DOROFEYENKO, G.N.; DULENKO, V.I.; ANTONENKO, L.M.

Perchloric acid and its compounds as catalysts of organic synthesis. Part 6: Magnesium perchlorate (anhydrone), a convenient catalyst of acylation of organic compounds by acid anhydrides. Zhur.ob.khim. 32 no.9:3047-3052 S '62. (MIRA 15:9)

1. Donetskoye otdeleniye Instituta organicheskoy khimii AN UkrSSR.
(Magnesium perchlorate) (Chemistry, Organic--Synthesis)

ANTONENKO, Leonid Sergeyevich; TIKHONOVA, N.V., red.; NESMYSLOVA, L.M., tekhn. red.

[Laboratory testing of building materials] Laboratornye raboty po ispytaniiu stroitel'nykh materialov, Moskva, Vses. uchebno-pedagog. izd-vo, Proftekhizdat, 1961. 58 p. (MIRA 14:12)
(Building materials—Testing)

LITVAK, S.L. [Lytvak, S.L.], kand.med.nauk; ANTONENKO, M.D.

Treatment with androgens of some forms of pathologic climacteric. Ped., akush. i gin. 22 no.6:48-49 '60. (MIRA 14:10)

1. Akusherskо-ginekologicheskaya klinika (direktor - zasluzhennyy deyatel' nauki prof. O.I.Malinin) Odesskogo meditsinskogo instituta im. M.I.Pirogova (direktor - zasluzhennyy deyatel' nauki prof. I.Ya.Doyenka) i kabinet lecheniya patologicheskogo klimakteriya pri 5-y zhenskoy konsul'tatsii g. Odessy (zaveduyushchiy - M.D.Antonenko).

(CLIMACTERIC) (ANDROGENS—THERAPEUTIC USE)

ANTONENKO, M., inzh. (Dnepropetrovsk)

Mountain air in a workshop. Okhr.truda i sotsstrakh. no.7:65-67 Jl '59. (MIRA 12:11)
(Air, Ionized)

ANTONENKO, M.

With machine constructors in Dnepropetrovsk. NTO no.8:16 Ag '59.
(MIRA 12:11)

1. Predsedatel' soveta pervichnoy organizatsii Nauchno-tekhnicheskogo obshchestva mashinostroitel'nogo zavoda, Dnepropetrovsk.
(Dnepropetrovsk--Machinery industry)

ANTONENKO, M.; BOLONSKIY, N.

Device for pouring ethyl benzine and rendering it harmless.
Okhr. truda i sots. strakh. no.2:87-88 Ag '58. (MIRA 12:1)
(Gasoline--Safety measures)

ANTONENKO, M., insh. (g. Dnepropetrovsk).

Valuable suggestions of innovators. Okhr. truda i sots. strakh. no.3:83-84 S '58. (MIRA 12:1)
(Hoisting machinery)

ANTONENKO, M.G., inzhener; BOLONSKIY, N.B., inzhener.

[redacted] Device for transfusion of ethylated gasoline. Bezop.truda v prom. 1 no.8:34-35 Ag '57. (MLRA 10:8)
(Automobiles--Apparatus and supplies)

ANTONENKO, M.G., inzh.

"Mountain air" in a machinery plant. Mashinostroitel' no.3:12 Mr '60. (MIRA 13:6)
(Factories--Air conditioning)

ANTONENKO, M.O.

With workers of the machinery industry in Dnepropetrovsk.
Mashinstroitel' no.7:40 '61. (MIRA 14:7)
(Dnepropetrovsk—Machinery industry)

ACC NR: AP6036272 SOURCE CODE: UR/0108/66/021/011/0073/0074

AUTHOR: Antonenko, M. G. (Active member)

ORG: Scientific and Technical Society of Radio Engineering and Electrocommunication im. A. S. Popov (Nauchno-tekhnicheskoye obshchestvo radiotekhniki i elektrosvyazi)

TITLE: Investigation of operating reliability of high-power ferrite devices (for purposes of discussion)

SOURCE: Radiotekhnika, v. 21, no. 11, 1966, 73-74

TOPIC TAGS: ferrite switch, ferrite, reliability

ABSTRACT: The operating reliability of Al-Mg ferrite elements (290 x 20 x 6.85 mm) functioning in a waveguide is reported. These failures were recorded:

	Number of failures	Failure Types		
		Cracks	Spalls	Breakdowns
In 1959	35	6	26	3
1960	27	4	16	7
1961	4	2	0	2
Total	66	12	42	12

Card 1/2 UDC: 621.3.019

ACC NR: AP6036272

The causes of failures were: heating by signal power; stresses between the ferrite elements and waveguide walls; low quality of cement and wall surface; inaccuracy of ferrite fabrication; nonhomogeneity of source materials. Estimated probabilities of failure were: Cost of repairs, 55100 rubles.

1959	1960	1961
0.346	0.117	0.017

Orig. art. has: 5 formulas and 2 tables.

SUB CODE: 14, 09 / SUBM DATE: 22Feb65 / ORIG REF: 004

Card 2/2

ANTONENKO, N.G.

GSC-300 welding generator on a pipe laying machine. Stroi. truboprov. 9 no.10:26-27 O '64. (MIRA 18:7)

1. Stroitel'no-montazhnoye upravleniye No.7 tresta Mosgazprovodstroy, Leningrad.

ANTONENKO, N.K.

Laying cables in reinforced concrete ducts. Avtom., telem. i svias' 2 no. 8:31 Ag '58. (MIRA 11:8)

1. Nachal'nik Leningrad-Finlyandskoy distantsii signalizatsii i svyazi Oktyabr'skoy dorogi.
(Electric cables)

ANTONENKO, N.K.

The cost of supporting level drifts according to the order of level development. Inv. AN Kazakh. SSR Ser.ger. dela no.3: 83-93 '51. (MLRA 9:6)
(Mine timbering) (Mining engineering)

ANTONENKO, N.K.; KUCHEROV, S.A.

Amount of methane emission in Karaganda Basin commercial sector mines. Trudy Inst. gor. dela AN Kazakh. SSR 1:83-92 '56. (MIRA 11:1)
(Karaganda Basin--Mine gases)

ANTONENKO, N.K.

Determining the most advantageous place for vertical shaft sinking by the dip of the minefield. Trudy Inst. gor. dela AN Kazakh. SSR 2:60-71 '57. (MIRA 10:12)

(Shaft sinking)

ANTONENKO, N.K.; TSKHAY, V.A.

Determination of spacing between intermediate entries. Izv. AN Kazakh. SSR. Ser. gor dela no.2:3-8 '58. (MIRA 12:10)
(Mining engineering)

ANTONENKO, N.K.

Cost of supporting mine levels during advance and retreat mining in the Karaganda Basin. Trudy Inst. gor. dela AN Kazakh. SSR no.3:3-15 '58. (MIRA 11:6)
(Karaganda Basin--Coal mines and mining)
(Mine timbering)

ANTONENKO, N.K., TSKHAY, V.A.

