

The Speed of Filling Up the Roll Pass of
Rolling Mill by Metal in the Initial
Stage of Rolling Process

77013
SOV/148-60-1-16/34

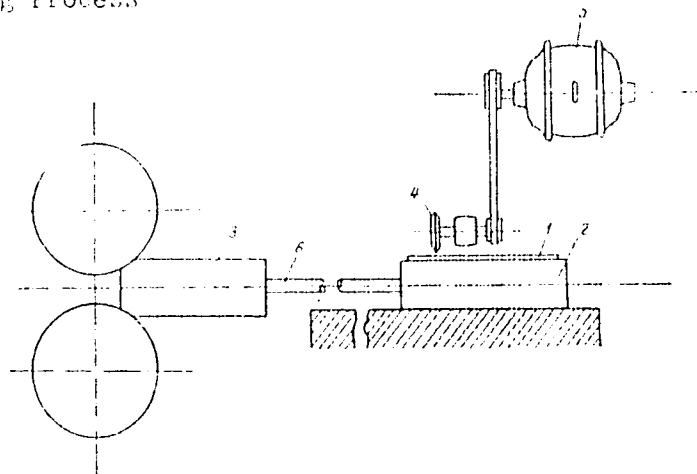
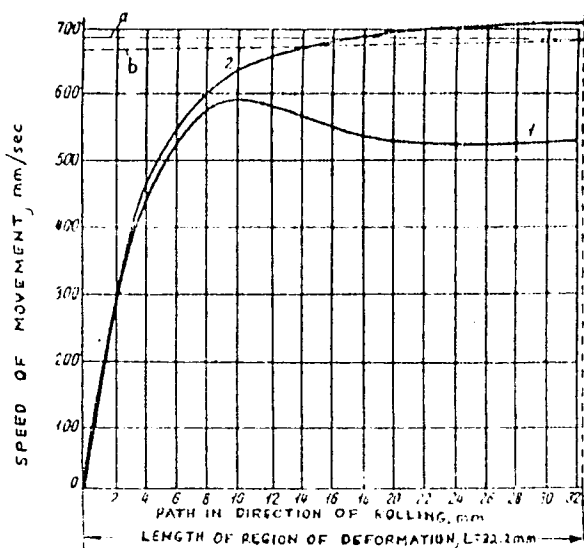


Fig. 1. General layout of a device for determination of speed of movement during rolling: (1) strip of glossy cardboard; (2) slider; (3) billet; (4) head; (5) electric motor; (6) rod.

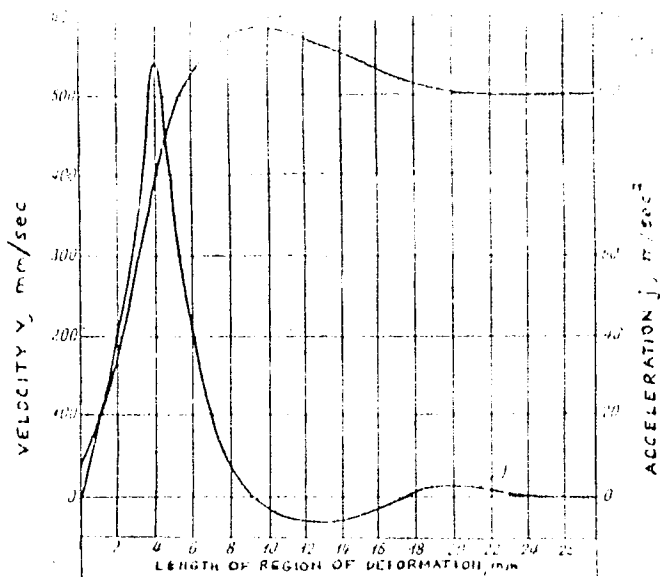
Card 5/7



77633 307/148-50-1-26/3

Fig. 4. Relation between movement of front (1) and rear (2) faces of sample, and path of rolling. (a) Peripheral speed of rolls; (b) horizontal component of peripheral speed of rolls.

