YATSENKO-KHMELEVSKIY, A.A.; SHILKINA, I.A.

New finds and a review of the genus Sahnioxylon. Paleont. zhur. no.3:100-110 '64. (MIRA 18:2)

1. Leningradskaya lesotekhnicheskaya akademiya imeni S.M. Kirova i Botanicheskiy institut imeni V.L. Komarova AN SSSR.

FEDORENKO, Nikolay Prokof'yevich; SHILKINA, Raisa Nikolayevna; KOROTKIY, A.A., red.; KARPOVA, T.V., tekhn. red.

[Seven-year plan in the chemical industry (in numbers and facts); manual for teachers] Semiletka khimicheskoi promyshlennosti (v tsifrakh i faktakh); posobie dlia uchitelei. Moskva, Gos. uzhebno-pedagog. izd-vo M-va prosv. RSFSR, 1961. 102 p. (MIRA 14:12)
(Chemical industries)

SHILKINA, V.V.

Results of public inspection of the fulfillment of plans of scientific research work and the introduction of the achievements of science and technology in the national economy. Der. prom. 13 no.7:29-30 Jl '64. (MIRA 17:11)

TUMANYAN, B.Ye.; KALIKHEVICH, F.F.; IVAKINA, T.Ya.; BRATIYCHUK, M.V.; BELENKO, V.I.; KRYLOV, A.G.; SENTSOVA, Yu.Ye.; SHILKINA, Z.S.; YUREVICH, V.A.; ZAKHAROV, V.N.

Results of photographic observations of artificial earth satellites. Biul.sta.opt.nabl.isk.sput.Zem. no.29:37-44 '62.
(MIRA 16:2)

1. Nachal'nik Yerevanskoy stantsii nablyudeniya iskusstvennykh sputnikov Zemli (for Tumanyan). 2. Nikolayevskaya stantsiya nablyudeniya iskusstvennykh sputnikov Zemli (for Kalikhevich, Ivakina). 3. Nachal'nik Uzhgorodskoy stantsii nablyudeniya iskusstvennykh sputnikov Zemli (for Bratiychuk). 4. Zvenigorodskaya stantsiya Astronomicheskogo soveta AN SSSR (for Belenko, Krylov, Sentsova, Shilkina, Yurevich). 5. Nachal'nik Irkutskoy stantsii nablyudeniya iskusstvennykh sputnikov Zemli (for Zakharov).
(Artificial satellites—Tracking)

NEVEL'SKIY, A.V.; BELENKO, V.I.; KRYLOV, A.A.; SENTSOVA, Yu.Ye.; SHILKINA, Z.S.; YUREVICH, V.A.

Results of photographic observations of artificial earth satellites. Biul. sta. opt. nabl. isk. sput. Zem. no.30: 22-26 '62. (MIRA 16:6)

1. Sverdlovskaya stantsiya nablyudeniya Iskustvennogo sputnika Zemli (for Nevel'skiy). 2. Zvenigorodskaya stantsiya Astronomicheskogo soveta AN SSSR (for all except Nevel'skiy).
(Artificial satellites—Tracking)

KRYLOV, A.G.; ROMANOVA, G.V.; SENTSOVA, Yu.Ye.; SHILKINA, Z.S.; YUREVICH, V.A.

Station of the Astronomical Council of the Academy of Sciences of the U.S.S.R. (1960). Biul. sta. opt. nabl. isk. sput. Zem. no.32:33-37 '63.

Station of the Astronomical Council of the Academy of Sciences of the U.S.S.R. (1960). Ibid.:37-43 (MIRA 17:7)

1. Stantsiya Astronomicheskogo soveta AN SSSR.

L 27214-65 EED-2/EWT(1)/EWT(d)/FBD/FSF(h)/FSS-2/FS(v)-3/EEC(k)-2/EWG(s)-2/EWG(v)/EWA(d)/T/EEC(t)/EEC(c)-2/EED-2/EED(b)-3 Pn-4/Po-4/Pe-5/Pq-4/Pac-4/Pg-4/Pae-2/Pi-4/Pk-4/Pl-4 IJP(c) TT/GW/WR

ACCESSION NR: AT5003548 S/2816/63/000/032/0037/0043

AUTHORS: Krylov, A. G.; Yurevich, V. A.; Sentsova, Yu. Ye.; Romanova, G. V.; Shilkina, Z. S.

TITLE: none

SOURCE: AN SSSR. Astronomicheskiy sovet. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli, no. 32, 1963, 37-43

TOPIC TAGS: artificial satellite, satellite tracking, satellite tracking camera/NAFA-3s/25 camera, KIM 3 microscope, Ural computer, satellite 1960 ι_1

ABSTRACT: Observations were made on the satellite 1960 ι_1 in July and August 1961. A NAFA-3s/25 camera was used. Observers were A. G. Krylov and V. A. Yurevich. Measurements were made by R. M. Belenko and I. A. Khasanov on a KIM-3 microscope. Computations were made by the Kiselev method for two sets of three reference stars and by the Turner method. Yu. Ye. Sentsova did the computations on the Ural computer. The next-to-last column of the table shows the maximal possible error in coordinates determined from negatives where the optical center could be reliably found. Figures I and II in the last column refer to two different NAFA-3s/25 cameras. G. V. Romanova and Z. S. Shilkina participated in the work. Results of

Card 1/3

L 27214-65

ACCESSION NR: AT5003548

187 observations are presented in a table, part of which is reproduced on the Enclosure. Orig. art. has: 1 table.

ASSOCIATION: Stantsiya Astronomicheskogo soveta AN SSSR (Station of the Astronomical Council, AN SSSR)

SUBMITTED: 17Dec62 ENCL: 01 SUB CODE: SV, DC

NO REF SOV: 000 OTHER: 000

Card 2/3

L 27214-65

ACCESSION NR: AT5003548

ENCLOSURE: 01

Station of the Astronomical Council AN SSSR

No.	Date	U. T.	Δ T	α (1950.0)	δ (1950.0)		
1	2	3	4	5	6	7	8
	1961		1960				
1.	July 29	$20^h28^m26^s.532$	$\pm0^s.005$	$22^h31^m35^s.0$	$14^o32'19''$		I
.....							
187.	August 8	23 23 43.768	0.007	23 57 11.7	-18 46 05	16	II

Card 3/3

L 25288-65 EEO-2/EWT(d)/FBD/FSF(h)/FSS-2/EWT(1)/FS(v)-3/EEC(k)-2/EWA(d)/T-2/EWA(b)/EEC(c)-2/EED-2/FCS(k)/EED(b)-3/EWA(h)/EWA(c) Pg-4/Pi-4/Pk-4/Pl-4/Pn-4/Po-4/Pq-4/Pv-4/Pac-4/Pae-2/Peb IJP(c) GW/WR

ACCESSION NR: AT5003547 S/2816/63/000/032/0033/0037

AUTHORS: Krylov, A. G.; Romanova, G. V.; Sentsova, Yu. Ye.; Shilkina, Z. S.; Yurevich, V. A.

TITLE: [Observation of artificial satellites]

SOURCE: AN SSSR. Astronomicheskiy sovet. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli, no. 32, 1963, 33-37

TOPIC TAGS: artificial satellite, satellite tracking, satellite tracking camera/satellite 1960 ι_1, NAFA-3s/25 camera, KIM 3 microscope, Ural computer

ABSTRACT: Observations were made on the satellite 1960 ι_1 in June 1961. The camera used was a NAFA-3s/25. Observers were A. G. Krylov and V. A. Yurevich. Measurements were made on a KIM-3 microscope by R. M. Belenko and I. M. Panferov. Computations were made by the Kiselev method for two sets of three reference stars and by the Turner method. Yu. Ye. Sentsova did the computations on the Ural computer. Observation times were reduced to standard time. The next to last column of the table gives the possible maximal error in coordinates, determined from negatives where the position of optical center was reliably known. Figures I and II in the last column indicate two different cameras (of the same type). G. V. Romanova and

Card 1/3

L 25288-65

ACCESSION NR: AT5003547

Z. S. Shilkina participated in the work. Results of 123 observations are given in a table, part of which is shown on the Enclosure. Orig. art. has: 1 table.

ASSOCIATION: Stantsiya Astronomicheskogo soveta AN SSSR (Station of the Astronomical Council AN SSSR)

SUBMITTED: 02Nov62 ENCL: 01 SUB CODE: SV, DC

NO REF SOV: 000 OTHER: 000

Card 2/3

L 25288-65

ACCESSION NR: AT5003547

ENCLOSURE: 01

0

Station of the Astronomical Council AN SSSR

No. No. P /P	Date	U.T.	Δ T	α (1950.0)	δ (1950.0)		
1	2	3	4	5	6	7	8
			I 9 6 0 1				
	1961						
1.	June 25	$20^h59^m56^s.404$	$\pm 0^s.008$	$00^h12^m14^s.3$	$12^o16'59''$	9"	I
....							
123.	26	22 29 52.794	0 .006	02 33 46 .4	01 37 17	11	II

Card 3/3

L 27217-65 EEO-2/EWT(d)/FBD/FSF(h)/FSS-2/EWT(1)/FS(v)-3/EEC(k)-2/EWC(v)/EWA(d)/T/EEC(c)-2/EED-2/EED(b)-3 Pn-4/Po-4/Pe-5/Pq-4/Pac-4/Pg-4/Pae-2/Pi-4/Pk-4/Pl-4 IJP(c) GW-2/WR

ACCESSION NR: AT5003550 S/2816/63/000/032/0047/0048

AUTHORS: Sentsova, Yu. Ye.; Shilkina, Z. S.; Yurevich, V. A.

