SOV/97-59-1-2/15

Methods of Obtaining High-Strength Vibrated Concretes Using Short Heat Curing.

When fine ground cement is not available standard rapid-hardening cement can be reground. It is advocated that vibro-grinder M-400, with capacity of 0.5-0.7 t per hour, should be used for this purpose. Tests have shown that instead of vibro-grinding of cement, the cement-sand mix could be ground on millstones for a period of 10 minutes. Good results are also achieved when concrete components are mixed in a vibro-mixer. This process activates the mix. It is advocated that factories should be supplied with up-to-date grinding-mixing machines and vibrating machines. Increasing the proportion of cement up to 800 kg/m^3 results in concrete having the same strength as when regrinding the cement, or with partial regrinding of ordinary cement of high activity: however, use of this high content of cement is not advocated. A better way is by lowering the water/cement ratio to 0.25-0.28 and improving the effectiveness of consolidation by using stronger vibration. Experiment showed that when concreting Card 3/6 yards are supplied with high quality finely ground cement

Methods of Obtaining High-Strength Vibrated Concretes Using Short Heat Curing

classified sands and fine aggregate the resulting concrete acquires the required strength in a short time without regrinding of cement locally on concreting yards. Table 1 gives characteristic values of concretes. Table 2 gives values of the strength of the sand and cement mix (1 : 2) immediately after curing. The addition of calcium chloride was excluded owing to the corrosive effect on reinforcement of smaller diameter than 5 mm. Curing tests were carried out with cements partly, and fully, reground and also with cements ground separately, and together with sand. The cement was reground once or twice in a vibro-grinder which had the effect of increasing the total surface area of grains; in the first case to a degree of fineness of 800 cm^2/g and in the second case by a further 500 cm^2/g (according to Tovarov). Results of these tests are given in Table 3. Further tests were carried out with fine-aggregate (granite up to 10 mm in size) concrete, and sand concrete made from clinker cement manufactured by "Gigant". Card 4/6 Fig.1 gives diagram of the strength, during compression, of

Methods of Obtaining High-Strength Vibrated Concretes Using Short Heat Curing

the cement/sand mix 1 : 2 after 3 hours curing at a temperature of 100°C, related to degree of fineness of cement. Table 4 gives strength values of cement/sand mix 1 : 2 (reground cement) after 3 hours curing. Table 5 gives strength of the sand concrete after 3 hours curing. Fig.2 shows the effect of the cement content on the strength of sand concrete after 3 hours curing at a temperature of 100°C. Table 6 gives strength values of cement/sand mix 1 : 2 in relation to the fineness of grinding of cement and quantity of cement (test carried out by N.I. Kokuyeva). Further tests were carried out (Ya.D. Ponasyuzhenko) with sand concrete based on "Tuchkov" sand, which was subjected to 10 minutes grinding by millstones and cured for 3 hours at a temperature of 100°C. Especially effective rapid-hardening cements used for short-time heat curing are high alumina cements with 55-60% of C3S. Further investigations were made with three types of cement containing varying amounts of calcium aluminate. Fig.3 shows

Methods of Obtaining High-Strength Vibrated Concretes Using Short Heat Curing.

curing apparatus for concrete samples. There are 3 figures and 6 tables.

SIZOV, V., doktor tekhn.nauk, prof.

Concrete hardening at freezing temperatures. Stroitel' no.10:12 O '59. (MIRA 13:2)
(Frost resistant concrete)

MIRONOV, S.A., doktor tekhn.nauk prof., laureat Stalinskcy premii;
SIZOV, V.N., kand.tekhn.nauk dots., laureat Stalinskoy premii

Using mortars with additives in plastering at freezing temperatures. Stroitel'stvo no.11:46-48 N '59. (MIRA 13:2)
(Plastering--Cold weather conditions)

SIZOV, Vasiliy Nikolayevich, prof., doktor tekhn.nauk; BISSER, Yakov Ruvimovich, kand.tekhn.nauk; VASIL'YEV, Aleksandr Petrovich, kand.tekhn.nauk; IL'INICH, Ivan Mikhaylovich, nauchnyy red.; NIKOLAYEVA, N.M., red.izd-va; OSENKO, L.M., tekhn.red.

[Making precast reinforced-concrete construction elements in construction yards] Izgotovlenie sbornykh zhelezobetonnykh konstruktsii na poligonakh. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 250 p.
(MIRA 13:10)

(Precast concrete)

SIZOV, V., kand.tekhn.nauk

Proportioning "cold" concrete mixes. Stroitel' no.1:11-15 Ja '61. (MIRA 14:2)

(Concrete)

SIZOV, V., kand.tekhn.nauk

"Cold" concreting. Stroitel' no.2:27-29 F '61. (MIRA 14:7)
(Concrete--Cold weather conditions)

S/081/62/000/002/077/107
B150/B101

AUTHORS: Mironov, S. A., Sizov, V. N., Malinina, L. A., Khvorostyanskiy, V. F.

TITLE: Investigation of the composition and processes of heat treatment of highly stable mortars and fine-grained concretes for prestressed reinforced concrete panels

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 391 - 392, abstract 2K354 (Tr. N.-i. in-ta betona i zhelezobetona Akad. str-va i arkhitekt. SSSR, no. 20, 1961, 52 - 69)

TEXT: The fundamental technological factors are considered for obtaining the requisite strength of vibrated and rolled concrete for prestressed and reinforced panels. To obtain a strength of 300 - 400 kg/cm^2 with preheating for 2 to 4 hours at 100°C it is essential to apply fresh high-quality low-aluminate alite cements containing $C_3S \geq 55\%$ and $C_3A \leq 6..8\%$ with a specific surface of 3500 - 4000 cm^2/g. It is necessary to use classified sand, eliminating particles less than 0.6 mm and to introduce instead parts of sand (25-50%) of granitic rubbles with grains of 10 to 15 mm in size. The

Card 1/2

SIZOV, V.N., prof., doktor tekhn.nauk

Reinforcing masonry work in seismic regions under winter conditions. Prom. stroi. 39 no. 1:55-56 '61. (MIRA 14:1)
(Masonry--Cold weather conditions)
(Earthquakes and building)

SIZOV, V.N., doktor tekhn. nauk, prof., laureat Gosudarstvennoy premii; POLYANSKIY, G.I., inzh., nauchn. red.; LYTKINA, L.S., red. izd-va; GOL'BERG, T.M., tekhn. red.

[Manual on building and assembling work in rural areas during the winter] Posobie po proizvodstvu stroitel'no-montazhnykh rabot v sel'skikh raionakh v zimnee vremia. Sost. V.N. Sizov. Moskva, Gosstroiizdat, 1963. 247 p. (MIRA 16:8)

1. Nauchno-issledovatel'skiy institut sel'skogo stroitel'stva.
(Building—Cold weather conditions)

GERSHBERG, Osip Abramovich, prof., doktor tekhn. nauk, laureat Gosudarstvennoy premii; VOLZHENSKIY, A.V., prof., retsenzent; SIZOV, V.N., prof., doktor tekhn. nauk, retsenzent; IVANOV, F.M., kand. tekhn. nauk, nauchn. red.

[Technology of concrete and reinforced concrete products] Tekhnologiia betonnykh i zhelezobetonnykh izdelii. Moskva, Stroiizdat, 1965. 326 p. (MIRA 18:8)

1. Rukovoditel' kafedry "Tekhnologiya vyazhushchikh veshchestv i betonov" Moskovskogo inzhenerno-stroitel'nogo instituta im. V.V.Kuybysheva (for Volzhenskiy). 2. Rukovoditel' kafedry "Stroitel'nyye materialy i izdeliya" Vsesoyuznogo zaochnogo politekhnicheskogo instituta (for Sizov).

SIZOV, Vasiliy Nikolayevich, prof., doktor tekhn.nauk;
RUDENKO-MORGUN, Ivan Yakovlevich, dots., kand. tekhn.
nauk; TKHILADZE, Georgiy Rodionovich, inzh.; USENKO,
Vasiliy Mitrofanovich, kand. tekhn. nauk; SHVIDENKO,
V.N., prof., retsenzent; DANILEVSKIY, A.S., inzh.,
retsenzent; KUPERSHMIDT, L., red.

[Technology of construction] Tekhnologiia stroitel'nogo
proizvodstva. [By V.I.Sizov i dr. Moskva, Vysshaia shkola,
1964. 613 p. (MIRA 19:1)

SIZOV, V.P., inzhener.

I.A.Kireenko's new method of planning the composition of concrete.
Stroi.prom.31 no.12:33-34 D '53. (MLRA 7:1)
(Concrete)

SIZOV, V.P., inzhener.

Fallacious theory for selection of components of concrete based on fine sands. Bet.i zhel.-bet. no.3:109-112 Je '55.
(Concrete) (MLRA 9:1)

Sizov, V. P.

AID P - 2597

Subject : USSR/Hydraulic Engineering

Card 1/1 Pub. 35 - 20/20

Author : Sizov, V. P., Eng.

Title : On planning the concrete mix

Periodical : Gidr stroi, 4, 46-48, Ap 1955

Abstract : Prof. I. A. Kireyenko published the book Proyektirovaniye sostava betona bez ucheta vodotsementnogo otnosheniya (Planning concrete mixes disregarding the water cement ratio) in 1950. The author of this article criticizes Kireyenko's theory and his conclusions and proves, with tables, errors made in computing concrete mixes. The savings of concrete are achieved owing to an increase in the water cement ratio, which decreases the strength of the concrete.

Institution : None

Submitted : No date

SIZOV, V.P., kand.tekhn.nauk

Using a gravel sand mix instead of crushed stone and sand. (MIRA 10:11)
Transp.stroi. 7 no.5:22-23 My '57.
(Concrete) (Railroads--Construction)

97-10-6/14

AUTHOR: Sizov, V. P., Can. of Mechanical Sciences.

TITLE: Use of Aggregates with Excessive Content of Impurities. (Primeneniye zapolniteley s povyshennym soderzhaniyem pylevidnykh primesey.).

PERIODICAL: Beton i Zhelezobeton, 1955, Nr.10. pp. 404 - 406. (USSR).

