\Delta w_a$	$\Delta w_{a,c}$	$\Delta w_o$	$\Delta w_{o,c}$	P, atm					
					0	50	100	150	200	250
Ni	0,7	1,4	10,70	10,00	12,3	14,0	17,2	11,8	0,6	7,50
Cu	1,05	2,2	9,18	11,32	12,4	13,2	13,4	10,2	7,9	6,60
Al	3,20	6,7	4,65	7,23	10,2	10,1	8,7	7,5	6,4	5,25
Zn	33,1	58,8	31,50	35,00	40,0	37,0	35,0	34,0	28,0	25,00
Sn	06,1	72,7	56,50	77,20	73,0	69,0	65,0	60,0	52,0	42,00

Tests carried out with  $C=100 \mu F$ ,  $U = 1 \text{ kV}$   $\Delta w_a$ ,  $\Delta w_{a,c}$ ,  $\Delta w_o$ ,  $\Delta w_{o,c}$ , and  $\Delta w_p$  are corrosion losses in atmospheric air, air in airtight chamber at normal pressure, oil in open container, oil in completely airtight container under normal pressure, and oil in airtight container at pressure p, respectively.

*beh*  
Card 3/3

AFANASYUK, I. N. ; MARONOVA, V. O.

Mechanized sand blowing of cores. Mashinostroitel' no.9:11 S  
'60. (MIRA 13:9)

(Coremaking)



AFANASYUK, I.N., inzh.; KOLEDA, S.V., inzh.

Mechanized screened stopper for molding mixes. Mekh.1 avtom.-  
proizv. 16 no.8:20-21 Ag '62. (MIRA 15:9)  
(Molding machines)

AFANASYUK, I.N.; BOBRYAKOV, G.I.; INTYAKOV, N.G.; KOLEDA, S.V.;  
STETYUKEVICH, I.P.; KHODIN, A.I.

Automatic proportioning and simultaneous application in layers  
of the facing and backing sand on the pattern. Lit. proizv. no.6:  
6-8 Je '64. (MIRA 18:5)

AFANOV, V.I.; KNYAZEVA, N.D.

Experimental processing of asbestos fibers blended with spun  
lavan. Tekst. prom. 25 no.3:92-93 Mr '65. (MIRA 18:5)

AFANSENKO, P. P.; MAMYTOV, B. M.; NEDVIGA, R. A.

"Fizicheskoye razvitiye detey Kirgizskoy SSR za rody Sovetskoy vlasti."

report submitted for 7th Intl Cong, Anthropological & Ethnological Sciences,  
Moscow, 3-10 Aug 64.

ROGOZKIN, V.A.; AFAR, Ya.

Use of casein hydrolysate and vitamin PP for the increase  
of athletic performance capacity. Vop.pit. 24 no.3:33-38  
My-Je '65. (MIRA 18:12)

1. Nauchno-issledovatel'skiy institut fizicheskoy kul'tury,  
Leningrad. Submitted June 10, 1964.

ROGOZKIN, V.A.; ~~AFAR, Ya.~~

Effect of experimental training on induced synthesis of nicotinamide  
deoxymaleotide in the organism. Ukr. biokhim. zhur. 37 no.4:558-564  
'65. (MIRA 18:9)

i. Nauchno-issledovatel'skiy institut fizicheskoy kul'tury, Lenin-  
grad.

ROGOZKIN, V.A.; AFAR, Ya.A.

Activation amino acids in the cytoplasm of skeletal muscles and  
liver during training. Ukr. biokhim. zhur. 37 no.2:218-221 '65.  
(MIRA 18:6)

1. Nauchno-issledovatel'skiy institut fizicheskoy kul'tury,  
Leningrad.

AFAR, Ya.M.

Effect of various fortifying nutrients on the capacity for work  
in prolonged physical exertion. Ukr.biokhim.zhur. 31 no.6:898-  
905 '59. (MIRA 13:5)

1. Division of Physiology, Biochemical Laboratory of the Central  
Research Institute of Physical Culture, Sophia, Bulgaria.  
(PHYSICAL FITNESS--TESTING) (FOOD, ENRICHED)



<sup>YA</sup>  
AFAR, S.M.; ROGOZKIN, V.A.

Changes of the muscle adenosinetriphosphoric acid content following the administration of casein hydrolysate. Cesk. gastroent. vyz. 16 no.3/4:288-290 Ap '62.

1. Vedeckovyzkumny ustav telesne vychovy, Leningrad.  
(ADENOSINE TRIPHOSPHATE) (MUSCLES) (CASEIN)  
(PROTEIN HYDROLYSATES)

AFAR, Ya.M.; ROGOZKIN, V.A.

Effect of casein hydrolysate on carbohydrate-phosphorus metabolism during a prolonged muscular exertion. Fiziol.zhur. 48 no.6:754-759 Je '62. (MIRA 15:8)

1. Sektor Biokhimiya Nauchno-issledovatel'skogo instituta fizicheskoy kul'tury, Leningrad. 2. Sotrudnik Vysshego instituta fizicheskoy kul'tury imeni G.Dimitrova, Sofiya (for Afar).

(BLOOD PLASMA SUBSTITUTES) (CASEIN) (CARBOHYDRATE METABOLISM)  
(EXERCISE) (PHOSPHORUS METABOLISM)

ACC NR: AR6005226

SOURCE CODE: UR/0058/65/000/009/EO89/EO89

AUTHOR: Afarida, A. M.

TITLE: Investigation of the change of the electric resistivity of nickel-manganese alloys in a longitudinal magnetic field

SOURCE: Ref. zh. Fizika, Abs. 9E750

REF SOURCE: Tr. Turkm. S.-kh. in-ta, v. 13, 1964, 351-357

TOPIC TAGS: nickel alloy, manganese containing alloy, galvanomagnetic effect, resistivity, magnetic saturation

TRANSLATION: The author investigated the <sup>21</sup>galvanomagnetic effect and the magnetization of quenched and annealed alloys of the Ni-Mn system. It is shown that the values of the longitudinal galvanomagnetic effect and the magnetization in quenched alloys (in the Mn concentration range 0--30 at.%) at saturation magnetic fields decrease linearly in accordance with the Annayev compensation law. The magnitudes of the longitudinal galvanomagnetic effect and of the magnetization in annealed alloys (in the interval of Mn concentration from 0 to 30 at.%) at saturation magnetic fields have a more complicated character. It is found that the general character of the curve of longitudinal galvanomagnetic effect in quenched alloys of the Ni-Mn system, as a function of the composition, coincides with the observations of other authors in spite of the difference in the magnitudes.

SUB CODE: 20

Card 1/1 *W*

L 00792-67 EWT(m)/EWP(w)/T/EWP(t)/ETI IJP(c) JD/HW

ACC NR: AR6000449

SOURCE CODE: UR/0137/65/000/009/1030/1031

AUTHOR: Afarida, A. M.