TITLE: none

SOURCE: AN SSSR. Astronomicheskiy sovet. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli, no. 32, 1963, 47-48

TOPIC TAGS: satellite, artificial earth satellite, satellite tracking, earth satellite tracking, satellite observation, satellite track analysis/ NAFA MK 75 camera, Ural electronic computer, KIM 3 microscope, UIM 21 microscope, satellite 1960 ε_3, satellite 1960 σ_1 (Midas 3), satellite 1960 ι_1 (Echo I)

ABSTRACT: Results obtained in photographic observations of three satellites (1960 ε_3, 1960 σ_1 (Midas-3), and 1960 ι_1 (Echo-I)) are presented. Camera NAFA MK-75 was used. V. A. Yurevich acted as observer, while measurements were obtained by R. M. Belenko on the KIM-3 microscope and by I. M. Panferova on the UIM-21 microscope. Data were processed according to the method of A. A. Kiselev, involving two sets of three reference stars. Yu. Ye. Sentsova carried out the calculations on the electronic computer "Ural." Moments of observations were reduced to standard time. Z. S. Shilkina and V. A. Yurevich took part in the data processing. Results

Card 1/3

L 27217-65

ACCESSION NR: AT5003550

are presented as 16 entries in the table shown partially on the Enclosure. Orig. art. has: 1 table.

ASSOCIATION: Stantsiya Astronomicheskogo soveta AN SSSR (Station of Astronomical Council, AN SSSR)

SUBMITTED: 02Nov62 ENCL: 01 SUB CODE: SV, DC

NO REF SOV: 000 OTHER: 000

Card 2/3

L 27217-65
ACCESSION NR: AT5003550

ENCLOSURE: 01

No.	Date	U. T.	ΔT	α(1950.0)	δ(1950.0)
1	2	3	4	5	6
			1960 ε_3		
1.	May 1961 29	$20^h42^m25^s.886$	±0.014	$14^h50^m31^s.3$	+42°07'07"
.....					
14.	April 17	00 27 02.624	0.003	16 34 29.2	-14 22 18

Card 3/3

SENTSOVA, Yu.Ye.; SHILKINA, Z.S.; YUREVICH, V.A.

Station of the Astronomical Council of the Academy of Sciences of the U.S.S.R. (1960 ε_3, 1960 δ, , 1960 ζ,). Biul. sta. opt. nabl. isk. sput. Zem. no.32:47-48 '63. (MIRA 17:7)

1. Stantsiya Astronomicheskogo soveta AN SSSR.

BELENKO, V.I.; BELENKO, R.M.; KRYLOV, A.G.; PANFEROV, I.M.; ROMANOVA, G.V.; SENTSOVA, Yu.le.; SHILKINA, Z.S.

Zvenigorod Station of the Astronomical Council of the Academy of Sciences of the U.S.S.R. (1960). Biul. sta. opt. nabl. isk. sput. Zem. no.33:29-33 '63. (MIRA 17:7)

1. Zvenigorodskaya stantsiya Astronomicheskogo soveta AN SSSR.

L 27196-65 EEO-2/EWT(d)/FRD/FSF(h)/FSS-2/EWT(l)/FS(v)-3/EEC(k)-2/EWG(v)/EWA(d)/T/EEC(c)-2/EED-2/EED(b)-3 Pn-4/Po-4/Pe-5/Pc-4/Pac-4/Pg-4/Pae-2/Pi-4/Pk-4/Pl-4 IJP(c) GM/WR S/2816/63/000/033/0029/0033

ACCESSION NR: AT5003597

AUTHORS: Belenko, V. I.; Belenko, R. M.; Krylov, A. G.; Panferov, I. M.; Romanova, G. V.; Sentsova, Yu. Ye.; Shilkina, Z. S.

TITLE: [Results of Satellite Observations]

SOURCE: AN SSSR. Astronomicheskiy sovet. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli, no. 33, 1963, 29-33

TOPIC TAGS: artificial satellite, satellite tracking, satellite tracking camera/ satellite 1960 ι_1, NAFA 3s/25 camera, KIM 3 microscope, Ural computer

ABSTRACT: Observations were made on the satellite 1960 ι_1 during August and October 1961. A NAFA-3s/25 camera was used. The observer was A. G. Krylov. Measurements were made on a KIM-3 microscope by R. M. Belenko, I. M. Panferov, and G. V. Romanova. Computations were made by the Kiselev method for two sets of three reference stars and by the Turner method. Yu. Ye. Sentsova did the calculations on the Ural computer. Observation times were reduced to standard time. The last column of the table shows possible maximal error in coordinates because of unreliability of locating ontical center within 1 cm. V. I. Belenko and Z. S. Shilkina participated in the work. Results of 125 observations are given in a table, part

Card 1/3

L 27196-65
ACCESSION NR: AT5003597

of which is reproduced on the Enclosure. Orig. art. has: 1 table.

ASSOCIATION: Zvenigorodskaya stantsiya Astronomicheskogo soveta AN SSSR
(Zvenigorodka Station of the Astronomical Council AN SSSR)

SUBMITTED: 17Feb63 ENCL: 01 SUB CODE: SV, DC

NO REF SOV: 000 OTHER: 000

Card 2/3

L 27197-65 FSF(h)/FSS-2/EWT(1)/FS(v)-3/EEC(k)-2/EWG(v)/EWA(d)/T/EED(b)-3
Pn-4/Pe-5/Pae-2/Pi-4 IJP(c) GW

ACCESSION NR: AT5003773 S/2816/63/000/036/0031/0033

AUTHORS: Belenko, R. M.; Krylov, A. G.; Panferov, I. M.; Sentsova, Yu. Ye.; Shilkina, Z. S.; Yurevich, V. A.

TITLE: [Results of Satellite Observations]

SOURCE: AN SSSR. Astronomicheskiy sovet. Byulleten' stantsiy opticheskogo nablyudeniya iskusstvennykh sputnikov Zemli, no. 36, 1963, 31-33

TOPIC TAGS: artificial satellite, satellite tracking camera, satellite track analysis/ satellite 1961 $\alpha\varepsilon_1$, satellite 1961 α_1, satellite 1962 ζ_1, satellite 1960 ε_2, satellite 1960 ε_3, satellite 1960 ξ_2, NAFA 3s/25 camera, KIM 3 microscope, UIM 21 microscope, Ural 1 computer

ABSTRACT: Observations were made in April, May, and June 1962 on the satellites 1961 $\alpha\varepsilon_1$, 1961 α_1, 1962 ζ_1, 1960 ε_2, 1960 ε_3, and 1962 ξ_2. The observers were A. G. Krylov (indicated by II in the table) and V. A. Yurevich (I in table). Both used NAFA-3s/25 cameras. Measurements were made by R. M. Belenko (with a KIM-3 microscope) and I. M. Panferov (with a UIM-21 microscope). Processing was done by the Turner method, by Yu. Ye. Sentsova using a Ural-1 electronic computer. For

Card 1/3 2

L 197-65

ACCESSION NR: AT5003773

control of the computed coordinates, the coordinates of one reference star were determined, along with the coordinates of points on the satellite track. The next to the last column of the table shows deviation of the computed coordinates of the reference star from the coordinates given in the Boss catalogue, if these deviations exceed 6". Observation times were reduced to standard time by Z. S. Shilkina. Results of 85 observations are presented in a table, partially reproduced in the Enclosure. Orig. art. has: 1 table.

ASSOCIATION: Astronomicheskiy sovet AN SSSR (Stantsiya No. 1072)(The Astronomical Council of the AN SSSR (Station No. 1072))

SUBMITTED: 16Nov63 ENCL: 01 SUB CODE: SV, DC

NO REF SOV: 000 OTHER: 000

Card 2/3

SHILKO, A.