Card 6/7



307/340-01-10/9-

Fig. 2. Acceleration (j) of sample movement during rolling on path (for initial stage of filling roll pass with metal).

Card 7/1

GLEBOV, Yu.P.; NIKOLAYEV, R.A.

Force of contact friction in pressing aluminum and certain
aluminum-base alloys. TSvet. met. 34 no. 4:48-50 Ap '60.
(MIRA 14:4)

(Aluminum) (Friction)

GLEBOV, Yu.P.; KIRILLOV, P.G.

Device to study the nonuniformity of metal flow during rolling.
Sbor. nauch. trud. GINTSVETMET no.33:349-354 '60. (MIRA 15:3)
(Rolling (Metalwork))

3/115/01/000/001/005/010
E193/E283

AUTHORS: Perlin, I. L. and Glebov, Yu. P.
TITLE: Determination of the Shape of the Plane of Contact
in Extrusion with a Plastic Pressure Disc
PERIODICAL: Tsvetnyye metally 1961, No. 1, pp. 72-75
TEXT: The problem of keeping to minimum the weight of the
discard from extrusion billet becomes particularly important in
extruding costly metals or alloys, and the present article des-
cribes a method of achieving this end. The method proposed is
based on the application of a conical die, used in conjunction with
a spacing disc of a plastic metal (with deformation characteristics
similar to those of the extruded material), placed between the
extrusion ram and the extrusion billet. The principle of the
method is best explained by referring to Fig. 1 which shows (1)
the extrusion billet; (2) plastic metal disc; and (3) extrusion
ram, before (A) and after (B) extrusion. The salient feature of
the method consists in that the mating surfaces of the extrusion
billet and the spacing disc are not flat, but convex and concave,
respectively. If the correct shape of the curved interface (line
Card 1/3

S/156/61/000/001/005/010
E195/E283

Determination of the Shape of the Plane of Contact in Extrusion
with a Plastic Pressure Disc

D-C-E, Fig. 1.A) is chosen. It becomes flat (line D-C-E Fig. 1.B) after emerging from the die, so that the tail end of the extruded rod is free from the "piping" defect and does not have to be discarded. A method of determining the correct shape of the curved interface from the co-ordinate net pattern, superimposed on the meridian face of an experimental billet, is described. Applying this method to alloy $\Delta 16$ (D16), extruded at 420°C from a billet 40 mm in diameter, to an 18.4 mm diameter rod, the present authors found that the correct interface constitutes, in this case, a quadratic paraboloid. It is concluded that if this method is employed in extruding metals at relatively low temperatures (below 500°C), the extrusion process can be carried out without producing a discard from the extrusion billet. There are 4 figures and 2 Soviet references.

Card 2/3

S/135/61/000/001/005/010
E193/E283

Determination of the Shape of the Plane of Contact in Extrusion
with a Plastic Pressure Disc

Fig. 1

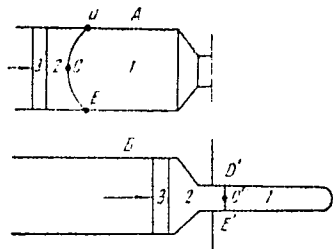


Рис. 1. Схема к процессу прессования
с пластической прокладкой:
А — до начала процесса; Б — после
окончания процесса; 1 — прессуемый ме-
талл; 2 — пластичная прокладка; 3 —
пресс-шайба

S/149/51/000/002/014/017
A006/A001

AUTHORS: Perlin, I.L., Glebov, Yu.P.