ABSTRACT: According to ГОСТ norms the impurities in sand should not exceed 5%, in aggregate 2% and in sandy aggregates 2.5% according to weight. The majority of sands and aggregates possess 2 - 12% of impurities. These impurities lower the strength of the concrete. Sands and gravels with high impurity content which are used instead of crushed aggregates for reducing the content of cement, are described in "Stroitel'naya Promyshlennost" No.1 Vol.(1955). A factory using local sand and gravel carried out a test of these materials and found that they complied with ГОСТ standard in regard to the content of impurities, but that these impurities cover the grains of sand and gravel in the form of a fine layer. The strength of concrete made from these materials was very low due to the small adhesion between the cement and the aggregate. To improve the quality of the concrete either more cement had to be added, or the aggregate had to be washed, but as neither of these was practicable the author advocated a

Card 1/3

Use of Aggregates with Excessive Content of Impurities.

variation of the order of mixing. Formerly, water was poured into a mixer, then coarse aggregate, and finally cement and sand, but this did not always remove the layer of impurities from the grains. The order of mixing was changed, therefore, as follows: First, the water was poured into the mixer, then sand and gravel was added, and the mix agitated for 20 to 30 seconds, during which time the layers of impurities were washed off the grains. Finally, cement was added and agitation continued for a further 50 to 70 seconds. In the case of very light layers of impurities, gravel was added after the water and agitated for 20 to 30 seconds, then cement was added, and the mix agitated for a further 50 to 70 seconds. Table 1 gives values obtained from tests of both these methods. When the same amount of sand was used the concrete mix prepared according to TU standards had a lower strength than that prepared by the new mixing method. The quantity of cement used when washed aggregate is employed is smaller, but the concrete so prepared has high water permeability. Where impure local sand and gravel are used, the savings made by the application of this method are quite considerable. Table 2 gives values obtained by testing cubes

Use of Aggregates with Excessive Content of Impurities.

prepared from impure aggregates. These mixing methods can also be used when preparing concrete for pre-tensioned structures, in which case the mixing of the concrete components is carried out in two stages as described above. In the case of very poor quality aggregate, the water used for washing is changed once or twice. There are two Tables.

AVAILABLE: Library of Congress.

Card 3/3 1. Concrete-Contamination 2. Concrete-Preparation

SIZOV, V.P., kand.tekhn.nauk

Methods for selecting concrete mixes made with gravel and sand. Transp.stroi. 9 no.5:46-48 My '59. (MIRA 12:12)

(Concrete)

SIZOV, V.P., kand.tekhn.nauk

Effectiveness of using sand in making concrete. Transp. stroi. 9 no.7:40-44 Jl '59. (MIRA 12:12)
(Sand) (Concrete--Testing)

SIZOV, V.P., kand.tekhn.nauk; KOSTYAYEV, P.S., inzh.

Making, laying and taking care of "cold" concrete. Transp. stroi. 10 no.11:31-35 N '60. (MIRA 13:11)
(Frost resistant concrete)

S/194/62/000/002/053/096
D273/D301

34 1800

AUTHOR: Sizov, V. P.

TITLE: Apparatus and method for measuring damping and velocity of propagation of longitudinal and transverse ultrasonic waves in solids in the frequency range 5 to 80 Mc/s

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 2, 1962, abstract 2-5-13f (Sb. Statey Vses. zaochn. politekhn. in-ta, 1960, no. 24, 99-110)

TEXT: Measurement of the damping and velocity of ultrasound in solids is carried out in a liquid bath. The sample, partly immersed in the liquid, is placed exactly above the source of ultrasonic impulses, situated at the bottom of the bath. The damping is determined by observing on the screen of a cathode-ray oscilloscope a series of reflected pulses with the signals which pass through a calibrated attenuator. The velocity of propagation is also determined on the basis of measuring the distance between pulses on the

Card 1/2

SIZOV, V.P., kand.tekhn.nauk

Viscosimeter for determining the most efficient placing qualities of concrete mixes. Bet. i zhel-bet. no. 1:36-38 Ja '61. (MIRA 14:2)

(Viscosimeter) (Concrete)

SIZOV, V.P., kand.tekhn.nauk

Some results of using sand concrete in construction. Bet. i zhel.-bet. 8 no.2:65-68 F '62. (MIRA 16:5)
(Concrete)

SIZOV, V. P.

USSR/Physics - Resonance Oscillations 21 Mar 53

"Investigations of ΔE-Effect and Damping of Elastic Waves in Polycrystalline Nickel by the Acoustic Method," V. P. Sizov, Sci-Res Inst of Phys, Moscow State U imeni Lomonosov

DAN SSSR Vol 89, No 3, pp 427-430

Outlines experimental results of effect of magnetic field and elastic tensions in polycrystalline nickel on ΔE effect and on damping of elastic waves. Presented by Acad B. A. Vvedenskiy. 29 Nov 52.

272T78

LOVTSOV, D.P.; SIZOV, V.P.; SPASSKIY, A.G.

Effect of casting conditions on ultrasonic wave damping in metals.. Izv.vys. ucheb. zav.; tsvet. met. no.3:127-131 '58. (MIRA 11:11)

1. Moskovskiy institut tsvetnykh metallov i zolota. Kafedra litoynogo proizvodstva.
(Founding) (Ultrasonic waves--Industrial application)

BENDRIKOV, G.A.; KRASNUSHKIN, P.Ye.; REYKHRUDEL', E.M.; POTEMKIN, V.V.; MUSTEL', Ye.R.; RZHEVKIN, K.S.; IVANOV, I.V.; KHARLAMOV, A.A.; TIKHONOV, Yu.V.; STRELKOVA, L.P.; KAPTSOV, L.N.; ORDANOVICH, A.Ye.; KHOKHLOV, R.V.; VORONIN, E.S.; BERESTOVSKIY, G.N.; KRASNOPEVTSEV, Yu.V.; MINAKOVA, I.I.; YASTREBTSEVA, T.N.; SEMENOV, A.A.; VINOGRADOVA, M.B.; KARPEYEV, G.A.; DRACHEV, L.A.; TROFIMOVA, N.B.; SIZOV, V.P.; RZHEVKIN, S.N.; VELIZHANINA, K.A.; NESTEROV, V.S.; SPIVAK, G.V., red.; NOSYREVA, I.A., red.; GEORGIYEVA, G.I., tekhn. red.

[Special practical manual in physics] Spetsial'nyi fizicheskii praktikum. Moskva, Izd-vo Mosk.univ. Vol.1. [Radiophysics and electronics] Radiofizika i elektronika. 1960. 600 p. (MIRA 13:7)

1. Professorsko-prepodavatel'skiy sostav otdeleniya radiofiziki fizicheskogo fakul'teta Moskovskogo gosudarstvennogo universiteta (for all, except Spivak, Nosyreva, Georgiyeva).
(Radioactivity) (Electronics)

9,9865

86210

S/049/60/000/008/007/015
E201/E191

AUTHORS: Volarovich, M.P., Levykin, A.I., and Sizov, V.P.

TITLE: A Study of Attenuation of Elastic Waves in Rock Samples

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geofizicheskaya, 1960, No. 8, pp.1198-1203 (+ 1 plate)

TEXT: The authors used 1 Mc/s ultrasonic pulses, reflected many times between the working surfaces of a cylindrical rock sample, to study attenuation of elastic waves. The diameter of the sample was 6-10 times greater than the wavelength of elastic waves, i.e. the sample could be regarded as massive for the purpose of these experiments. The block circuit of the apparatus is shown in Fig.1. A standard generator (1 in Fig.1) 26-I (26-I) produced square modulating pulses of 100 V amplitude and 10 μsec duration. These pulses were fed to a generator of r.f. pulses (2 in Fig.1). The pulse repetition frequency and the duration of pulses was governed by the generator 26-I. A pulse of 1 Mc/s frequency and 10 μsec duration obtained with this apparatus is shown in Fig.2 (plate). From the output cathode follower of the generator 2 (Fig.1) the pulses travelled along a coaxial cable to a piezo-electric quartz plate 3, which served as a source of ultrasonic

Card 1/3

S/049/60/000/008/007/015
E201/E191

A Study of Attenuation of Elastic Waves in Rock Samples

pulses. The ultrasonic pulses travelled along a rock sample 4, and were detected with a piezoelectric quartz plate 5. The pulses were then amplified with a wide-band amplifier 6, and were applied to the vertical plates of an oscillograph 8 (this oscillograph is marked by a square box to distinguish it from a coil, also numbered 8). The oscillograph sweep was synchronized with pulses from the generator 1. To obtain the optimum energy transfer between the quartz transducers and the rock sample, matching circuits, consisting of coils 7 and 8 and capacitances of the quartz plates, were used. Fig.3 (plate) shows a typical oscillogram obtained in a sample of gabbro. Figs 4 and 5 (plate) give oscillograms recorded in gabbro, diorite and granite (Fig.4), in aluminium and marble (Fig.5). Figs 6 and 7 give the dependence of the amplitude of the ultrasonic pulses on the distance along the various rock samples (Fig.6) or along aluminium, brass, Plexiglas and granite (Fig.7). A table on page 1200 gives the amplitude attenuation factor for longitudinal ultrasonic waves travelling in basalt, gabbro, marble, gabbrodiorite, quartz sandstone, syenite, granite, labradorite, aluminium, brass and Plexiglas.

Card 2/3

ACC NR: AP7013157 SOURCE CODE: UR/0108/67/022/001/0032/0036

AUTHOR: Sizov, V. P.

ORG: none

TITLE: Phasal automatic-frequency-control system with the phase shifter in the feedback network

SOURCE: Radiotekhnika, v. 22, no. 1, 1967, 32-36

TOPIC TAGS: automatic frequency control, phase detector, phase shifter, electronic feedback, automatic gain control, radio noise

SUB CODE: 09

ABSTRACT: The article describes a phasal AFC system which differs from other known ones by having an electronic phase shifter inserted in the feedback network. In addition, the system consists of a controled oscillator and a phase detector with a low-frequency filter. An error signal coming from that filter drives the phase shifter, as a result of which the dynamic performance of the the system is improved and the noise band is reduced. The differential equation for this system is derived in order to analyze the filter action and it is shown that the excellent noiseproof feature is obtained by making the phase shifter gain large without changing the gain of the other components of the

Card 1/2 UDC: 621.396.668

0933 0870

SIZOV, V.S., inzh.