Effect of gas-emanating properties of a mine on the size of its main elements. Trudy Inst. gor. dela AN Kazakh. SSR 5:16-29 '60.
(MIRA 13:8)

(Mine gases) (Coal mines and mining)

LEVSHUNOV, P.A.; RAKITA, N.I.; RABUTOVSKIY, V.B.; ANTONENKO, N.N.

Oil-bed sampler. Trudy VNIGNI no.11:211-218 '58. (MIRA 13:1)
(Geochemical prospecting--Equipment and supplies)

ANTONENKO, N.V.

Conference-seminar of chief and senior veterinarians from the state livestock farms of Leningrad Province. Veterinariia 37 no.8:96 Ag '60. (MIRA 15:4)

(Veterinary medicine)

ANTONENKO, N.S.; KODNER, M.S.; ADAMOVA, M.N.

Spectrophotometric determination of styrene and vinylmethyl adipate in polymerization products. Zhur. anal. khim. 20 no.10:1112-1115 '65. (MIRA 18:11)

1. Severodonetskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta azotnoy promyshlennosti i produktov organicheskogo sinteza.

ANTONENKO, N.S.

Infrared spectroscopy method for studying the molecular interaction of acid amides of dicarboxylic acids. Zhur. ob. khim. 35 no.3:425-429 Mr '65. (MIRA 18:4)

1. Severodonetskiy filial Gosudarstvennogo instituta azotnoy promyshlennosti.

DIDENKO, V.Ye.; TSAREV, M.N.; DMITRIYEV, M.M.; LEYTES, V.A.; OBUKHOVSKIY, Ya.M.; IVANOV, Ye.B.; CHERTOK, V.T.; URSALENKO, R.N.; KRIGER, I.Ya.; PINCHUK, A.K.; ANTONENKO, N.Z.; SMUL'SON, A.S.; VASIL'CHENKO, S.I.; DRASHKO, A.M.; HAYEVSKIY, B.N.; KUCHIRYAVENKO, D.N.; SAVCHUK, A.I.; ZHURAVLEVA, L.I.; BAUTIN, I.G.; KHRIYENKO, V.Ya.; MOSENKO, N.K.; CHEBONENKO, G.P.; LISSOV, L.K.; MAMONTOV, V.V.; BELUKHA, A.A.; POYDUN, V.F.; VOLODARSKIY, M.B.; KAL'CHENKO, G.D.; LEVCHENKO, V.M.; BASHKIROV, A.A.; VOROB'YEV, M.F.; IL'CHENKO, L.I.; PODSHIVALOV, F.S.; MOGIL'NYY, P.P.; LEVI, A.R.; VASLYAYEV, G.P.; DURNEV, V.V.; OSYPA, S.S.; SAMOFALOV, G.N.; FOMIN, A.F.; LESHCHINA, A.I.; FANKEL'BERG, G.Ye.; KHODANKOV, A.T.; MAKARENKO, I.S.; KARPOVA, K.K.; VASILENKO, I.M.; VOLOSHCHUK, A.S.; SHELKOV, A.K.; FILIPPOV, B.S.; TYUTYUNNIKOV, G.N.; DOLINSKIY, M.Yu.; NIKITINA, P.P.; MEDVEDEV, S.M.; TSOGLIN, M.E.; LERNER, R.Z.; BOGACHEV, V.I.

Mihail IAkovlevich Moroz; obituary. Koks i khim.no.3:64 '56.(MLRA 9:8)
(Moroz, Mikhail IAkovlevich, 1902?-1956)

ANUCHIN, M.A., kand.tekhn.nauk, dotsent; ANTONENKOV, O.D., kand.tekhn.nauk; POPKOV, G.I., inzh.; DUBININ, V.V., inzh.; NOSIKOV, S.M., inzh.

Movement of billets in free explosion forging. Izv.vys.ucheb.zav.; mashinostr. no.6:155-161 '63. (MIRA 16:10)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.

ANUCHIN, M.A., kand. tekhn. nauk, dotsent; ANTONENKOV, O.D., kand. tekhn. nauk; NOSIKOV, S.M., inzh.; DUBININ, V.V., inzh.

Determining the energy of shape formation of parts in stamping without presses. Izv. vys. ucheb. zav.; mashinostr. no.2:156-159 '64. (MIRA 17:5)

1. Moskovskoye vysshoye tekhnicheskoye uchilishche imeni Baumana.

ACCESSION NR: AP4030380 S/0145/64/000/002/0156/0159

AUTHORS: Anuchin, M. A. (Candidate of technical sciences, Docent); Antonenkov, O. D. (Candidate of technical sciences); Nosikov, S. M. (Engineer); Dubinin, V. V. (Engineer)

TITLE: On the problem of determining embossing energy of work piece with die without molding

SOURCE: IVUZ. Mashinostroyeniye, no. 2, 1964, 156-159

TOPIC TAGS: die, embossing energy, paraboloid of revolution, ellipsoid of revolution, spherical segment, deformed metal, symmetric shape

ABSTRACT: Simplified expressions were derived for the dimensionless embossing energy of a piece having the shape of a paraboloid of revolution, an ellipsoid of revolution, or a spherical segment. The generalized energy is given by

$$E = \int A(\varepsilon_i)\,dV,$$

where $A(\varepsilon_i)$ - specific deformation work, V - volume of deformed metal. For a symmetric shape ε_i is represented by

$$\varepsilon_i = \frac{1}{\sqrt{3}} \ln \frac{\xi^2}{\eta}\, d\eta,$$

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ACCESSION NR: AP4030380

$$\xi = \frac{r}{r_0},$$

where

$$\eta = \int_0^r \sqrt{1 + \left(\frac{dy}{dr}\right)^2} \frac{dr^2}{r_0^2} = \int_0^\xi \sqrt{1 + \left(\frac{dy}{dr}\right)^2} d\xi^2 .$$

Substituting these into the first equation and introducing the dimensionless form of the energy $E' \quad E = B\pi r_0^3 \delta E'$, yields

$$E' = \int_0^1 \frac{1}{\sqrt{3}} \ln \frac{\xi^3}{\eta} b\eta .$$

For the three different shapes mentioned above this equation is integrated numerically on the Ural-2 computer, and the results are displayed graphically. Orig. art. has: 14 formulas and 2 tables.

ASSOCIATION: MVTU im. N. E. Baumana (MVTU)

SUBMITTED: 22Jul63 ENCL: 00

SUB CODE: MM. NO REF SOV: 001 OTHER: 000

Card 2/2

[illegible], [illegible].F.

Numerical solution of the Dirichlet problem for open surfaces of revolution. Vych. sist. no.12:79-97 '64. (MIRA 18:2)

ANTONENKO, P.N.