TITLE: On the Shape of Elastic Zone in a Die During Pressing Through a Single-Channel Flat Die

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, 1961, No. 2, pp. 131 - 133

TEXT: The shape of the deformation seat in pressing through flat dies is determined by the elastic zone. The effect of various factors on the magnitude of elastic zones has been dealt with in a number of publications (Ref. 1 - 4). However, they do not explain the causes of a constantly equal shape of the surface separating the elastic zone from the deforming metal volume. The shape of this boundary represents a trajectory of the motion of peripheral layers of the pressed metal. Investigations of this boundary provide data on: regularities in metal flow during pressing; characteristics of the surface of slip in the deformation seat, and on the effect of the aforementioned boundary on force conditions. The authors attempt to explain the causes determining the surface shape of the elastic zone. For this purpose it is suggested to use the principle of the least work and the least time for the trajectory of motion of metal particles

Card 1/3

S/149/61/000/002/014/01
A006/A001

On the Shape of Elastic Zone in a Die During Pressing Through a Single-Channel Flat Die

(Fig. 1). The trajectories of particles from point A to B can be determined analogous to the solving of Bernoulli's problem of the brachistochrone which shows (Ref. 6) that the given curve is a cycloid (Fig. 3) which is concave in the motion direction of the point and resembles by its shape the boundary of the elastic zone. Another method of demonstrating the concave shape of the curve formed by the trajectory of a point moving at high speed and minimum time is shown in Figure 4. The straight line $m - m$, parallel to axis x , crosses the possible trajectories in points c, d, f . Time is gained when the shorter section is passed at a lower speed and the longer section at a higher speed. Sections of the course, passed by a point at the same level and by different trajectories, are in the relation $Ac < Ad < Af$, i.e. at the beginning of motion at lower speed, the concave trajectory provides for a shorter course, and for a longer course at the end of motion at maximum speed, since the section of the trajectory below $m - m$ are in relation $Bc > Bd > Bf$. Thus the shape of the elastic zone surface during pressing through flat dies, corresponds directly to the principle of the least work. This is important when developing methods of determining force conditions for pressure working of metals by the least work principle, using variational calculus. Data ob-

Card 2/3

S/149/61/000/002/014/017
A006/A001

On the Shape of Elastic Zone in a Die During Pressing Through a Single-Channel Flat Die

tained may be used for designing pressing tools.

Figure 1:

Schematic drawing of an elastic zone during pressing with a flat die.

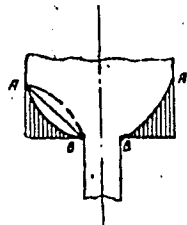
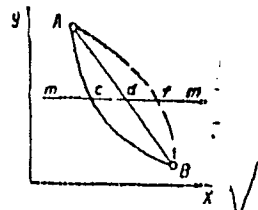


Figure 4:

Schematic drawing explaining the shape of the boundary between the elastic and plastic zones during pressing through a flat die.



There are 4 figures and 6 references; 5 Soviet and 1 non-Soviet.

ASSOCIATIONS: Krasnoyarskiy institut tsvetnykh metallov (Krasnoyarsk Institute of Non-Ferrous Metals). Kafedra obrabotki metallov davleniyem (Department of Pressure Working of Metals)

Card 3/3

SUBMITTED: October 5, 1960

01276

11200A

S/L36/61/000/004/004/006
E193/E183

AUTHORS: Glebov, Yu.P., and Nikolayev, R.A.
TITLE: Stresses Due to Contact Friction During Extrusion of Aluminium and Some Aluminium-Base Alloys
PERIODICAL: Tsvetnyye metally, 1961, No. 4, pp. 48-50
TEXT: The accuracy of analytical determination of extrusion pressure depends to a large extent on the accuracy of data on contact friction, used in the calculations. Although several formulae for contact friction have been derived (Refs.1,2,6) they all contain parameters which are difficult to determine either analytically or experimentally. Consequently it is easier to determine the magnitude of contact friction experimentally. The contact friction phenomena during extrusion of aluminium or aluminium alloys have certain specific features, owing to the fact that these materials tend to stick to the container wall and form on it a lining, so that friction takes place not between steel and the extrusion material, but between the welded-on lining and the extrusion billet. When the temperature of the container is near to that of the billet, welding may readily occur between the lining
Card 1/5