Automatic welding under flux of girth joints in thick-walled vessels of heat-resistant steel. Svar. proizv. no.1:22-24 Ja '64. (MIRA 17:1)

1. Izhorskiy zavod im. A.A. Zhdanova.

L 22660-66 EWT(m)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k) JD/HM/HW
ACC NR: AP6006185 (N) SOURCE CODE: UR/0135/66/000/002/0027/0029

AUTHOR: Sharapov, Yu. V. (Engineer); Sizov, V. S. (Engineer); Trofimov, I. F. (Technician)

ORG: none

TITLE: Properties of the metal seam and heat affected zone in electroslag welding of 15Kh2MF steel

SOURCE: Svarochnoye proizvodstvo, no. 2, 1966, 27-29

TOPIC TAGS: electroslag welding, alloy steel, mechanical property, metallographic examination

ABSTRACT: The electroslag welding was done with SV-13Kh2MTI welding wire and 48-OF-6 flux. Tubes of 650 and 250 mm thickness were preheated, welded and heat treated by oil quenching from 1000°C and tempering at 700°C. The tubes were cut by oxygen for property and metallography studies. Mechanical properties such as strength, ductility, static bending, impact resistance and microhardness were obtained from cylindrical specimens cut longitudinally and transversely to the welding direction. Data

UDC: 621.791.79:669.15-194

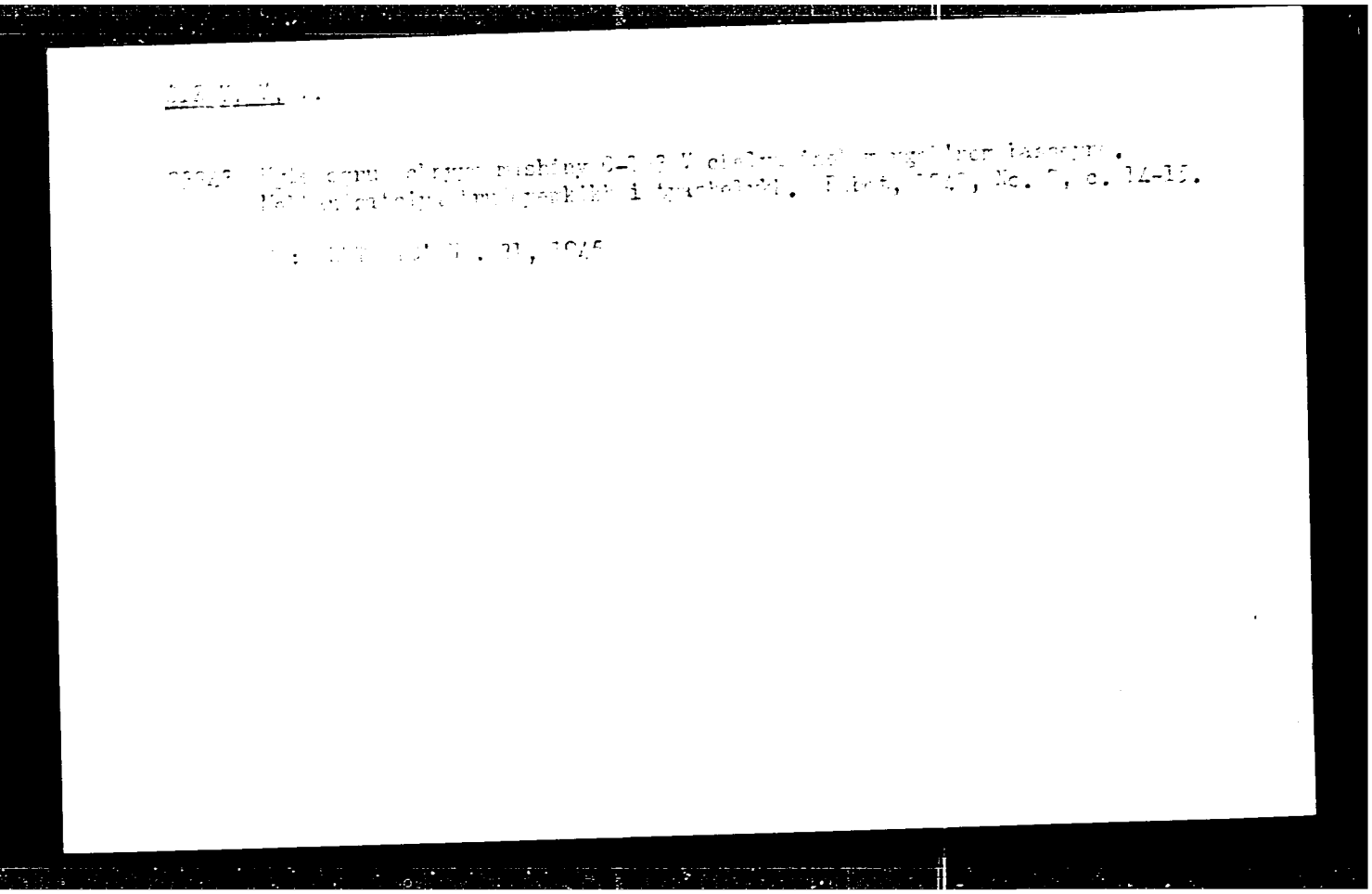
Card 1/2

L 22660-66
ACC NR: AP6006185

showed that the weld (42.5-46.3 kg/mm^2) was stronger than the base metal (40 kg/mm^2) and ductility was greater (δ = 16.1-19.2%, ψ = 71.4-74.4%) than in the base metal (δ = 15.9-16.3%, ψ = 63.8-72.8%). The properties in the transverse direction to the weld were about 6-10% lower. For static bend testing, load was measured as a function of deflection on V-notched samples. The base metal was stronger in this test than the weld as a result of higher Cr content; chemical analysis of the samples as a function of distance from the weld showed about a 10-15% decrease in Cr content in the weld. Impact testing was done by notching the center of the weld and the boundary of the heat affected zone. After welding and tempering at 700°C for 40 hr the heat affected zone had an impact energy of 16.3 kg/cm^2 against 8.6 kg/cm^2 for the weld, but the properties equalized to about 24 kg/cm^2 after quenching from 1000°C and tempering at 700°C for 40 hr; these were higher than the base metal (16.8-17.1 kg/cm^2). Metallographic examination of the welded metal showed that the seam and surrounding zone after quenching and tempering had a small grained ferritic-sorbitic structure of No. 7-8 (GOST 5639-62) grain size. Orig. art. has: 4 figures, 2 tables.

SUB CODE: 13,11/ SUBM DATE: 00/ ORIG REF: 000/ OTH REF: 000

Card 2/2 fw



SIZOV, V.V.

Revording winds by the use of a photographic recorder. Trudy MGI (MIRA 15:2)
25:65-68 '62.

(Winds)

ACC NR: AP7002396 SOURCE CODE: UR/0363/66/002/012/2103/2109

AUTHOR: Shelimova, L. Ye.; Abrikosov, N. Kh.; Zhdanova, V. V.; Sizov, V. V.

ORG: Institute of Metallurgy im. A. A. Baykov, Academy of Sciences, SSSR (Institut metallurgii Akademii nauk SSSR)

TITLE: Study of the systems PbSe-GeSe and GeSe-GeTe

SOURCE: AN SSSR. Izvestiya. Neorganicheskiye materialy, v. 2, no. 12, 1966, 2103-2109

TOPIC TAGS: lead compound, selenide, telluride, germanium compound, phase transition

ABSTRACT: The phase equilibria and solid solutions in the systems PbSe-GeSe and GeSe-GeTe were studied by thermal, microstructural, x-ray and dilatometric analyses in the 20-620°C range. It was found that the PbSe-GeSe system is not a quasi-binary section of the ternary system Ge-Pb-Se. The polythermal section of GeSe-GeTe showed the existence of a continuous series of solid solutions at temperatures near the solidus. Phase transformations at low temperatures connected with the polymorphism of GeSe and GeTe were investigated, and the boundaries of solid solutions were determined in both systems. Orig. art. has: 7 figures and 2 tables.

SUB CODE: 07/ SUBM DATE: 25Dec65/ ORIG REF: 003/ OTH REF: 007

UDC: 546.815'231+546.289'231
546.289'231+546.289'241

Card 1/1

SIZOV, V.V.; PETRASH, G.G.; TIKHOMIROV, N.S.

Method for the realization of an accurate rectilinearity of displacements up to 500 mm. Izm. tekh. no.3:15-17 Mr '65. (MIRA 18:5)