Model airplane builders of Stalingrad Province. Kryl.rod.2 no.3:9 Mr '51. (MLRA 10:2)

1. Inspektor avtomodel'nogo sporta Stalingradskogo oblastnogo komiteta Dobrovol'nogo obshchestva sodeystviya aviatsii.
(Stalingrad Province--Airplanes--Models)

ANTONENKO, S.

Graphic art lacquers based on the KS-22 carbinol lacquer. Khim. prom. [Ukr.] no.1:57 Ja-Mr '64. (MIRA 17:3)

11(0) SOV/92-58-11-13/36

AUTHOR: Antonenko, S.A., Member of the TTU Ukrglavneftesbyt

TITLE: Bulk Plants Should Have Underground Oil Filling Stations (Neftebazam podzemnyye maslorazlivochnyye)

PERIODICAL: Neftyanik, 1958, Nr 11, pp 17-18 (USSR)

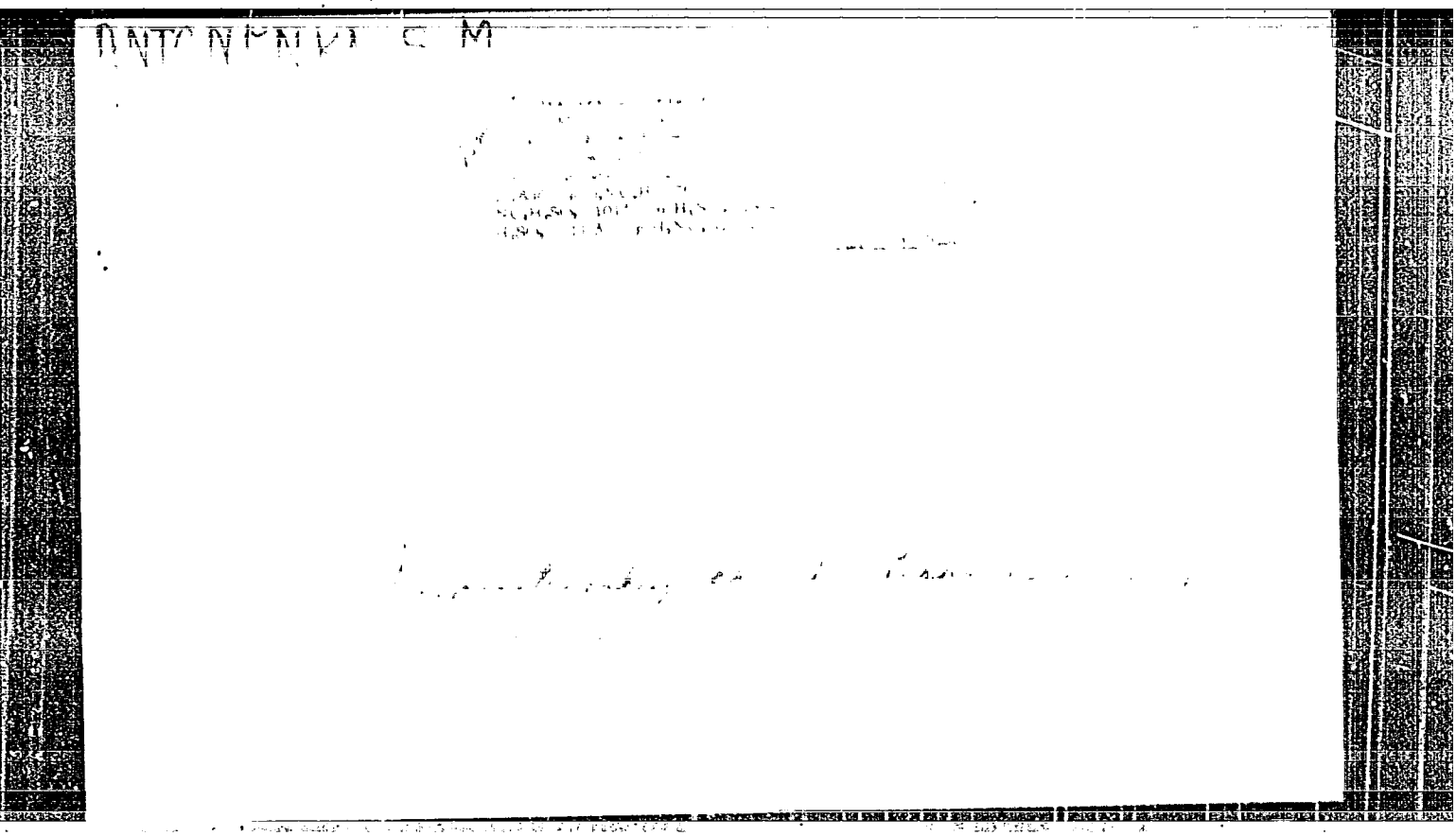
ABSTRACT: To facilitate the supply and delivery of lube oil, especially complicated in winter time, one of the Ukrglavneftesbyt bulk plants built an underground oil filling station in front of 18 horizontal semi-buried storage tanks with a capacity ranging from 3 cu m to 50 cu m. Faucets with a 2" pipe diameter were installed in the tank bottoms through which a 200 liter barrel could be filled in 4-15 minutes. From this underground filling station barrels are carried away in a narrow-gage cars drawn by an electric winch. Oil is pumped into tank trucks by the ShDP-125 or the R3-7 pump; in about 30 to 60 minutes. The underground tankage cut down fire hazard and makes it possible to reduce the bulk plant area since the space

Card 1/2

Bulk Plants Should Have Underground (Con.)

between installations can be economized. If the profile of the terrain permits lube oil can be unloaded from tank cars and poured into underground storage tanks by gravity. Besides this underground filling station, the author mentions another similar station, where a number of operations were mechanized and the time of oil loading and unloading was shortened.

ASSOCIATION: L'vovskiy TTU Ukrglavneftesbyta (The L'vov TTU of the Ukrainian Branch of the Main Administration for Petroleum Marketing)



35338
S/194/62/000/001/042/066
D201/D305

16.3400 (1132,1253,1327)

AUTHORS: Kozulin, Yu. N. and Antonenko, T. I.

TITLE: Tabulating functions $Q_\mu(p,z)$ of two complex variables

PERIODICAL: Referativnyy zhurnal, Avtomatika i radioelektronika, no. 1, 1962, 21, abstract 1ZhM42 (Uch. zap. Kishinevsk. un-t, 1960, 55, 209-217)

TEXT: In calculating the electromagnetic field of a vertical magnetic dipole over a 2-layer conducting medium the necessity arose of tabulating functions

$$Q_\mu(p,z) = \int_0^\infty I_0(p\,\mathrm{sh}\zeta)e^{-z_v\,\mathrm{ch}\zeta - \mu\zeta}\,d\zeta =$$

-- given for

Card 1/3 0.5, 1.0, 1.5 and for 6 va-
.. the dependence of the electromagneti.

C ..)