82452

S/136/61/000/004/004/006
E193/E183

Stresses Due to Contact Friction During Extrusion of Aluminium
and Some Aluminium-Base Alloys

and the billet, in which case friction is replaced by plastic shear. ✓
When different alloys are extruded from one container, the
situation is complicated by the fact that the chemical composition
(and, consequently, the properties) of the container lining changes
continuously, being often different from that of the extruded
alloy. For this reason the only reliable data can be obtained from
experiments carried out under industrial conditions, and since data
on contact friction during extrusion of aluminium are scarce, the
present investigation was undertaken. The stresses due to contact
friction were determined during extrusion on 1200, 1500, 2000, and
5000 t presses with the aid of a method due to I.L. Perlin (Ref.4)
which consisted in the following. The extrusion pressure
(P , kg/cm²), as indicated by the manometer, was plotted against the
distance (L , mm) travelled by the extrusion ram. Two points were
then chosen on the linear portion of the $P(L)$ curve, and the
difference in pressure, ΔP , and the corresponding distance ΔL
travelled by the extrusion ram between these two points, were
Card 2/5

89492

S/136/61/000/004/004/006
E193/E183

Stresses Due to Contact Friction During Extrusion of Aluminium and Some Aluminium-Base Alloys

measured. The change in the magnitude of the friction area, F_{tp} , was calculated from the formula:

$$F_{tp} = \pi D_K \Delta L, \tag{3}$$

where D_K is the container diameter (mm). The friction stress, τ_{kp} , in the plane of the container wall was then calculated from:

$$\tau_{kp} = \frac{\Delta P \cdot F_{\pi\lambda}}{F_{tp}} \tag{4}$$

where $F_{\pi\lambda}$ is the cross-section area of the extrusion ram. Data, obtained during 200 tests carried out under various conditions of temperature (t), extrusion speed (v), and elongation (μ), were analyzed. Typical results are reproduced in Fig.2, where τ_{kp} (kg/mm²) is plotted against the extrusion temperature (t , °C). Curves 1-6 in Fig.2 relate to the following conditions: (1) aluminium, extruded at $v = 31-52$ mm/sec, $\mu = 21$; (2) aluminium,

Card 3/5

89192

S/136/61/000/004/004/006
E193/E183

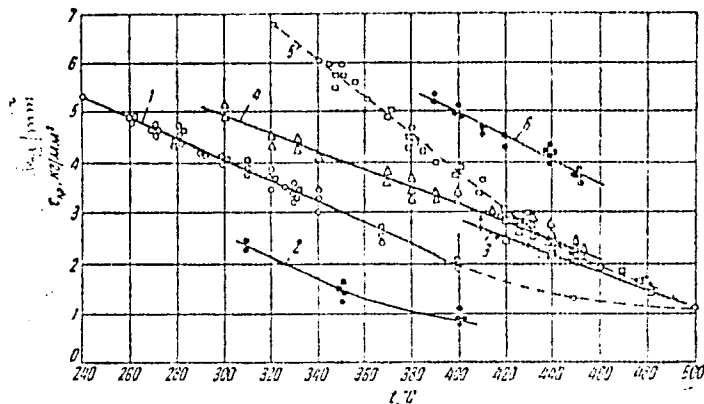
Stresses Due to Contact Friction During Extrusion of Aluminium and
Some Aluminium-Base Alloys

$v = 4-5$ mm/sec, $\mu = 4.5$; (3) alloy AK6 (AK6), $v = 0.5-1.5$ mm/sec, $\mu = 19$; (4) alloy 895 (V95), $v = 0.2-0.6$ mm/sec, $\mu = 13-33$; (5) alloy AB (AV), $v = 11-18$ mm/sec, $\mu = 15-35$; (6) alloy AMG5B (AMG5V), $v = 0.8-1.0$ mm/sec, $\mu = 22$. The following conclusions were reached. (1) At a constant extrusion temperature the stress due to contact friction during extrusion of aluminium alloys varies within wide limits, depending on the extrusion speed and on the elongation, the former parameter having a more pronounced effect. (2) Above a certain critical value of the elongation (μ) which amounts to 13-15, further increase in μ has practically no effect on τ_{kp} . (3) The results quoted in the course of the present investigation were obtained under conditions most frequently met in industrial practice and can be used for calculating the extrusion pressure for the alloys studied. There are 4 figures and 6 Soviet references.