L 2454-66 EWT(l)/EEC(k)-2/EED-2/FCS(k)/EWA(h) LJP(c) WR

ACCESSION NR: AP5016395 UR/0120/65/000/003/0198/0200 58
535.853.4 55
13

AUTHOR: Petrash, G. G. ; Sizov, V. V. 44, 55

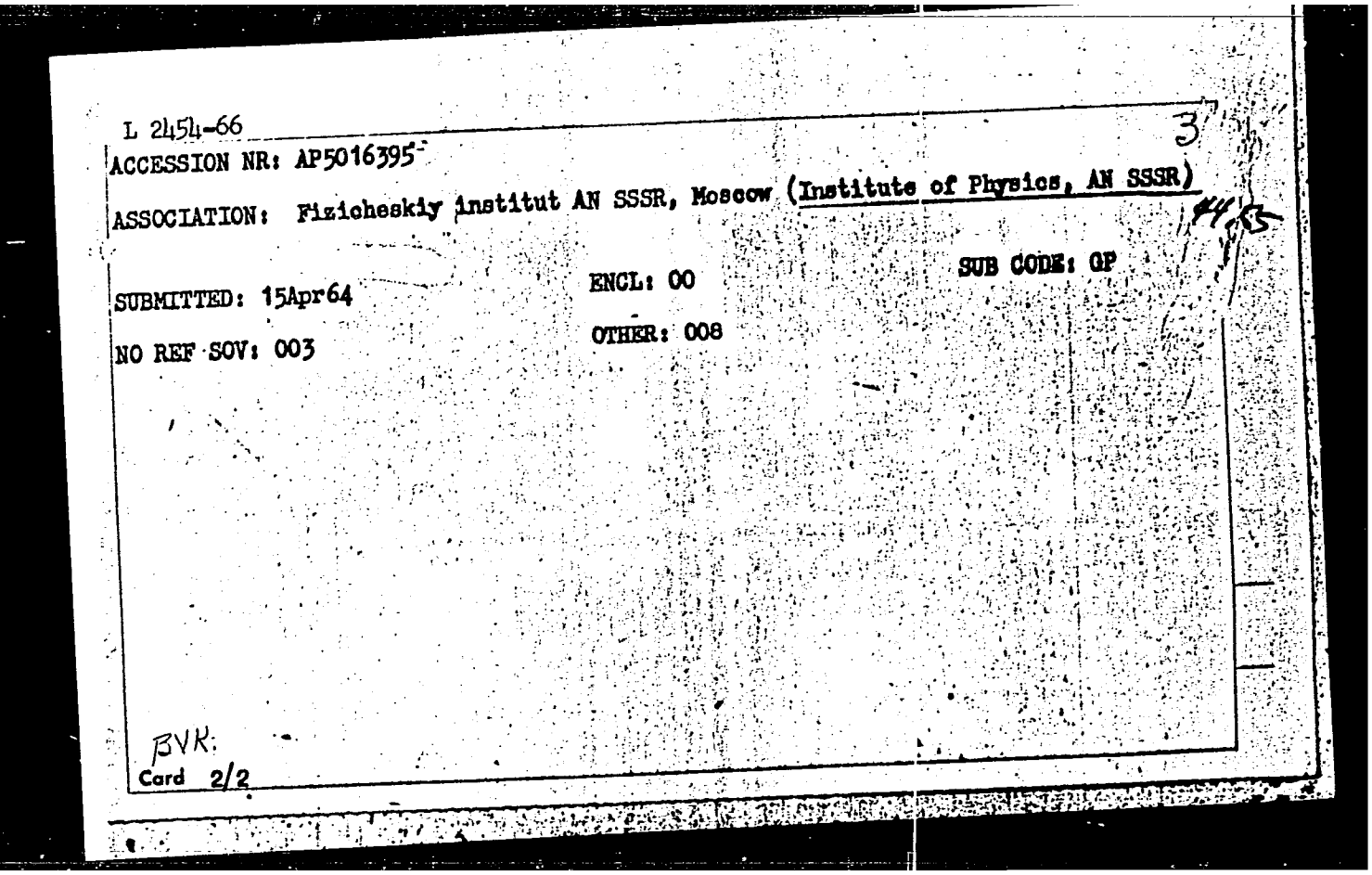
TITLE: System for accurate translation of the mirror in a Michelson interferometer for 500 mm 21, 44, 55

SOURCE: Pribory i tekhnika eksperimenta, no. 3, 1965, 198-200

TOPIC TAGS: interferometer, two beam interferometer 25

ABSTRACT: The interferometer mirror is fastened to a bridge which is supported by two floats in two parallel liquid-filled channels. The latter are mounted on a 1000x1500-mm true platen. Four guide rails ensure straight translational movement of the mirror. Tests have shown that the mirror can travel for 500 mm with an error in its plane of 0.2—0.3". The system resolution is 0.01 per cm for the entire spectrum (for $\lambda = 1\mu$, the resolution is 10^6)."The authors wish to thank P. A. Bazhulin and B. A. Tayts for their constant attention to the work, V. I. Malyshev and N. S. Tikhomirov for their very valuable advice re the system design, and A. A. Katunin and S. P. Kurayev for assembling ard adjusting the system." Orig. art. has: 1 figure.

Card 1/2



L 2454-66

ACCESSION NR: AP5016395

ASSOCIATION: Fizicheskiy institut AN SSSR, Moscow (Institute of Physics, AN SSSR)

SUBMITTED: 15Apr64 ENCL: 00 SUB CODE: GP

NO REF SOV: 003 OTHER: 008

BVK

Card 2/2

KHOTEYEV, L.V., inzh.; NEUSYPIN, A.M., inzh., vedushchiy red.; SIZOV, V.Ye., red.; POMOMAREV, V.A., tekhn.red.

[Organization of technical information and exchange of information on advanced practices; collection of reviews] Organizatsiia tekhnicheskoi informatsii i obmena peredovym opytom; referativnyi sbornik. Moskva, 1958. 11 p. (Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 51, no.19/1) (MIRA 12:1)

1. Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.

(Technology--Information services)

SIZOV, Ye.

In reliable hands. Okhr.truda i sots.strakh. 3 no.6:26-27 Je '60. (MIRA 13:7)

1. Zamestitel' predsedatelya zavkoma khimzavoda imeni Frunze, Ivanovskaya oblast', g.Zavolzhsk.
(Zavolzhsk—Chemical industries—Hygienic aspects)

L 44297-65 EWT(d)/EWT(m)/EWA(d)/EWP(t)/EWP(k)/EWP(h)/EED-2/EWP(z)/EWP(b)/EWP(i)/EWA(c) Pq-4/Pf-4/Pg-4/Pk-4 IJP(c) BB/MJW/JD/HW/GG/GS

ACCESSION NR: AT5011606 UR/0000/64/000/000/0264/0270 45 42 B+1

AUTHOR: Sizov, Ye. A. 16

TITLE: Tapes in the micron thickness range for devices used in computer technology

SOURCE: Vsesoyuznoye soveshchaniye po magnitnym elementam avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki. Lvov, 1962. Magnitnyye elementy avtomatiki, telemekhaniki, izmeritel'noy i vychislitel'noy tekhniki (Magnetic elements of automatic control, remote control, measurement and computer engineering); trudy soveshchaniya. Kiev, Naukova dumka, 1964, 264-270

TOPIC TAGS: thin metal tape, thin tape processing, thin tape magnetic property, thin tape magnetic core, tape rolling, magnetic memory

ABSTRACT: A semi-industrial multiroller mill 14 constructed and adjusted for the rolling of tapes up to 0.003 mm in thickness is described. The fundamental peculiarity of this kind of rolling consists of the use of rollers whose ratio of roller diameter to the thickness of the product is extraordinarily high. The paper outlines the product technology developed for the production of sufficient quantities of such extremely thin tapes. A relationship is found between the magnetic properties and the final thermal

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ACCESSION NR: AT5011606

3

processing and production technology of the cores, and the optimum conditions for the thermal processing are determined from comprehensive experimental data. Thin tapes made of the 79NM and 79NMA alloys are already widely used, and cores made with the 0.003 mm tape exhibit a better temperature stability and better magnetic properties than the corresponding ferrite cores. Orig. art. has: 2 formulas, 2 figures, and 6 tables.

ASSOCIATION: none

SUBMITTED: 29Sep64 ENCL: 00 SUB CODE: DP, IE

NO REF SOV: 003 OTHER: 003

Foil 18

am

Card 2/2

ACC NR: AP7005637 (A) SOURCE CODE: UR/0413/67/000/002/0091/0091

INVENTOR: Sizov, Ye. A.; Aptekar', I. L.

ORG: None

TITLE: A magnetically soft iron-nickel alloy. Class 40, No. 190584 [announced by the Central Scientific Research Institute of Ferrous Metallurgy im. I. P. Bardin (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 91

TOPIC TAGS: iron nickel alloy, magnetic alloy

ABSTRACT: This Author's Certificate introduces a magnetically soft iron-nickel alloy. The material has a rectangular hysteresis loop, high coercive force and short magnetic reversal time. The alloy has the following chemical composition (in %): nickel--50-80, aluminum--1-4, boron--less than 0.1, the remainder iron.

SUB CODE: 11/ SUBM DATE: 20Dec65

Card 1/1 UDC: 669.24.71:669.018.58

SIZOV, Ye.A.

Selection of an efficient pace for sampling alluvial sediments in prospecting in dispersion runs. Razved. i okh. nedr 26 no.4:48-50 Ap '60. (MIRA 15:7)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut razvedochnoy geofiziki.

(Prospecting)

ACCESSION NR: AP4033690 S/0193/64/000/004/0005/0007

AUTHOR: Sizov, Ye. A.; Lyubenko, E. A.

TITLE: Experimental use of hard alloy rolls for rolling ultra thin strips

SOURCE: Byulleten' tekhniko-ekonomicheskoy informatsii, no. 4, 1964, 5-7

TOPIC TAGS: metal strip, metal strip thickness (0.0015 mm), rolling mill, steel roll, tungsten carbide roll, hard alloy roll, VK-8 tungsten carbide, high polish finish, carbide roll wear resistance

ABSTRACT: Metal strip thickness has been reduced from 0.003 mm to 0.0015 mm in experiments at the Central Scientific-Research Institute of Ferrous Metallurgy by replacing the steel rolls (3 mm diameter) in all 20 rolls of a rolling mill with VK-8 tungsten carbide rolls (4.5 and 5.5 mm diameters). The number of passes is reduced by half and the highly polished strip surface resulting requires no additional finishing. Tungsten carbide rolls have to be made to more exact specifications than steel rolls due to greater hardness and less

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L 55332-65 EPA(s)-2/EWT(m)/EWP(i)/EWA(d)/EWP(t)/EWP(z)/EWP(b) MJW/JD/GS

ACCESSION NR: AT5014631 UR/0000/65/000/000/0180/0185

681.142.324

AUTHOR: Sizov, Ye. A.; Al'tgauzen, O. N.; Artsishevskiy, M. A.

TITLE: Magnetic properties of extremely thin films from magnetically soft alloys

SOURCE: Vsesoyuznoye soveshchaniye po magnitnym elementam avtomatiki i vychislitel'noy tekhniki, 9th, Yerevan, 1963. Magnitnyye analogovyye elementy (Magnetic analog elements); doklady soveshchaniya. Moscow, Izd-vo Nauka, 1965, 180-185

TOPIC TAGS: thin magnetic film, magnetic film production, alloy magnetic property, neutron irradiation, magnetically soft alloy, alloy cold rolling

ABSTRACT: In view of the widespread incorporation of magnetic films into electronic devices, the personnel of the Institut pretsizionnykh splavov TsNIIChM (Institute for Precision Alloys of TsNIIChM) developed the technology of the mass production of magnetically soft alloy films using the 20-roller stand TsKBMM-90 with a 3-35 mm roller diameter. Cold rolling produces films 0.02-0.003 mm thick and 30-40 mm wide without heat treatment. The paper describes in considerable detail the production of films, the general magnetic properties

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ACCESSION NR: AT5014631

of the samples, the magnetic properties of 79NMA, 80NMA, 77NMD, and 79NM alloys within the -60 to +150C temperature range, and the effect of neutron irradiation on the magnetic properties of the films. The results seem to agree with the assumption that nuclear particle irradiation has an adverse effect on magnetic materials by causing radiation defects and radiation ordering (see, e.g., M. A. Artsishevskiy, Ya. P. Selisskiy, FMM, 1961, 11, no. 1). Orig. art. has: 2 figures and 5 tables.