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D201/D305

Tabulating functions $Q_u(p,z)$...

field components e_φ and h_z on the modulus of parameter p is shown.
/Abstracter's note: Complete translation./

Card 3/3

S/058/61/000/010/074/100
A001/A101

24,7400

AUTHORS: Rykov, V.I., Antonenko, T.I.

TITLE: On determining the surface energy of solids

PERIODICAL: Referativnyy zhurnal, Fizika, no. 10, 1961, 242, abstract 10E90 ("Uch. zap. Kishinevsk. un-t", 1960, v. 55, 227 - 231)

TEXT: The authors derive an equation which relates specific surface energies of the solid $\mathcal{E}_s$ and its smelt $\mathcal{E}_{sm}$ at the smelting point: $\mathcal{E}_s = K\,\mathcal{E}_{sm}$, where K depends on energies of sublimation and evaporation, external pressure and molar volumes of solid, smelt and vapor. The formula yields results in satisfactory agreement with experiments. A linear relation is obtained, using the Gibbs-Helmholtz equation, between the specific surface free energies of the solid and its smelt. The following quantities enter this expression as parameters: temperature and heat of smelting, molar volumes and thermal coefficients of volumetric expansion for the solid and its smelt.

G. Krasko

[Abstracter's note: Complete translation]

Card 1/1

41692
S/837/61/049/000/004/011
B102/B104

AUTHOR: Antonenko, T. I.

TITLE: Determination of the total surface energy of solids from the angle of wetting

SOURCE: Kishinev. Universitet. Uchenyye zapiski. v. 49, 1961, 54-58

TEXT: The great deviations in surface energy as established by the usual methods are ascribed to the fact that most of those methods depend on solid - solid interaction. Here it is proposed to work with solid - liquid interaction for determining surface energy and stress. As compared with other wetting methods, this one offers the advantage that the final formulas involve no quantities difficult to determine. The parameters of the liquid are assumed to be all known. Surface energies, ε, and wetting angle, θ, are related by $\varepsilon_1 - \varepsilon_{12} = \varepsilon_2\left(1 + \frac{1}{\cos\theta} - \tan\theta\right)$ where ε_{12} is a function of the potential energy of molecular interaction; the subscripts 1 and 2 refer to solid and liquid, respectively. When ε_{12} is calculated

Card 1/2

Determination of the total surface ...

and expressed in terms of θ and $x = (v_2/v_1)^{1/3}$ this leads to the final relation

$$\sigma_1 = \left[\sqrt{1 + \frac{8\sigma_{12}x^4}{16x^2\left(\frac{1}{2}+\frac{x}{2}\right)^6\left(2+\frac{1}{\cos\theta}-\operatorname{tg}\theta\right)}} - 1\right]^3 \cdot \qquad (13)$$

the v_i are the specific volumes. Surface energy and surface stress are computed for solid benzene and for sulfur wetted with benzene, CCl_4, toluene, and cyclohexane. The values agree well with each other. The surface stress for NaCl is found to be 257 dyne/cm. There is 1 table.

Card 2/2

RYKOV, V.I.; ANTONENKO, T.I.

Relation between sublimation and hardness. Izv.vys.uch.zav.; fiz. no.4:173 '62. (MIRA 15:9)

1. Kishinevskiy gosudarstvennyy universitet.
(Sublimation (Physical sciences)) (Hardness)

ACCESSION NR: AP4025092 S/0139/63/000/006/0104/0109

AUTHORS: Antonenko, T. I.; Rykov, V. I.

TITLE: Calculating entropy changes in evaporation and sublimation

SOURCE: IVUZ. Fizika, no. 6, 1963, 104-109

TOPIC TAGS: entropy change, evaporation, sublimation, transition layer, potential energy, Boltzmann distribution

ABSTRACT: A new analytic method for measuring entropy changes during evaporation and sublimation which requires knowledge of the molar volume of only one phase has been described. The method is based on the fact that between the volume of the two phases in equilibrium there exists a transition layer where all parameters change abruptly, especially the density ρ and the potential energy u of the molecule, i.e., from ρ_1 and u_1 to ρ_2 and u_2. The analysis is carried out in two steps: 1) the molecules transfer from the first phase into the transition layer, and 2) the molecules move out of the transition layer into the second phase. Under the assumption of a Boltzmann distribution for the molecules in either phase and a

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ACCESSION NR: AP4025092

linear dependence of molecular potential energy in the transition layer, an expression is derived for the transition layer thickness. Furthermore, universal functions are derived and tabulated

$$\Phi(\rho_2/\rho_1) = \frac{R \cdot F(\rho_2/\rho_1)}{(\rho_1/\rho_2 - 1)}$$

to enable the determination of values of L/T, ρ_2/ρ_1, and the signs of dp/dT and v_1. Orig. art. has: 18 formulas, 3 tables, and 1 figure.

ASSOCIATION: Kishinevskiy gosuniversitet (Kishinev State University)

SUBMITTED: 09Jul62 DATE ACQ: 14Feb64 ENCL: 00

SUB CODE: PH NO REF SOV: 002 OTHER: 000

Card 2/2

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720015-4"

APPROVED FOR RELEASE: 06/05/2000 CIA-RDP86-00513R000101720015-4"

AUTHOR: Antonenko, T. I.

SUB CODE: GP FSCL:

Card 1/1

L 26766-66 EWT(1)/EPF(n)-2/ETC(m)-6 WW/GG

ACC NR: AT6005620 UR/2837/64/069/000/0023/0025

AUTHOR: Antonenko, T.I. 49 B+1

ORG: Kishinev State University, Kishinev (Kishinevskiy gosuniversitet)

TITLE: Determination of surface layer thickness between a liquid and its saturating vapor

SOURCE: Kishinev. Universitet. Uchenyye zapiski v.69, 1964, 23-25

TOPIC TAGS: light polarization, integral equation

ABSTRACT: The present work establishes a connection between the coefficient of polarization ellipticity and the thickness of the surface layer of a liquid in contact with its saturated vapor. The approach is based upon the phenomenon of elliptic polarisation of a linearly polarized light, following a reflection from a flat liquid surface. This fact shows the existence of a transitional surface layer between the liquid and its saturated vapor phase, with a structure essentially different from that of the homogeneous infinite liquid. The analysis builds upon previously published theory of elliptic polarization of light reflected from layers with a thickness much smaller than the light wave length of the falling light (D.V. Sivukhin, J. Exp. & Theor. Phys., v.18, 1948, 976, and v.21, 1951, 367). An integral equation relating the coefficient of pola-

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ACC NR: AT6005620

rization ellipticity and the layer thickness has been obtained. The surface layer thickness, for several liquids, turned out to be 2 - 3 times the liquid intermolecular distance (19 Å. for benzene, 12 Å. for carbon tetrachloride). Orig. art. has: 15 formulas.