Amateur rifle club in the factory. Voen. znan. 35 no.8:21 Ag '59. (MIRA 12:12)

1. Predsedatel' soveta samodeyatel'nogo strelkovo-sportivnogo kluba Chelyabinskogo metallurgicheskogo zavoda.
(Chelyabinsk--Rifle practice)

SHILKO, Ivan Petrovich

[Diet for patients] Pitanie bol'nogo. Sverdlovsk, Sverdlovskoe knizhnoe izd-vo, 1958. 77 p. (MIRA 13:6)
(DIET IN DISEASE)

SHILKO, M.O. [Shylko, M.O.], dotsent; FURLET, A.A., assistent

Treatment of weak labor with spherophysine. Ped., akush. i gin. 22 no.3:47-50 '60. (MIRA 14:4)

1. Kafedra akusherstva i ginekologii (zav. - dotsent M.O.Shilko) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta (direktor - dotsent S.I.Georgiyevskiy).
(LABOR (OBSTETRICS)) (SPHEROPHYSINE)

SHILKO, M.O. [Shylko, M.O.], dotsent

Increasing the contractile capacity of the uterus in cesarean section. Ped., akush. i gin. 23 no.1:51-53 '61. (MIRA 14:6)

1. Kafedra akusherstva i ginekologii pediatricheskogo fakul'teta (zav.kafedroy - dotsent M.O.Shilko) Krymskogo meditsinskogo instituta (direktor - dotsent S.I.Georgiievs'kyi [Heorhiievs'kyi, S.I.]).

(CESAREAN SECTION) (NOVOCAINE) (UTERUS)

SHILKO, N.A.

Shilko, N.A. "Treating infected abortions with 'akrikhin'" Zdravookhraneniye Kazakhstana, 1948, No. 8, p. 17-18.

SO: U-3042, 11 March 53, (Letopis 'nykh Statey, No. 9, 1949)

SHILKO, N.A., dotsent; SUMOVSKAYA, A.Ye., kandidat meditsinskikh nauk; FEDINA. N.N.,

Isopromedol as an analgesic in labor. Akush. i gin. no.4:59-61 Jl-Ag '55. (MLRA 9:1)

1. Iz kafedry akusherstva i ginekologii pediatricheskogo fakul'teta Saratovskogo meditsinskogo instituta.

(ANALGESICS,
isopromedol in labor)
(LABOR, anesth. and analgesia
isopromedol)

SHILKO, N.A., dotsent.

Vaginal stimulation with ether as a method for treating uterine atony in the early puerperium. Akush. i gin. 32 no.1:31-35 Ja-F '56 (MLRA 9:6)

1. Iz kafedry akusherstva i ginekologii (zav.-prof. I.F. Pantsevich) Krymskogo meditsinskogo instituta imeni I.V. Stalina.

(UTERUS, dis.
atony in early puerperium, ther., vaginal irritation with ether)
(ETHER, ETHYL, ther. use
irritation of vagina, in ther. of uterine atony in early puerperium)
(PUERPERIUM, compl.
atony of uterus, ther. with irritation of Vagina with ethyl ether)

SHILKO, N.A., dotsent; YERMAKOVA, A.V., ordinator

Comparative evaluation of injuries in children and mother from the application of forceps by the TSov'ianov method and by the usual method. Akush.i gin. no.6:16-19 '60. (MIRA 14:1)

1. Iz kafedry akusherstva i ginekologii (zav. - dotsent N.A. Shilko) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta.
(LABOR, COMPLICATED) (BIRTH INJURIES)

SHILKO, N.A., dotsent

Content of basic coagulation factors in blood during labor and the early puerperium. Akush.i gin. no.6:28-35 '61. (MIRA 14:12)

1. Iz kafedry akusherstva i ginekologii (zav. - dotsent N.A. Shilko) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta.
(BLOOD—COAGULATION) (LABOR (OBSTETRICS)) (PUERPERIUM)

SHILKO, N.A., dotsent; FURLET, A.A., assistent; KALASHNIKOV, V.P., student VI kursa

Physiological condition of the uterus in women in early stages of the puerperium. Akush.i gin. 37 no.2:39-44 F '61.
(MIRA 14:3)

1. Iz kafedry akusherstva i ginekologii (zav. - N.A. Shilko) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta.
(UTERUS) (PUERPERIUM)

SHILKO, N.A., dotsent

Effect of external uterine massage on its contractile capacity. Akush.i gin. no.5:30-35 '61. (MIRA 15:1)

1. Iz kafedry akusherstva i ginekologii (zav. - dotsent N.A. Shilko) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta.

(UTERUS) (MASSAGE)

SHILKO, N.A., dotsent

Content of some basic components of the blood coagulation system in the fetus immediately after birth. Vop.okh.mat.i det. 7 no.9:8-13 S '62. (MIRA 15:12)

1. Iz kafedry akusherstva i ginekologii pediatricheskogo fakul'teta (zav. - dotsent N.A.Shilko) Krymskogo meditsinskogo instituta.

(BLOOD--COAGULATION) (INFANTS (NEWBORN))

SHILKO, N.A.

Modified method for the determination of thrombotropin and prothrombin in the blood plasma. Lab.delo 8 no.5:9-14 My '62. (MIRA 15:12)

1. Kafedra akusherstva i ginekologii (zav. - dotsent N.A.Shilko) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta.
(PROTHROMBIN) (THROMBOTROPIN)

SHILKO, N.A., dotsent

Causes of hypofibrinogenemia and afibrinogenemia during labor and in the early postpartal period. Akush. i gin. no.2:52-59'63. (MIRA 16:10)

1. Iz kafedry akusherstva i ginekologii (zav. - dotsent N.A. Shilko) pediatricheskogo fakul'teta Krymskogo meditsinskogo instituta.
(BLOOD — DISEASES) (LABOR (OBSTETRICS))
(PUERPERIUM)

ACC NR: AP6013175 (A) SOURCE CODE: UR/0256/66/000/004/0075/0078

AUTHOR: Shilko, N. V.

ORG: None

TITLE: Painting steel machine parts under field conditions

SOURCE: Vestnik protivovozdushnoy oborony, no. 4, 1966, 75-78

TOPIC TAGS: paint, corrosion protection /138A paint, ALG-1 paint, ALG-5 paint

ABSTRACT: The author reviews various methods and procedures of painting steel parts of military equipment undergoing repair under field conditions. The work is usually done at temperatures higher than 5 C and humidities less than 80% in areas protected from wind and sun rays. The preparation of metal surfaces for painting is explained including cleaning, washing, drying, and, if necessary, the removal of old paints. The use of 138A paints is recommended for priming surfaces located in dry rooms. The surfaces affected by humid air or aggressive agents are to be primed with ALG-1 or ALG-5 oil paints. The ALG-1 contains only zinc chromats while the ALG-5 paint has an addition of zinc white. The advantages of priming by means of dipping (only for small parts) or by

Card 1/2

ACC NR: AP6013175

using brushes and sprayers are discussed. The drying time for a 138A first coat varies from 28 to 36 hr while for ALG-1 coat a time of 42 to 48 hr is needed. The second coat is laid by using only the 138A paint because this type of paint has good adhesive properties. About 2 hr are required for drying the second layer. If necessary, the second coat is covered by two or three layers of enamel paint of appropriate colors. The enamels are of nitro or chlorinated polyvinyl chloride composition. The time of drying is about 3 hr for the first enamel coat, 5 hr for the second layer, and 12 hr for the third. The use of enamels made on the base of synthetic resin is also mentioned. The procedures of enameling are discussed and some remedies for repairing cracks and flaws are recommended.

SUB CODE: 11/ SUBM DATE: None

Card 2/2

SHILKOV,A.P.; BALDIN,N.M.

Diagram for multiple station electric welding. Rats.i izobr.predl. v stroi.no.100:23-24 '54. (MLRA 8:10)
(Electric welding)

POLUKHIN, P. I., prof., doktor tekhn. anuk; FEDOSOV, N. M., prof.;
KRUPIN, A. V., kand. tekhn. nauk; MATEROV, V. A., inzh.;
SHILKOV, B. N., inzh.; MAKSIMOV, B. M., inzh.

Increase in width during rolling with drawing dies. Sbor. Inst. stali i splav. no.40:100-106 '62. (MIRA 16:1)

(Drawing(Metalwork))

S/057/60/030/008/016/019
B019/B060

AUTHORS: Korobochko, Yu. S., Shilkov, K. S.

TITLE: A Model of a Cylindrical Air-core Betatron

PERIODICAL: Zhurnal tekhnicheskoy fiziki, 1960, Vol. 30, No. 8, pp. 981-983

TEXT: The betatron described here consists of two solenoids telescoped within each other (Fig. 1) which are separated by two glass tubes. Details of the construction and the electron injection are discussed. Two quartz reflectors are utilized for securing the stability of the electron motion. L. A. Rivlin is mentioned in this connection. The bremsstrahlung was measured with a scintillation counter, the gamma radiation output was observed in different phases of the electron injection and at different potentials on the reflectors. As compared to similar constructions, the betatron described offers the advantage that its intensity can be considerably augmented by increasing the length of the system. It is said to be well suited for certain purposes. The authors thank Professor A. P. Komar for his interest and advice. There is 1 figure.

