"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

L 38285-66 EWP(j) RM

ACC NR: AP6029164 SOURCE CODE: RU/0003/66/017/002/0069/0072

AUTHOR: Moldovan, I.; Gruder, Galia

ORG: none

TITLE: New technological process for the preparation of high-quality TiO sub 2 pigment 15

SOURCE: Revista de chimie, v. 17, no. 2, 1966, 69-72

TOPIC TAGS: titanium dioxide, pigment, chemical production

ABSTRACT: The authors describe a process for the preparation of TiO_2 by chlorination which permits the recycling of the secondary products in a continuous process and eliminates the difficulties associated with the handling of liquid $TiCl_4$. The process consists of: chlorination of the titaniferous raw materials, separation of the solid suspensions and condensable chlorides, absorption of gaseous $TiCl_4$ in HCl or H_2SO_4 solution, decomposition of the K_2TiCl_6 precipitated from the solution, and oxidation to TiO_2. Orig. art. has: 3 figures. [Based on authors' Eng. abst.] [JPRS: 36,556]

SUB CODE: 07, 11 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 010

UDC: 661.882.2

Card 1/1 JS

0917 2731

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

Composition and nomenclature of garnets of the andradite-glossular isomorphic series. Trudy Min. muz. no.15:108-114 '64.
(MIRA 17:11)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P., dotsent; ANTSYFEROV, I.K., inzhener.

"Brief handbook for rolling mill workers" by D.KA.Gurevich. Reviewed by A.P.Grudev, I.K.Antsyferov. Stal' 16 no.10:953-956 O '56. (MLRA 10:9)

1. Dnepropetrovskiy metallurgicheskiy institut (for Grudev).
2. Ministerstvo chernoy metallurgii SSSR (for Antsyferov).
(Rolling (Metalwork))

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

YAKHONTOVA, L.K.; GRUDEV, A.P.

Experimental study of the isomorphous relationship between Co and Ni i arsenates [with summary in English]. Geokhimiia no.3:240-252 '57. (MLRA 10:7)

1. Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova, Kafedra mineralogii.
(Cobalt) (Nickel) (Arsenates)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

SOV/137-58-9-18956

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 114 (USSR)

AUTHOR: Grudev, A.P.

TITLE: On Methods of Determining Coefficient of Friction in Rolling (O metodakh opredeleniya koeffitsiyenta treniya pri prokatke)

PERIODICAL: V sb.: Prokatn. i trubn. proiz-vo. Moscow, Metallurgizdat, 1958, pp 41-62

ABSTRACT: The results of a determination of the coefficient of friction (CF) in rolling by different methods under identical conditions are adduced. The method of "maximum angle of bite" is applicable only to the investigation of CF during bite. The "ultimate reduction" method involves an interruption in the rolling process when the rolls start to slip; CF is found from the conditions $\alpha_{c_{max}} = n\,\beta_a$, where $\alpha_{c_{max}}$ is the maximum angle of contact representing the moment of the onset of slip, $\beta_y = \tan^{-1} f_y$ is the angle of friction, and n is a coefficient numerically equal to the ratio of the contact angle to the angle of inclination of the resultant of the radial unit pressures; it is usually taken that n = 2. When the method of "braking of the strip

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

SOV/137-58-9-18956

On Methods of Determining Coefficient of Friction in Rolling

in the rolls" (suggested by I.M. Pavlov) is employed, the total roll pressure (P) and the braking force are measured during the process of slip. Employing the equation for the equilibrium of forces in the horizontal and vertical planes, we determine the CF. To determine CF by this method it is suggested that a special instrument be used. Experiments have shown that the braking method can yield satisfactory results only if a selfrecording, low-inertia measuring apparatus be employed, which makes it possible to record the magnitude of the braking forces and the P at the initial moment of slippage. When the "forward slip" method is employed, it is necessary to allow for spread in the rolling of narrow samples, when there is significant transverse deformation. Experimental data testify to the fact that, in its present form, the forward slip method is not suited to precise determination of CF. The "pressure" method measures the total P on the rolls. The value found is substituted in one of the theoretical formulas for calculation of P. Then a value of CF is chosen at which the experimental and calculated P are in complete agreement. This method does not permit determination of the true values of CF.

B.Ts.

1. Rolling mills--Friction 2. Rolling mills--Mathematical analysis

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

AUTHOR: Grudev, A. P. SOV/163-58-2-31/46

TITLE: On the Problem of the Gripping Properties of Rollers (K voprosu o zakhvatyvayushchey sposobnosti prokatnykh valkov)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Metallurgiya, 1958, Nr 2, pp. 172-177 (USSR)

ABSTRACT: The gripping properties in the rolling process were investigated. The maximum of the gripping angle in the initial moment of rolling ($\alpha_{H_{max}}$ = 8°55') as well as the size of the contact angle ($\alpha_{C_{max}}$ = 5°50') were determined for certain given dimensions of sample and roll. When comparing the values of $\alpha_{H_{max}}$ and $\alpha_{C_{max}}$ it was found that in the rolling process the gripping properties of rolling are greatest in the initial moment.
To determine the ratio between the two angles more accurately investigations with a steel alloy of the following composition were carried out in hot rolling: Co = 0,22 %, Mn = 0,40 %, Si = traces, S = 0,035 %, P = 0,030 %. The con-

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

On the Problem of the Gripping Properties of Rollers SOV/163-58-2-31/46

tact angle and the friction coefficient in gripping were determined. The friction coefficient amounts to 0,35 at 1040°C. The ratio $\alpha_{G_{max}} : \alpha_{H_{max}} = 0,87$.

For the sake of industrial rolling processes as well as for the development of the rolling theory it is necessary to carry out further investigations at different rolling conditions in order to determine the true ratio between the two angles. There are 1 figure, 1 table, and 9 references, 9 of which are Soviet.

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk Metallurgical Institute)

SUBMITTED: October 7, 1957

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

SOV/133-59-5-19/31

AUTHORS: Chekmarev, A.P., Academician of the Ac.Sc. Ukr.SSR, Dinnik, A.A., Grudev, A.P., Mut'yev, M.S., Spiridonov, N.P., Candidates of Technical Sciences and Vorotyntsev, Yu.V., Engineer

TITLE: On Maximum Angles of Bite During Rolling (O maksimal'nykh uglakh zakhvata pri prokatke) (I)

PERIODICAL: Stal', 1959, Nr 5, pp 444-445 (USSR)

ABSTRACT: These are remarks on the paper of B.P. Bakhtinov - "Utilisation of Reserve Friction Forces During Rolling on a Blooming Mill" (Stal', 1957, Nr 2) which was discussed during a conference on working of metals by pressure in Dnepropetrovsk. In the original paper, the author attempted to explain why the theoretical relationship $\alpha_e = 2\alpha_b$ (where α_e - maximum angle of bite during the steady state process of rolling, α_b - maximum angle of bite during the initial moment of feeding metal into rolls) is not confirmed by practice. The present authors point out that the work of the Rolling Section of the Academy of Sciences of the Ukrainian SSR established the deciding influence of scale on the coefficient of friction which led to the following conclusions: 1) Scale has little

Card 1/3

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

influence on the initial conditions of bite as during the moment of feeding the metal into the rolls, the latter break off the scale from the edges of the specimen being fed into them, leaving clean metal.

2) The relatively small influence of scale on the friction coefficient and maximum angle of bite during slipping and stoppage of metal in rolls is also due to breaking off of scale from the contact surface of the rolls.

3) The scale reduces considerably (2 - 2.5 times) the coefficient of friction during the steady state rolling process, whereupon a wide field of instability of the process appears - from a bite angle below the friction angle (at $\alpha_b \approx 24^\circ$ and the ratio of $\alpha_e/\alpha_b \leqslant 1$) up to friction angles corresponding to complete slipping ($\alpha_b = 39\text{-}40^\circ$).