SUB CODE: 20 SUBM DATE: None/ ORIG REF: 003/ OTH REF: 001

Card 2/2

MALYUSHITSKIY, Ivan Pavlovich[Maliushyts'kyi, I.P.]; USANOV, I.O., dots., red.; KOVALENKO, N.Ya., red.; ANTOKHENKO, T.S., red.

[Physical and colloid chemistry; colloid chemistry] Fizychna i koloidna khimiia; koloidna khimiia. Kyiv, Radians'ka shkola, 1964. 182 p. (MIRA 18:1)

ANTONENKO, O. (g.Kirovograd, USS); ANTONENKO, V. (g.Kirovograd, USSR)

Contact with life. Politekh.obuch. no.10:87-88 O '59.
(MIRA 13:2)
(Kirovograd--Education, Cooperative)

ANTONENKO, V.A., inzh.

Current feeding nozzle on a semiautomatic machine for welding in carbon dioxide. Svar. proizv. no.1:35 Ja '64. (MIRA 17:1)

ANTONENKO, V.D., inzh.

Capron instead of nonferrous castings. Stroi.truboprov. 6 no.7:6 Jl '61. (MIRA 14:8)

1. L'vovskiy mekhanicheskiy zavod, g. L'vov.
(Nylon) (Gas industry--Equipment and supplies)

ANTONENKO, V.D.

Organization of indoor work of the party. Geod. i kart. no.11:41-43 N '62. (MIRA 15:12)

(Cartography)

AD'YASEVICH, B.P.; ANTONENKO, V.G.

Manufacture of glass collimators. Prib. i tekh. eksp. 8 no.2:126-128 Mr-Ap '63. (MIRA 16:4)
(Collimators)

ANTONENKO, V.I., veterinarnyy vrach (Odessa)

Immunization of pigs against plague and erysipelas by a mixture of two vaccines. Veterinariia 39 no.11:46-47 N '62.
(MIRA 16:10)

AUTHORS: Filippov, S. I., Antonenko, V. I. SOV/[illegible]

TITLE: Characteristic Features of the Oxidation Kinetics of Carbon at a Low Content of Carbon in the Metal Melt (Osobennosti kinetiki okisleniya ugleroda pri nizkikh soderzhaniyakh yego v metallicheskoy vanne)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 3, pp 5 - 9 (USSR)

ABSTRACT: The characteristic kinetic features of the decarburization of low-carbon steel were investigated. The investigations were carried out in quartz test tubes by means of high-frequency furnaces in an argon atmosphere. The velocity of the addition of the oxidizing agents to the metals and the yield of the gaseous products after the reaction were determined by means of capillary rheometers. The course of the oxidation of the carbon was traced during the reaction, and is given in figure 1. The curve of the separation of carbon monoxide specifies the kinetics of the process; it consists of three parts. The decarburization process limits the oxygen transfer in the

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reaction zone to the critical concentration of the carbon in metals. When the addition of the oxidizing agent is increased the curve takes an rising course. The horizontal part of the curve points to the constancy of the process. The critical concentration of carbon in dependence on the intensity of the addition of the oxidizing agent was investigated. The rate of the decarburization process decreases constantly and is determined by the following equation:

$$-\frac{dC}{d\tau} = S/V \cdot K \cdot [C]$$

$$K = \frac{K_x \cdot \gamma}{K_x \cdot \gamma} ,$$

where S/V denotes the ratio between the reaction surface and the volume of the melt, [C] the carbon content of the metal, and K_x and γ the constants of reaction velocity and the carbon transfer. The carbon content

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in the metal melt is determined for any point by means of the content of the carbon monoxide formed; it is useful to represent it by the following equation:

$$[C] = [C]_0 + \sum_n^0 (v\tau).$$

The constants of the decarburization velocity were determined at different carbon contents in the metals, the mean temperature having been 1560° C. From the results obtained may be concluded that the decarburization process in the case of an intense action of gaseous oxidizing agents on the liquid metal takes place much more slowly than in the case of its moderate action. There are 5 figures and 3 references, which are Soviet.

ASSOCIATION: Moskovskiy institut stali (Moscow Steel Institute)

Characteristic Features of the Oxidation Kinetics of Carbon at a Low Content of Carbon in the Metal Melt

SOV/163-58-3-1/49

SUBMITTED: April 5, 1958

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ANTONENKO, V.S.; PUGAY, N.V.; TSEYTLIN, M.A.

Operational reliability of 200 Mw. blocks. Energ. i elektrotekh. prom. no.2:59-61 Ap-Je '63. (MIRA 16:7)

1. Glavnoye upravleniye energeticheskogo khozyaystva Donetskogo basseyna.
(Electric power plants) (Steampipes)

ANTONENKO, V.S., inzhener.

Results of the competition for the best efficiency suggestion.
Sudostroenie 23 no.3:63 Mr '57. (MLRA 10:5)
(Shipbuilding)

ANTONENKO, V.S., inzh.

Results of the competition among the efficiency promoters of the Maritime Province. Sudostroenie 24 no.5:71 My '58. (MIRA 11:6)
(Maritime Province--Marine engineering)

ANTONENKO, V.S., inzh.

Special features of shipping operations in the Far-Eastern Basin. Sudostroenie 26 no.2:78-79 (208) Feb '60. (MIRA 14:11)
(Soviet Far East--Shipping)

ANTONENKO, V.S., inzh.

Maritime Territory Report and Election Conference. Sudostroenie 27 no.8:79-80 Ag '61. (MIRA 14:9)

1. Zamestitel' predsedatelya kraevogo pravleniya Nauchno-tekhnicheskogo obshchestva sudostroitel'noy promyshlennosti. (Shipbuilding--Conferences)

ANTONENKO, V.S., inzh.

Measuring the actual outlines of a ship's hull using a theodolite. Sudostroenie 27 no.9:62-63 S '61. (MIRA 14:11)
(Ships—Measurement)

ANTONENKO, V.S.

Out-of-town session of the Welding Department of the Scientific Technological Society for Shipbuilding. Sudostroenie 28 no.4: 81-82 Ap '62. (MIRA 15:4)

1. Zamestitel' predsedatelya Primorskogo kraevogo pravleniya Nauchno-tekhnicheskogo obshchestva sudostroitel'noy promyshlennosti. (Ships--Welding)

ANTONENKO, V.S., inzh.

Synthetic materials for the finishing and equipment of ship accommodations. Sudostroenie 29 no.10:78-79 O '63.