ASSOCIATION: TsNIIChM

SUBMITTED: 28Dec64 ENCL: 00 SUB CODE: MM, EC

NO REF SOV: 003 OTHER: 002

Card 2/2

VLASOV, A.M.; SIZOV, Ye.I.

Machine tools manufactured in plants of the Vladimir Province Economic Council in 1960-1961. Biul.tekh.-ekon.inform. no.9:33-35 '61. (MIRA 14:9)

(Vladimir Province--Machine tools)

S/147/60/000/01/017/018
E191/E581

AUTHORS: Yershov, A.G. and Sizov, Ye. S.

TITLE: Analysis of the Process of Bending, with Simultaneous Bevelling, of Extruded Profiles by Forcing Through a Die

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Aviatsionnaya tekhnika, 1960, Nr 1, pp 149-158 (USSR)

ABSTRACT: Simultaneous bending and bevelling of profiles in a single die has been introduced to avoid the need for large dies otherwise required to calibrate the diameter and bevel the flange in making ring frames from profiles with large sizes of the cross-section. This process is theoretically and experimentally investigated by the authors. Aluminium alloy unequal angles of 75 x 50 x 12 mm were bent about the short flange, whilst the long flange was bevelled. The forcing load is first found theoretically on the assumption that plastic deformation arises at a relatively small flexure of an element. A power relation is assumed between stress and strain in the process of elasto-plastic bending. The total forcing load is the sum of the load to carry out the bending of the profile, the load to twist the flange to be bevelled, the

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S/147/60/000/01/017/018
E191/E581

Analysis of the Process of Bending, with Simultaneous Bevelling, of Extruded Profiles by Forcing Through a Die

load to bend the bevelled flange in its root section and the load due to friction. The separate contributions are evaluated, making use, in part, of some well-known formulae of Nadai. The design of the die facilitates the separation of the load components which largely arise in different sections of the die. The experimental work was carried out on an "Amsler" tensile testing machine where the diagram of the forcing loads was recorded. The comparison with analysis shows that, on the assumption of a friction coefficient of 0.15, the total measured load at 7,500 kg was 12.5% larger than the total predicted load. The largest error of the theory arose in the zone of bevelling in the die. The process of bending of a profile, for example an angle, by the thinning or upsetting of the flange edge can also be accomplished by forcing through a die with

Card 2/3 suitable inserts. Such an insert is shown in Fig 5 and

S/147/60/000/01/017/018
E191/E581

Analysis of the Process of Bending, with Simultaneous Bevelling, of Extruded Profiles by Forcing Through a Die

a brief analysis is given to determine the forcing load in this type of die from the basic geometry of the profile deformation.
There are 6 figures, 1 table and 6 Soviet references.

SUBMITTED: October 22, 1959

Card 3/3

S/019/60/000/016/002/134
A152/A029

AUTHORS: Sizov, Ye.S.; Kozlov, I.V.; Khrenkov, V.V.

TITLE: A Method of Making Flexible Metal Pipes With a Spiral Corrugation and a Machine for This Purpose

PERIODICAL: Byulleten' izobretenіy, 1960, No. 16, p. 7

TEXT: Class 7a, 4. No. 130865 (645954/22 of December 4, 1959). 1) This method is distinguished by the following special feature: in order to reduce ironing of the tube billet during the forming process and eliminate harmful frictional forces when the billet is moved in relation to the forming tool, the feed of material into the spiral corrugation is effected by the pulsating sectors of external and internal split worms. 2) The machine for carrying out the method described in Point 1 is distinguished by the following special feature: in order to form the tube billet and move it in the forming head, the sectors of the external and the internal split worms carry out a pulsating motion in a radial direction in such a way that upon counter motion of the sectors the billet is formed in accordance with the work surfaces of the worms, while upon movement of the

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S/019/60/000/016/002/134
A152/A029

A Method of Making Flexible Metal Pipes With a Spiral Corrugation and a Machine for This Purpose

sectors in opposite directions the tube billet is moved along its axis and turned round by a certain angle. 3) A form of the machine described in Point 2, distinguished by the following special feature: in order to reduce the dimensions of the machine and reduce the labor consumed in the production of flexible metal pipes of great length after forming of the tube billet in the forming head, its turns are brought closer together with the aid of a guide and a closing nut, the distance between which is adjusted.

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ACC NR: AP6025582 (N) SOURCE CODE: UR/0413/66/000/013/0011/0011

INVENTOR: Sizov, Ye. S.; Sizova, K. G.; Strunin, N. M.; Razumilov, V. D.

ORG: None

TITLE: A die for drawing sheet metal parts. Class 7, No. 183173

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 11

TOPIC TAGS: sheet metal, metal drawing, die

ABSTRACT: This Author's Certificate introduces a die for drawing sheet metal parts by using hydraulic pressure. The unit contains a punch, a fluid-filled female die and a clamping device. The unit is designed for hydrodynamic lubricating conditions and blocking off the section of the blank subject to damage. The die is equipped with an annular reservoir with a bottom flush with the female die surface. A knockout tool is placed in the working area with a diameter greater than that of the finished part. This knockout tool has apertures for transmitting fluid from the female die area to the annular reservoir, which are connected by a pipeline.

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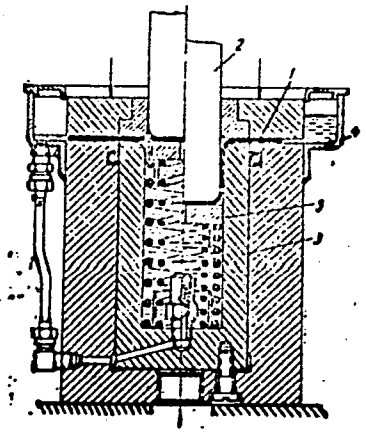
UDC; 621.983.32

ACC NR: AP6025582



1-blank; 2-punch; 3-female die; 4-annular reservoir

SUB CODE: 13/ SUBM DATE: 12Jul63

Card 2/2

ACC NR: AP6029013 SOURCE CODE: UR/0413/66/000/014/0013/0014

INVENTOR: Sizov, Ye. S.; Strunin, N. M.; Razumilov, V. D.; Kozlov, I. V.; Sizova, K. G.

ORG: None

TITLE: Double action hydraulic press. Class 7, No. 183709

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 13-14

TOPIC TAGS: hydraulic equipment, hydraulic cylinder, die, metal drawing

ABSTRACT: This Author's Certificate introduces a double action hydraulic press equipped with a hydraulic cylinder control system with distribution valves. These hydraulic cylinders transmit power both to the punch and the clamping jig. The unit is designed for transmitting pulsating movements with a given force and pulsation amplitude to the clamping device to provide deeper drawing. The hydraulic cylinder which transmits power to the clamping device has a hollow piston rod. This rod is mounted on the rod of a piston connected to the punch and is located in a hydraulic cylinder interacting with the distribution valves by means of an electrocontact pressure gauge in the hydraulic system and a terminal circuit breaker rigidly mounted on the press frame. The distribution valves switch fluid delivery between the cavities in the

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UDC; 621.983.32.06;621.226

ACC NR: AP6029013

hydraulic cylinder above and below the piston. The ratio between the piston areas is calculated to provide pressure for the clamping jig which is several times the punch pressure.

SUB CODE: 13/ SUBM DATE: 25Mar63

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ACC NR: AP6035820 (N) SOURCE CODE: UR/0413/66/000/020/0020/0021

INVENTOR: Sizov, Ye. S.; Polyakov, S. I.; Sizova, K. G.; Strunin, N. M.

ORG: none

TITLE: Sheet metal forming unit. Class 7, No. 186957.

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 20-21

TOPIC TAGS: metal forming, sheet metal, ~~forming~~ hydrostatic pressure, ~~metal forming~~ metal forming ~~unit~~ press

ABSTRACT: This Author Certificate introduces a unit for sheet metal forming. The unit has a chamber which can be evacuated or filled with inert gas, a die, and a pressure container (Fig. 1). To form low-ductility metals, the unit is provided with an attachment for heating the female die, the blank, and the material which plays the part of the male die, all of which are moved into the container by the rod of a hydraulic cylinder installed in the housing coaxially with the container. In a variant, the heating equipment is located outside the container and consists of two semicylinders with heaters enveloping the dies and the blank during the pre-

Card 1/2 UDC: 621.983.32.05

ACC NR: AP6035820

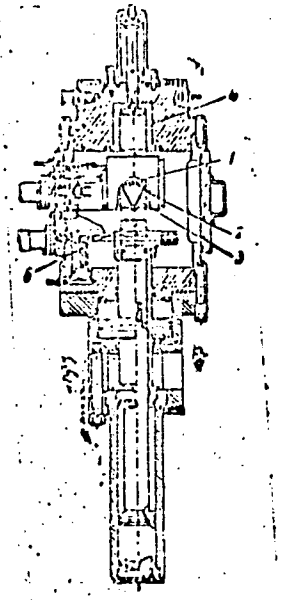

Fig. 1. Metal forming unit

1 - Male die; 2 - blank; 3 - female die; 4 - container; 5 - attachments; 6 - hydraulic cylinder rod.

heating and opening, when dies and blank are pushed into the container. Orig. art. has: 1 figure. [ND]

SUB CODE: 13/ SUBM DATE: 06Jan64/ ATD PRESS: 5109

Card 2/2

ACC NR: AP6021769 SOURCE CODE: UR/0413/66/000/012/0023/0023

INVENTOR: Rodionov, A. A.; Sizov, Ye. S.