4) On rolling specimens from which scale was removed, a sharp increase of the friction coefficient was observed, whereupon a stable rolling process is attained at an angle of bite $\alpha_e = 39\text{-}40^\circ$ and a ratio $\alpha_e/\alpha_b \approx 1.7$.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

On Maximum Angles of Bite During Rolling SOV/133-59-5-19/31

5) On rolling specimens for which no attempt was made to preserve or remove the scale, the ratio of the angles of bite varied within a wide range - from 1.5 to values below unity. Thus, the ratios of angles of bite obtained during rolling α_e/α_b = 1.25 - 1.35 (Ref 4) and occasionally below unity should be explained mainly by a decrease in the friction coefficient on transfer from the initial stage of bite to the steady state process induced by the scale or other causes. With preliminary removal of scale and forced feeding of metal into the rolls, a steady state progress can be obtained at large angles of bite. In conclusion it is stated that the corrections of Bakhtinov relating to the steady state conditions of rolling are incorrect.

There are 5 Soviet references.

Card 3/3

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

(14) GRUDEV, A.P.

PHASE I BOOK EXPLOITATION SOV/3611

Dnepropetrovsk. Metallurgicheskiy institut

Obrabotka metallov davleniyem (Metal Forming) Khar'kov, Metallurgizdat, 1960. 326 p. (Series: Its: Nauchnyye trudy, vyp. 39) 2,100 copies printed.

Ed.: A.P. Chekmarev; Ed. of Publishing House: R.A. Belina; Tech. Ed.: S.P. Andreyev.

PURPOSE: This collection of articles is intended for technical and scientific personnel in metallurgy and in mechanical engineering. It will also be of interest to designers of rolling equipment.

COVERAGE: This collection of articles treats the theory of rolling. It discusses such factors as the total and the unit pressures of the work on rolls, moments of rolling, forward slip, spread, etc. It also includes results obtained from investigation of rail quality, rolling of cast iron sheets, and other problems. No personalities are mentioned. References follow each article.

Chekmarev, A.P., and M.I. Chepurko [Candidate of Technical Sciences]. Deformation of Metal in the Manufacture of Pipe 173

The authors present a method for determination of local (layer) deformations for any element of pipe in the focus of deformation, at various manufacturing processes (rolling, drawing, rotary rolling) in order to determine the most suitable process for given conditions.

Chekmarev, A.P., Ya.S. Pinkel'shteyn [Candidate of Technical Sciences], and I.M. Ludenskiy [Engineer]. Kinematics of the Process of Helical Rolling 191

The authors try to explain in a new way a number of phenomena occurring during helical rolling, the kinematics of the process magnitude and direction of forces in the contact area, slip of metal, and the ways of intensification of the process of helical rolling.

Galezin, M.P. [Candidate of Technical Sciences]. Effect of Size and Shape of Trapezoidal Roll Passes on the Quality of Rails 221

The article deals with experiments undertaken by the author in order to determine the effect of the conditions of deformation at rolling on elimination of defects in rails. The practical recommendations concerning the shape passes and magnitude of drafts are presented.

Chekmarev, A.P., A.P. Grudev [Candidate of Technical Sciences], and V.G. Zhuk [Engineer]. Cold Rolling of Annealed Cast Iron Sheet 231

The authors describe process of removing defects on cast iron sheets either by hot or by cold rolling

Nikolayenko, Ye.G. [Engineer], S.I. Vitenzon [Candidate of Technical Sciences], and L.D. Stepanova [Engineer]. Effect of Cold Deformation on the Properties of Cast Iron Sheets 243

Effect of cold hardening, recrystallization, number of passes, and amount of drafts on the ductility and strength of cast iron sheets is discussed.

Vatkin, Ya.L. [Candidate of Technical Sciences], I.D. Kronfel'd, S.V. Rozhnov, and I.A. Chekmarev [Engineers]. Investigation of Pressure on Rolls, and Power Consumption at Rolling Pipe in Continuous Rolling Mill With Long Mandrel 252

The authors discuss the distribution of pressure on rolls, the effect of wall thickness and amount of additional alloy in steel on the pressure of the rolls. They give formulas for determination of unit and total roll pressure, and for power consumption in continuous rolling.

Chekmarev, A.P., and L.Ye. Kapturov. Experimental Investigation of Unit Pressures in Hot Rolling 278

The authors conducted a laboratory investigation in the Dnepropetrovsk Metallurgical Institute on determination of magnitude, and distribution pattern of the unit pressure in the contact area at rolling of steel and, of various thickness and with various drafts.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

Correlation ratio between cobalt and sulfur in metasomatic deposits of magnetites. Vest.Mosk.un.Ser.4: Geol. 15 no.3: 53-57 My-Je '60. (MIRA 13:8)

1. Kafedra mineralogii Moskovskogo universiteta.
(Cobalt) (Sulfur) (Magnetite)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

S/137/61/000/006/037/092
A006/A101

AUTHORS: Chekmarev, A.P., Grudev, A.P., Zhuk, V.G.

TITLE: Cold rolling of annealed cast iron sheets

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 6, 1961, 6, abstract 6D48 ("Nauchn. tr. Dnepropetr. metallurg. in-t", 1960, no. 39, 231-242)

TEXT: Information is given on results of cold rolling of annealed cast iron sheets. The value : serves as a basic characteristic of the deformation degree. Specimens of roofing cast iron sheets were rolled at from 0.1 to 53.5% per pass on a two high mill with rolls of 185 - 200 mm in diameter and 180 mm barrel length. Specimens with high reduction (relative widening up to 512%) were rolled on a four high mill with working rolls of 125 mm in diameter, backing rolls of 420 mm in diameter and 500 mm barrel length. As a result it was established that: 1) annealed cast iron sheets having the structure of ferrite wrought iron, are a sufficiently plastic material and can be rolled at room temperature; 2) when rolling cast iron sheets the mean specific pressure is

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Cold rolling of annealed cast iron sheets

S/137/61/000/006/037/092
A006/A101

higher than during rolling of carbon steel; 3) the use of greases (castor oil, machine oil and emulsion) reduces the metal pressure on the rolls.

V. Fosnekhov

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.; RATNIKOVA, G.I.

Ilvaite, hisingerite, and dashkesanite from the southern sections of Dashkesan deposit (Azerbaijan). Izv. vys. ucheb. zav.; geol. i razv. 3 no.5:89-93 My '60. (MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet imeni M.V.Lomonosova.
(Dashkesan region--Minerals)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

"True" equation of regression in calculating the reserves of accessory minerals. Razved. i okh. nedr 26 no.6:21-23 Je '60. (MIRA 15:7)

1. Moskovskiy gosudarstvennyy universitet.
(Trace elements) (Prospecting)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

Petrology of the Dashkesan intrusive massif (Transcaucasis).
Vest. Mosk. un. Ser. 4: Geol. 16 no.1:46-56 Ja-F '61.
(MIRA14:3)

1. Kafedra mineralogii Moskovskogo universiteta.
(Transcauscasia--Rocks, Igneous)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

18 5100 1496 1413 1454

32794
S/137/61/000/012/078/149
A006/A101

AUTHORS: Grudev, A. P., Zil'berg, Yu. V., Zhuk, V. G., Stepanova, L. D., Tarshinov, V. I.

TITLE: Peculiarities of cold rolling of cast iron sheets

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 7, abstract 12D43 (V sb. "Polucheniye izdeliy iz zhidk. met. s uskoren. kristallizatsiyey", Moscow-Kiyev, Mashgiz, 1961, 211-223)

TEXT: Investigations were made with specimens and sheets of conventional cast-iron containing in %: C 3 - 3.4; Si 1.4 - 1.7; Mn 0.4 - 0.7; S 0.1, P about 0.1. It was established that the optimum degree of deformation in cold rolling of sheets which assures the highest indices of strength and ductility, is 25 - 30%. The properties of sheets depend mainly on total deformation; the effect of the factor of deformation divisibility during rolling was very small. High-quality longitudinal rolling of sheets is achieved in rolls with concave outline, i.e. when the shape of the slit between the rolls corresponds to the cross sectional shape of the sheet supplied for rolling. It is also required that the sheets be free of slag trails. The use of spindle oil as a technological

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

32794
S/137/61/000/012/078/149
A006/A101

Peculiarities of cold rolling of cast iron sheets

grease makes it possible to obtain 7 - 11% drawing in one pass without overloading the mill. The following distribution of drawings over the passes is recommended: 1st pass 6 to 8%; 2 - 8 to 10%; 3 - 5 to 7%. To reduce the possibility of hollow formation, H_{sh} of the roll barrel should be $\geqslant$ 100 units. The sheets should be straightened after recrystallization annealing. Mills for the cold rolling of cast-iron sheets should be equipped with 4-roll stands; the roll diameter must be 350 - 400 mm (working rolls) and 900 - 1,100 mm (backing rolls) at a length of the roll barrel $L = b_{max} + 100$ mm, where b_{max} is the maximum width of the sheets to be rolled. The mill motor should have a power of about 350 - 400 kw.