Conference on the experience of operating new ships in the Far-Eastern Basin. 80 (MIRA 16:12)

S/118/60/000/011/006/014
A161/A133

AUTHORS: Kryzhanovskiy, O.M., Vrublevskiy, V.I., and Antonenko, V.T., Engineers

TITLE: Overall machanization and automation of the cupola process

PERIODICAL: Mekhanizatsiya i avtomatizatsiya proizvodstva, no. 11, 1960, 19-21

TEXT: Detailed illustrated information is given on a system automatically composing and loading the cupola charge and controlling the heat process. The system has been developed at the Otdel avtomatizatsii i mekhanizatsii instituta liteynogo proizvodstva AN USSR (Section of Automation and Mechanization of the Institute of Foundry Production of the AS UkrSSR) and tested in a model. The system collecting and charging the metal charge (pig iron and scrap) (Fig.1) includes hopper sections holding metal for one work day, an apron-type feeder, a shaker, and a motor. The hoppers are suspended and shaken with 15-100 times a minute frequency and 3-6 mm amplitude. The charge components weight in the weighing carriage is measured through deformation of resilient elements, i.e. a beam with fixed ends, or

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a diaphragm, by inductive pickups (Fig.2) producing an electric signal to an electronic potentiometer which transforms the signal into an angle of rotation of a program disc. A special transistorized electronic computer of the Institute design controls the automatic charge collecting with minimum deviations from the components weight set on the program disc. The weighing hopper design has been developed in two different versions - with the hopper directly on the weighing carriage, and with a hopper at every feeder and none on the carriage. A safe gamma-relay (also of the Institute design) device watching the charge level in the cupola produces a signal for the loaded carriage to discharge. The carriage discharges into the bucket, and the hoist switches on and brings the metal charge into the furnace. At the same time, the carriage begins collecting the components from metal hoppers included into the program. The feeders are switched on by the approaching carriage and off by the weight program, and the carriage moves to the next hopper. After collecting, the carriage waits for the gamma-relay signal, receives it, goes to the bucket and unloads. Then follows the charging of coke and flux. Then the cycle repeats. The heat process is controlled by an automatic self-setting system, or extremum regulator (Fig.4). Its

Overall mechanization and automation ...

operation principle is based on the extremum of the iron temperature and blast volume ratio, $T = f(q)$ (where T is the liquid iron temperature in ^{o}C, and q the volume of blast in $m^3/m^2 \cdot min$). The temperature is measured with a thermocouple with a special protection hood and recorded by a writing recorder. If the wanted maximum metal temperature cannot be reached, a signal gives a command for additional coke charge (i.e. the signal will give command for additional coke load in a conventional cupola furnace, or for temperature raise in special furnace). The system can be completed by a telemechanical digital recording circuit for the charge components and the liquid metal temperature. It will replace 10 men. The estimated costs amortization time is 1-1.5 years. The Kiyevskiy armaturno-mashinostroitel'nyy zavod (Kiyev Fitting-and-Machine Plant) and some other are making preparations to use the system. It is pointed out that it may also be used for electric furnaces. /Abstractor's note: The article does not include any design details of the hopper shaking system, the programmer, the computer and the gamma-relay/. There are 5 figures.

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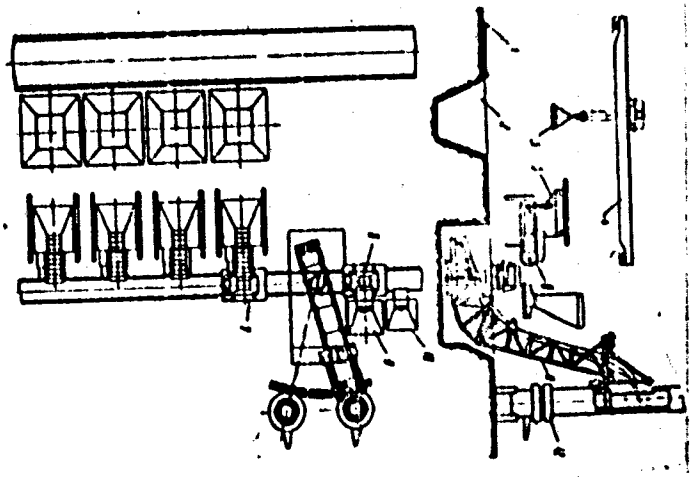
Fig. 1 - 1-rail tracks; 2-hoppers for metal components; 3-disc magnet; 4-beam crane; 5-hopper; 6-feeder; 7-electric weighing carriage for metal; 8-carriage for coke and flux; 9-coke hopper; 10-flux hopper; 11-hoist; 12-cupola.



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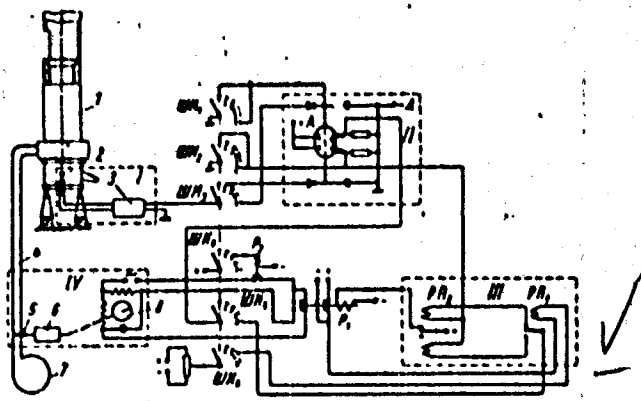

Fig. 4 - The extremal blast regulator: I-the measuring element; 1-the cupola; 2-liquid iron temperature measuring device; 3-amplifier; II-the element determining the temperature growth sign: ШИ 1; ШИ 2; ШИ 3; ШИ 4; ШИ 5; ШИ 6; - step-by-step switch; III-the element multiplying the temperature growth signs and changing the volume of blast; РП 1, РП 2 - polarized relay; IV-servo element; 4-air line; 5-air line gate valve; 6-reducing valve; 7-fan; 8-servo-motor.

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KRIZHANOVSKI, O.N.; VRUBLEVSKI, V.I.; ANTOMENKO, V.T.

Complex mechanization and automation of cupola furnace. Tekhnika 10 no.10: 33-35 '61.

ANTONENKO, V.T.; VRUBLEVSKIY, V.I.

Control device for proportioning cupola charges with sectional magnetic disks. Avtom.i prib. no.4:3-4 O-D '62. (MIRA 16:1)

1. Institut liteynogo proizvodstva AN UkrSSR.
(Proportioning equipment)

ANTONENKO, V.I.; KOZHEUROV, V.A.

Calculating hydrogen solubility in multicomponent slags.
Izv. vys. ucheb. zav.; chern. met. 8 no.11:14-19 '65.
(MIRA 18:11)

1. Chelyabinskiy politekhnicheskiy institut.

ANTONENKO, V.T., insh.; VRUBLEVSKIY, V.I., kand. tekhn. nauk

Using sectional and magnetic plates for automatic composing and proportioning of cupola-furnace charges. Mashinostroenie no.1:30-32 Ja-F '63. (MIRA 16:7)

1. Institut liteynogo proizvodstva AN UkrSSR.
(Cupola furnaces—Equipment and supplies)

ANTONENKO, V.T.

Device for automatic control of cupola-furnace output depending on the agglomeration in the forehearth. Avtom.i prib. no.1:86-87 Ja-Mr '63. (MIRA 16:3)

1. Institut liteynogo proizvodstva AN UkrSSR.
(Cupola furnaces) (Electric controllers)

ANTONENKO, V.T.