TITLE: A study of changes in the electrical resistivity of the nickel-manganese system alloys in a longitudinal magnetic field

SOURCE: Ref. zh. Metallurgiya, Abs. 91188

REF SOURCE: Tr. Turkm. s.-kh. in-ta, v. 13, 1964, 351-357

TOPIC TAGS: nickel alloy, manganese alloy, magnetic field, electric resistance, galvanomagnetic effect

ABSTRACT: The galvanomagnetic effect (GE) and magnetizability (M) of hardened and annealed Ni-Mn alloys (0--30% Mn) have been studied. GE was measured by the method of unbalanced bridge and was found to grow smaller as the Mn content increased in an annealed alloy (except for the alloy with 5 at.% of Mn). M was measured simultaneously with GE with the help of a differential coil. The values of M for the hardened alloys diminish as the content of Mn increases. The magnitudes of the longitudinal GE and M of annealed alloys in the fields of magnetic saturation are of a more complex character. V. Olenicheva [Translation of abstract]

SUB CODE: 11

Card 1/1 mjs

UDC: 669.245.74:538.63+538.24

L 58964-65 EPR/EPA(s)-2/EWP(z)/EWT(m)/EWP(b)/T/EWA(d)/EWP(w)/EWP(t) PB-L/

Pad IJP(c) JD/HW

ACCESSION NR: AP5016443

IR 0292 65 000 003 0027 0632

157 (4)

AUTHOR: Afarida, A. M.

2127

TITLE: Temperature dependence of the galvanomagnetic effect of Ni-Al alloys

SOURCE: AN Turkmen SSR. Izvestiya. Seriya fiziko-tekhnicheskikh, khimicheskikh i geologicheskikh nauk, no. 3, 1965, 27-32

TOPIC TAGS: galvanomagnetic effect, galvanomagnetic effect temperature dependence, saturation magnetization, even magnetization effect, alloy magnetic property, nickel alloy, aluminum alloy

ABSTRACT The study of electrical resistivity variations in ferromagnetic metals and alloys placed within a magnetic field (galvanomagnetic effect) of Thomson (Goldhammer) can be used for the verification of existing theories of the origin of the ferromagnetic effect. Consequently, the author studies the temperature dependence of magnetization (around room temperature) of annealed Ni-Al alloys (2, 4, 6, 8, 10, and 12 at. % Al). The dependence of the galvanomagnetic effect in a large temperature interval (from room temperature to the Curie point) in various Ni-Al alloys (2, 4, 6, 8, 10, and 12 at. % Al). The latter would simultaneously check the compensation law of R. G. Annayev (Trudy TSKhI, v XI,

L 58964-65

ACCESSION NR: AP5016443

0

1962), represented by:

$$a_{S,AB}^{(T)} = a_{S,AB}^{(0)} \left[ 1 - (T/\theta_{A0}) \right] \left( 1 - \frac{B}{B_s} \right), \tag{1}$$

$$f_{S,AB}^{(T)} = f_{S,AB}^{(0)} \left[ 1 - \gamma (T/\theta_{A0})^{3/2} \right] \left( 1 - \frac{B}{B_s} \right), \tag{2}$$

and

$$\theta_{AB} = \theta_{A0} \left( 1 - \frac{B}{B_s} \right), \tag{3}$$

where  $a_{S,AB}^{(T)}$  and  $f_{S,AB}^{(T)}$  are the magnitudes of the even magnetization effect and the saturation magnetization, respectively, for a given temperature.  $B$  is the concentration of the  $S$  and  $AB$  ions or weight fraction of the component  $S$  in the alloy.  $B_s$  is the concentration of the  $S$  ions or weight fraction of the component  $S$  in the pure metal.  $\theta_{A0}$  is the Curie point of the  $AB$  alloy.  $\gamma$  is the temperature dependence of the galvanic effect.  $a_{S,AB}^{(0)}$  and  $f_{S,AB}^{(0)}$  are the saturation magnetization and the Curie point of the  $AB$  alloy at  $T=0$ .

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L 58964-65

ACCESSION NR: AP5016443

increase in Al content, confirming the above formulas. Orig. art. has: 5 formulas and 4 figures.

ASSOCIATION: Turkmenskiy sel'skokhozyaystvennyy institut im. M. I. Kalinina  
(Turkmen Agricultural Institute)

SUBMITTED: 30May64

ENCL: 00

SUB CODE: MM,EM

NO REF SOV: 014

OTHER: 002

Card

NC  
3/3

ACCESSION NR: AR4020765

S/0044/64/000/001/B042/B042

SOURCE: RZh. Matematika, Abs. 1B219

AUTHOR: Afashagov, M. S.

TITLE: The operator method of integrating a third order differential equation

CITED SOURCE: Uch. zap. Kabardino-Balkarsk. un-t, vy\*p. 16, 1962, 60-62

TOPIC TAGS: operator method, third order differential equation integration, Bissel equation

TRANSLATION: The following equation is considered:

$$xy''' + xy' + vy = 0. \quad (1)$$

The operator

$$D^{-\rho}f(x) = \frac{1}{\Gamma(\rho)} \int_a^x (x-a)^{\rho-1} f(a) da, \quad f(a) = 0.$$

Card 1/2



ACCESSION NR: AR4020765

is introduced. A solution of equation (1) is desired in the form  $y = D^{\nu}v$ .  
After certain transformations the solution reduces to the Bessel equation

$$x^2 z'' + xz' + (x^2 - \lambda^2)z = 0, \lambda = \frac{\nu+1}{2}.$$

V. Nemytskiy

DATE ACQ: 03Mar64

SUB CODE: MM

ENCL: 00

Card 2/2

LAKHTIN, G.A.; TIL'GA, V.A.; ROZLOVSKIY, A.A.; BOGDANOV, V.A.;  
AFASHAGOV, Yu.A.

Mercury vapor condensation in apparatuses with internal water  
cooling. TSvet. met. 35 no.9:44-50 S '62. (MIRA 16:1)  
(Mercury--Metallurgy) (Distillation apparatus)

KERSHANSKIY, I.I.; ROZIOVSKIY, A.A.; SALOMATOV, N.K.; KERSHANSKAYA, L.N.;  
AFASHAGOV, Yu.M.; KUUR, V.P.

Pilot plant tests in precipitation reduction smelting of antimony  
concentrates in electric furnaces. TSvet. met. 38 no.5:34-41 My '65.  
(MIRA 18:6)

S/169/63/000/001/025/062  
D263/D307

**AUTHORS:** Keyrimov, Sh.B., Kisin, I.M. and Afayev, Sh.M.

**TITLE:** Particulars of the distribution of atmospheric deposits in the basin of River Kishchay, according to precipitation-meter data

**PERIODICAL:** Referativnyy zhurnal, Geofizika, no. 1, 1963, 45, abstract 1B241 (Uch. zap. Azerb. Un-t. Geol.-geogr. ser., 1962, no. 1, 71-78 (Azerb.: summary in Rus.))