V. D'yakov

[Abstracter's note: Complete translation]

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

S/137/61/000/012/079/149
A006/A101

AUTHORS: Grudev, A. P., San'ko, N. M., Zil'berg, Yu. V., Zhuk, V. G.

TITLE: Hot rolling of white iron sheets and its effect on the structure and properties of the metal

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 12, 1961, 7, abstract 12D44 (V sb. "Polucheniye izdeliy iz zhidk. met. s uskoren. kristallizatsiyey", Moscow-Kiyev, Mashgiz, 1961, 224-235)

TEXT: Experimental hot rolling was carried out with conventional, low-silicon and low-carbon white iron sheets, and specimens with an S content raised to 0.14%. The initial thickness was 0.6 - 2 mm; width 100 mm, and length 200 - 300 mm. The specimens were cut with the aid of a fine emery wheel out of full-dimensional white iron sheets selected immediately after forming. Hot rolling was performed on a two-high mill with polished quenched steel rolls of 185-200mm in diameter, 180 mm barrel length and 0.3 m/sec rolling speed. Independent of the chemical composition the white iron sheets possessed considerable ductility at 750 - 1,050°C. δ per pass was 1 - 10% and more. When rolling the specimens individually at 950 - 1,000°C, δ as high as 15 - 34% was attained. Industrial

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

tests confirmed the possibility of hot rolling of white cast-iron sheets. Rolling affects considerably the structure of white iron sheets; the amount of graphite impurities is sharply raised; their size is reduced; the graphitization rate is raised and a number of other structural changes take place. It is recommended to design a mill for the hot rolling of white iron sheets as a four-high type with roll diameters of 250 - 300 mm (working rolls) and 600 - 800 mm (backing rolls), and a barrel length $L_{max} = b_{max} + 100$ mm, where b_{max} is the greatest width of the white iron sheets to be rolled. The possibility of regulating the revolution of the rolls must be provided for. Maximum rolling speed can be assumed to be about 3 m/sec. Gas torches should be mounted along the barrel of the rolls to heat the rolls and to regulate their profile.

V. D'yakov

[Abstracter's note: Complete translation]

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

Statistical method of calculating the spacial distribution of ore bodies. Izv. vys. ucheb. zav.; geol. i razv. 4 no.1: 78-82 Ja '61. (MIRA 14:7)

1. Moskovskiy gosudarstvennyy universitet imeni M.V. Lomonosova. (Prospecting)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

Relationship between the chemical and mineral composition of rocks of the quartz-diorite and granodiorite family. Biul. MOIP. Otd. geol. 36 no.2:131-132 Mr-Ap '61. (MIRA 14:7)
(Geology--Congresses)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.; ZIL'BERG, Yu.V.

Relation of maxima angles of grip to the thickness of the strip being rolled. Izv. vys. ucheb. zav.; chern met. 5 no.1:112-120 '62. (MIRA 15:2)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Rolling(Metalwork))

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.; ZILBERG, I.V. [Zil'berg, I.V.]

Dependence of the maximum gripping angles on the thickness of laminated bands. Analele metalurgie 16 no.4:112-121 O-D '62.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRULEV, A.P.; RUMYANTSEV, G.S.

Morphogranulometric study of ore minerals as a preliminary estimation of the quality of ores. Vest.Mosk.un.Ser.4: Geol. 17 no.2:67-70 Mr-Ap '62. (MIRA 15:5)

1. Kafedra mineralogii Moskovskogo universiteta.
(Sayan Mountains--Ores--Sampling and estimation)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

Studies of the relation between the properties and the composition of rock-forming minerals. Biul.MOIP.Otd.geol. 37 no.2:160-161 Mr-Ap '62. (MIRA 15:7)

(Mineralogy, Determinative)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A. P., kand. tekhn. nauk; ZIL'BERG, Yu. V., inzh.

Maxima angles of bite in the rolling of steel and nonferrous metals. Nauch. trudy DMI no.48:186-191 '62. (MIRA 15:10)

(Rolling(Metalwork)) (Friction)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A. P., kand. tekhn. nauk; ZIL'BERG, Yu. V., inzh.

Investigating external friction during the rolling of lead. Nauch. trudy DMI no.48:299-310 '62. (MIRA 15:10)

(Rolling(Metalwork)) (Friction)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

CHEKMAREV, A.P., adademik; GRUDEV, A.P., kand. tekh.nauk; TARAN, Yu.N., kand. tekhn.nauk; ZIL'BERG, Yu.V., inzh.; KURILENKO, V.Kh., inzh.; DERGACH, A.Ya., inzh.; LITINSKIY, D.M., inzh.; NESTEROVA, G.V., inzh. SAMOYLENKO, V.D., inzh.

Reducing metal sticking on the rolls during the hot rolling of stainless tubes. Stal' 23 no.7:631-635 Jl '63. (MIRA 16:9)

1. AN UkrSSR (for Chekmarev).
(Pipe mills) (Steel, Stainless)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

L 33931-65 EPF(c)/EWP(k)/EWA(c)/EWT(m)/EWP(b)/T/EWA(d)/EWP(t) Pf-4/ Pr-4 DJ/HW/JD

ACCESSION NR: AP4049066 S/0148/64/000/011/0131/0136

AUTHOR: Chekmarev, A. P.; Grudev, A. P.; Zil'berg, Yu. V.

35
30
B

TITLE: Use of lubricants in hot rolling of steel 14

SOURCE: IVUZ. Chernaya metallurgiya, no. 11, 1964, 131-136

TOPIC TAGS: rolling lubricant, hot rolling, steel rolling, glass lubricant, salt, graphite

ABSTRACT: Investigations were carried out to determine the possibility of using lubricants in the production of thin-walled light-weight sections. The lubricants were required to reduce external friction significantly, not liberate smoke, soot, etc., not have a deleterious effect on the equipment and rolled metal, be easily removed from the surface of the finished rolled product or be retained as an intact, strong film, and be cheap and readily available. All lubricants were used in powder form. The lubricants used were: window glass, a mixture of window glass and silver graphite (1:1 by volume), No. 6 glass, and common salt. The experiments were carried out on a laboratory mill with 205.6-206.6 mm diam. rolls. The rolls were chilled cast iron; barrel hardness was Shore 65; rolling speed was 0.3 m/sec. The specimens were heated in a furnace at 30-50C above the rolling temperature. After heating, the specimens were removed from the

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

L 33931-65
ACCESSION NR: AP4049066

3

furnace, descaled, immersed in the powdered lubricant, returned to the furnace and held 5-10 min. before rolling. The factors investigated were: general characteristics of lubricant behavior, spreading, forward creep, rolling pressure, and maximal angle of contact. It was found that in hot rolling of steel it is advantageous to use lubricants in the finishing passes to reduce external friction and roll wear. The investigations are to continue in order to determine efficient compositions of lubricants and to develop a device for supplying the lubricant to the metal being rolled. "P. L. Klimenko determined the specific rolling pressures." Orig. art. has: 4 tables, 1 figure, and 2 formulas.

ASSOCIATION: Dnepropetrovskiy metallurgicheskiy institut (Dnepropetrovsk metallurgical institute)

SUBMITTED: 31Jul62 ENCL: 00 SUB CODE: FP, MM, IE

NO REF SOV: 007 OTHER: 002

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

SERGEYEVA, N.Ye.; GRUDEV, A.P.

Chemical composition of magnetite. Vest. Mosk. un. Ser. 4: Geol. 19 no.4:27-36 Jl-Ag '64. (MIRA 17:11)

1. Kafedra mineralogii Moskovskogo universiteta.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A. I. (Dnepropetrovsk); [illegible] (Dnepropetrovsk)

Influence of the metal temperature on the coefficient of friction during rolling. Izv. AN SSSR. Met. i gor. delo no.6:161-164 N-D '64. (MIRA 18:3)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, A.P.