Card 1/2

A Model of a Cylindrical Air-core Betatron

S/057/60/030/008/016/019
B019/B060

ASSOCIATION: Leningradskiy politekhnicheskiy institut im. M. I. Kalinina (Leningrad Polytechnic Institute im. M. I. Kalinin)

SUBMITTED: March 1, 1960

V B

Card 2/2

41571
S/057/62/032/010/009/010
B104/B102

24.6740

AUTHORS: Korobochko, Yu. S., and Shilkov, K. S.

TITLE: Model of a cylindrical ironless betatron with axial magnetic focusing

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v. 32, no. 10, 1962, 1245-1247

TEXT: An ironless cylindrical betatron model in which the electron motion was axially stabilized by electrostatic reflectors was reported in a previous paper (Yu. S. Korobochko and K. S. Shilkov, ZhTF, XXX, no. 8, 981, 1960). Since the negatively charged electrostatic reflectors had been found to hinder particle injection, the second model had two additional magnetic lenses (Fig. 1) to provide with axial focusing. The equilibrium orbital radius was 40 mm, the outer coil had one turn per cm, its diameter was 157mm and its length 600 mm. The inner coil had 5 turns per cm, a diameter of 40 mm and a length of 600 mm. Five of the turns of the reflecting lenses were connected in series to an outer coil and ten turns to an outer d-c or a-c source. The reflectance of the lenses could be varied. A Kerst injector was fed with voltage pulses of 15 μsec and amplitudes up to 35 kv,

Card 1/3

Model of a cylindrical ...

the magnetic system was fed with current pulses of 240 μsec. An FG-235A ignotron was used as discharge exciter. Results: (1) the intensity of x-ray emission increases strongly as the injection energy and the emission current increase. At a distance of 1 m from the target a maximum x-ray intensity of 600 μr/min was measured; (2) lens and solenoid must be well adjusted in order to ensure a maximum yield; (3) the highest intensity is attained if the injector is inserted into the accelerator space to such a depth that the electron-emitting wires are at a distance of 5-8 mm from the midplane of the neighboring lenses; (4) a change in the reflectance of the outer lenses does not notably affect the intensity; From an electron counter oscillogram it can be seen that two escape mechanisms exist: During the injection period, electrons which do not enter the accelerating cycle are lost to the walls, and electrons are spontaneously lost to the walls. The spontaneous accumulation of electrons on the chamber walls was intensified at the end of the cycle. It is attributed to a kind of magnetic resonance. There are 2 figures.

ASSOCIATION: Leningradskiy politekhnicheskiy institut (Leningrad Polytechnic Institute)

Card 2/3

SHILKOV, M.A.; ROZHIN, M.M.

Economic efficiency of various plans for the development of seams in the Kizel Basin. Nauch. trudy Perm NIUI no. 4:58-64 '62. (MIRA 17:6)

MOSKVIN, V.A.; SHILKOV, M.A.

Relation between the extent of repairs on mine workings and their excavation depth. Nauch. trudy PermNIUI no.6:95-101 '64. (MIRA 18:2)

30(11)

AUTHOR: Shilkov, S., Inventor, Member of the CPSS Since 1919

SOV/29-59-2-24/41

TITLE: Good Fortune (Bol'shoye schast'ye)

PERIODICAL: Tekhnika molodezhi, 1959, Nr 2, p 27 (USSR)

ABSTRACT: To the question raised by the editors of the periodical "Tekhnika Molodezhi" how he imagined future to be S. Shilkov answered: "The Seven-Year Plan for the further development of our country will take us a big step forward on the way to Communism. When I returned in 1918 from the front to the village, I had to organize committees of poverty, komsomol and party organizations in my district. Later on, I was occupied with party work, established the sovkhoz, and worked as a chief mechanic in the factory. Now I am a pensioner. Now it would be time to take a rest. But no! - As a half grown-up I had already to work as a locksmith, lubricator and hammer-smith. With the spade I had to mend highways. Recently I have designed a universal high-speed milling machine which replaces manual labor in cleaning and building roads, and the building of squares and irrigation systems. My other machine, a motorless automatic loader, was shown at the All-Union Agricultural Exhibition.

Card 1/2

It is most fortunate to know that the results of one's modest work will help the people to attain Communism sooner."
There is 1 figure.

SHILKOV, V.

V. Shilkov, B. Vassiliyev, V. Pilasvky, A. Repnikov, N. Leiboshits, J. Roussakov, V. Kotchedamov, N. Khomoutetsky, T. Dubiago, A. Petrov, J. Denniseov, L. Medersky, E. Gladkova, E. Moskalenko

V. Shilkov, author of the following chapters: "Projects of Petersburg Planning 1737-1740", "A. V. Kvassov and I. E. Starov's works on the planning of Russian towns," "Four Drawings by Peter I for the planning of Peterhof," "The Architect Timothy Ussov" from the book Architectural Inheritance written by the Academy of Architecture of USSR and published in Leningrad and Moscow in 1953 by the State Publishing House for Literature on Building and Architecture. The book is a history of Russian architecture of the XVIII and XIX centuries, a selection of works by Leningrad architects and scientific workers.

L 21722-65 EWT(d)/EWT(l)/EWT(m)/FA/EWP(h)/T-2 AFWL S/0256/64/000/009/0057/0061
ACCESSION NR: AP5001585

AUTHOR: Shilkov, V. A. (Engineer, Captain)

TITLE: Rapid repair of airport pavements

SOURCE: Vestnik protivovozdushnoy oborony, no. 9, 1964, 57-61

TOPIC TAGS: civil engineering, concrete, reinforced concrete/ TR 14/22 2 saw

ABSTRACT: A time-motion efficiency study of the process of laying reinforced concrete slabs preformed to the dimensions 6.0 x 2.0 x 0.14 m was conducted. The formula $\Pi_э = \frac{T_{day}}{T_c} K_B X$ is given, where $\Pi_э$ is the exploitation productivity of the crane used for placing the slabs, T_{day} is the daily duration of slab laying, T_c is the duration of a work cycle of the crane, K_B is the coefficient of crane use in time, and X is the number of slabs placed during one cycle. T_c is, in turn, a function of seven time-variables representing a crane cycle broken into seven divisions of separate actions. Assuming a 5-man crew (1 crane operator and 4 riggers), the author comments on the relative times required to perform the

Card 1/2

L 21722-65
ACCESSION NR: AP5001585

specified actions. Night work is considered less productive than daytime work, even when illumination is present. A scheme is presented whereby uninterrupted performance is possible, even with crew changes in double shift operation. The use of a driver or assistant crane operator to move the crane to new positions is discussed. Placing 3 slabs at a time from a single crane position was found to be 1.5 times as quick as placing 2 slabs. The relative positioning of the crane and slab delivery truck is considered quite important. A discussion of the proper positioning method is given in accordance with the geometric parameter defined in Fig. 1 on the Enclosure. Correct use of the proper equipment can yield production as high as 150 slabs per shift, the record achieved by the unit commanded by Captain Zavoykin. The author recommends the use of the TR-14/22-4-2 saw for breaking up old pavements. Orig. art. has: 3 figures and 2 equations.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 01

SUB CODE: GO NR REF SOV: 000 OTHER: 000

Card 2/3

L 29960-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(b) MJW/JD/WB

ACCESSION NR: AR5003990 S/0277/64/000/010/0006/0006

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruktsii i raschet detaley mashin. Gidroprivod. Otd. vyp., Abs. 10.48.32

AUTHOR: Vasil'yev, I. V.; Fedosova, T. T.; Shilkov, V. A.

TITLE: Corrosion of metals under friction in an aggressive medium

CITED SOURCE: Tr. Vses. n.-i. i konstrukt. in-t khim. mashinostr. vyp. 45, 1963, 121-134

TOPIC TAGS: metal friction, metal corrosion, aggressive medium, corrosive medium, corrosion resistance, metal oxide film, metal failure, steel corrosion, steel 45, steel R 18, steel 1Kh18N9T, steel 2Kh13, steel 3Kh13, cast iron SCh18-36

TRANSLATION: The mechanism of corrosion under friction, the effect of corrosion under friction on the service life of connected parts, and a method for combatting corrosion under friction were studied. Tests on metals (steels 45, R 18, 1Kh18N9T, 2Kh13, and 3Kh13, and cast iron SCh18-36) for corrosion under friction in different media

Card 1/2

L 29960-65

ACCESSION NR: AR5003990

(air, water, 1% and 10% caustic soda) carried out on an MT-4 machine showed that the highest rate of metal failure is observed in an atmosphere of air, while the smallest is observed in a 10% solution of sodium hydroxide. With metallographic analysis, it was established that the effect of a liquid medium on corrosion failure of metals under friction is demonstrated above all by the formation of an oxide film on the friction surface protecting the metal from plastic deformation of a thin surface layer. The application of an electron diffraction method to the study of friction products made it possible to determine the structure of the films which form during corrosion in an air atmosphere as well as in liquid media. In this study it turned out that the metal friction products after the action of a liquid medium have a lower hardness on the Mohs scale than metal friction products after the action of an air atmosphere.