**TEXT:** To study the snow cover and atmospheric precipitation, snow-measuring traverses were undertaken in 1958 in the River Kishchay basin, situated on the southern slope of the Main Caucasian Ridge. Six precipitation meters were also established, and the amounts of deposits falling in the lower part of the basin were determined at rainfall-measuring points between Nukha and Station Damarchik. From these investigations it appears that the change from increasing precipitation with altitude of the locality to decreasing precipitation occurs, in this region, at a height of 2500 - 2600 m.

Card 1/2

Particulars of the distribution ...

S/169/63/000/001/025/062  
D263/D307

The zone of maximum precipitation during all seasons and taken annually is between altitudes of 2500 and 2600 m. The most intense increase in the precipitation occurs mainly in the summer and autumn (mean gradient of the increase of precipitation with height reaches 3 - 4 mm per 100 m). In winter and spring the gradients are less pronounced, being 1 - 2 mm per 100 m. Above 2600 m, the gradients of decreasing precipitation are 3 - 5 mm per 100 m during the summer and autumn months. The mean annual gradient of increasing precipitation was 15 - 18 mm for 1959-1960, while for individual mountain zones this value varied from 0 to 40 mm per 100 m. At heights between 2800 and 3000 m, above the height at which the increase-to-decrease change occurred, the decrease of precipitation was 5 mm for every 100 m of altitude. (Author's summary).

[ Abstracter's note: Complete translation ]

Card 2/2

SAPIECHA, Julia; AFEK-KAMINSKA, Maria

Case of leukemia with generalized moniliasis in 2 year old child.  
Pediat. polska 32 no.2:183-186 Feb 57.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego A.M w  
Warszawie Kierownik: prof. dr. med. J. Bogdanowicz i z  
Pracowni Anatomopat. Miejskiego Szpitala Zakaznego Nr 1  
w Warszawie Dyrektor Szpitala: dr. med. A. Krysztof  
Kierownik Pracowni: dr. med. M. Afek-Kaminska. Adres:  
Warszawa, ul. Wolska 37.

(MONILIASIS, in inf. & child  
with leukemia (Pol))

(LEUKEMIA, in inf. & child  
with moniliasis (Pol))

MAY, Jozef; AFREK-KAMINSKA, Maria; ZGORZEISKI, Stanislaw

Torulosis (cryptococcosis) with description of personal cases. Polski tygod. lek. 13 no.13:480-484 31 Mar 58.

1. Za Szpitala Zakaznego nr. 1. w Warszawie ordynator: Jozef May i z  
pracowni anatomo-patologicznej Kierownik: Maria Alek-Kaminska,  
(CRYPTOCOCOSIS, case reports  
fatal, in child (Pol))

AFEK-KAMINSKA, Maria; MIGDALSKA-KASSUROWA, Bronislawa

Rhabdomyomatosis congenita cordis. Polski tygod lek. 14 no.46:2030-2033  
16 Nov 59.

1. (Z Oddzialu Obserwacyjnego Szpitala Zakaznego Nr 1 w Warszawie;  
ordynator: doc. dr med. Br. Migdalska-Kassurowa i z Zakladu Anatomii  
Patologicznej Szpitala Zakaznego nr 1; kierownik: dr med. M. Afek-  
Kaminska).

(HEART, neopl.) (RHAEDOMYOMA, in inf. & child)



AFEK-KAMINSKA, Maria

A case of generalized moniliasis. Pat.polska 11 no.4:381-384 '60.

1. Z Pracowni Anatomopatologicznej Szpitala Zakaznego Nr 1 w  
Warszawie, Kierownik: dr M.Afek-Kaminska.  
(MONILIASIS case reports)

AFEK-KAMINSKA, Maria

A case of torulosis in a 6-year-old boy. Pat.polska 11 no.4:  
385-393 '60.

1. Z Pracowni Anatomopatologicznej Szpitala Zakaznego Nr 1  
w Warszawie, Kierownik: dr M.Afek-Kaminska.  
(CRYPTOCOCCOSIS in inf & child)

POLAND

NAREBSKI, Jerzy, WOLOSZCZUK, Irena, and AFEK-KAMINSKA, Maria; Second Clinic of Infectious Diseases (II Klinika Chorob Zakaznych) of the AM [Akademia Medyczna, Medical Academy], Center of Clinical Studies (Osrodek Badan Klinicznych) of PZH [Panstwowy Zaklad Higieny, State Institute of Hygiene] (Director: Prof. Dr. med B. KASSUR), and the Anatomico-Pathological Laboratory (Pracownia Anatomico-Patologiczna) of the Municipal Hospital for Infectious Diseases (Miejski Szpital Zakazny) No 1 (Director: Dr. M. AFEK-KAMINSKA), all in Warsaw

"Case of Acute Interstitial Myocarditis."

Warsaw, Polski Tygodnik Lekarski, Vol 18, No 15, 8 Apr 63, pp 555-559.

Abstract: [Authors' English summary] Authors report a case of acute isolated interstitial myocarditis (Fiedler type) in a man aged 36. Clinico had diagnosed it as myocardial infarction, but histological examination of the heart muscle revealed the true situation. Importance of proper diagnosis is emphasized, since hormonal treatment can be of help, at least in the chronic cases. 11 Polish, 3 German, 5 Western references.

1/1

32

OSWIEDCIMSKA, Irena; AFEK-KAMINSKA, Maria

A case of cardio-renal syndrome with signs of hypertension in a 6-year-old child. Pediat. pol. 38 no.3:309-316 '63.

1. Z Kliniki Chorob Zakaznych Wieku Dzieciecego AM w Warszawie Kierownik: prof. dr med. J. Bogdanowicz i z Pracowni Anatomico-patologicznej Szpitala Zakaznego nr 1 Kierownik: dr med. M. Afek-Kaminska.

(HYPERTENSION, RENAL)  
(HEART DEFECTS, CONGENITAL)  
(KIDNEY DISEASES)  
(ABNORMALITIES)

GEPNER-WOZNIEMSKA, Maria; LEWICKA, Teresa; AFEK-KAMINSKA, Maria

Aplasia of the erythroblastic system co-existing with a benign tumor of the thymus. Pol. arch. med. wewnet. 34 no.3:367-372 '64

1. Z Oddzialu Chorob Wewnetrznych Instytutu Hematologii w Warszawie (kierownik: doc.dr.med. S.Pawelski) oraz ze Szpitala Zakaznego Nr.1 w Warszawie (Dyrektor: dr.med. A. Krysztof).

\*

AFELT, Zofia

Properties of spinal frog preparation in relation to the level of the spinal transection. Acta biol. exp. 23 no.3: 155-164 '63.

1. Department of Neurophysiology, The Nencki Institute of Experiment Biology, Warsaw 22, Poland.  
(SPINAL CORD) (REFLEX) (PHYSIOLOGY)

AFELT, Zofia

Locomotor reactions in a chronic spinal preparation of the frog.  
Acta biol. exp. (Warsz.) 25 no.3:161-172 '65.