ORG: None

TITLE: A method for flaring the ends of thin-walled tubes. Class 7, No. 182673

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 23

TOPIC TAGS: pipe, metal forming, metal deformation

ABSTRACT: This Author's Certificate introduces a method for flaring the ends of thin-walled tubes by setting up pressure on the edge of the blank. Controlled counter-pressure is applied to the zone under deformation both before and during the application of end pressure to increase ductility and eliminate loss of stability in the metal.

SUB CODE: 13/ SUBM DATE: 26Aug63

Card 1/1 UDC; 621.774.7.06

ACC NR: AP6021770 SOURCE CODE: UR/0413/66/000/012/0023/0024

INVENTOR: Rodionov, A. A.; Sizov, Ye. S.

ORG: None

TITLE: A unit for flanging the ends of thin-walled tubes. Class 7, No. 182674

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 23-24

TOPIC TAGS: pipe, metal forming, hydraulic equipment

ABSTRACT: This Author's Certificate introduces a unit for flanging the ends of thin-walled tubes. The unit consists of a housing with a built in conical split collar mechanism for squeezing the blank, and an upsetting mechanism. Controllable counter-pressure in the deformation zone is provided by boring the inside of the housing and placing a plastic material within this aperture. This material is compressed by the piston rod of the hydraulic cylinder which is attached to the housing and equipped with a throttle.

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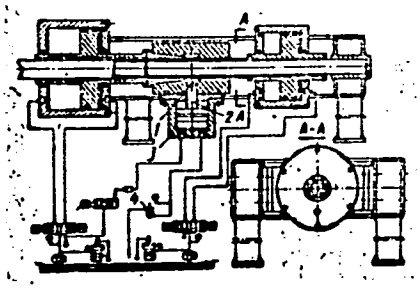
UDC: 621.774.7.06

ACC NR: AP6021770



1-plastic material; 2-rod; 3-hydraulic cylinder; 4-throttle

SUB CODE: 13/ SUBM DATE: 26Aug63

Card 2/2

L 64182-65 EWT(d)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/
ACCESSION NR: AP5021546 EWA(c) JD/HW UR/0286/65/000/013/0007/0007
621.983.3

28
B

AUTHOR: Sizova, K. G.; Sizov, Ye. S.
44 55 44 55

TITLE: A method for punch-drawing parts from sheet metal. Class 7, No. 172265 16

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 7

TOPIC TAGS: metal drawing, metal forming press, sheet metal
49 55 14

ABSTRACT: This Author's Certificate introduces: 1. A method for punch-drawing parts from sheet metal on presses. The sheet metal is placed over a deformable material and is formed by a rigid die. The method is designed for deep drawing with a single press operation and for improving the quality of the finished product. A soft metal, e.g. lead, is placed in an open box beneath the sheet metal workpiece. 2. A modification of this method in which the original state of the soft metal can be restored after each operation so that it can be used repeatedly. After each article has been stamped and removed from the press, the soft metal is squeezed flat by a plate directly on the press.

Card 1/3

L 64182-65

ACCESSION NR: AP5021546

ASSOCIATION: none

SUBMITTED: 11Feb59 ENCL: 01 SUB CODE: IE, MM

NO REF SOV: 000 OTHER: 000

Card 2/3

L 64182-65

ACCESSION NR: AP5021546

ENCLOSURE: 01

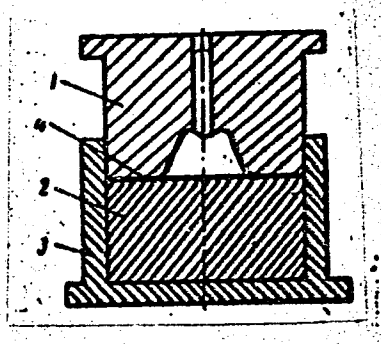


Fig. 1. 1--die, 2--soft metal (lead); 3--box; 4--sheet metal workpiece

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ACC NR: AP6035835 SOURCE CODE: UR/0413/66/000/020/0038/0038

INVENTOR: Knunyants, I. L.; Bykhovskaya, E. G.; Frosin, V. N.; Sizov, Yu. A.

ORG: none

TITLE: Preparation of fluorine-containing isoxazolidines. Class 12, No. 187026 [announced by Military Academy for Chemical Protection (Voyennaya akademiya khimicheskoy zashchity)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 38

TOPIC TAGS: fluoroisoxazolidine, nitrone, olefin, potassium fluoride, fluorinated organic compound, potassium compound, fluoride

ABSTRACT: In the proposed method, fluorine-containing isoxazolidines are obtained by treating nitrones with C_1—C_5 ϕ-olefins in an organic solvent, e.g., benzene, in the presence of potassium fluoride in an autoclave at ~20°C.

[WA-50; CBE No. 14]
[PS]

SUB CODE: 07/ SUBM DATE: 20Sep65

Card 1/1 UDC: 547.786'221.07

ACC NR: AP6025587 SOURCE CODE: UR/0413/66/000/013/0020/0020

INVENTOR: Knunyants, I. L.; Bykhovskaya, E. G.; Frosin, V. N.; Sizov, Yu. A.

ORG: none

TITLE: Method of preparation of 2-(N-alkoxy-N-alkyl)aminoethyle mercaptans. Class 12, No. 183204. [announced by Miliatry Academy for Chemical Protection (Voyennaya akademiya khimicheskoy zashchity)]

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 20

TOPIC TAGS: alkoxyalkylaminoethyl mercaptan, ethylene sulfide, dialkylhydroxylamine, mercaptan, sulfide, hydroxylamine

ABSTRACT:
In the proposed method, 2-(N-alkoxy-N-alkyl)aminoethyl mercaptans are obtained by the reaction of ethylene sulfide with N,O-dialkylhydroxylamine at 90—100°C in an organic solvent. [W.A. 50; CBE No. 10]

SUB CODE: 07/ SUBM DATE: 20Sep65/

Card 1/1 UDC: 547.269.1'233.07

KVYATKOVSKIY, A.N.; YESIN, O.A.; SIZOV, Yu.M.; ABDEYEV, M.A.

Reducing copper losses in lead production slags by electrochemical methods. Izv.AN SSSR. Otd.tekh.nauk. Met.i topl. no.4:40-43 Jl-Ag '62. (MIRA 15:8)
(Copper) (Electrocapillary phenomena)

PLATONOV, G.F.; ABDEYEV, M.A.; BUTENKO, N.S.; SIZOV, Yu.M.; VERSHININA, V.V.; MIKHAYLOV, N.I.; SIDORENKO, T.A.; DYUYSEKIN, Ye.K.; PRIMBETOV, M.D.; KUZNAKHMETOV, E.I.; GANCHENKO, V.M.; SHISHKIN, V.I.; CHIRKOVA, N.P.; IL'INA, I.I.; BERDUS, Yu.M.

Two-stage method of treating slag and sinter cake in electric furnaces. Trudy Alt. GMNII AN Kazakh. SSR 14:4-13 '63. (MIRA 16:9)
(Nonferrous metals—Electrometallurgy)

KVYATKOVSKIY, A.N.; SIMOV, Yu.M.; YESIN, O.A.; ABDEYEV, M.A.

Electrochemical extraction of copper from slag with the fuming process equipment of the lead industry. Trudy Alt. GMMII AN Kazakh. SSR 14: 52-58 '63. (MIRA 16:9)
(Lead industry—By-products) (Copper—Electrometallurgy)

SIZOV, Yu.M.; PLATONOV, G.F.; ABDEYEV, M.A.; SEMYKIN, N.G.

Refining and use of cast iron obtained during the smelting of zinc slags and sinter cake. Trudy Alt. GMMII AN Kazakh. SSR 14:123-128 '63. (MIRA 16:9)

(Nonferrous metal industries--By-products)
(Cast iron--Metallurgy)

SIZOV, Yu.N., inzh.

Investigating direct current tractors. [Nauch.trudy] VIESKH 3: 161-187 '58. (MIRA 13:4)
(Tractors--Electric driving)

LEPESHKIN, A.A., tekhnik; SIZOV, Yu.P., tekhnik

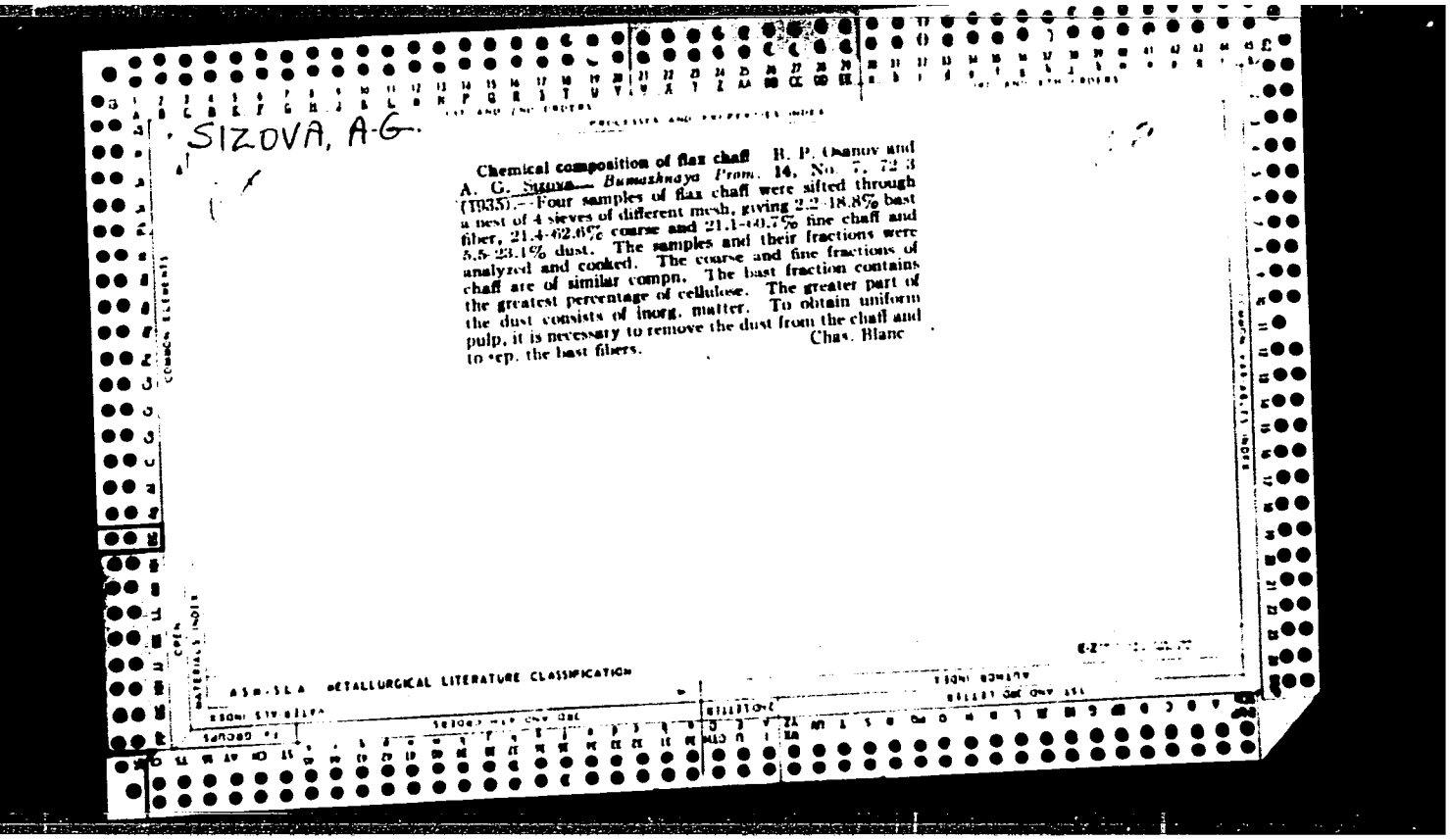
For three-shift work. Shakht. stroi. no.8:25-26 Ag '60.
(MIRA 13:11)