Card 4/5

89492

S/136/61/000/004/004/006
Stresses Due to Contact Friction... E193/E183



Card 5/5

Fig. 2

PERLIN, I.L.; GLEBOV, Yu. P.

Shape of the elastic zone of dies in single-channel, flat
die stamping. Izv. vys. uchev. zav.; tsvet. met. 4
no.2:131-133 '61. (MIRA 14:6)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra obrabotki
metallov davleniyem.
(Dies (Metalworking))

S/149/62/000/003/009/011
A001/A101

AUTHOR: Glebov, Yu. P.

TITLE: Determination of maximum main deformation in the process of extrusion of round rods

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Tsvetnaya metallurgiya, no. 3, 1962, 135 - 146

TEXT: The author studied, under the guidance of I. L. Perlin, the process of extrusion of round rods with the purpose of determining shear deformation and the magnitude of maximum main deformation occurring during this process. He divides the volume of an ingot, being extruded through a die to produce a round rod, into three sections: first zone, preceding the deformation seat, in which there is no plastic deformation; second zone or the seat of plastic deformation, and third zone which represents the rod after extrusion. The motion of the points within each of these zones is analyzed, considering the process as an axial-symmetrical one and neglecting the friction losses. As a result of the analysis, an approximate equation of the curve is derived into which a straight transverse line

Card 1/3

Determination of maximum...

S/149/62/000/003/009/011
A001/A101

of the rod co-ordinate network transforms when the extrusion process reaches a steady state. Differentiating this equation the author finds the tangent of angle λ which is the angle of shear deformation, expressed in terms of initial co-ordinates λ :

$$\operatorname{tg} \lambda = \frac{\mu \cdot \lambda}{1.2 D_c^2 - \lambda^2} \quad (15)$$

where μ is deformation degree, being the ratio of cross sections of the ingot and the rod; λ is a coefficient whose value depends on the die angle (a graph showing their relation is presented in the article); D_c is diameter of container in which the ingot is placed, i.e. initial diameter prior to extrusion. The magnitude of relative maximum main deformation for values of $\mu > 10$, which is usually the case in practice, is expressed by the following formula:

$$\ln \lambda_x = \ln \mu \sqrt{1 + \frac{\lambda^2}{1.2 D_c^2 - \lambda^2}} \quad (16)$$

On the basis of this formula, the necessary magnitude of total extrusion pressure is determined, which looks as follows:

Card 2/3

S/149/62/000/003/009/011
A001/A101

Determination of maximum...

$$p = \frac{D_c^2}{4} S_{d_{av}} \ln(k), \quad (13)$$

where $S_{d_{av}}$ is average value of yield point over the deformation seat, and k is a correction coefficient taking into account the additional shear deformation in axial direction of individual concentric layers. The effect of this coefficient is compared with that exerted by another coefficient in the Perlin formula ("Tsvetnyye metally", no. 9, 1957), and corrections found by both ways were found to be of the same order of magnitude. There are 7 figures and 3 tables.

ASSOCIATION: Krasnoyarskiy institut tsvetnykh metallov (Krasnoyarsk Institute of Non-Ferrous Metals), Kafedra obrabotki metallov davleniyem (Department of Pressure Machining of Metals)

SUBMITTED: May 15, 1961

Card 3/3

GLEBOV, Yu.P.

Pressing rods without leaving butts. TSvet. ket.
35 no.7:55-70 J1 '62. (MIRA 15:11)
(Power metallurgy)

ZLOTIN, L.B.; GLEBOV, Yu.P.

Determining the design value of deformation resistances in continuous processes. Izv. vys. ucheb. zav.; tsvet. met. 5 no.4: 169-173 '62. (MIRA 16:5)
(Metalwork) (Strains and stresses)

ZACHAROV, I.P.; ZACHAROV, M.M.; ZACHAROV, K.M.