Automatic control of proportioning metal charges. Priborostroenie no.7:15-16 Jl '63. (MIRA 16:9)

KRYZHANOVSKIY, Oleg Mikhaylovich; VRUBLEVSKIY, Vladislav Iosifovich; ANTONENKO, Vladimir Timofeyevich; TITOVA, N.M., red.

[Automation of cupola furnaces] Avtomatizatsiia vagranok. Kiev, Izd-vo AN USSR, 1963. 103 p. (MIRA 17:5)

ANTONENKO, V.T., inzh.; VRUBLEVSKIY, V.I., inzh.

Automatic charge feed to cupola furnaces. Mekh. i avtom. proizv. 17 no.4:6-7 Ap '63. (MIRA 17:9)

VERBLOVSKIY, V.I., kand. tekhn. nauk; [illegible], V.T., [illegible]; [illegible], V.N., inzh.

Automatic proportioning of coke and limestone in cupola charging systems. Mekh. i avtom. proizv. 18 no.9:1-2 S '64. (MIRA 17:11)

ANTONENKO, V.T.; VRUBLEVSKIY, V.I., kand. tekhn. nauk

Measuring-out of the ferromagnetic components of cupola furnace charges using sectional magnetic discs. Avtom. i prib. no.3: 10-13 Jl-S '64. (MIRA 18:3)

YERMOLAYEVA, Antonina Nikitichna; ANTONENKO, Vera Vasil'yevna; KRYUCHKOVSKIY, Semen Arkad'yevich; VOLGAR', L.G., kand. biol. nauk, nauchn. red.; FEDYUSHINA, L.M., red.

[Biology for agriculture, Biochemistry, Biology and space; lists of recommended books] Biologiia - sel'skomu khoziaistvu, Khimiia zhizni, Biologiia i kosmos; rekomendatel'nye spiski literatury. Nauchn. red. L.G.Volgar'. Leningrad, 1963. 23 p. (Na temy dnia, no.7) (MIRA 17:2)

1. Leningrad. Publichnaya biblioteka.

ANTONENKO, V.V.

Study of gamasid mites in Dnepropetrovsk Province. Trudy Ukr. resp. nauch. ob-va parazit. no.2:154-158 '63 (MIRA 17:3)

1. Dnepropetrovskiy institut epidemiologii, mikrobiologii i gigiyeny.

EL'MAN, A.; PIKHOVKIN, F., ekonomist; POLYANSKIY, M.; ANTONENKO, Ye. (Rostov-na-Donu); ZHBANNIKOVA, T., tekhnik (Chkalovsk, Gor'kovskoy obl.); PANFILOVA, V., tekhnik (Chkalovsk, Gor'kovskoy obl.); GOLOVANOV, A.

We discuss O. Gabarov's letter entitled "We must not work this way any longer". Zhil.-kom.khoz. 12 no.8:10-11 Ag '62. (MIRA 16:2)

1. Nachal'nik zhilishchno-kommunal'nogo otdela g. Kolpino, Leningradskoy obl. (for El'man). 2. Zhilishchno-kommunal'naya kontora tresta "Krasnodarstroy", Krasnodar (for Pikhovkin). 3. Glavnyy insh. filiala Moskovskogo oblastnogo proyektnogo instituta, g. Klin, Moskovskoy obl. (for Polyanskiy). 4. Nachal'nik zhilishchno-kommunal'noy kontory Khabarovskogo soveta narodnogo khozyaystva (for Golovanov).

(Housing management)

ANTONENKO, Ye.

Centralized technical service on highways. Avt. transp. 43 no.10:19-20 O '65. (MIRA 18:10)

1. Kiyevavtotrans.

NIKOL'SKAYA, Yu.P.; NIKOLAYEV, A.V., otv. red.; ANTONENKO, Ye.A., red.; VYALYKH, A.M., tekhn. red.

[Salt formation processes in lakes and waters of the Kulunda Steppe] Protsessy soleobrazovaniia v ozerakh i vodakh Kulundinskoi stepi. Novosibirsk, Izd-vo Sibirskogo otd-niia AN SSSR, 1961. 179 p. (MIRA 14:10)

1. Chlen-korrespondent AN SSSR i nachal'nik Kulundinskoy ekspeditsii AN SSSR (for Nikolayev).

(Kulunda Steppe—Saline waters)

KUNIN, Leonid Aleksandrovich; ROTSHTEYN, Leonid Isaakovich; ANTONENKO, Ye.A., red.; GOSTISHCHEVA, Ye.M., tekhn. red.

[Installation and repair of radio receivers, record players, and radio-phonograph combinations] Radioprieemniki, radioly, proigryvateli; ustroistvo i remont. Novosibirsk , Novosibirskoe knizhnoe izd-vo, 1960. 68 p. (MIRA 14:11)

(Radio) (Phonograph)

PARAMONOV, Grigoriy Aleksandrovich, inzh.; ANTONENKO, Ye.A., red.; SUBBOTINA, G.M., tekhn. red.

[Roofing operations] Krovel'nye raboty. Novosibirsk, Novosibirskoe knizhnoe izd-vo, 1961. 124 p. (MIRA 14:11)
(Roofing operations)

ANTONENKOV, A.S.

Work of the Moscow local building materials industry for 1949. Gor.khoz. Mosk. 23 no.11:17-23 N '49. (MLRA 6:11)

1. Nachal'nik Gorodskogo upravleniye promyshlennosti stroymaterialov. (Moscow--Building materials industry) (Building materials industry--Moscow)

ANTONENKOV, F. V.

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Fundamentals of standardization of analytical methods for fats and oils. S. A. Heilling and F. V. Antonenkov. *Schriften zentral. biochem. Forschungsinst. Nahr.-Genussmittelind.* (U. S. S. R. 1 2, 49-61(1932). Current standards are critically discussed with respect to colorimetry, sedimentation analysis, refractometry, d. measurements and the detn. of m. p., ash, and the various fat consts. The Kaufmann-Hanus method is preferred to the Hubl method for I no.; the German standards are preferred to the Russian for sapon. no. and for unsaponifiable matter. The commonly used methods for fat consts. have been found applicable to soy bean oil as well as to other oils.

Julian F. Smith

ANTONENKOV, Nikolay Akimovich; RAZNIKOV, P., red.; KUZNETSOVA, A., tekhn. red.

[Houses cost less] Doma obkhodiatsia deshevle. Moskva, Mosk. rabochii, 1963. 37 p. (MIRA 16:4)

1. Brigadir kompleksnoy brigady stroiteley goroda Elektrostali (for Antonenkov).
(Construction industry--Production methods)
(Elektrostal'--Apartment houses)

ANTONENKOV, O., inzh.; DUBININ, V., inzh.