Some new concepts on petrochemical recalculations. Biul. MOIP Otd. geol. 40 no. 6:138-139 N-D '65 (MIRA 19:1)

1. Submitted April 1, 1965.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, D. I.

24169 GRUDEV, D. I. Izmeneniye plodovitosti svinoy pri mezhporodnom skreshchivanii. Sov. zootekhniya, 1949, No. 3, S. 63-69.

SO: Letopis, No. 32, 1949.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDIV, D.

Swine

Planned interbreeding in pig raising. Kilkh. proizv. 12 no. 2, 1952

9. Monthly List of Russian Accessions, Library of Congress, June 1952 Uncl.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

YESAULOV, P.A., kandidat sel'skokhozyaystvennykh nauk; ALIKAYEV, V.A., kandidat veterinarnykh nauk; GHUDEV, D.I., kandidat sel'skokhozyaystvennykh nauk;DOROKHOV, S.M.; TARANOV, G.F., kandidat sel'skokhozyaystvennykh nauk; FANDEYEV, B.V., kandidat sel'skokhozyaystvennykh nauk; SHAIN, S.S., professor; PETROVSKAYA, A.P., redaktor; TATAPOV, M.I., tekhnicheskiy redaktor

[Fundamentals of stockbreeding; a textbook for students in secondary rural schools] Osnovy zhivotnovodstva; uchebnoe posobie dlia uchashchikhsia sel'skoi srednei shkoly. Pod red. P.A.Esaulova. Moskva, Gos. uchebno-pedagog. izd-vo Ministerstva prosveshcheniia RSFSR, 1956. 294 p. (MLRA 10:1)

1. Starshiy spetsialist Ministerstva sellskogo khozyaystva SSSR (for Dorokhov)
(Stock and stockbreeding)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, D.I.

GRUDEV, D.I., Doc Agr Sci -- (diss) "The Urzhumskaya breed of hogs and basic problems of the theory and practice of its raising." Mos, 1957. 30 pp (All-Union Order of Lenin Acad of Agr Sci im V.I.Lenin. All-Union Sci Res Inst of Animal Hushendry). (KL, 20-58, 99)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

USSR/Farm Animals - Swine Q-5

Abs Jour : Ref Zhur - Biol., No 6, 1958, No 26201

Author : Grudov D.I.
Inst : Not Given
Title : The Process of Growth and Development of the Urzhum Swine (Zakonomernosti rosta i razvitiya urzhumskikh svinoy)

Orig Pub : Vestnik s.-kh. nauki, 1957, No 6, 64-73

Abstract : In the experiments in the raising of supernumerary swine of the Urzhum breed, carried outin the sovkhoz "Mukhinskiy" and kolkhoz "Kreyser Avrora" of the Kirov Oblast', 89 pigs at 12 months of age attained 182 kg. on the average, and the best of them 226-235 kg. In order to study the growth of organs and tissues, 18 heads of swine aged 1-21 days, 2, 6, 7, 10 and 12 months were killed in 7 slaughterings. During the first year of the life of swine, three stages of growth are distinguished. In the first stage (up to 2 months of age), the digestive organs grow more; in the second stage (from 2 to 6 months), muscle tissue grows and the growth of fat con0

Card : 1/2

USSR/Farm Animals - Swine Q-5

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

tinues, but the rate of the growth of digestive organs decreases; in the third stage (from 6 to 12 months), fat grows more than other tissues, and the intensiveness of the growth of muscles, skeleton, skin, and internal organs becomes stabilized.

Card : 2/2

41

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

ROSTOVTSEV, N.; DOBRYNIN, P.; TIKHOMIROV, V.; LOGACHEV, A.; SHAKUN, V.; GRUDEV, D.; KUDRYAVTSEV, P.; MALEYEV, M.; SOKOV, N.; KORNIKOV, V.; TOLOKONNIKOV, A.; PUSTOVALOV, A.; RED'KIN, A.; BLOMKVIST, M.; PETROV, N.; SHUBSKIY, I.; SEMENOV, S.; POPOV, G.; BRODOV, K.; KORENEV, P.

Professor M.N. IAkovlev; obituary. Zhivotnovodstvo 19 no.12:90 D '57. (MIRA 10:12)
(IAkovlev, Mitrofan Nikolaevich, 1878-1957)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, Dmitriy Ivanovich; BALAKIN, V.M., red.; SHESHNEVA, E.A., tekhn. red.

[Organization of breeding work in swine raising] Organizatsiia plemennoi raboty v svinovodstve. Moskva, Izd-vo M-va sel'-khoz.RSFSR, 1962. 137 p. (MIRA 17:1)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I., doktor sel'skokhoz. nauk; KOTOV, P.Ya., nauchnyy sotrudnik; RODIONOVSKIY, M.S., nauchnyy sotrudnik; SYRKIN-SHKIOVSKIY, Ye A., nauchnyy sotrudnik; UNANOV, G.S., nauchnyy sotrudnik

Use of the tissue preparation VNIIMP-3 in the fattening of swines. Trudy VNIIMP no.15:13-19 '63. (MIRA 17:5)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, D., doktor sel'skokhoz. nauk; KURITSYN, N.; PANOVA, N.

Modification of the system for the receiving of cattle by the meat combines and pyaments for cattle based on the weight and quality of meat. Mias. ind. SSSR 34 no.4:37-39 '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut myasnoy promyshlennosti.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, D. I.; SMIRNITSKAYA, N. Ye.

"Objective methods of evaluation of young beef carcasses qualities by their morphological structure."

report submitted for 10th European Mtg, Meat Res Workers, Rockilde, Denmark, 7-15 Aug 1964.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, D.I., doktor sel'skokhoz. nauk; SADOVNIKOVA, N.V., starshiy nauchnyy sotrudnik; SMIRNITSKAYA, N.Ye.; KARAVAYEVA, S.G.; KOTOV, P.Ya.; RODIONOVSKIY, M.S.; KRYLOVA, N.N., kand. biol. nauk; KRASIL'NIKOVA, T.F., inzhener-khimik; SOLNTSEVA, G.L., aspirant; KUZNETSOVA, V.V., mladshiy nauchnyy sotrudnik; Prinimali uchastiye: BAZAROVA, K.I.; MALYGINA, M.I.; BUDINSKAYA, S.Z.; SINITSYNA, I.K.

Comparative evaluation of the fattening and slaughtering characteristics of Shorthorn and Kalmyk steers and physico-chemical indices of their meat. Trudy VNIIMP no.16:5-23 '64. (MIRA 18:11)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, F.I.

Malarial and malarial-quinacreine psychoses. Zhur.nevr. i psikh. Supplement:60-61 '57. (MIRA 11:1)

1. Kafedra psikhiatrii Omskogo meditsinskogo instituta imeni M.I. Kalinina i Omskaya psikhonevrologicheskaya bol'nitsa
(PSYCHOSES) (MALARIA) (QUINACRINE)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, F.I.

Effect of acrichine on the higher nervous activity in dogs [with summary in English]. Zhur.vys.nerv.deiat. 7 no.4:582-590 Jl-Ag '57. (MIRA 10:12)

1. Kafedra psikhiatrii i kafedra normal'noy fiziologii Omskogo meditsinskogo instituta.

(REFLEX, CONDITIONED,
eff. of quinacrine on higher nervous activity (Rus))
(QUINACRINE, effects,
on higher nervous activity in dogs, conditioned reflex method of determ. (Rus))

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

USSR / Pharmacology and Toxicology. Chemotherapeutic Agents. Antimalarial Agents. V-10

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 80717

Author : Grudev, F. I.
Inst : Omsk Medical Institute

Title : On the Problem of the Influence of Quinacrine on the Activity of the Higher Sections of the Central Nervous System of Animals

Orig Pub : Tr. Omskogo med. in-ta, 1957, No 21, 74-80

Abstract : The influence of various doses of quinacrine (I) administered orally, on salivary conditioned reflexes was investigated on 3 dogs. 511 experiments were conducted. I, in doses of 1-8 mg/kg, selectively strengthened the process of excitation; in doses of 4-8 mg/kg I, along with strengthening of the stimulator process, according to the law of negative induction, it also improves the

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

USSR / Pharmacology and Toxicology. Chemotherapeutic Agents. Antimalarial Agents. V-10

Abs Jour : Ref. Zhur - Biologiya, No 17, 1958, No. 80717

differentiating inhibition of the reflex. Doses of 16-32 mg/kg exert a tonic effect, up to the disappearance of conditioned and unconditioned reflexes; protective inhibition sets in in the cortex of the brain and a dissociation of the subcortical activity occurs. Repeated introduction of I in a dose of 4 mg/kg in animals subjected earlier to the influence of I, leads to the impairment of the conditioned reflex activity. In dogs of the strong type of nervous system, quinacrine intoxication was less expressed and disappeared more rapidly than in dogs of the excitable type.