1. Department of Neurophysiology, The Nencki Institute of  
Experimental Biology, Warsaw 22, Poland.

AFELT, Zofia; JANKOWSKI, Kazimierz

Relation between the ambulation pattern and architectonics  
of the spinobulbar junction in the frog *Rana esc.* Acta biol.  
exp. (Warsz.) 25 no.3:173-176 '65.

1. Department of Neurophysiology, The Nencki Institute of  
Experimental Biology, Warsaw 22, Poland.

ACCESSION NR: AP4044914

S/0226/64/000/004/0080/0085

AUTHOR: Afenchenko, O. G.

TITLE: Wedge pressing of metal powders;

SOURCE: Poroshkovaya metallurgiya, no. 4, 1964, 80-85

TOPIC TAGS: powder metallurgy, powder pressing, wedge pressing, powder wedge pressing

ABSTRACT: A new technique of wedge pressing is described which makes it possible to obtain thick sheets and rectangular bars of large cross section from metal powders using low power equipment. Information is available on the pressing of 3050 x 6100 mm sheets having a thickness of 0.5-1.5 mm. The design of the wedge press is shown in Fig. 1 of the Enclosure. Pressing is done in die 2 by punch 1 with a bevel at the lower edge. The operation is cyclic; as a result, the powder is pressed into a strip with a width equal to that of the die. Fig. 2 of the Enclosure shows the behavior of the powder under the punch. The following equation, which can be used to determine the needed tool dimensions, describes the procedure of wedge pressing:

$$l = h_k \frac{k_2 - 1}{\rho}$$

(1)

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ACCESSION NR: AP4044914

in which  $l$  is the projection of the inclined part of the punch,  $h_k$  is the final height of the pressing zone,  $k_2$  is a pressing coefficient determined from the densities before and after pressing, and  $f_n$  is a frictional coefficient. This equation is geometrical, being taken from Fig. 2. A numerical example is given of the use of this equation. Other equations are then derived which were used for designing tools for a 60-ton press for iron powder sheets 11 mm thick and 50 mm wide. In this press, some powder was forced out during pressing, the powder did not require preliminary leveling, the density increased at lower speeds and the produced sheet was bent slightly toward the punch. Due to these factors, mainly the first, the initial equation was changed to

$$l = h_k \frac{k_2 - 1}{\operatorname{tg}(\alpha_u - \Delta\alpha)}, \quad (2)$$

where  $\alpha_u$  is the angle of inclination of the instrument and  $\Delta\alpha$  is an angle determined by the volume of powder flowing out. Sheet bending was caused by unequal density along the height of the sheet. Wedge pressing may be performed on any press, but the best machines are hydraulic presses with electro-mechanical multipliers. Further study of this method may lead to the design of new machines for obtaining large diameter rings made of metal powders by the two-sided wedge pressing method illustrated in Fig. 3 of the Enclosure. The further elucidation of the theory of wedge pressing will aid the future development of powder metallurgy.

Card 2/5

ACCESSION NR: AP4044914

Orig. art. has: 5 figures, 2 equations and 1 table.

ASSOCIATION: Gor'kovskiy politekhnicheskij Institut im. Zhdanova (Gor'kiy Poly-technical Institute)

SUBMITTED: 09Mar63

ENCL: 02

SUB CODE: MM

NO REF SOV: 004

OTHER: 000

Card 3/5

ACCESSION NR: AP4044914

ENCLOSURE: 01

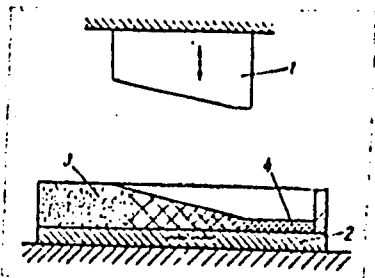


Fig. 1. Diagram of wedge pressing:  
1 - punch; 2 - die; 3 - filled-in  
powder; 4 - pressed product.

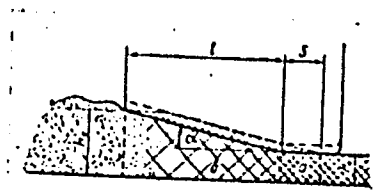


Fig. 2. Geometrical diagram  
of the process:  
a - zone of final pressing;  
b - zone of preliminary  
pressing.

Card 4/5

KRICHMAR, S.I.; AFENDIK, K.F.

Nature of polarization in the anodic dissolution of copper in concentrated solutions of  $H_3PO_4$ . Dokl. AN SSSR 159 no.2:405-408 N '64. (MIRA 17:12)

1. Dneprodzerzhinskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektного instituta azotnoy promyshlennosti i produktov organicheskogo sinteza. Predstavleno akademikom A.N. Frumkinym.

AFENDIK, L. G.

Otsenka pogreshnosti pri chislennom integrirovanii po sposobu shtermera. Prikl. mat. i mekh., 1 (1937-1938), 557-562.

SO: Mathematics in the USSR, 1917-1947  
edited by Kurosh, A.G.,  
Markushevich, A.I.,  
Rashevskiy, P.K.  
Moscow-Leningrad, 1948

AFENDIK, L. G.

O chislennom integrirovanii metodom shtermera. Dnepropetrovsk. Nauchn. zap. un-ta, otd. fiz.-matem., 1:1 (1938) 85-93.

SO: Mathematics in the USSR, 1917-1947  
edited by Kurosh, A.G.,  
Markushevich, A.I.,  
Rashevskiy, P.K.  
Moscow-Leningrad, 1948

AFENDIK, L.G.

Deformation of plastic materials during torsion tests. Dop. -  
AN URSR no.2:3-11 '49. (MLRA 9:9)

1. L'vivs'kiy <sup>teor.</sup> fiddil matematichnoi teorii <sup>plastich.</sup> prushnoshti institutu  
matematiki AN URSR. Predstaviv diysniy chlen AN URSR G.M. Savin.  
(Deformations (Mechanics)) (Plastics)

AFENDIK, L. G.

USSR/Engineering - Stresses, Bars                      Feb 50  
Torsion

"Plastic Torsion of Cylindrical Bars," L. G. Afendik, V. G. Bessonov, Inst of Math, Acad Sci Ukrainian SSR, 7 1/2 pp

"Zavod Lab" Vol XVI, No 2

Emphasizes increasing importance of torsion tests in studying mechanical properties of metals, describes experiments on subject, and concludes, that, in cases of large angular twist, formulas from theory of finite deformations must be used for determining deformations, and

159M23

USSR/Engineering - Stresses, Bars (Contd) Feb 50

effect of anisotropy on mechanical properties of plastic materials is quite noticeable. Important factor in torsion is origination of longitudinal compression of material for particles located nearer bar surface, and development of longitudinal tension in bar core. Later conclusion is reverse of that made by S. P. Timoshenko in his consideration of stresses in highly twisted cylindrical bars.