SUB CODE: MM, AS ENCL: 00

Card 2/2

L 11072-63 EWP(q)/EWT(m)/BDS--AFFTC/ASD--JD

ACCESSION NR: AP3001377 S/0148/63/000/005/0129/0135 60 59

AUTHOR: Astakhov, I. G.; Krupin, A. V.; Fedosov, N. M.; Shilkov, V. B.; Pustovalov, U. V.; Kontsevaya, Ye. M.

TITLE: Specific pressure during cold rolling of alloy E1602 and steel E1962

SOURCE: IVUZ. Chernaya metallurgiya, no. 5, 1963, 129-135

TOPIC TAGS: cold rolling, austenite (E1602), martensite (E1962), deformation, gage of flat product, lubrication characteristics, hardening temperature, cogging, yield strength, relative elongation

ABSTRACT: The change in specific pressure of austenite (E1602) and martensite (E1962) steel during cold rolling are examined as a function of deformation, gage of flat product, and lubrication characteristics. The influence of hardening temperature on cogging characteristics are studied at various specific pressures, and as a function of yield strength and relative elongation. Traditional rolling production practice and theory was confirmed quantitatively in measurements of change of specific pressure during cold rolling in relation to gage of flat product. Orig. art. has: 2 tables, 7 figures, and 4 references.

Moscow Inst. of Steel and Alloys

Card 1/2

SHIL'KO, V.I., inzh.

Studying the work of reinforced panels in transverse bending. Trudy BITM no.21:42-48 '64. (MIRA 18:8)

NIKOL'SKIY, Ye.N., doktor tekhn.nauk, prof.; PAVLUSHIN, G.P., inzh.; SHIL'KOV, V.I., inzh.

Longitudinal load test of a model of the body of ER-10 electric train cars. Trudy BITM no.21:10-18 '64. (MIRA 18:8)

RUSAKOV, G.K., kand. sel'khoz. nauk; MILYAVSKIY, I.O., kand. sel'khoz. nauk; SHILKO, V.P., kand. sel'khoz. nauk; MARTINENAS, A.N.; BELINSKIY, A.I., agr.-ekonom.; KARPUSHENKO, A.I., agr.-ekon. [deceased]; POSMITNYY, V.M., ekonom.; PANCHENKO, Ya.I., agr.-ekonom.; KVACHEV, V.M., agr.-ekonom.; SOBOLENKO, V.S.; KRAVTSOV, D.S., agronom.; LYSOV, V.F., ekonom.; SHLYAKHTIN, V.I., kand. ekon. nauk; TSYBUL'KO, F.Ye.; ORIKHOVSKIY, I.G., agr.-ekonom.; TATUREVICH, N.M., agr.-ekonom.; GARMASH, I.I.; NOSACHENKO, V.F., inzh.-ekonom.; MUKHTISULLIN, Sh.M., agr.-ekonom.; ROZENTSVAYG, A.L., agr.-ekonom.; BERLIN, M.Z., dots.; IVANOV, K.I., agr.-ekonom.; SILIN, A.G., ekonom.; LIKHOT, I.K.; CHANOV, G.I., kand. ekon. nauk; MIKHAYLOV, M.V., kand. ekon. nauk; GORELIK, L.Ya., red.

[Planning and economical operation on collective farms] Planirovanie i rezhim ekonomii v kolkhozakh. Moskva, Ekonomika, 1965. 258 p. (MIRA 18:5)

1. Zaveduyushchiy otdelom ekonomiki i organizatsii kolkhoznogo proizvodstva Nauchno-issledovatel'skogo instituta ekonomiki sel'skogo khozyaystva Litovskoy SSR (for Martinenas). 2. Zaveduyushchiy otdelom Stavropol'skogo krayevogo komiteta KPSS (for Likhot).

TISHCHENKO, I.G.; SKOROKHOD, O.R.; SHILKOVA, L.P.

Interaction of 4-diphenyl-3-amino-3-methyl hydroxy-2-butanone with metals. Vestsi AN BSSR.Ser.khim.nav no.2:131-135 '65. (MIRA 18:12)

S/148/60/000/009/023/025
A161/A030

AUTHORS: Lyakhovich, L.S., and Shilkova, T.S.

TITLE: The effect of phosphorus and boron on reversible brittleness in low-carbon nickel steel

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Chernaya metallurgiya, no. 9, 1960, 167-168

TEXT: The combined effect of phosphorus and boron on steel brittleness was studied in steel from two heats :

Heat	Designation (own)	Components content, in %							
		C	Si	Mn	Cr	Ni	S	P	B
No.1	15-H-1 15-H-2 15-H-3	0.12	0.19	0.73	0.11	1.30	0.026	0.012 0.060 0.114	-

Card 1/5

The effect of phosphorus and boron ...

Heat	Designation (own)	Components content, in %							
		C	Si	Mn	Cr	Ni	S	P	B
No.2	15-HP-1 15-HP-2 15-HP-3	0.13	0.25	0.58	0.13	1.17	0.03	0.025 0.063 0.103	0.0015

Ingots were forged into rods 32 mm in diameter and cut into blanks, and quenched from 950°C. All specimens were hardened throughout; no ferrite was found; austenite grain was of size 8. Tempering was at 450, 500, 550, 600 and 650° ; tempering for 1.5 hr; cooling by water quenching, and with the furnace (with 50°/hr). The results are shown in two graphs (Fig.1 and 2). As seen from the curves, P content of 0.114 drastically decreased the impact strength, and the cooling rate had an effect, particularly after tempering at 600°. The presence of boron increased the impact strength, which is most clear in steel with the highest P content. The impact streng was lower in steel with lower P content in temperature range 550-600°

Card 2/5

The effect of phosphorus and boron ...

in the presence of B, thus boron assisted the appearance of reversible temper brittleness. It is mentioned that an analogous effect of boron combined with phosphorus had been stated by the authors previously in medium-carbon steel (0.3% C). Conclusions: 1) The increased content of phosphorus in nickel steel assists the appearance of reversible temper brittleness; 2) The addition of boron into steel with higher phosphorus content assists reversible temper brittleness, but with a low phosphorus content, boron has no such effect. There are 2 figures.

ASSOCIATION: Chelyabinskiy politekhnicheskiy institut (Chelyabinsk Polytechnical Institute)

SUBMITTED: 27 February 1960

Card 3/5

The effect of phosphorus an boron ...

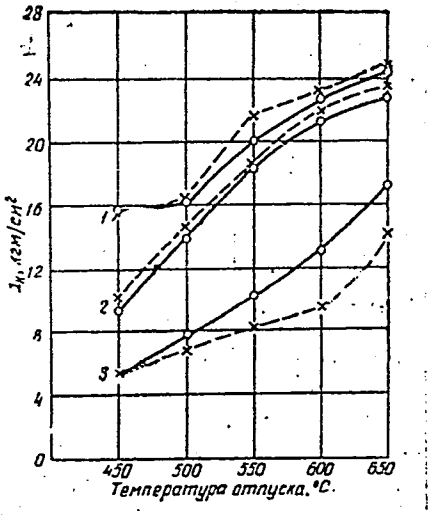


Fig. 1 - The effect of tempering temperature and phosphorus content on the impact strength (in kg/cm^2 ; tempering temperature up to 650°C).

1 - 15H-1 steel; 2 - 15H-2 ;
3 - 15H-3; ——— rapid cooling (in water); ------ slow cooling (50°/hr, with furnace)

Card 4/5

The effect of phosphorus and boron...

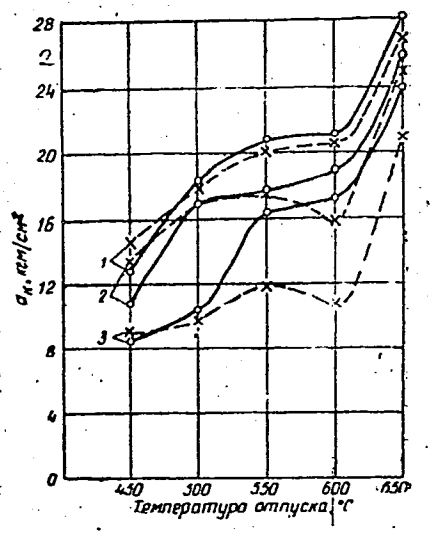


Fig. 2 - The effect of the tempering temperature and phosphorus content on the impact strength of steel:

1 - 15HP-1 steel;
2 - 15HP-2;
3 - 15HP-3

Card 5/5

S/137/63/000/002/028/034
A006/A101

AUTHORS: Lyakhovich, L. S., Shilkova, T. S.