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, F. I., Candidate of Med Sci (diss) -- "Acrichine psychoses (Clinical and experimental data)". Omsk, 1959. 22 pp (Novosibirsk State Med Inst), 250 copies (KL, No 21, 1959, 119)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, F.I.

Tularemic psychoses and their treatment. Zdrav.Kazakh. 22 no.6:30-33 '62. (MIRA 15:11)

1. Iz kafedry psikhiatrii (zav. - kand.med.nauk F.I.Grudev) Semipalatinskogo meditsinskogo instituta.
(TULAREMIA) (PSYCHOSES)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

S/137/62/000/005/068/150
A006/A101

AUTHOR: Grudev, I. D.

TITLE: Non-stationary process of extruding and drawing thin-walled pipes

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 39-40, abstract 5D227 ("Izv. AN SSSR, Otd. tekhn. n. Mekhan. i mashinostr.", 1961, no. 5, 119-123)

TEXT: The author analyzes problems of non-stationary extrusion and drawing in the finishing of thin-walled pipes, when the longitudinal force pushes the pipe into a conic or other contraction of the die and when the pipe end is drawn through the die. The pipe is considered to be non-compressible with extremely thin walls; it is assumed that the pipe material corresponds to the Saint-Venan condition of ductility; pipe friction against the die walls is neglected. The system of three equations obtained, pertains to the hyperbolic type and has two different groups of characteristic features which are determined by an equation that can be integrated by the method of final differences with arbitrary approximation. As a result, normal stress σ_k, pipe thickness n, and

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

speed v can be determined and then pressure p can be found. An example is given of calculating the most conventional die type with a surface formed by the rotation of the circumferential arc around an axis.

M. Feygin

[Abstracter's note: Complete translation]

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

S/137/62/000/004/070/201
A052/A101

AUTHOR: Grudev, I. D.

TITLE: Drawing thin-wall pipes through non-conical matrices

PERIODICAL: Referativnyy zhurnal. Metallurgiya, no. 4, 1962, 35-36, abstract 4D205 ("Tr. Mosk. fiz.-tekhn. in-ta", no. 7, 1961, 85-96)

TEXT: The problems of drawing and upsetting thin-wall pipes through a non-conical matrix are discussed. The pipe material is assumed to be perfectly plastic; the matrix is assumed to be so lubricated that there is no friction between the pipe and the matrix walls. Initially the pipe has a constant wall thickness both crosswise and along the generatrix. The problem is reduced to the solution of a system of differential equations which can be integrated in a finite form.

K. Ursova

[Abstracter's note: Complete translation]

Card 1/1

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, I.D. (Moskva)

Drawing and pressing thin-walled pipes through rigid dies.
Inzh.zhur. 1 no.3:122-130 '61. (MIRA 15:2)
(Pipe mills)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, I. D.

Dissertation defended at the Institute of Mechanics for the academic degree of Candidate of Physicomathematical Sciences:

"Plastic Flows in Wave Generation of Pipes of Noncircular Profile."

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

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

SIGOV, I.V., kand.tekhn.nauk; GRUDEV, M.L., inzh.

Multipurpose planetary reducing gears. Vest.mashinostr. 43 no.9:43-44 S '63. (MIRA 16:10)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I., kand.tekhn.nauk

Deflection of work rolls as consequence of the simultaneous flattening of work and back-up rolls. Obr.met.davl. no.2:200-223 '53. (MIRA 12:10)

1. Zavod "Zaporozhstal'."
(Rolls (Iron mills))

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I., inzh.

Transverse flattening of rolls. Obr.met.davl. no.2:224-235 '53. (MIRA 12:10)

1. Zavod "Zaporozhstal'."
(Rolls (Iron mills))

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I.

Sturdiness of the bed plate of rolling mill stands. Vest.mash. 33 no.11: 21-23 N '53. (MLRA 6:12)

(Rolling-mill machinery)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

123-1-503

Translation from: Referativnyy Zhurnal, Mashinostroyeniye, 1957, Nr 1, p.82 (USSR)

AUTHORS: Chekmarev, A.P., Saf'yan, M.M., Pavlov, V.L., Grudev, P.I.

TITLE: Tentative Heat Balance in Plastic Deformation (Orientirovochnyy teplovoy balans pri plasticheskoy deformatsii)

PERIODICAL: Trudy In-ta chernoy metallurgii AN UkSSR, 1956, Nr 10, pp. 129-137.

ABSTRACT: For a proper selection of the cooling system for rollers in a cold-rolling mill it is necessary to know the quantity of heat emanating during the period of metal deformation, and the distribution of this heat. The author's research has indicated that the generated heat is being dissipated in the two

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

123-1-503

Tentative Heat Balance in Plastic Deformation (Cont.)

running rollers, two supporting rollers, the rolled metal strip and in the coolant. The authors present thermal design data of the mill with running rollers of 400 mm in diameter, supporting rollers of 1,370 mm in diameter, the rollers' shaft of 1,600 mm long, and the 2,250 HP engine at 300 to 500 rpm.

Card 2/2 M.I.M.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I., Doc Tech Sci--(diss) "Rolling of thin sheets and strips/ and elastic deformations of cylinders." Mos, 1958. 17 pp (Min of Higher Education USSR. Mos Order of Labor Red Banner Inst of Steel im I.V.Stalin), 120 copies (KL,47-58,132)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

AUTHOR: Grudev, P. I. (Cand.Tech.Sciences) SOV/133/58-9-13/29

TITLE: Main Causes of the Differences in the Thickness of Hot Rolled Strip Produced on Continuous Mills (Osnovnyye prichiny raznotolshchinnosti polos pri goryachey prokatke na nepreryvnykh stanakh)

PERIODICAL: Stal', 1958, Nr 9, pp 813-817 (USSR)

ABSTRACT: On the basis of an analysis of the results of investigation of the causes of the variation in thickness of hot rolled strip during rolling the author arrived at the following conclusions. Variations in the strip thickness along its length are due to regular and incidental causes. To the first kind belong: the lack of tension during rolling of the end of the strip and a regular decrease in temperature of the strip during the rolling process. These two causes produce the highest departures from the nominal strip thickness. In this case the elimination of the variation in the thickness can be obtained by a strict programming of an automatic control of the screw down mechanism along

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

SOV/133/58-9-13/29

Main Causes of the Differences in the Thickness of Hot Rolled Strip Produced on Continuous Mills

the length of strip (Fig.8). In order to eliminate the variation in thickness caused by incidental causes the screw down mechanism should be equipped with a closed system of thickness control. It is expedient to use the metal pressure on rolls as a signal initiating the screw down mechanism. The control of the strip thickness by a variation in tension is also possible. There are 8 figures.

ASSOCIATION: TsNIIChM

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Gruder, P. I.

25(1) PHASE I BOOK EXPLOITATION SOV/1878

Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii. Institut stali

Prokatnoye i truboprokatnoye proizvodstvo (Rolling and Tube Rolling) Moscow, Metallurgizdat, 1959. 268 p. (Series: Its: Sbornik trudov, vyp. 16) Errata slip inserted. 2,500 copies printed.

Sponsoring Agency: USSR. Gosudarstvennaya planovaya komissiya.

Ed.: B. P. Bakhtinov; Ed. of Publishing House: N. A. Valov; Tech. Ed.: A. I. Karasev.

PURPOSE: This collection of articles may be of interest to scientific workers, process engineers in rolling and tube-rolling plants, and students of metallurgical vtuzes.