Investigations in the extrusion of pipe with an arbitrary lateral shape. Izv. vuz. tekhn. nauk; avtot. mat. 6 no.3:119-123, 1963. (Abstract (Russian))

ACCESSION NR: AP4015111

S/0136/64/000/002/0062/0065

AUTHOR: Perlin, I.L.; Glebov, Yu.P.; Yermanok, M.Z.

TITLE: Effect of temperature, degree and rate of deformation on the deformation strength of aluminum alloys.

SOURCE: Tsvetny*ye metally*, No.2, 1964, 62-65

TOPIC TAGS: aluminum alloy, D16 aluminum alloy, V95 aluminum alloy, AD31 aluminum alloy, deformation strength, deformation rate, deformation temperature, deformation strength temperature function

ABSTRACT: The effect of different temperatures (360, 420, 480C) and various deformation rates (0.19, 0.8, 220 and 880 mm/sec) on the deformation strength S_d was investigated for D16, V95, and AD31 aluminum alloys. The deformation rate w affects S_d ; and with increased degree of deformation ψ , the intensity of the growth of S_d is decreased and in some cases even lowered (for AD31 S_d is lower at a rate of 14 sec.⁻¹ than at 4 sec.⁻¹). The curves which show the dependence of S_d on degree of deformation have a maximum, and it is also shown that

Card 1/32

ACCESSION NR: AP4015111

the degree of deformation depends on temperature and rate of deformation. As temperature increases the maximum on the curve is shifted in the direction of smaller deformation values; and with increasing rate of deformation, it is shifted in the direction of larger deformation values. Working diagrams (fig.1) of the $S_{\lambda} = f(t^n)$ relationship were constructed by extrapolation from experimental data for the 3 temperatures investigated. Curves are also included for the most probable deformation periods encountered in extruding the given alloys. The lower curves S_{λ} show the initial values corresponding to S_{λ} for $\psi = 3-6\%$ and minimum rate of deformation $w = 0.03 \text{ sec}^{-1}$. Orig. art. has: 3 figures

ASSOCIATION: None

SUB CODE: ML

DATE ACQ: 12Mar64

ENCL: 01

SUBMITTED: 00

NO REF SOV: 009

OTHER: 003

Card 2/32

L 13760-65 EWT(m)/EWP(k)/EWA(d)/EWP(t)/EWP(b) P1-L ASD(1)-3 JD/H#
S/0149/04/000/000/0186/0141

ACCESSION NR: AP4047494

AUTHOR: Perlin, I. L.; Glebov, Yu. P.; Yermanok, M. Z.

TITLE: Nature of the relationship between strain resistance and the degree of strain in
recrystallization processes during pressure working of metals

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 4, 1964, 135-141

TOPIC TAGS: strain resistance, stress strain curve, pressure working, metal
recrystallization

ABSTRACT: It has been proven that for pressure working of metal the strain resistance
should be selected with consideration of the effect of the rate
for relative strains up to

Two types of strain are considered as follows:
Card 1/3

L 13760-65
ACCESSION NR: AP4047494

effect of heat is not considered, while the stress rate is varied from sample to sample but is constant for each sample. The second type is at various temperatures, but at a constant

and 5 formulas.

ASSOCIATION: NONE

SUBMITTED: 15Nov63

NO REF SOV: 008

ENCL: 01

OTHER: 003

SUB CODE: REM

Card 2/3

L 13760-65
ACCESSION NR: AP4047494

ENCLOSURE : 0



Degree of deformation

Fig. 1. Relationship between strain resistance and the degree and rate of strain: solid lines - 360C; dashed line - 420C; dash-dot line - 480C.

Ordinate = actual stress in kg/mm²;
abscissa = degree of strain in %.

Card 3/3

PERLIN, I.L.; GUSEV, Yu.P.; YEFIMYUK, M.Z.

Character of the dependence of the resistance to deformation
on the degree of deformation in recrystallization processes
following the pressure working of metals. Izv. vyz. uchab. zav.;
tsvet. met. 7 no. 4:135-141 64. (MIRA 19.1)

G-3

Category : USSR/Electricity - Semiconductors

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 1599

Author : Glebov, Yu S , Karavayeva, A.D , Radkevich, S.D.