TITLE: The effect of phosphorus, boron and carbon upon the ductility and temper brittleness of nickel steels

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 2, 1963, 65 - 66, abstract 21373 (In collection: "Novoye v metalloved. i tekhnol. term. obrabotki stali", Chelyabinsk, 1962, 107 - 120)

TEXT: The authors studied the effect of B admixture (0.0015%) and the P content (within 0.01 - 0.1%) upon the ductility and reversible temper brittleness of improved Ni 15 H (15N) and 30 H (30N) steels (in both steel grades the Ni content is about 1%). Forged rods, 15 mm in diameter, were produced from laboratory heats. The rods were quenched from 950°C (15N) and 850°C (30N). Tempering was performed at 450 - 650°C during 1.5 hours. It is shown that the nature of the effect of P upon ductility and temper brittleness of the investigated steels is the same: P reduces the ductility and promotes the appearance of temper brittleness. The higher the C content in the steel, the stronger the ef-

Card 1/2

fect of P. The addition of B increases also the effect of P. The nature of the C effect upon ductility does not change in dependence on B and P. However, the intensity of its effect depends also upon the amount of P and, possibly, B. In low-carbon steels B increases the ductility and reduces same in medium carbon steels. This effect is connected also with the P content: it appears only at a higher P content. In all steels B promotes the appearance of reversible temper brittleness. It is assumed that in steels, pure in respect to P, this effect is very insignificant. There are 15 references.

L. Yelagina

[Abstracter's note: Complete translation]

RAYTSES, V.B.; SHILKOVA, T.S.; VOSKOBOYNIKOVA, N.A.

Reviewed of A.A.IUrgenson's book "Nitriding in the power machinery industry." Metalloved. i term. obr. met. no.9:62-63 S '63.
(MIRA 16:10)

SHIL'KRAUT, V. L. Physician, Cand. Med. Sci.

Dissertation; "Physical Development and Health Conditions of School-Age Children in Closed Institutions." Second Moscow State Medical Inst., imeni I. V. Stalin, 29 Sep 47.

SO: Vechernyaya Moskva, Sep, 1947 (Project #17836)

SHIL'KRAUT, V.L.

Traskov's mixture for treating bronchial asthma in children as outpatients. Pediatriia no.9:89-90 S '57. (MIRA 10:12)

1. Iz Moskovskoy oblastnoy detskoy diagnosticheskoy poliklinik.
(ASTHMA)

SHIL'KRAUT, V.L., kand.med.nauk (Moskva)

Work of a pediatric consultation polyclinic. Sov.zdrav. 16 no.12: 42-45 D '57. (MIRA 11:1)
(HOSPITALS,
pediatric consultation polyclinic (Rus))

SHIL'KRUT, D.I. (L'vov)

USSR/Mathematics - Operational transformation by Efros FD-955

Card 1/1 Pub 85-9/11

Author : Shil'krut, D. I. (L'vov)

Title : A certain generalization of the Efros transformation

Periodical : Prikl. mat. i mekh. 18, 627-630, Sep/Oct 1954

Abstract : A transformation of parameters comprising a generalization of Efros' transformation (A. M. Efros et al. Operatsionnoye ischisleniye i konturnyye integraly, 1937 (Operational computation and contour integrals)) is analyzed. Applies his results to an example of computation of dynamics of a not perfectly elastic medium. Five references.

Institution : --

Submitted : December 10, 1953

SHIL'KRUT, D.I.

Longitudinal vibrations of an incompletely elastic semiendless rod. Nauch. zap. IMA AN URSR Ser. mashinoved. 4 no.3:33-42 '55. (MLRA 9:8)
(Elastic rods and wires--Vibration)

Shil'krut, D.I.

USSR / Mechanical Properties of Crystals and Polycrystallic Compounds. E-9

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9444

Author : Shil'krut, D.I.
Inst : L'vov Lumber Institute USSR
Title : Connection Between the Logarithmic Decrement of Attenuation and the Relative Attenuation of the Amplitude of Potential Energy (Cyclic Viscosity).

Orig Pub : Dokl. AN SSSR, 1955, 104, No 2, 237-238

Abstract : In work on the phenomena of incomplete elasticity it is assumed that the logarithmic decrement of attenuation of the amplitude of oscillations ($\hat{\delta}$) equals half the relative decrease in the amplitude of the potential energy per cycle ($\Delta\alpha/\alpha$), which follows from the assumption of the proportionality of the total oscillation energy (α) to the square of the amplitude of oscillation. It was established by many experimen-

Card : 1/2

USSR / Mechanical Properties of Crystals and Polycrystallic Compounds. E-9

Abs Jour : Ref Zhur - Fizika, No 4, 1957, No 9444

Abstract : tal investigations that during the deformation process itself, there occurs a change into account, the author proposes to assume that the coefficient of proportionality (c) depends on time, and then the connection between δ and α will be of the form $2\delta = \Delta\alpha/\alpha - \Delta c/c$ where $\Delta c/c$ is the relative change in c during one period.

Card : 2/2

SHIL'KRUT, D.I. (L'vov)

Wave propagation in incompletely elastic media. Izv.AN SSSR.Otd. tekh.nauk no.4:160-163 Ap '56. (MLRA 9:8)
(Elasticity) (Rheology)

SHIL'KRUT, D.I. (L'vov)

Problem for the thermal conductivity of two media. Prikl.mat.i mekh. 20 no.2:284-288 Mr-Ap '56. (MLRA 9:7)
(Heat--Condition)

SHILKRUT, D.I.

USSR/Physics

Card 1/2 Pub. 22 - 15/53

Authors : Shilkrut, D. I.

Title : Propagation velocity of elastic waves in an imperfectly elastic medium (speed of a signal)

Periodical : Dok. AN SSSR 106/1, 58-60, Jan 1, 1956

Abstract : An analysis is presented of the propagation of elastic waves (longitudinal, sound) in an imperfect medium (elastically-viscous). The analysis was conducted under the assumption that

$$\sigma(t) = b\left[\varepsilon(t) - \int_0^t \varphi(t-\tau)\varepsilon(\tau)\,d\tau\right]$$

expresses the necessary relationship in the quantities to satisfy the solution of the problem. In addition, the constant b (a dynamic modulus of elasticity) and the function $\varphi(t)$ (a monogonous of decaying function

Institution : L'wov Polytechnical Institute

Presented by: Academician P. A. Rebinder, July 6, 1955

Card 2/2 Pub. 22 - 15/43

Periodical : Dok. AN SSSR 106/1, 58-60, Jan 1, 1956

Abstract : expressing elastic imperfections of a medium or material) are determined experimentally. The analysis led to the following statement: propagation velocity of the signal, not of the wave front, is the real velocity of elastic waves propagating in an elastically imperfect medium. Seven references: 6 USSR, 1 USA (1938-1955).

SHIL'KRUT, D.I.

Mechanical vibration treatment of plastic materials. Dokl.AN SSSR 107 no.2:255-257 Mr '56. (MIRA 9:7)

1.L'vovskiy lesotekhnicheskiy institut. Predstavlena akademikom P.A. Rebinderem.
(Plastics--Vibration)

SOV/124-58-3-3585

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 138 (USSR)

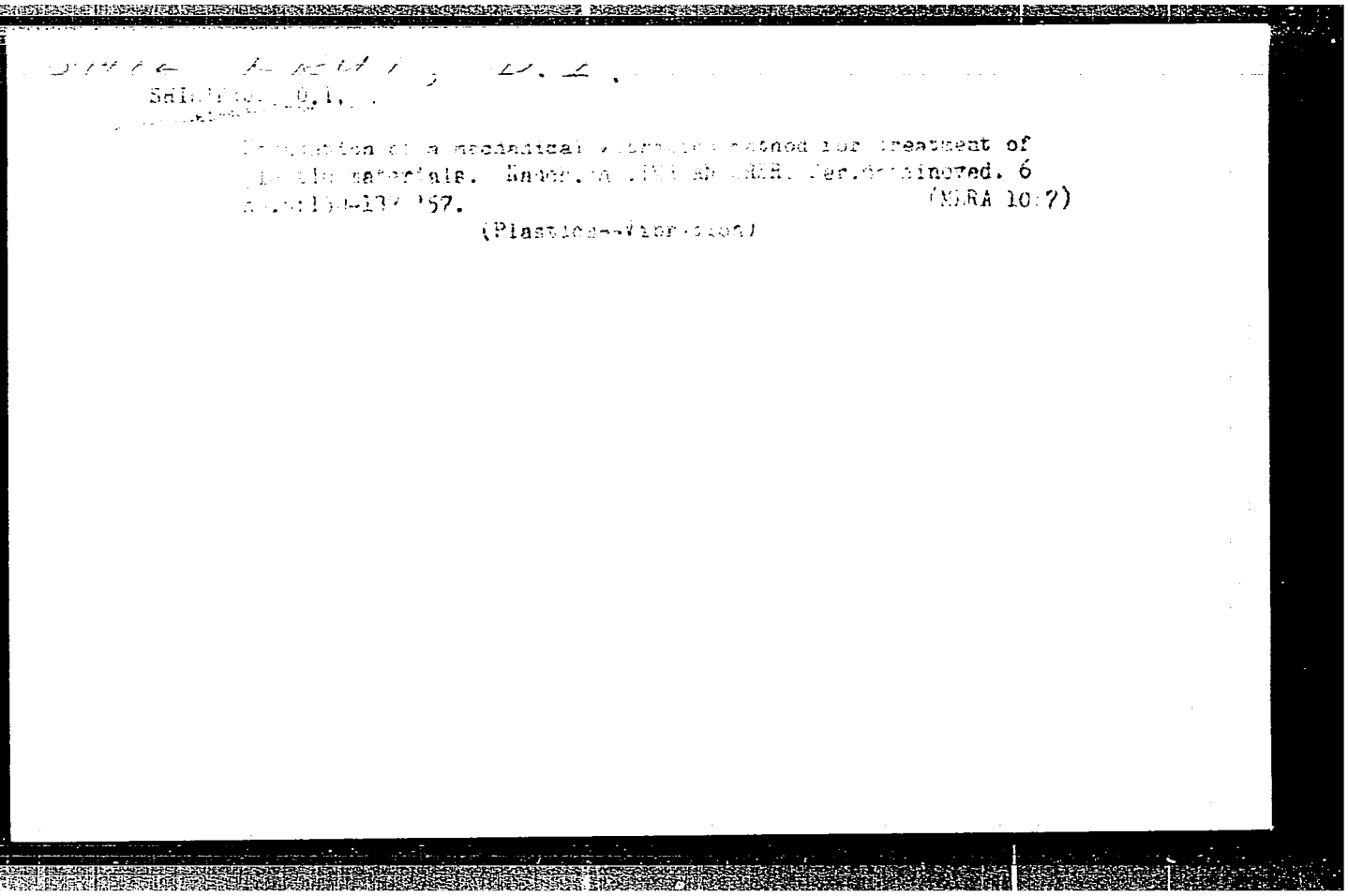
AUTHORS: Sin'kevich, A. L., Shil'krut, D. I.