COVERAGE: The articles describe work done at the laboratory for metal forming at the Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii (Central Scientific Research Institute of Ferrous Metallurgy). Some theoretical and practical problems of hot and cold rolling of simple and intricate

Card 1/10

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

shapes and tubes are considered. Many of the articles discuss results of scientific research carried out under actual operating conditions. K.K. Andratskiy, A.I. Filatova, V.S. Smirnov, P.T. Yemel'yanenko, A.I. Tselikov, N.D. Lomakin, V.Ya. Ostrenko, D.Ye. Rokhman, O.A. Plyatskovskiy, I.A. Fomichev, Yu.K. Fedorov, and V.N. Shashkov are mentioned as having contributed to this field. There are 37 references: 33 Soviet and 4 German.

TABLE OF CONTENTS:

Chizhikov, Yu.M., Candidate of Technical Sciences. Influence of Various Factors on Rate of Production of Blooming Mills
The author shows how the rate of production of blooming mills is affected by the weight of ingots, number of passes, size of blooms produced, number of manipulations, speeds and dwells during rolling, and how all these factors affect each other. The increase in rate of production of a blooming mill for any individual case can be calculated from Formula 7. 5

Chizhikov, Yu.M., Candidate of Technical Sciences, and I.G. Drozd. Some Strength Characteristics of a Blooming Mill
The authors discuss the design for strength of the main part of a blooming mill and compare data on existing pressures in blooming mills used in four plants. 23

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Rolling and Tube Rolling

SOV/1878

Chizhikov, Yu. M., Candidate of Technical Sciences. Lateral Deformation in Rolling and Forging of Large Sections

The author discusses spread of blooms in rolling and forging and compares results obtained. 36

Kabantsev, N. A. and I. G. Drozd, Engineers. Pressure of Work on Rolls and Torques in Rolling Alloy Steels on Blooming Mills

The pressure was measured by strain gages. The torque was determined by the formula $Md = 0.97K\phi I$, where Md is torque of motor shaft; K a coefficient constant for a given mill; ϕ the magnetic flux of the motor, and 0.97 the efficiency of the installation. 47

Kabantsev, N. A., Engineer. Determination of Torques in Rolling

Experiments were made in the laboratory and under operating conditions by means of torsiometers. The deformations were picked up by wire strain gages. 59

Card 3/10

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Rolling and Tube Rolling

SOV/1878

Vitkin, A.I., Candidate of Technical Sciences. Single-stand Continuous Mill

The author discusses the increase of the draft until a 90 percent reduction is attained in a single pass through the stand. A single-stand rolling mill with two pairs of working rolls was built in the TsNIITMASh rolling laboratory. The results of laboratory rolling are given. 71

Grudev, P. I., Candidate of Technical Sciences. On Determination of Flattening of Rolls [During Rolling]

The author offers a method of determining the elongation of the arc of contact due to flattening of rolls. 81

Svede-Shvets, N. I., Candidate of Technical Sciences. Methods of Measuring the Temperature of the Roll Surface of Sheet Mills

In TsNIIChM (Central Scientific Research Institute of Ferrous Metallurgy) two methods of measuring the temperature of moving bodies were developed: 1) by stationary thermocouples (measuring the drop in temperature between two points), and 2) by a movable ("walking") thermocouple for measuring the true temperature. Measurement of temperature of rolls during rolling is desirable in order to 88

Card 4/10

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

control the temperature of rolls--i.e, the uniformity of sheet thickness-- automatically.

Aleksandrova, T. K., Engineer. Some Problems of Pass Design of Rolls for Cold Rolling of Shapes 102

In designing passes for cold rolling of complex shapes a special technique which assures dimensional accuracy of shapes should be used. Basic considerations for designing passes for complex shapes are presented.

Pavlov, Ig.M., Corresponding Member, Academy of Sciences, USSR, Doctor of Technical Sciences, and M. L. Zaytsev, Engineer. Method of Comparing Pass Designs as Related to Efficiency of Deformation 111

To compare the amount of deformation in one pass, the authors use the interrelations between cross-sectional areas of the work: F initial . F end, and F displaced . As a criterion for efficiency of deformation, the ratio of volume displaced in the longitudinal direction to the volume displaced in the lateral direction may be used.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Zaytsev, M. L., Engineer. Efficiency of Deformation During Rolling in Diamond and Oval Shapes as Compared With Deformation in Plain Rolls 122

The author describes the methods of experiments he conducted on the basis of the idea presented in the preceding article and presents results of their evaluation. He comes to the conclusion that the criteria examined make it possible to answer the question of the suitability of using a given pass design. He found that in deformation of a square bar a higher efficiency was attained in a diamond pass than in an oval pass, or in plain rolls.

Zaytsev, M. L., Engineer. Design of a Diamond Pass for a Diamond-square System 134

Using the relations presented in the article written with Ig. M. Pavlov (p. 111), the author shows how to determine the dimensions of a diamond pass and of the following square pass.

Chizhikov, Yu. M., Candidate of Technical Sciences, and A. N. Funde, Engineer. Conditions for Obtaining Quality Hollow Steel Bar Stock for Drilling 140

The article discusses sizes and mechanical properties of billets with inserted cores and also the pass design necessary for making a good product.

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Funde, A. N., Engineer. Effect of Some Processing Factors on the Quality of Hollow Steel Bar Stock for Drilling

The influence of heating conditions, of the clearance between the billet and the inserted core, of the billet's curvature, of the displacement of the center of the hole, and of tilting the stock are discussed. 154

Teterin, P. K., Candidate of Technical Sciences. Tangential Slipping and Friction Forces in Cross Rolling and Roll Piercing

The author discusses discrepancies between experimental and theoretical data concerning the direction of slipping of the work and of tangential forces acting in cross rolling and roll piercing. Equations for rolling contact angle, for coefficient of tangential slip, and for efficiency are derived. 162

Teterin, P. K., Candidate of Technical Sciences. Conditions for Rotation of the Work in Roll Piercing

Equations based on deformation and giving the conditions for regular rotation of work are derived and compared with an equation based on the kinematics of rolling. Conditions for gripping the work by rolls are also analyzed. 181

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Teterin, P. K., Candidate of Technical Sciences. Twisting of Work in Roll Piercing 195

The author derives equations for the twisting angle and the helix angle of the work for any section of contact area, for the twisting angle after leaving the rolls, and/or the taper angle of the rolls at which there will be no twisting (eq.27). All these equations are derived taking into account the axial slipping of the work and the variation of its axial velocity along the arc of contact.

Teterin, P. K., Yu. V. Manegin, I. Ye. Musorina, and Ye. A. Trifonov. Design of Roll Profile for Rotary Rolling and Sizing Mills 215

The profiling of rolls is described, and results of tests carried out in TsKBMM of TsNIITMASh are presented. It was found that with increasing taper of the gripping portion of sizing rolls, the permissible draft will also increase.

Teterin, P. K., Yu. V. Manegin, and A. S. Burov. Pressure of Work on Rolls in Pilger Process 227

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

The dependence of pressure distribution along the contact arc on roll design, wall thickness of pipe, and amount of feed is explained. The dependence of the amount of pressure on rolling temperature, wall thickness, and feed is established.

Teterin, P. K., N. L. Klyamkin, and I.Ye. Musorina. **Mastering the Manufacture of Two-Layer Brazed Tubes** 241

The method of cold roll forming of a thin (0.6 to 0.9 mm.) copper-coated steel band with tapered edges into a two-layer brazed tube (6 to 16 mm. in diameter) has been developed and mastered in the laboratory for tube manufacture of the Institut metallurgicheskikh problem (Institute for Metallurgical Problems). The authors state that these tubes show a fatigue strength 3 to 4 times higher than that of copper tubes. The corrosion resistance is also better, due to the copper coating; they are approximately 3 times cheaper than copper tubes. The waste of material amounts to only 5 percent in comparison with 50 percent and more in cold drawing.

Pavlov, Ig. M., P. K. Teterin, N. L. Klyamkin, and I.Ye. Musorina. Roll Design for Forming Two-layer Tubes 251

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Rolling and Tube Rolling

SOV/1878

The two-layer tubes are cold-roll-formed in fourteen-stand continuous machines. The method of roll design, tapering of edges, and the shapes and construction of all 14 pairs of rolls are discussed and illustrated. The process of forming the band into a two-layer tube is described.

AVAILABLE: Library of Congress

Card 10/10

GO/fal
8-25-59

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I., kand.tekhn.nauk

Determining the flattening of rolls. Sbor.trud.TSNIICHM no.16:81-87 '59. (MIRA 12:5)
(Rolls (Iron mills))

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P. I.