Title : Electric Conductivity of Oxifers

Orig Pub : Sb. statey Leningr. in-ta tehnoloy mekhan. i optiki, 1955, vyp. 18, 163-168

Abstract : Investigation results are given on certain electric properties of oxifers. The temperature dependence of the resistance obeys the exponential law $R = Ae^{B/T}$ only at high temperatures. A deviation from this law is observed at temperatures below 40° , at which the magnetic properties of the oxifers manifest themselves (40° is the Curie point). The dependence of $Tk R$ on T and on $\chi = f(T)$, has a maximum of 40° . The distribution of the potential over the specimen is practically linear. The voltage across the contacts is much higher (12 -- 20%) than the voltage applied to the specimen, with the percentage voltage drop across the contacts increasing with increased applied voltage (from 0.5 to 1.5 volts). The electrodes are fused-in silver. The static voltage-current characteristics show that the oxifers are similar to thermistors in their properties. Unlike the static characteristics, the low-frequency voltage-current characteristics of oxifers are determined not by thermal

Card : 1/2

Category : USSR/Electricity - Semiconductors

G-3

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 159:

phenomena, but some special process, a study of which would help explain the mechanism of the conductivity of oxifers. The resultant voltage-current characteristics are similar to those featured by thin metallic films, by metallic powders, and by semiconducting complexes. The basic conduction mechanism of oxifers is apparently closely related to contact phenomena between the grains of the oxifer.

The resistance R of the oxifer decreases with increasing frequency (f) with maximum reduction in R being observed at low values of f . A further increase in f from 16 to 20 kc changes the resistance of the oxifer but little. A conclusion is drawn that the electric and magnetic properties of the oxifers are inter-related.

Card : 2/2

Translation from: Referativnyy zhurnal, Fizika, 1960 No. 6, pp. 170-181. # 1771.
 S/O58/66/A00/006/008,004
 A005/A001

AUTHOR Glenny, Yu. S.
 TITLE Analysis of the Determination Accuracy of the Heat Conductivity Coefficients of Semiconductors According to the Method of A.V. Ioffe and A.F. Ioffe

PERIODICAL Nauchn. tr. Leningr. in-¹¹ tekhny mekhan. i optiki, 1959, No. 57, pp. 43-51

TEXT The fundamental formulae for calculating the heat conductivity according to the method of A.V. Ioffe and A.F. Ioffe, (Zh. tekhn. fiz., 1952, No. 2) are derived in detail. The errors analyzed arising in consequence of the heat exchange with the surrounding medium and the nonlinearity of the heat conduction in the specimen. The author assumes turbulent convection and a large initial temperature drop on the specimen (2000C) and concludes that great errors are possible during measurement's making the method inapplicable. However, the usual

37088-50/000/005/009/0-0
A005/A001

Analysis of the Determination Accuracy of the Heat Conductivity Coefficient of
Semi-conductors According to the Method of A.V. Ioffe and A.P. Ioffe

experimental conditions are corresponding to steady conditions, which leads to
a sharp reduction of the possible errors.

A.V. Ferris

Translated from: This is the full translation of the original Russian abstract.

Card 2/2

GLEBOV-KOTEL'NIKOV, Erik Anatol'yevich; KATS, A.M., red.; POLOSINA, G.V.,
red.; PRYTKOVA, R.N., tekhn.red.

[Application of accounting-punched card machines for preparing
consolidated constructional and technological documentation]
Primenenie schetno-perforatsionnykh mashin dlia mekhanizatsii
sostavleniia svodnoi konstruktorskoii i tekhnologicheskoi
dokumentatsii. Moskva, Gosstatizdat, TsSU SSSR, 1961. 41 p.
(MIRA 15:5)

(Machine accounting) (Punched card systems)

USSR/Zooparasitology. Parasitic Worms. General Problems. G

Abs Jour: Ref. Zhur. - Biol., No 23, 1958, 104052

Author : Kas'yanova, K. A.; Glebova, A. A.