159M23



Mathematical Reviews  
Vol. 14 No. 10  
Nov. 1953  
Mechanics

*Strout* (handwritten)  
Afendik, L. G. Some questions of the theory of finite deformations. Ukrain. Mat. Zhurnal 3, 98-117 (1951). (Russian)  
The author derives the strain coefficients for finite deformations referred to the undeformed and deformed states, and relations between them. All the results appear to be well known.  
L. M. Milne-Thomson (Greenwich).  
*EH* (handwritten)

**AFENDIK, L.G.**

Topics in the theory of large plastic deformations. Nauch.zap. IMA  
L'viv.fil. AN URSR no.1:121-140 '53. (MIRA 8:11)  
(Deformations (Mechanics))

AFENDIK, L.G.

Plasticity and energy storage capacity of metals subjected to impact  
tensile stresses. Nauch. zap. IMA L'viv. fil. AN URSS. Ser. mash.3  
no.2:5-16 '54. (MIRA 8:11)  
(Deformations (Mechanics)) (Steel--Testing)

AFENDIK, L.G.

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SOV/124-58-8-9337

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 8, p 137 (USSR)

AUTHORS: Afendik, L.G., Shekhter, L.I.

TITLE: A Tensile Stress-strain Investigation of Tubular Specimens of Polycrystalline Metals Subject to Stricture (Issledovaniye napryazheniy i deformatsiy pri rastyazhenii trubchatykh obraztsov iz polikristallicheskikh metallov, obrazuyushchikh sheyku)

PERIODICAL: Nauchn. zap. In-ta mashinoved. i avtomatiki. AN UkrSSR, 1957, Vol 6, pp 100-108

ABSTRACT: See RZhMekh, 1958, Nr 8, abstract 9336.

Card 1/1

AFENDIK, L. G.

5(4)

PHASE I BOOK EXPLOITATION

SOV/2610

Akademiya nauk Ukrayins'koyi RSR. Instytut mashynoznavstva ta avtomatyky

Deyaki pytannya fizyko-khimichnoyi mekhaniky metaliv  
(Physical, Chemical, and Mechanical Properties of Metals)  
Kyiv, 1958. 142 p. 1,000 copies printed.

Resp. Ed.: H.V. Karpenko, Doctor of Technical Sciences; Ed. of  
Publishing House: V.I. Fedzkovs'kyy; Tech. Ed.: V.I. Yurchyshyn.

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

COVERAGE: The collection of 15 articles in 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 phenomenon of corrosion fatigue and the effect of various liquid media upon such fatigue. Methods of investigation are described

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Physical, Chemical, and Mechanical (Cont.)	SOV/2610
Karpenko, H.V. New Concepts on the Mechanism of Corrosion Fatigue	47
Yanchyshyn, F.P. Effect of Agressive Liquid Media on the Fatigue Strength of Steel Subjected to Stress Concentrations	53
Yatsyuk, A.I. Absence of Direct Relationship Between the Fatigue Strength and Corrosion Resistance of Steel	75
Karpenko, H.V. and F.P. Yanchyshyn. Effect of the Tapping Temperature of 40KH Steel Upon its Corrosion Resistance and its Corrosion-Fatigue Strength	83
Stepurenko, V.T. Corrosion Resistance of "45" Steel	88
Stepurenko, V.T. Corrosion-Fatigue Strength of "45" Steel in Hydro-sulphuric Solutions [Acid ]	97

Card 3/5

Physical, Chemical, and Mechanical : (Cont.)

SOV/2610

Yatsyuk, A.I., V.T. Stepurenko, and F.P. Yanchyshyn, Methods of  
Investigating the Fatigue Strength of Metals in Aggressive Liquid  
Media with the NU Testing Machine

140

AVAILABLE: Library of Congress (TA465.A42)

Card 5/5

TM/gmp  
12-22-59



10.7200

32620

S/137/61/000/011/081/123  
A060/A101

AUTHOR: Afendik, L.G.

TITLE: Deformation anisotropy of mechanical characteristics of polycrystalline metals for certain non-monotonous processes of plastic deformation

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 11, 1961, 48-49, abstract 11Zh288. ("Dokl. L'vovsk. politekhn. in-ta", 1958, 2 No 2, 72 - 76)

TEXT: The deformation anisotropy for two-stage processes of plastic deforming of structural steels was studied. The violation of the monotony of the deformation process occurs abruptly in passing from the first deformation stage to the second, and the directions of the principal axes of deformation were retained. The following processes were investigated: tension - compression, tension - pure shear, 2-axial restrained compression - tension or compression in different directions. A (deviator) strength-anisotropy tensor with components expressing the influence of the local oriented structure micro-

X

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Deformation anisotropy.....

32620  
S/137/61/000/011/081/123  
A060/A101

variations upon the plastic deformation process, was introduced to describe the features of the deformation anisotropy at moderate temperatures. These components were determined on the basis of the experimental data under the condition that the tensor of the considered stressed state together with the strength anisotropy tensor should satisfy the equation of plastic deformation of the anisotropically strengthened material. In investigating the deformation anisotropy of mechanical characteristics it was established that in all the cases when the directions of the principal axes of the shears vary sharply, the resistance to further plastic deformation was considerably decreased. Moreover, after passing from single-axis tension in one direction to single-axis compression in the perpendicular direction or from compression in one direction to tension in the perpendicular direction, the resistance to plastic deformation increased noticeably. All the characteristic features of deformation anisotropy are described by means of the strength anisotropy tensor. The existing discrepancy between the experimental and the calculated values of deformation components is small, and is apparently related to the influence of some little anisotropy of the initial state.

X

Z. Fridman

[Abstracter's note: Complete translation]

Card 2/2

AUTHOR: Afendik, L. G. SOV/126-6-2-16/34

TITLE: Features of the Step-wise Monotonous Processes of Plastic Deformation of Steels. I.  
(Osobennosti stupenchato-monotonnykh protsessov plasticheskogo deformirovaniya staley. I)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1958, Vol 6, Nr 2, pp 304-310 (USSR)

ABSTRACT: Polycrystalline bodies, the dimensions of which are sufficiently large compared to those of individual crystals, can be considered quasi-isotropic if the crystallites are chaotically orientated. However, experiments have shown that isotropy in the case of plastic deformation is observed only when the process of deformation is monotonous. If the monotonous nature of the plastic deformation of a polycrystalline metal or alloy is disturbed in one way or another, an anisotropy is observed in its mechanical properties. The author refers to the anisotropy caused by plastic deformation as "deformation anisotropy". The relations governing plastic deformation of polycrystals under simple loading conditions are known to a greater or lesser extent; the

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SOV/126-6-2-16/34

Features of the Step-wise Monotonous Processes of Plastic Deformation of Steels. I.

direction of the main stresses and their ratios remain constant and the process of deformation is monotonous. The attempts of certain authors (Refs.1-3) to apply to non-monotonous processes the "plastic flow" theory is, in the view of the author of this paper, not quite appropriate since the features of the deformation anisotropy and mechanical ageing are not taken into consideration. In this paper the author describes results of investigations of step-wise-monotonous processes of plastic deformation of carbon engineering steels at room temperature. In the experiments the directions of the main deformation axes were maintained constant but the directions of the deformations themselves and (which is an important factor) the directions of the main macro-slips were changed when passing from one stage of the tests to the next. The thereby detected anisotropy of the mechanical properties, and particularly the anisotropy in work hardening, is characterised by the components of the "hardening anisotropy" vector.