(40)

PHASE I BOOK EXPLOITATION SOV/6044

Rokotyan, Ye. S., Doctor of Technical Sciences, Ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 2. Moscow, Metallurgizdat, 1962. 685 p. 8500 copies printed.

Authors: P. A. Aleksandrov, Doctor of Technical Sciences; V. P. Anisiforov, Candidate of Technical Sciences; V. I. Bayrakov, Candidate of Technical Sciences; M. V. Barbarich, Candidate of Technical Sciences; B. P. Bakhtinov, Candidate of Technical Sciences [deceased]; B. A. Bryukhanenko, Candidate of Economic Sciences; M. V. Vasil'chikov, Candidate of Technical Sciences; A. I. Vitkin, Doctor of Technical Sciences; S. P. Granovskiy, Candidate of Technical Sciences; P. I. Grudev, Candidate of Technical Sciences; I. V. Gunin, Engineer; M. Ya. Dzugutov, Candidate of Technical Sciences; V. G. Drozd, Candidate of Technical Sciences; N. F. Yermolayev, Engineer; G. M. Katsnel'son, Candidate of Technical Sciences; M. V. Kovynev, Engineer; M. Ye. Kugayenko, Engineer; N. V. Litovchenko, Candidate of Technical Sciences; Yu. M. Matveyev, Candidate of Technical

Card 1/14

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

(46)

Rolling Industry; Handbook SOV/6044

Sciences; V. I. Meleshko, Candidate of Technical Sciences; N. V. Melkhov, Engineer; A. K. Ninburg, Candidate of Technical Sciences; V. D. Nosov, Engineer; B. I. Panchenko, Engineer; O. A. Plyatskovskiy, Candidate of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; I. A. Priymak, Professor, Doctor of Technical Sciences [deceased]; A. A. Protasov, Engineer; M. M. Saf'yan, Candidate of Technical Sciences; N. M. Fedosov, Professor; S. N. Filipov, Engineer [deceased]; I. N. Filippov, Candidate of Technical Sciences; I. A. Fomichev, Doctor of Technical Sciences; M. Yu. Shifrin, Candidate of Technical Sciences; E. R. Shor, Candidate of Technical Sciences; M. M. Shternov, Candidate of Technical Sciences; M. V. Shuralev, Engineer; I. A. Yukhvets, Candidate of Technical Sciences; Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobuzhinskaya.

PURPOSE: This handbook is intended for engineering personnel of metallurgical and machine-building plants, scientific research

Card 2/14

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Rolling Industry; Handbook SOV/6044

institutes, and planning and design organizations. It may also be used by students at schools of higher education.

COVERAGE: Volume 2 of the handbook reviews problems connected with the preparation of metal for rolling, the quality and quality control of rolled products, and designs of roll passes in merchant mills. The following topics are discussed: processes of manufacturing semifinished and finished rolled products (the rolling of blooms, billets, shapes, beams, rails, strips, wire, plates, sheets, and the drawing of steel wire), hot-dipped tin plates, lacquered plates, floor plates, tubes made by different methods, and special types of rolled products. Problems of the organization of rolling operations are reviewed, and types of rolled products manufactured in the USSR are shown. No personalities are mentioned. There are no references.

TABLE OF CONTENTS: [Abridged]:

Card 3/14

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Rolling Industry; Handbook SOV/6044

Part VIII. Rolling of Plates and Sheets 281

Ch. 45. Hot Rolling of Plates (M. Ye. Kugayenko, and M. V. Kovynev)
1. General characteristics of steel plates 281
2. Initial materials for rolling plates 281
3. Heating of slabs for rolling 282
4. Rolling of plates 289
5. Finishing of plates 290

Ch. 46. Hot Rolling of Sheets (G. M. Katsnel'son, V. I. Meleshko, and M. M. Saf'yan) 310
1. Rolling in continuous and semicontinuous mills 314
2. Rolling in reversing mills with furnace coilers and in planetary mills 314
3. Pack rolling of sheets 321

Ch. 47. Making of Cold-Rolled Plates, Sheets, and Strips (P. I. Grudev) 321
1. Purpose of cold rolling 330

Card 7/14 330

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I., kand.tekhn.nauk

Importance of cold rolling in the production of hot-tinned sheet steel. Sbor. trud. TSNIICHM no.28:55-61 '62. (MIRA 15:11)
(Sheet steel) (Tinning)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEV, P.I.; DAVYDOV, T.N.

Curves of roughing and the pressure during rolling on a 1450 MMK continuous hot rolling strip mill. [Sbor. trud.] TSNIICHM no.29: 149-154 '63. (MIRA 17:4)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

L 44505-66 EWT(m)/EWP(t)/T/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AP6029871 SOURCE CODE: UR/0413/66/000/015/0022/0022

INVENTOR: Voronov, F. D.; Filatov, A. D.; Gun, S. B.; Selivanov, N. M.; Nosov, V. D.; Savel'yev, G. V.; Goncharov, F. I.; Plotnikov, P. I.; Roshkov, S. A.; Kustobayev, G. G.; Polushkin, V. P.; Arkhipov, V. M.; Uziyenko, A. M.; Kolov, M. I.; Kozhevnikov, V. P.; Shapiro, B. S.; Kalugin, V. F.; Grudev, P. I.; Aksenov, B. N.; Khomyachkov, A. P.; Rudakov, Ye. A.; Kuzema, I. D.; Gomzhin, V. V.; Poydyshev, B. N.; Shternov, M. M.

58
B

ORG: none

TITLE: Method of making high-strength steel plates by pack rolling. Class 7, No. 184232

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 22

TOPIC TAGS: high strength steel, high strength steel plate, high strength steel sheet, steel plate rolling, steel sheet rolling

ABSTRACT: This Author Certificate introduces a method of pack rolling high-strength steel plates and sheets up to 10 mm thick and up to 3500 mm wide in a carbon steel envelope. The method includes cleaning, coating, making of the pack, heating, rolling and subsequent heat treatment. To ensure an accurate thickness of the plates

Card 1/2 UDC: 621.771.23

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

L 44005-66

ACC NR: AP6029871

or sheets regardless of their location in the pack, the thickness of the envelope must be at least 0.6 of the total initial thickness of the high-strength plates of the pack. [ND]

SUB CODE: 13/ SUBM DATE: 18Jun64/ ATD PRESS: 5070

Card 2/2 blg

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDEVA, N.P.

Use of nonlinear recording in grouping seismographs. Trudy Inst. fiz. Zem. no.20:113-116 '62. (MIRA 15:8)
(Seismic prospecting)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

ACCESSION NR: AP4038145 S/0049/64/000/005/0665/0674

AUTHOR: Grudeva, N. P.

TITLE: Properties of the boundary at the core of the earth

SOURCE: AN SSSR. Izv. Seriya geofizicheskaya, no. 5, 1964, 665-674

TOPIC TAGS: seismology, elastic wave, wave reflection, seismic discontinuity

ABSTRACT: The author has examined the records of a large number of earthquakes from American and Swedish stations as well as domestic stations for a large geographic distribution of foci. The amplitude characteristics of waves reflected from the core, particularly the ScS and ScP waves, were analyzed to discover the density ratios at the core boundary. These experimentally obtained ratios were compared with theoretical values derived on the basis of a solid-liquid interface with density ratios ranging through values from 1 to 2. Measured density ratios from the seismic records indicate a value exceeding 2, but comparisons with the theoretical computations suggest the value should not exceed 1.8, i.e., the observed value is greater than the computed. The discrepancy may arise either from an actual density ratio greater than 2 at the core boundary or from erroneous computations because of neglect of some factor. A possible factor, omitted in the theoretical consideration,

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

ACCESSION NR: AP4038145

might be a transitional layer between core and mantle. If the velocity gradient of such a layer is large and commensurate with the wave length (that is, perhaps 30 to 50 km), then the intensity of the ScP wave would be smaller than if the boundary were sharp, and a density ratio as low as 2.0 might obtain. Examination of the SP and SS waves on the basis that such a layer exists may shed light on the plausibility of the assumption. Orig. art. has: 6 figures, 3 tables, and 2 formulas.