TITLE: The Modulus of Elasticity of European Beech Wood (Modul' uprugosti drevesiny yevropeyskogo buka)

PERIODICAL: Nauchn. tr. L'vovsk. lesotekhn. in-t, 1957., Vol 3, pp 116-129

ABSTRACT: Bibliography entry

Card 1/1



Shishkin, G.I.

Investigation of a mechanical vibration method for treatment of plastic materials. Izv. vys. ucheb. zav.; chern. met. 6 no.4:163-170 '63. (MIRA 16:7)

(Plastics--Vibration)

SOV/122-58-6-25/37

AUTHORS: Shil'krut, D.I., Docent, Rukin, V.V., Smirnov, V.A. and Butenko, G.A., Engineers

TITLE: A Mechanical Vibrator with Independent Adjustment of Amplitude and Frequency (Mekhanicheskiy vibrator s nezavisimoy regulirovkoy amplitudy i chastoty)

PERIODICAL: Vestnik Mashinostroyeniya, 1958, Nr 6, pp 63-64 (USSR)

ABSTRACT: An experimental vibrating saw designed and tested at the vibration-cutting laboratory of the L'vovskiy lesotekhnicheskiy institut (L'vov Lumbering Technology Institute) is described with the help of a cross-sectional drawing. A single shaft rotates in bearings inside a sleeve, itself rotating in two plummer blocks. The central shaft carries the cutting disc saw at one end and is driven by a V-belt pulley at the other end. The rotating sleeve is driven by another V-belt pulley. Due to its eccentric position, this rotation produces oscillations at a frequency independent of the speed of the cutting spindle. The rdating sleeve is mounted inside a set of double

Card 1/2

SOV/122-58-6-25/37

A Mechanical Vibrator with Independent Adjustment of Amplitude and Frequency

eccentrics. The maximum frequency of vibrations is 14 000 cpm. A simple device is diagrammatically illustrated which absorbs the vibrations in one plane and transmits those at right angles.
There are 3 figures and 2 Soviet references.

Card 2/2

1. Cutting tools--Design 2. Cutting tools--Performance
3. Vibration--Applications

SHABUNIO, I.F.; SHIL'KRUT, D.I.; BUTENKO, G.A.

Natural tests used in the furniture industry. Der. prom. 7 no.1:12 Ja '58. (MIRA 11:1)

1. L'vovskiy lesotekhnicheskiy institut.
(Chairs--Testing)

24(6) SOV/20-122-1-18/44

AUTHOR: Shil'krut, D. I.

TITLE: Concerning the Theory of the Development of the Microcracks in Solid Bodies During the Processes of Deformation (K teorii razvitiya real'nykh mikrotreshchin v tverdykh telakh v protsessakh deformatsii)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 1, pp 69-72 (USSR)

ABSTRACT: In the first part of this paper, the author discusses some previous investigations of this subject. The author assumes the existence of a throughgoing two-dimensional internal microcrack (length 2 a, aperture angle enclosed by its ends - θ, length of its circumference - 4 l). In the infinity, the plate is assumed to be expanded by the tensions σ which are perpendicular to the major axis of the microcrack (plane problem). By means of the method of A. A. Griffith (Griffits) the author finds the values of the critical tension σ_k and of the critical length a_k where the microcrack begins to grow. A formula is given for the variation of the specific

Card 1/3

superficial energy $\alpha(s)$ along the circumference of the microcrack. The microcrack begins to grow when its length 2a reaches the critical value $2a_k$ where the total increase of the energy has the maximum value. Also the critical values a_k and σ_k for the superficial microcracks may be found in the same way. The following conclusions may be drawn from the above-given considerations: a) The microcracks vanish automatically if the stresses in the body cease. b) σ_k increases if the angle θ decreases. c) According to Griffith σ_k is the upper limit of the possible values for the critical tensions of real microcracks. The above-discussed analysis permits a qualitative explanation of the various mechanisms of the action of the adsorption layers and of the surface active media which facilitate the deformations and the destruction of solid bodies. These phenomena depend essentially on temperature. If the duration of the stressed state increases, more and more short microcracks are envolved in the discussed processes. According to the results of this paper, the active microcracks must increase practically instantly.

 The considerations of the 2 inverse processes of the blocking

Concerning the Theory of the Development of the Microcracks in Solid Bodies During the Processes of Deformation

and unblocking of the microcracks possibly allows an investigation of the important problem of the existence of a permissible charge for the static fatigue of solid bodies. There are 19 references, 7 of which are Soviet.

ASSOCIATION: L'vovskiy lesotekhnicheskiy institut
(L'vov Forestry Engineering Institute)

PRESENTED: April 28, 1958, by P. A. Rebinder, Academician

SUBMITTED: April 11, 1958

Card 3/3

RUKIN, V.V.; SHIL'KRUT, D.I.

New system of polishing machines. Der.prom. 9 no.3: 13-14 Mr '60. (MIRA 13:6)
(Grinding and polishing)

SHIL'KRUT, D.I. (Kishinev)

Determining the rheologic law for an incompletely elastic solid for periodic processes in case of an elliptic hysteresis loop. Izv.AN SSSR. Otd.tekh.nauk.Mekh. i mashinostr. no.4:141-146 Jl-Ag '61. (MIRA 14:8)

(Rheology)

S/179/61/000/005/008/022
E191/E435

AUTHOR: Shil'krut, D.I. (Kishinev)

TITLE: Comparison of the fundamental rheological law of the elliptic type with other rheological relationships describing the hysteresis phenomenon

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye. v.5, 1961, 52-57

TEXT: In his previous paper (Ref.1: Izv. AN SSSR, OTN, Mekhanika i mashinostroyeniye, 1961, no.4), the author has described a fundamental rheological law of the elliptical type which embraces all possible rheological relationships yielding, under harmonic deformation, an elliptical hysteresis loop in the steady state. It was shown that all the known relationships of the elliptical type can be derived from the fundamental law by a special choice of the general functions contained therein. The rheological relationship for an arbitrary periodic deformation can be obtained by a superposition which constitutes a harmonic analysis of the periodic deformation. If these special functions in each harmonic are different, the hysteresis loop will no longer be an

Card 1/3

Comparison of the fundamental ...

ellipse. Another transformation for the case of a general periodic deformation is suggested in the present paper which embraces all possible variants of the elliptical law. This most general law is compared with rheological relationships of other types, first in the case of a harmonic deformation and then in the case of a general periodic deformation. A general formula for the area of the hysteresis loop is derived. It is concluded that the area is obtained by superposition so that any one term adds an area contributed by the same term in the harmonic analysis of deformation and stress. This contribution is equal to the area of the ellipse produced by that term acting alone. The error introduced by the superposition method of transformation from harmonic to general periodic deformation is evaluated. It is found that, in the region after the first resonance, the error due to superposition is small. In the region around the first resonance, the superposition error is also small because the resonance amplitude is large. In the region below the first resonance, superposition is not applicable. It follows that the simpler law of superposition is invariably applicable when dealing with internal damping in the material but it requires further

Comparison of the fundamental ...

examination when dealing with structural damping in an assembly. It is stated that there are no direct experimental investigations of the range of application for the superposition method. Experimental results on the effect of the law of load variation on the shape and area of the hysteresis loop have been given by Ye.S.Sorokin (On the theory of internal friction during vibrations of elastic systems. Gosstroyizdat, 1960). At resonance, the shape of the loop hardly depends on the law of load variation but the area of the loop substantially depends on this law. At low frequencies, the position is reversed. These experimental results are explained by the theory presented in this paper. N.N.Davidenkov, D.Yu.Panov, I.L.Korchinsky and Ye.V.Lunts are mentioned for their contributions in this field. There are 8 Soviet-bloc references.