Card 2/5 The experimental investigations of two-stage processes

SOV/126-6-2-16/34

Features of the Step-wise Monotonous Processes of Plastic Deformation of Steels. I.

of plastic deformation of preliminarily annealed engineering steels revealed the following features: after uniaxial tension or compression up to residual deformations not exceeding 20%, the values of the modulus of elasticity  $E$  for various directions differ from the initial values obtained for the quasi-isotropic state by not more than 3%; when the change-over from the first stage of plastic deformation to the second is accompanied by a change in direction in at least one of the main directions of slip, the resistance to further plastic deformation decreased compared to the respective value for the monotonous process; appearance of new main slip directions which previously equalled zero is accompanied by a certain increase of the resistance to plastic deformation. In the last chapter experimental results are described relating to particular cases of two-stage processes of plastic deformation for preliminarily annealed specimens of the steels 10, 20 and 30. During the first stage uniaxial tension, uniaxial compression and pure shear was applied in three mutually perpendicular directions. For

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SOV/126-6-2-16/34

Features of the Step-wise Monotonous Processes of Plastic Deformation of Steels. I.

the tensile and compression tests cylindrical specimens of 6 mm dia., were used; for reducing friction at the end faces of the specimen, lead inter-plates and lubrication was used. The shear tests were effected by axial compression of tubular specimens with a simultaneous increase of the internal hydraulic pressure in such a way that the axial and the radial stresses were equal in magnitude. Furthermore, during the first stage of deformation large-size specimens were tested until certain values of residual deformation were reached. Following that, from these, small specimens were produced which were orientated in the direction of the main deformation axis of the first stage. Then, in the second stage, the deformation was produced by uniaxial tension, uniaxial compression and pure shear. The obtained results are graphed in Figs.1-4, p 309. The work hardening anisotropy tensor components for the two-stage deformation tests for the Steel 30 are expressed

Card 4/5 approximately by the relations:

SOV/126-6-2-16/34

Features of the Step-wise Monotonous Processes of Plastic  
Deformation of Steels. I.

$$\left. \begin{aligned} |\alpha_{12}| = |\alpha_{31}| &= \frac{6.8 (e_1^0)^{0.50}}{(1+e_1^0) e_1^{0.38}}, \left[ \frac{\text{kg}}{\text{mm}^2} \right] (e_1 \geq 0.004) \\ |\alpha_{23}| &= \frac{31.0 (e_1^0)^{0.75}}{(1+e_1^0)^{7.10}}, \left[ \frac{\text{kg}}{\text{mm}^2} \right] (e_1 \geq 0.030) \end{aligned} \right\}$$

There are 4 figures and 6 references, 5 of which are  
Soviet, 1 English.

ASSOCIATION: L'vovskiy politekhnicheskiy institut (L'vov  
Polytechnical Institute)

SUBMITTED: October 11, 1956

Card 5/5    1. Steel--Deformation    2. Plastic flow--Theory    3. Steel--  
Mechanical properties    4. Steel--Test methods    5. Mathematics--  
Applications

AUTHOR: Afendik, L. G. SOV/126-7-6-18/24

TITLE: Characteristics of the Continuous Gradual Plastic Deformation Processes of Steels. II

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 7, Nr 6, pp 910-914 (USSR)

ABSTRACT: In the present paper the anisotropic nature of the relationships between stresses and deformations for continuous stepwise plastic deformation processes and the influence of relaxation and mechanical ageing on the deformation and anisotropy of mechanical properties of structural steels are considered. The paper is essentially mathematical. In Fig 1 curves are plotted which show the dependence of the ratios  $e_1/e_3$  and  $e_1''/e_3''$  for cross-sectional deformations on the intensity of secondary deformation  $e_i$  for Steel 30. Data for steels 10 and 30, characteristic for the change of the components  $\alpha_{12}$  and  $\alpha_{31} = -\alpha_{12}$  of the tensor of anisotropy in hardening in connection with an increase of the time interval between the first and second steps of deformation of from 30 min to 24 hours, are shown in the

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SOV/126-7-6-18/24

Characteristics of the Continuous ~~Gradual~~ Plastic Deformation Processes of Steels. II

table, p 913. The author arrives at the following conclusions:

1) A quasi-isotropy of mechanical properties of steels on plastic deformation is observed only for continuous deformation processes. Disturbances in the monotonous change of the main macroslips lead to different forms of deformational anisotropy.

2) The characteristics of deformational anisotropy for monotonous stepwise plastic deformation processes, in which the directions of the main deformation axes are preserved but the monotony of the main slips is disturbed on transition from one deformation step to another, can be expressed by the tensor of anisotropy of hardening with components  $\alpha_{kl}$  ( $k, l = 1, 2, 3; k \neq l$ ). The components of this tensor are determined according to the deviations of the stress intensities observed from those intensities which would have existed in isotropic hardening.

3) One of the important characteristics of the monotonous stepwise processes of plastic deformation of steels

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SOV/126-7-6-18/24

Characteristics of the Continuous Gradual Plastic Deformation Processes of Steels. II

the  
is the lowering of/resistance to plastic deformation as the result of change in direction of at least one main macroslip and some increase of this resistance if new main slips arise which reached a value of 0 earlier.

4) For the investigated two-step processes of plastic deformation of steels the tensor components of anisotropy in hardening can be represented with the help of the fraction:

$$\alpha_{k\ell} = \delta(\text{sign } \delta g_{k\ell}) f_{k\ell}(e_i^0, e_i) \varphi_{k\ell}(t).$$

5) The anisotropic nature of the relationships between deformation components and stress can be expressed by the equations

$$(D_e) = \frac{3}{2} \frac{e_i}{\sigma_i} \left[ (D_\sigma) + (D_\alpha) \right] - \frac{1}{2G} (D_\alpha),$$

$$(D_{e'}) = \frac{1}{2G} (D_\sigma),$$

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NOV/126-7-6-18/24

Characteristics of the Continuous Gradual Plastic Deformation  
Processes of Steels. II

$$(D_{e''}) = \left( \frac{3}{2} \frac{e_i}{\sigma_i} - \frac{1}{2G} \right) [(D_{\sigma}) + (D_{\alpha})]$$

6) Relaxation and ageing processes decrease the magnitude of the tensor components of hardening anisotropy and lower the effect of deformation anisotropy. The deformation anisotropy of mechanical properties approaches a somewhat stationary state.

There are 1 figure, 1 table and 1 Soviet reference.

ASSOCIATION: L'vovskiy politekhnicheskii institut  
(L'vov Polytechnical Institute)

SUBMITTED: October 11, 1956 (Initially)  
May 8, 1957 (After revision)

Card 4/4

S/137/62/000/006/104/163  
A052/A101

AUTHOR: Afendik, L. G.