Explosion stamping. Tekh.mol. 30 no.1:36-37 '62. (MIRA 15:2)
(Sheet-metal work)

L 16582-63 EWP(k)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pf-4 JD/HW 64
S/145/62/000/012/010/011 63

AUTHOR: Anuchin, M. A., Candidate of Technical Sciences, Orlenko, L. P., Candidate of Technical Sciences, Antonenkov, O. D., Engineer, and Dubinin, V. V., Engineer

TITLE: Approximate method of evaluation of energy of forming thin walled parts 16

PERIODICAL: Izvestiya vysshikh uchebynkh zavedeniy. Mashinostroyeniya, no. 12, 1962, 158-167

TEXT: The author presents an approximate method for evaluation of energy for stamp forming with explosives of thin walled axially symmetrical parts. These calculations have been corroborated on a special installation for hydraulic stamping. The energy of stamp forming is a sum of deformation work of tension-compression, bending and friction. The major part of deformation energy is required for tension-compression (about 80% of the total sum of the effort). The author gives a mathematical analysis of deformations and their intensity. The energy required for obtaining parts of the required form is the determining factor serving for the estimation of the weight of the charge, the

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L 16582-63

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Approximate method of evaluation...

basic technological parameter. The results of some tests and theoretical evaluations are shown in a table. In the case of dynamic charges dynamic diagrams must be known. This is required to make possible the evaluation of forming evergy when calculating the weight of the charge. Four Soviet references. There are 8 formulas, 8 figures, and 2 tables.

ASSOCIATION: MVTU im. N. E. Baumana (Moscow High Engineering School im. N. E. Bauman)

SUBMITTED: 00

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L 28446-66 EWT(m)/EWP(t)/ETI/IJP(k) IJP(c) JD/HM

ACC NR: AP6016580 (A) SOURCE CODE: UR/0182/66/000/005/0026/0027

AUTHOR: Antonenkov, O. D.; Anuchin, M. A.; Kulagin, A. F.; Nosikov, S. M.

ORG: none

TITLE: Coefficient of reduction in explosive forming

SOURCE: Kuznechno-shtampovochnoye proizvodstvo, no. 5, 1966, 26-27

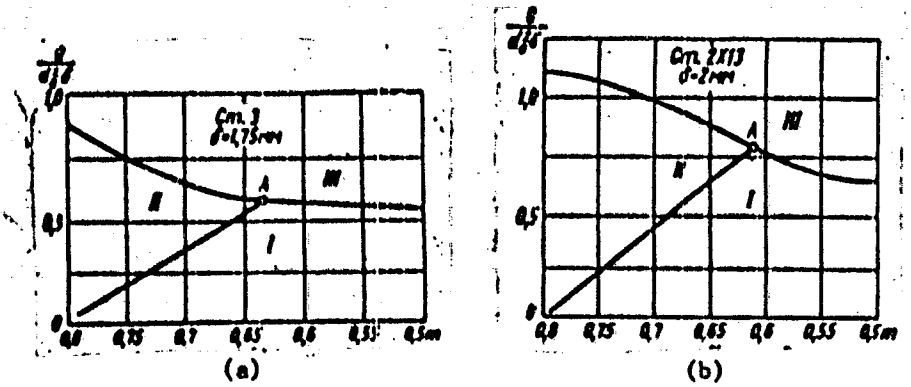
TOPIC TAGS: explosive forming, steel sheet, sheet forming, steel formability

ABSTRACT: Experiments have been conducted to determine the relationship between reductions in explosive forming and the weight of the explosive charge. Steel specimens 70—300 mm in diameter were tested in two explosive forming units of different design (one with a soft and another with a rigid water container) with explosive charges of varying weight suspended at a certain constant height above the tested material. The results of experiments with St3 and 2K13 steels are shown in Fig. 1, in which the horizontal axis represents reductions (the ratios of cup diameter to blank diameter) and the vertical axis represents the specific charge weights ($g/d_3^2\delta$, where g is the charge weight in g, d_3 is the die diameter in mm, and δ is the sheet thickness in mm). Region I represents the conditions under which the desired reduction cannot be obtained in a single operation; region II, the con-

Card 1/2 UDC: 621.98.044

L 20446-66

ACC NR: AP6016580



(a) (b)

Fig. 1. Dependence of the reduction coefficient upon the explosive charge weight.

a) St3 steel; b) 2Kh13 steel.

ditions under which full reductions are obtained without material failure; and region III, the conditions under which the material fails. Point A represents optimal conditions under which maximum reduction (0.63—0.67) can be obtained in a single operation. Orig. art. has: 4 figures. [ND]

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 002/ ATD PRESS: 5006

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ANTONESCU, A.

(12)

5117. DETERMINING OXIDIZABILITY OF COALS AND CARBONS, ESPECIALLY ANODE CARBONS. Iacob, E., Rommelter, A, and Antonescu, A. (Acta Tech. Acad. Sci. Hung., 1952, vol. 4, 85-106; title in Chem. Abstr., 1953, vol. 47, 6579).

10/27/54 AJP

27002 R/003/61/012/003/003/004
D238/D302

18 1210 2408 1413 4016

AUTHORS: Antonescu, A., and Fruchter, M. Engineers

TITLE: Electrothermal production of Al-Si alloy from indigenous kaolin

PERIODICAL: Revista de chimie, v. 12, no. 3, 1961, 150-156

TEXT: The authors investigated the structural, technological and economic factors affecting the electrothermal production of Al-Si alloy from indigenous kaolin and charcoal. In doing so, they had in view the subsequent separation of aluminum from this alloy by processes which have been recently studied. The experimental results were considered satisfactory in order to start production of the alloy on a semi-industrial scale. A review of the thermodynamics and kinetics of the specific reactions involved indicated the following preliminary requirements. (a) Rapid heating of the charge up to 2100°C, requiring a furnace with high specific power input; (b) very pure raw materials;

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optimum tension and current intensity were found as 40V and 1600 A, respectively. A rapid method for analysis of the alloy was elaborated. The sample is treated at 900°C with dry, gaseous HCl to chlorinate the metals, which are then separated as chlorides and analyzed by known methods. The washed residue is then oxidized at 1000°C and CO_2 is trapped by KOH solution, giving the amount of free carbon. Next, Pbo is added and another oxidation at 1000°C destroys the carbides. Si is determined by difference. The power consumption per unit of product is shown to be a function of furnace power. A specific consumption of 18.6-22.6 kWh/Kg alloy was attained at 40V and 1600A. This figure is identical with the specific consumption for a 250kWh-furnace, given by literature. The consumption of kaolin, charcoal and electrodes per Kg of alloy was 3.63, 1.68 and 0.05 Kg. respectively. (8) Yields of 56 to 80% were recorded. Most of the losses are attributed to volatilization of a.c.; the losses were exceedingly high due to the relatively wide space between electrodes and walls. Alloys of the following composition were produced. Al, 34-36%; Si 56-57%; Fe 4-7%; Ca, traces;