1. Normativno-issledovatel'skaya stantsiya No.7 kombinata Kuzbasshakhtostroy.
(Mining engineering) (Hours of labor)

SIZOVA, A.

Ways of eliminating seasonal production. Mias.ind. SSSR 33 no.3:30-31 '62. (MIRA 15:7)

1. Volgogradskiy sovnarkhoz.
(Poultry plants)



SIZOVA, A.G.

Chemical composition of flax chaff. B. P. Osanov and A. G. Sizova. *Bumazhnaya Prom.* 14, No. 7, 72-3 (1935).—Four samples of flax chaff were sifted through a nest of 4 sieves of different mesh, giving 2.2-18.8% bast fiber, 21.4-62.6% coarse and 21.1-40.7% fine chaff and 5.5-23.1% dust. The samples and their fractions were analyzed and cooked. The coarse and fine fractions of chaff are of similar compn. The bast fraction contains the greatest percentage of cellulose. The greater part of the dust consists of inorg. matter. To obtain uniform pulp, it is necessary to remove the dust from the chaff and to sep. the bast fibers.

Chas. Blanc

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

MEL'NICHENKO, Ye.L.; KAGAN, I.S.; GOL'DENBERG, M.Ya.; KAMNEVA, Z.P.; SIZOVA, A.G.

Flow diagram of the manufacture of fruit juices. Kons.i ov.prom. 15 no.11:14-15 N '60. (MIRA 13:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut konservnoy promyshlennosti.

(Fruit juices)

SKURATOV, A.D., red., V redaktirovanii prinimali uchastiye: SHKATOV, K.K.; FEDOROVA, M.A.; OVCHINNIKOV, A.I.; SIZOVA, A.I.; SIGEL', M.G.; KAHVETSKIY, A.V.; KULICHKIN, A.V.; NIKOLAYEVA, Z.A.; STEPANOVA, V.P.; RYZHOVA, V.K.; MUZHIKOVA, V.N.. YEREMIN, N.I., red.; KHAKHAM, Ya.M., tekhn.red.

[Economy of Ul'yanovsk Province; a concise statistical manual] Narodnoe khoziaistvo Ul'ianovskoi oblasti; kratkii statisticheskii sbornik. Ul'ianovskoe knizhnoe izd-vo, 1958. 199 p. (MIRA 12:3)

1. Ulyanovsk (Province). Oblastnoye statisticheskoye upravleniye. 2. Nachal'nik Statisticheskogo upravleniya Ul'yanovskoy oblasti (for Skuratov).
(Ul'yanovsk Province--Statistics)

[illegible], [illegible]; ZOTIKOV, V.Ye., prof., doktor tekhn. nauk, [illegible] raboty, zasluzhennyy deyatel' nauki i tekhniki

Characteristics of cotton blends with synthetic fibers and of yarns produced from these blends. Tekst. prom. 25 no.3:23-28 Mr '65. (MIRA 18:5)

1. Kafedra mekhanicheskoy tekhnologii voloknistykh materialov Moskovskogo tekstil'nogo instituta (for Sineva).

SIZOVA, A. P.

"The Bacteriological Characteristics of Local Strains of the Microorganisms Which Cause Paratyphoid in Calves." Cand Biol Sci, Omsk Veterinary Inst; Kurganskiy Agricultural Inst, Min Higher Education, Omsk, 1954. (KL, No 3, Jan 55)

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SO: Sum. No. 556, 24 Jun 55

SIZOVA, A. V.

Jun 50

USSR/Medicine - Brucellosis Diagonsis, Methods

"Variation of Wright's Reaction for the Diagnosis of Brucellosis in Animals," K. V. Bunin, Cand Vet Sci, A. V. Sizova, Dr Vet Med, Chelyabinsk Oblast Vet Bacteriol Lab, 1½ pp

"Veterinariya" No 6

Discusses method of increasing terminal titer of Wright's agglutination reaction. Method involves use of neutral salt as electrolyte which contains bivalent ion, thus causing coagulation of colloids in weaker concentrations. Tabulates data on results of testing method.

PA 161T79

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"The dry biological mass (bio-mass) - an effective means in animal breeding."

Veterinariya, Vol. 38, No. 5, 1961

Sizova, A. V. -Candidate of Biological Sciences

Kurgan Agricultural Institute

ARAVIYSKIY, A. N., prof.; SIZOVA, A. V.; NECHAYEVA-PUGACHEVA, Ye. V.

Practical importance of the phenomenon of luminescence in the diagnosis of favus of the hair. Vest. derm. i ven. 36 no.7: 37-38 Jl '62. (MIRA 15:7)

(FAVUS) (LUMINESCENCE)

KOZLOVA, Z.M.; NECHAYEVA-PUGACHEVA, Ye.M.; MARTYNYUK, M.S.; SIZOVA, A.V.; GLEYZER, A.M.; KUCHINSKAYA, L.M.; MURAV'YEVA, M.F.

Experience with 4% epilin plaster in the treatment of scalp mycosis. Vest. derm. i ven. 37 no.4:73 Ap '63. (MIRA 17:5)

1. Detskaya kozhnaya bol'nitsa Leningrada (nauchnyy rukovoditel' -prof. A.N. Araviyskiy).

NFOR[illegible]VA-[illegible]UGACHEVA, Ye.V.;SIZOVA, A.V.(Leningrad)

Experience with the use of griseofulvin for patients with dermatomycosis of the scalp in a pediatric dermatological hospital. Vest. derm. i ven. 37 no.9:81-82 S '63.

(MIRA 17:6)

1. Detskaya kozhnaya bol'nitsa (nauchnyy rukovoditel' - prof. A.N. Araviyskiy), Leningrad.

GRESHNYAKOV, G.I.; SIZOVA, G.A.

Norms for furniture blanks. Der.prom. 9 no.3:20 Mr '60. (MIRA 13:6)
(Furniture industry--Standards)

L 52792-65 EWT(m)/EPF(c)/EWP(j) Pc-4/Pr-4 RM
ACCESSION NR: AP5016189 UR/0079/64/034/012/3952/3954

19
B

AUTHOR: Yevdakov, V. P.; Mizrakh, L. I.; Sizova, G. P.

TITLE: Reaction of the anhydride of methylphosphinic acid with certain acids and their salts

SOURCE: Zhurnal obshchey khimii, v. 34, no. 12, 1964, 3952-3954

TOPIC TAGS: phosphinic acid, aliphatic carboxylic acid, aromatic carboxylic acid

Abstract: Continuing an investigation of anhydrides of phosphorus acids, the authors treated methylphosphinic acid anhydride with organic acids and their salts. For both aliphatic and aromatic carboxylic acids, the reaction produced the carboxylic acid anhydride and pyromethylphosphinic acid or the corresponding salt. The reaction can be conducted without a solvent, but is more conveniently conducted in benzene or xylene medium.

ASSOCIATION: none

SUBMITTED: 02Aug63 ENCL: 00 SUB CODE: OC, GC

NO REF SOV: 003 OTHER: 003 JPRS

Card 1/1

ABRAMOVA, Z.V., kand.sel'skokhoz.nauk; SHUROVENKOV, Yu.B.; PONOMARCHUK, V.I. (Uzhgorod); KHODYREV, N.G., agronom (Ust'-Labinskiy rayon, Krasnodarskogo kraya); KASUMOV, V.G., nauchnyy sotrudnik; PROKOF'YEV, M.A.; SIZOVA, G.S.

Brief information. Zashch. rast. ot vred. i bol. 9 no. 4:48-50 '64. (MIRA 17:5)

1. Leningradskiy sel'skokhozyaystvennyy institut (for Abramova). 2. Zaveduyushchiy laboratoriyey zashchity rasteniy Kurganskoy oblastnoy sel'skokhozyaystvennoy opytnoy stantsii (for Shurovenkov). 3. Azerbaydzhanskiy institut zashchity rasteniy (for Kasumov). 4. Altayskaya opytnaya stantsiya sadovodstva (for Prokof'yev, Sizova).

ACC NR: AP6025582 (N) SOURCE CODE: UR/0413/66/000/013/0011/0011

INVENTOR: Sizov, Ye. S.; Sizova, K. G.; Strunin, N. M.; Razumilov, V. D.