TITLE: Monotonous plastic deformation of a complex-loaded steel

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 6, 1962, 28, abstract 6I169  
("Dokl. L'vovsk. politekhn. in-ta", 1961, 5, no. 1, Mekhanika, 3 - 7)

TEXT: The purpose of the study was, by means of measuring the deformations of the sample in the direction of compressive stresses, to verify the assumption that the considerable deviations of experimental data from the theory of elastic-plastic deformations observed previously are observed only when the monotony of plastic deformation is upset. Under monotony it is understood that the main deformation axes are maintained constant in the process of deformation. CT 20 (St 20) samples 48 x 48 mm in cross-section and 90 mm high were deformed under constricted bi-axial monotonous compression. On the basis of experimental data various criteria of the theory of elastic-plastic deformations (the relation of the free lateral expansion  $e_3$  to the intensity of deformation  $e_1$  and also Lodet parameters  $\mu_\sigma$  and  $\mu_\epsilon$ ) were computed. It is shown that if the ratio  $e_3/e_1$  changes

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Monotonous plastic deformation...

S/137/62/000/006/104/163  
A052/A101

with a change of  $e_1$  in accordance with the theory of elastic-plastic deformations, the parameters  $\mu_\sigma$  and  $\mu_e$  differ considerably from one another, which points to the deviations from the conditions of proportionality of stress and deformation deviators.

I. Kop'yev

[Abstracter's note: Complete translation]

✓

Card 2/2

18(5),14(5)  
AUTHORS:

SOV/127-59-2-1/21  
Mel'nikov, N.V., Man'kovskiy, G.I., Afendikov, N.N.,  
Simkin, B.A.

TITLE:

On the Tasks in the Development of the Iron-Ore Industry in the Kursk Magnetic-Anomaly (Zadachi razvitiya zhelezorudnoy promyshlennosti na Kurskoy magnitnoy anomalii)

PERIODICAL:

Gornyy zhurnal, 1959, Nr 2, pp 3-5 (USSR)

ABSTRACT:

The authors recite a long series of tasks which must be fulfilled in order to complete the development of the mining- and heavy-industry basin of Kursk - Belgorod. The territory to be exploited is about 600 km long and 100 km wide. The deposits are 40 to 60 m thick in the North, 300 to 350 m and even more in the South. The advantages of the local ore are said to be easy recuperation, rich iron contents (69%), low percentage of silica, and in many cases the possibility of using open pits. Iron-ore deposits of the Belgorod areas are estimated to be 15 to 17 billion tons. The Pogrometskaya deposits (in the center

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SOV/127-59-2-1/21

On the Tasks in the Development of the Iron-Ore Industry in the Kursk Magnetic-Anomaly

of the magnetic anomalies occurring at Novyy Oskol) are said to contain more than 350 million tons. Ore layers in the **Lebedinskoye, Mikhaylovskoye, Yuzhno-Lebedinskoye, Stoylenskoye** deposits are suitable for open-pit mining. There is much water in the entire KMA (Kursk Magnetic-Anomaly). The stage of operations at several points of the mining area is shortly described, and prospects for operations in the next years or at the end of the running 7-Year-Plan are given. A huge excavator ESh-14/75 is being assembled in the **Lebedinskiy open-pit**. The access RR as well the power transmission line are already completed in the **Mikhaylovskoye area**. A table is given showing the estimated deposits, the prospective annual output, the amount of rock to be removed and the strip coefficient at 5 open-pit areas: **Lebedinskiy (osnovnoy and yuzhnyy), Stoylenskiy, Mikhaylovskiy, Kurba-  
kinskiy**. The **Gostishevskoye** deposits are said to

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SOV/127-59-2-1/21

On the Tasks in the Development of the Iron-Ore Industry in the Kursk Magnetic-Anomaly

contain about 6 billion tons. The **Yakovlevskoye deposits** in the area of Belgorod will furnish about 15 million tons of rich ore yearly. Special preliminary tasks are listed which must be quickly carried out by the Institut gornogo dela AN SSSR (Institute of Mining attached to the AS SSSR), by the Ukrainskiy nauchno-issledovatel'skiy institut organizatsii i mekhanizatsii shakhtnogo stroitel'stva (Ukrainian Scientific Research Institute for the Organization and Mechanization of Mine Construction), and by the Yuzhgiproruda Institute. The tasks concern especially the **Yakovlevskoye deposits** with their particular problems of freezing mines and mine drainage. There is 1 table.

Card 3/3



The Tasks of Defining the Kursk Magnetic Anomaly

SOV/30-59-3-48/61

work on the site of the Kursk Anomaly was said to be the discovery of rich iron ore deposits which are to be found in low depths and which can be exploited by means of open-air working. For the purpose of organizing further work of prospecting the program of extensive geological investigations and plotting-drilling must be extended. Also the work of lowering water levels must be intensified. The largest deposits of rich iron ores are to be found in the Belgorod region. They are, however, very deep and must therefore be exploited by underground working. Preparatory measures must therefore be taken for the building of shafts, which work is to be carried out by the Economic Councils of Belgorod and Kursk. The conference mentioned the success achieved by the first flotation factory of the USSR in the "K. Aruda" Kombinat and recommended that a flotation department be established in the new Yuzhno-Korobkovskaya factory.

Card 2/2

AFENDIKOV, N.N., kandidat tekhnicheskikh nauk

Further problems in the exploitation of the Kursk Magnetic  
Anomaly. Vest.AN SSSR 30 no.7:104-105 J1 '60.  
(MIRA 13:7)

(Kursk Magnetic Anomaly)

SHEVYAKOV, L.D., akademik, otv. red.[deceased]; MAN'KOVSKIY, G.I., red.; AFENDIKOV, N.N., kand. tekhn. nauk, red.; YERSHOV, N.N., kand. tekhn. nauk, red.; LIBERMAN, Yu.M., red.; PANOV, A.D., red.[deceased]; RUSHCHINSKIY, M.V., red.; KRASOVSKIY, I.P., red.izd-va; PROZOROVSKAYA, V.L., tekhn. red.; LOMILINA, L.N., tekhn. red.

[Rock pressure and the lining of vertical shafts] Gornoe davlenie i krep' vertikal'nykh stvolov. Pod red. L.D. Sheviakova. Moskva, Gosgortekhzdat, 1963. 211 p.  
(MIRA 16:11)

1. Moscow. Institut gornogo dela imeni A.A.Skochinskogo.  
(Rock pressure) (Shaft sinking)

AFENDIKOV, S.

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USSR/Radio Receivers  
Loudspeakers

Oct 48

"USSR Loudspeakers," S. Afendikov, 1½ pp

"Radio" No 10

Describes VETPER-1-46 loud-speaker, and that  
installed in VEF-M-557 receiver.

LC

22/49T101

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AFENDIKOV, S.