SUBMITTED: April 11, 1961

Card 3/3

29217
S/145/61/000/006/003/007
D203/D305

10.7400

AUTHOR: Shil'krut, D.I., Candidate of Physico-Mathematical Sciences, Docent

TITLE: The phenomenon of accumulating deformation in an imperfectly elastic body under cyclic loading

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Mashinostroyeniye, no. 6, 1961, 82-89

TEXT: The author analyzes the problem with the aid of the differential form of the Boltzman-Volter law (1)

$$\dot{\sigma}(t) + r\,\sigma(t) = b\,\dot{\varepsilon}(t) + nb\,\varepsilon(t)$$

where σ, ε - stress and relative strain, $\dot{\sigma}, \dot{\varepsilon}$ - their derivatives with respect to time, b - dynamic modulus of elasticity, $r \geq n \geq 0$ - rate of relaxation and rate of after-effect (material constants). This equation is not generally valid (not applicable to steels at

Card 1/5

29217
S/145/61/000/006/003/007
D203/D305

room temperatures) but is used to obtain qualitative results. Quantitative results, even for more complex rheological relations can be obtained by coupling the solution of this equation with the methods of statistics. As an example, the equation is applied to a linearly stressed semi-infinite body with a periodic load of constant sign applied to its surface. The stress is

$$\sigma(t) = \sigma_{max}\,\eta(t) = \sigma_{max} \sum_{j=-\infty}^{j=+\infty} c_j\, 1^{ij\omega t} \qquad (10)$$

where $1 \geq \eta(t) \geq 0$ - periodic function with period T, C_j - coefficients in the complex Fourier series of $\eta(t)$. The accumulated deformation is then given by

Card 2/5

The phenomenon of ...

$$\varepsilon(\lambda T) = \frac{\sigma(\lambda T)}{E\sim} \qquad (13)$$

(λ is the number of cycles). $E\sim$ is called the cyclic modulus of elasticity and is given by

$$E\sim = \frac{b\eta(\lambda T)}{\eta(\lambda T) + \alpha(\beta-1)(1-1^{-2\pi\alpha\lambda}) \sum_{j=-\infty}^{j=+\infty} \frac{C_j}{ij+\alpha}} \qquad (14)$$

where

Card 3/ 5

The phenomenon of ...

$$\alpha = \frac{n}{\omega} ; \quad \beta = \frac{r}{n} > 1 \qquad (12)$$

It approaches the dynamic modulus b when the frequency ω is high or the static modulus $\frac{bn}{r}$ when the frequency is low. The accumulated deformation $\varepsilon(\lambda T)$ increases asymptotically with the number of cycles λ. It follows that $\varepsilon(\lambda T)$ has a maximum at a certain optimum value of α_o which is a function of λ and the form of cyclic loading only. The phenomenon is called internal resonance and can be visualized by observing that there can be no accumulation of deformation when the frequency is either very high or very low. The process of accumulating deformation (by Eq. (1)) depends on the after-effect alone while the relaxation affects its magnitude only. If $\eta(t)$ changes sign the problem is that of finding a hysteresis loop. A comparison is made with the results based on the equations

Card 4/5

29217

S/145/61/000/006/003/007
D203/D305

The phenomenon of ...

of Maxwell and Thompson. There are 2 figures and 15 Soviet-bloc references.

ASSOCIATION: Vsesoyuznyy zaochnyy inzhenerno-stroitel'nyy institut (All-Union Correspondence Civil Engineering Institute)

SUBMITTED: January 21, 1961

Card 5/5

SHIL'KRUT, D.I. (Kishinev)

Natural vibrations of a non-completely-elastic system with one degree of freedom. Izv.AN SSSR.Otd.tekh.nauk.Mekh.i mashinostr. no.6:91-96 N-D '61. (MIRA 14:11)

(Vibration)

L 2367-66 EWT(d) IJP(c)
ACCESSION NR: AP5020290 UR/0208/65/005/004/0615/0625
518:517.91/.94

AUTHOR: Shil'krut, D. I. (Kishinev)

TITLE: On one method of approximate solution of ordinary differential equations

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 5, no. 4, 1965, 615-625

TOPIC TAGS: differential equation, differential solution, approximation method, Cauchy problem, computer, algorithm

ABSTRACT: The author studied the solution of the problem

$$y^{(n)}(t)+f(t, y(t), y(t), \ldots, y^{(n-1)}(t))=0,$$
$$y^{(i)}(0)=\alpha_i \quad (i=0, 1, \ldots, n-1)$$

as a step-wise procedure. There is proposed the existence of a unique solution of the problem, and this solution has the required number of derivatives. The approximate expression of this solution is "constructed" by steps. At the j^{th} step of the process a solution is sought of the form

Card 1/3

L 2367-66

ACCESSION NR: AP5020290

$$y_j(t)=\sum_{m=0}^{k} y_j^{(m)}(t_{j-1})\frac{(t-t_{j-1})^m}{m!}+\frac{a_j(t-t_{j-1})^{k+1}}{(k+1)!}=\tilde{y}_j(t)+\frac{a_j(t-t_{j-1})^{k+1}}{(k+1)!}$$

where $k > n$, and the values $y_j^{(m)}(t_{j-1})$ are constants which are determined either from initial conditions or are determined in succession according to the formula

$$y^{(m)}(t_{j-1})=-\frac{d^{m-n}}{dt^{m-n}}f(t, y(t), \dot{y}(t), \ldots, y^{(n-1)}(t))\Big|_{t=t_{j-1}}$$

$$(m=n, n+1, \ldots, k).$$

The parameters a_j are determined in satisfying a problem boundary condition. A discussion and evaluation of error is given with respect to the convergence of each iteration. An example is worked out for the Cauchy problem for a Riccati type equation which has a known, exact solution. The problem was run on a digital computer by B. I. Chinik. Very crude initial approximations were input; the rate of convergence of the iterations leading to solution is demonstrated by means of tables giving computed values of parameters after execution of selected numbers of iterations. The algorithm is stated in a generalized form and is described as being applicable for differential equations with a delay argument and also for first order differential equations systems. An algorithm of solution of the boundary

Card 2/3

L 2367-66

ACCESSION NR: AP5020290

problem is also studied and demonstrated in the context of the problem of deflection of an absolutely stiff membrane. Orig. art. has: 31 equations.

ASSOCIATION: none

SUBMITTED: 20Jun64 ENCL: 00 SUB CODE: DP, MA

NO REF SOV: 007 OTHER: 002

Card 3/3

L 00930-67

ACC NR: AR6013767 SOURCE CODE: UR/0044/65/000/010/B084/B084

AUTHOR: Shil'krut, D.I.

13

ORG: None

TITLE: Computation of design components on the basis of a new method for the approximate solution of ordinary differential equations

SOURCE: Ref. zh. Matematika, Abs. 10B396

REF SOURCE: Tr. Kishinevsk. politekhn. in-t, vyp 2, 1964, 49-70

TOPIC TAGS: differential equation, nonlinear differential equation, numeric solution

PRODUCTION ENGINEERING

ABSTRACT: A new method for the numerical solution of ordinary differential equations is presented for use in the design of complicated constructional components. Description of an algorithm for the solution of the Cauchy problem (method of stepwise linearization) is given. The boundary problem is discussed. A method for the solution of a combined boundary problem is described, for an equation with coefficients having different analytical expressions in different regions of the solution interval. The use of the presented method does not require the solution of a system of equations, the number of which depends upon the number of steps, - a distinction from all other numerical methods of boundary problem solution. Examples of boundary problem computations for elastic systems are discussed, showing the convenience of using with this

Card 1/2

UDC 518:517.91/94

L 08938-67

ACC NR: AR6013767 O

method, of only one step, equal to the relevant problem interval. Solution of problem of finding the critical load in the case of a beam imbedded on one side and subjected to a uniformly distributed lengthwise load; and of the determination of the critical force P for a statically indeterminate case of a beam with uniform rigidity are discussed. Transverse bending of a constant rigidity elastic beam on two bearing supports as well as the bending of an absolutely flexible membrane is discussed. Solution of problems related to free and forced vibrations of nonlinear systems and the construction of phase trajectories of an autovibratory system is described. Numerical examples are given. Translation .

SUB CODE: 12/13/

Card 2/2 nst