ORG: None

TITLE: A die for drawing sheet metal parts. Class 7, No. 183173

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 13, 1966, 11

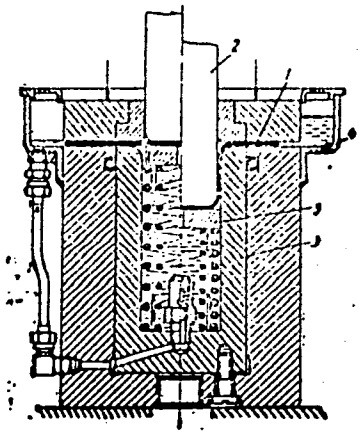
TOPIC TAGS: sheet metal, metal drawing, die

ABSTRACT: This Author's Certificate introduces a die for drawing sheet metal parts by using hydraulic pressure. The unit contains a punch, a fluid-filled female die and a clamping device. The unit is designed for hydrodynamic lubricating conditions and blocking off the section of the blank subject to damage. The die is equipped with an annular reservoir with a bottom flush with the female die surface. A knockout tool is placed in the working area with a diameter greater than that of the finished part. This knockout tool has apertures for transmitting fluid from the female die area to the annular reservoir, which are connected by a pipeline.

Card 1/2

UDC: 621.983.32

ACC NR: AP6025582



1-blank; 2-punch; 3-female die; 4-annular reservoir

SUB CODE: 13/ SUBM DATE: 12Jul63

Card 2/2

ACC NR: AP6029013 SOURCE CODE: UR/0413/66/000/014/0013/0014

INVENTOR: Sizov, Ye. S.; Strunin, N. M.; Razumilov, V. D.; Kozlov, I. V.; Sizova, K. G.

ORG: None

TITLE: Double action hydraulic press. Class 7, No. 183709

SOURCE: Izobret prom obraz tov zn, no. 14, 1966, 13-14

TOPIC TAGS: hydraulic equipment, hydraulic cylinder, die, metal drawing

ABSTRACT: This Author's Certificate introduces a double action hydraulic press equipped with a hydraulic cylinder control system with distribution valves. These hydraulic cylinders transmit power both to the punch and the clamping jig. The unit is designed for transmitting pulsating movements with a given force and pulsation amplitude to the clamping device to provide deeper drawing. The hydraulic cylinder which transmits power to the clamping device has a hollow piston rod. This rod is mounted on the rod of a piston connected to the punch and is located in a hydraulic cylinder interacting with the distribution valves by means of an electrocontact pressure gauge in the hydraulic system and a terminal circuit breaker rigidly mounted on the press frame. The distribution valves switch fluid delivery between the cavities in the

Card 1/2 UDC: 621.983.32.06;621.226

ACC NR: AP6029013

hydraulic cylinder above and below the piston. The ratio between the piston areas is calculated to provide pressure for the clamping jig which is several times the punch pressure.

SUB CODE: 13/ SUBM DATE: 25Mar63

Card 2/2

ACC NR: AP6035820 (N) SOURCE CODE: UR/0413/66/000/020/0020/0021

INVENTOR: Sizov, Ye. S.; Polyakov, S. I.; Sizova, K. G.; Strunin, N. M.

ORG: none

TITLE: Sheet metal forming unit. Class 7, No. 186957.

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 20, 1966, 20-21

TOPIC TAGS: metal forming, sheet metal, ~~forming~~, hydrostatic pressure, ~~metal forming~~, metal forming unit, press

ABSTRACT: This Author Certificate introduces a unit for sheet metal forming. The unit has a chamber which can be evacuated or filled with inert gas, a die, and a pressure container (Fig. 1). To form low-ductility metals, the unit is provided with an attachment for heating the female die, the blank, and the material which plays the part of the male die, all of which are moved into the container by the rod of a hydraulic cylinder installed in the housing coaxially with the container. In a variant, the heating equipment is located outside the container and consists of two semicylinders with heaters enveloping the dies and the blank during the pre-

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ACC NR: AP6035820

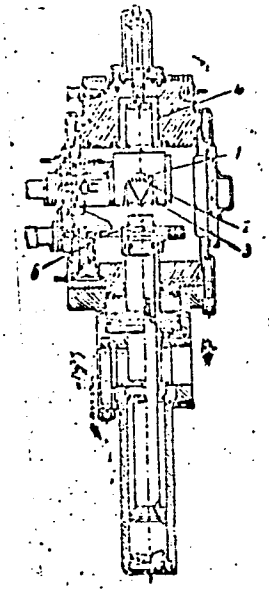


Fig. 1. Metal forming unit

1 - Male die; 2 - blank; 3 - female die; 4 - container; 5 - attachments; 6 - hydraulic cylinder rod.

heating and opening, when dies and blank are pushed into the container. Orig. art. has: 1 figure. [ND]

SUB CODE: 13/ SUBM DATE: 06Jan64/ ATD PRESS: 5109

Card 2/2

L 64182-65 EWT(d)/EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(b)/EWP(l)/
ACCESSION NR: AP5021546 EWA(c) JD/HW UR/0286/65/000/013/0007/0007
621.983.3

28
B

AUTHOR: Sizova, K. G.; Sizov, Ye. S.
44 55 44 55

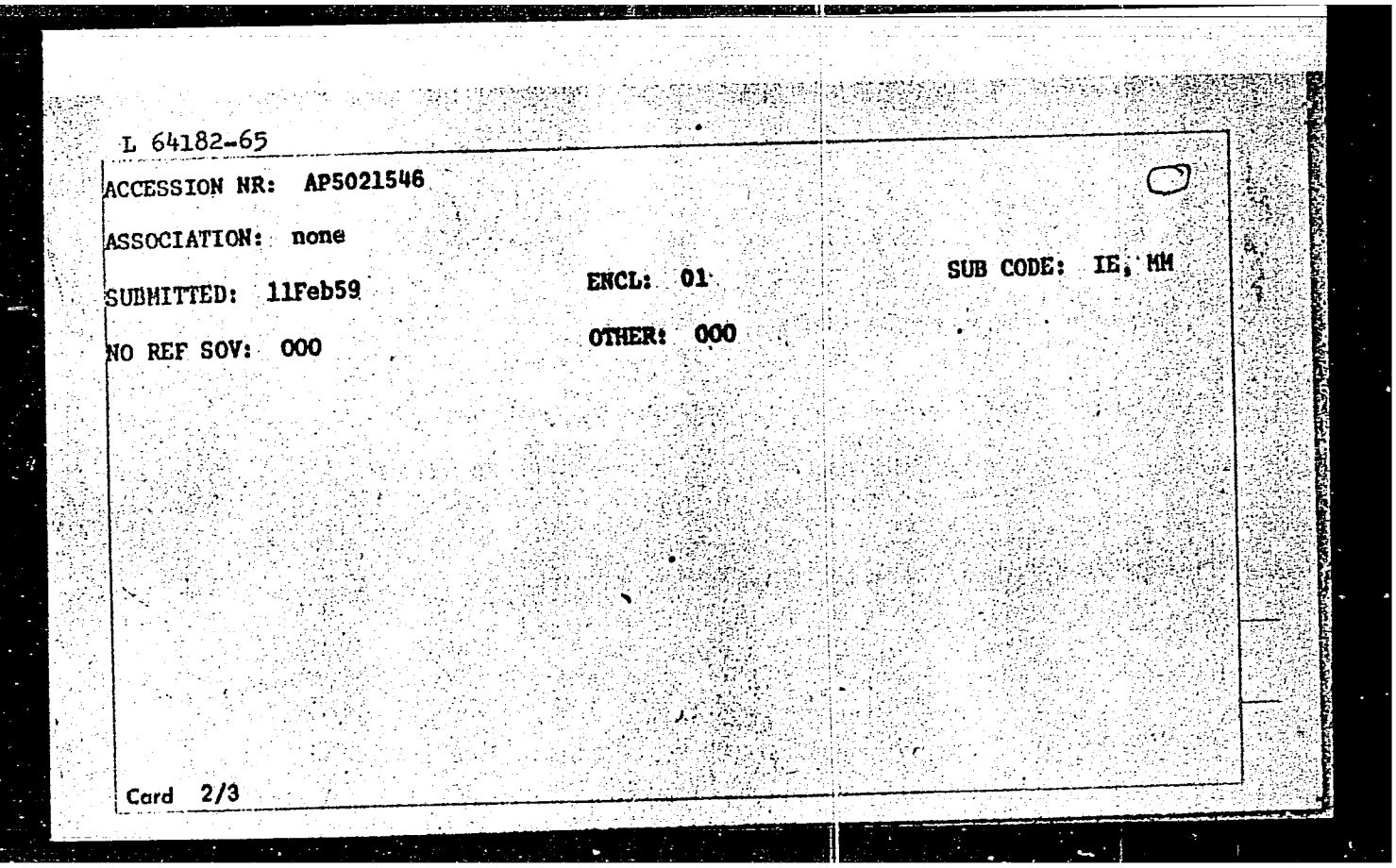
TITLE: A method for punch-drawing parts from sheet metal. Class 7, No. 172265 16

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 13, 1965, 7

TOPIC TAGS: metal drawing, metal forming press, sheet metal
49 55 14

ABSTRACT: This Author's Certificate introduces: 1. A method for punch-drawing parts from sheet metal on presses. The sheet metal is placed over a deformable material and is formed by a rigid die. The method is designed for deep drawing with a single press operation and for improving the quality of the finished product. A soft metal, e.g. lead, is placed in an open box beneath the sheet metal workpiece. 2. A modification of this method in which the original state of the soft metal can be restored after each operation so that it can be used repeatedly. After each article has been stamped and removed from the press, the soft metal is squeezed flat by a plate directly on the press.

Card 1/3



L 64182-65

ACCESSION NR: AP5021546

ASSOCIATION: none

SUBMITTED: 11Feb59 ENCL: 01 SUB CODE: IE, MM

NO REF SOV: 000 OTHER: 000

Card 2/3

L 64182-65

ACCESSION NR: AP5021546

ENCLOSURE: 01

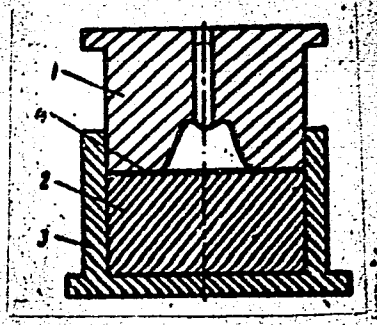


Fig. 1. 1--die; 2--soft metal (lead); 3--box; 4--sheet metal workpiece

Card 3/3