USSR/Radio - Loud-Speakers,  
Electrodynamic

Sep 49

"The R-10 Loud-Speaker," S. Afendikov, 1 p

"Radio" No 9

The R-10 loud-speaker (horn, power of 10 volt-  
amperes) is an electrodynamic speaker with a  
permanent magnet. The coefficient of nonlinear  
distortion at 100 cycles does not exceed 10%.  
It is designed primarily for radiofication of  
squares and streets.

1/50187

AFENDIKOV, S.

Loudspeakers for Wired Radio Networks, S. Afendikov. Radio no.6, pp 18-21, June '53.

Gives structural features, photographs, and characteristics of the types DGM, DGS, Baykal, and Sever room loudspeakers, the DGF-5, R-10, and R-100 street loudspeakers, and the DGR-25 park loudspeakers. All are produced by plants of the Min. of Elec. Power Stations and Electric Industry.

261T66

AFENDULI, K.; SAPA, I.

Tool for making hooks for use in producing reedwork panels.  
Stroi. mat. 2 no.10:39 0 '56. (MIRA 12:3)  
(Reed (Betany))

AFENDULI, K. P.

"Device for Winding Up Springs and Bending the Ends," Stan. i Instr., 3, 1952



1. YELAGIN, V. P., ENGB.; AFENDULLI, K. P.

2. USSR 600

4. Punching Machinery

7. Machine for simultaneous punching of holes in motorcycle shields, Vest. mash, 32, No. 9, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

USSR/ Miscellaneous - Springs

Card 1/1 : Pub. 103 - 12/29

Authors : Afenduli, K. P.

Title : Manufacture of springs with pretension

Periodical : Stan. i instr. 9, 27-29, Sep 1954

Abstract : The mechanical characteristics of pretensioned springs are outlined. A method of manufacturing pretension springs is briefly described. Drawings.

Institution : ...

Submitted : ...

AFENDULI, K. P.

USSR/Miscellaneous---machine construction

Card 1/1

Author : Afenduli, K. P., engineer

Title : Machine for making blanks of welding electrodes

Periodical : Vest. mash. 34/3, 70, Mar/1954

Abstract : A description of a powered machine making welding electrode blanks from material in the liquid state. This machine reduces the number of workmen required from four to one as formerly four machines were used. Drawings.

Institution : .....

Submitted : .....

AFENDULI, K.F., inzh.

Welded sealing-gland compensator. Mashinostroenie no.6s31-32  
N-D '64 (MIRA 18s2)

CATEGORY : USSR  
CATEGORY : Soil Science. Fertilizers  
ABS. JOUR: Ref Zhur -Biologiya, No. 5 , 1959, No. 20085  
AUTHOR : Afendalov, K.P.  
LIST :  
TITLE : Mechanized Application of Granulated Super-phosphate into Hills  
ORIG. PUB.: Udobreniye i Urozhay, 1958, No.2, 49-53

ABSTRACT : Two years of field experiments on the common Chernozem of Stalingradskaya Oblast' proved that the most effective fertilization for hills of corn was the application of granulated P<sub>2</sub>O<sub>5</sub> in doses of 5 kg per hectare. The method of placing this fertilizer which assured the greatest yield of corn grain (4.2 to 5.5 centners/ha) was separate insertion into each hill 2-3 cm below and 4-5 cm away from the seeds. Application of P<sub>2</sub>O<sub>5</sub> by this method

CARD: 1/2

COUNTRY :  
CATEGORY :

REF. JOUR.: Ref Zhur -Biologiya, No. , 1959, No.

AUTHOR :  
INSTIT. :  
TITLE :

ORIG. PUB.:

ABSTRACT : together with small additions of Naa and  
K<sub>2</sub>O (5 kg of N and K<sub>2</sub>O per ha) added to the  
yield (2.1-2.2 centners/ha) less than P  
alone in the same dose. The author gives a  
detailed description and diagram of a drill  
equipped for insertion of fertilizer into the  
hills. an adaptation of the SKG-6 drill.  
-- O.P. Medvedeva

CARD : 2/2

30(1)

SOV/25-59-8-45/48

AUTHOR: Afendulov, K.P.

TITLE: They Write to Us

PERIODICAL: Nauka i zhizn', 1959, Nr 8, p 78 (USSR)

ABSTRACT: During the 1956-1958 period, the Agricultural Experimental Station of Stalinskaya Oblast' carried out investigations concerning the effect of fertilization on the accumulation of protein in the green mass and the grain of corn. The experiments have shown that phosphorus fertilization of corn increases the qualitative composition of albumen in the grain. The introduction of 25 kg of granulated superphosphate into 1 hectare of land gave an increase of 5.3% of water-soluble albumen and a reduction of 4% alcohol soluble albumen.

Card 1/2

SOV/25-59-8-45/48

They Write to Us

ASSOCIATION: Stalinskaya oblast'naya se'lskokhoyaystvennaya opyt-  
naya stantsiya (Stalinskaya Oblast' Agricultural  
Experimental Station)

Card 2/2



AFENDULOV, K. P.

Effect of fertilizers on the organogenesis of corn inflorescence.  
Nauka i pered. op v sel'khoz 9 no.6:54-56 Je '59.

(MIRA 12:9)

1. Direktor Stalinskoy oblastnoy sel'skokhozyaystvennoy opytnoy  
stantsii.

(Corn (Maize)--Fertilizers and manures)

AFENDULOV, Konstantin Panteleyevich; CHERNOV, M.P., red.; SAVCHENKO, M.S.,  
tekhn.red.

[Fertilizer application to corn] Udobrennia kukurudzy. Kyiv,  
Derzh.vyd-vo sil's'kohospodars'koi lit-ry URSS, 1960. 78 p.  
(MIRA 14:1)

(Corn (Maize)--Fertilizers and manures)

AFENDULOV, K. P.

Cand Agr Sci - (diss) "Efficiency of organic and mineral fertilizers as a function of procedures of administering them for corn under conditions of the Stalinskaya Oblast." Khar'kov, 1961. 25 pp; with diagrams; (Ministry of Agriculture Ukrainian SSR, Khar'kov Order of Labor Red Banner Agricultural Inst imeni V. V. Dokuchayev); 200 copies; price not given; list of author's works on pp 24-25 (20 entries); (KL, 6-61 sup, 230)

AFENDULOV, K.P., kand. sel'skokhoz. nauk; BOYKO, Ye.I., kand. sel'skokhoz. nauk; PEREMERAY, Ye.A., kand. sel'skokhoz. nauk; PODURAZHNYI, P.K. kand. sel'skokhoz. nauk; PONAMARENKO, F.K.

Practices in the intensive use of land. Zemledelie 27 no.6:15-20 Je '65. (MIRA 18:9)

1. Chernigovskaya oblastnaya sel'skokhozyaystvennaya opytnaya stantsiya. 2. Glavnyy agronom opytnogo khozyaystva Chernigovskoy oblastnoy sel'skokhozyaystvennoy stantsii (for Ponamarenko).