ASSOCIATION: Akademiya nauk SSSR Institut fiziki Zemli (Academy of Sciences SSSR, Institute of Physics of the Earth)

SUBMITTED: 05Jun63 DATE ACQ: 12Jun64 ENCL: 00

SUB CODE: ES NO REF SOV: 005 OTHER: 003

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

ACC NR: AT6033695 SOURCE CODE: UR/3231/66/000/002/0104/0120

AUTHOR: Grudeva, N. P.

ORG: none

TITLE: Dependence of earthquake magnitude on the focal depth

SOURCE: AN SSSR. Institut fiziki Zemli. Vychislitel'naya seysmologiya, no. 2, 1966. Mashinnaya interpretatsiya seysmicheskikh voln (Computer interpretation of seismic waves), 104-120

TOPIC TAGS: earthquake, seismic wave, seismography, harmonic analysis, seismic model

ABSTRACT: In research into a gross effect of this kind it is sometimes simpler to calculate the theoretical seismograms than the spectra of their experimental counterparts. In this connection, the author calculates and analyzes the theoretical seismograms of the first three harmonics of Love waves in a vertically inhomogeneous medium with several different focal depths (from 0 to 250 km) at epicentral distances of 1000 and 6000 km, by the method and program described by Z. S. Andrianova et al. (Poverkhnostnyye volny Lyava. Izd-vo "Nauka," 1965) It was established that the presence of sediments affects the magnitude of the earthquake only if its focus lies in the crust and not in the mantle. This gives reason to believe that earthquakes with foci in the upper crust may be distinguished according to the fundamental harmonic of Love waves

Card 1/3

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

ACC NR: AT6033695

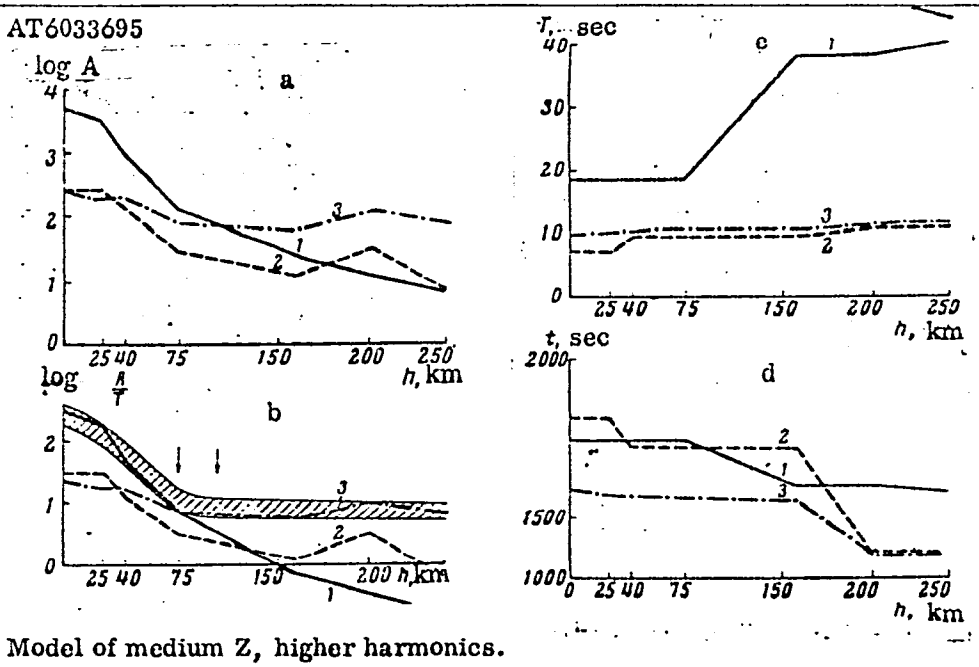

Fig. 1. Model of medium Z, higher harmonics.
Relation of focal depth to parameters of the maximum phase, measured on the seismograms of the first three harmonics
a - log (max A); b - log (max A/T); c - period corresponding to maximum amplitude; d - time corresponding to maximum A/T ratio, 1, 2, 3—1st, 2nd, 3rd harmonics

Card 2/3

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

ACC NR: AT6033695

(long duration, high frequencies in the presence of foci in the upper crust) if sediments are present. As regards the higher harmonics, the decrease in recorded amplitude with increasing focal depth occurs at a much slower rate than in the case of the fundamental harmonic (Fig. 1), so that the maximum amplitudes switch to the higher harmonics with increase in focal depth. When $h = \geq 100$ km only the higher harmonics remain on the tracing; this effect may be utilized to estimate the focal depth. A similar analysis of Rayleigh waves will be performed in a subsequent investigation. Orig. art. has: 10 figures, 3 appendices.

SUB CODE: 08, 12, 09/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 003

Card 3/3

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDIN B.M.

127-58-1-22/28

AUTHORS: Volkov, K.D.; Grudin, B.M., and Kal'nitskiy, N.F., Engineers

TITLE: Drifting, Scraper- Hopper-Train (Prokhodcheskiy skrepernyy poyezd-bunker)

PERIODICAL: Gornyy Zhurnal, 1958, Nr 1, pp 72-74 (USSR)

ABSTRACT: A drifting, scraper hopper-train was designed, manufactured and applied for drifting a cross in the Belousovo mine early in 1957. This hopper-train of the PSPB-1 type consists of individual car sections installed on the carriages of VOK-80 cars, a loading car, and an unloading car, shown in Figures 2, 3 and 4. When the train is being composed, individual sections enter into each other forming thereby a continuous trough-hopper. A scraper winch is installed on a separate carriage and it moves a 0.15 m^3 scraper with which the rock is transported from the loading machine into the hopper-train. The technical characteristics of the hopper-train are as follows: the capacity is 25 cu m; the efficiency in loading is 30 cu m/hr and in unloading is 40 cu m/hr; the length is 31,000 m, the width is 1,200 mm and the height is 1,700 mm. The experience of using the PSPB-1 justifies

Card 1/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

Drifting, Scraper- Hopper-Train 127-58-1-22/28

the conclusion that 100 or 150 m per month can become the average speed of drifting horizontal workings.
The article contains 4 figures and 1 photo.

ASSOCIATION: Belousovskoye rudoupravleniye, Vostochno-Kazakhstanskaya oblast' (Belousovka Mine Administration, East-Kazakhstan Oblast')

AVAILABLE: Library of Congress

1. Cargo vehicles-Mines 2. Mines-Equipment 3. Ores-Transportation

Card 2/2

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDIN, B.M.

Mining with use of a hopper-train. Shakht. stroi. no.10:24-26 '58. (MIRA 11:11)

1. Glubochanskoye upravleniye shakhtnogo stroitel'stva, Vostochno-Kazakhstanskaya oblast'.
(Mining machinery) (Mine railroads)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDIN, B.M., inzh.; YURKOV, V.N., inzh.; BELYASHOV, V.N., inzh.

What was made apparent by the use of roof bolting in mining. Shakht.stroi. no.11:24-27 N '59. (MIRA 13:3)

1. Blubochanskoye shakhtostroyupravleniye, Vostochno-Kazakhstanskaya oblast'.
(Mine roof bolting)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

YELINSON, I., kand.tekhn.nauk; GRUDIN, L., inzh.

Simplified hand windlasses. Stroitel' no.5:23-24 My '61.
(MIRA 14:6)

(Winches)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDIN, B.M., gornyy inzh.

Reply to the article by P.P.Makarenko and IU.A.Petrov "BPS-1 bunker train for loading rock without changing cars in drifting." Gor.zhur. no.4:78-79 Ap '62. (MIRA 15:4)

1. Kazgiprotsvetmet, Ust'-Kamenogorsk.
(Mine railroads)
(Makarenko, P.P.) (Petrov, IU.A.)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"

"APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8

GRUDIN, B.M., inzh.; BELYASHOV, V.N., inzh.; YURKOV, V.N., inzh.

Use of a bunker train in drifting. Shakht.stroi. 6 no.4:4-5 Ap '62. (MIRA 15:4)

1. Kazgiprotsvetmet (for Grudin). 2. Altayskiy gornometallurgicheskiy nauchno-issledovatel'skiy institut AN KazSSR (for Belyashov, Yurkov).

(Kazakhstan--Mine railroads)

APPROVED FOR RELEASE: 08/10/2001 CIA-RDP86-00513R000617110016-8"