Inst : - *Institute of Parasitology and Zoology, Academy of Sciences of the USSR*

Title : Case of Diphyllidiosis in Man *Med. parazit. i parazitarn. bolezni*

Orig Pub: Med. parazitol. i parazitarn. bolezni, 1958, 27,
No 2, 219

Abstract: No abstract

Card 1/1

24

GLEBOVA, Antonina Ivanovna; SAVONIN, Yevgeniy Fedorovich; SHMELEV, I.

[Economic accountability at enterprises of the Penza Economic Council] Khozraschet na predpriatiakh Penzenskogo sovnarkhoza. Penza, Penzenskoe knizhnoe izd-vo, 1960. 242 p.

(MIRA 14:7)

(Penza Province—Accounting)

GIEROVA A. I. Amyloidosis in horses producing i-une sera. Arkh. Patol., Moscow 1948, 10/5
(55-57)

Experience showed that every horse producing i-une sera dies from peritoneal haemorrhage after rupture of the liver caused by amyloid degeneration. This occurs after 10 to 50 months of continuous immunization, despite the healing of abscesses of the horses. An extensive study was carried out on post-arterial material from 120 horses which died from amyloidosis. Regression of amyloidosis was studied in horses no longer used for the production of sera. If such horses are given full rest, they do recover completely. The findings in the Congo-red stain gradually return to normal after about 12 months. The cause of amyloid degeneration in horses producing i-une sera is unknown, but mere withdrawal of blood has nothing to do with it, since in horses used for the sterile broth alone over 18 months was also harmless. It is thought, therefore, that the formation of deep abscesses after frequent injections of antigen may be the cause. This, however, has not yet been proved experimentally.

From - (Arch. Patol. Abstracts)

So: Medical Microbiology and Hygiene, Section IV, Vol. 1, No. 1-6

GLEBOVA, A.N., uchitel'nitsa

The school zoology study room. Biol. v shkole 6:48-51 N-D '58.
(MIRA 11:11)

1. Krupetskaya srednyaya shkola Krupetskogo rayona Kurskoy oblasti.
(Zoology--Study and teaching)

BARANOV, A.A.; BUNIN, K.P.; GLEBOVA, E.D.

Kinetics of the second stage of graphitizing cast iron with
spheroidal graphite. Izv. vys. ucheb. zav.; Chern. met. 6
no.7:172-175 '63. (MIRA 16:9)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Cast iron--Metallography) (Annealing of metals)

RUNIN, K.P., BARANOV, A.I. *Primeneniye teorii klyuchevykh sloz*, 1970, 128 str., 160 k.

Grants, protokoly i druzhnye dokumenty, 1970, 128 str., 160 k.
160.

1. Izoprikladnyye slozovye klyuchi. 2. 11 klyuchevykh sloz
AN SSSR (Ser. B. 1).

МАШИНОПИСЬ

BARANOV, A. A.; GILBOVA, E. D.

Growth of cast iron with spheroidal graphite. *zv. vys. shch. zav.; Chern. met.* 7 no. 4:133-140 '64. (MIRA 17:5)

1. Dnepropetrovskiy metallurgicheskiy institut.

BABANOV, A.A.; GHEBWA, E.D.

Growth of graphitized iron alloys at temperatures above the A_1
point. Izv. vys. ucheb. zav.; Chern. met. 7 no.10:143-148 '64.
(NINA 17:13)

1. Dnepropetrovskiy metallurgicheskiy institut.

composition and structure on the growth of
[illegible] [illegible] [illegible]

BARANOV, A.A.; BUDIN, K.P.; GLEBOVA, F.D.

Structural change in globular graphite in the cyclic thermal
treatment of cast iron. Dokl. AN SSSR 164 no.1:84-85 S '65.
(MIRA 18:9)

1. Dnepropetrovskiy metallurgicheskii institut. Submitted
January 30, 1965.

GLEBOVA, G.D.; KOSHELEVA, G.N.

Use of Fischer's reagent in determining the water content of
certain reagents. Trudy IREA no.22:115-118 '58.

(MIRA 14:6)

(Chemical tests and reagents)

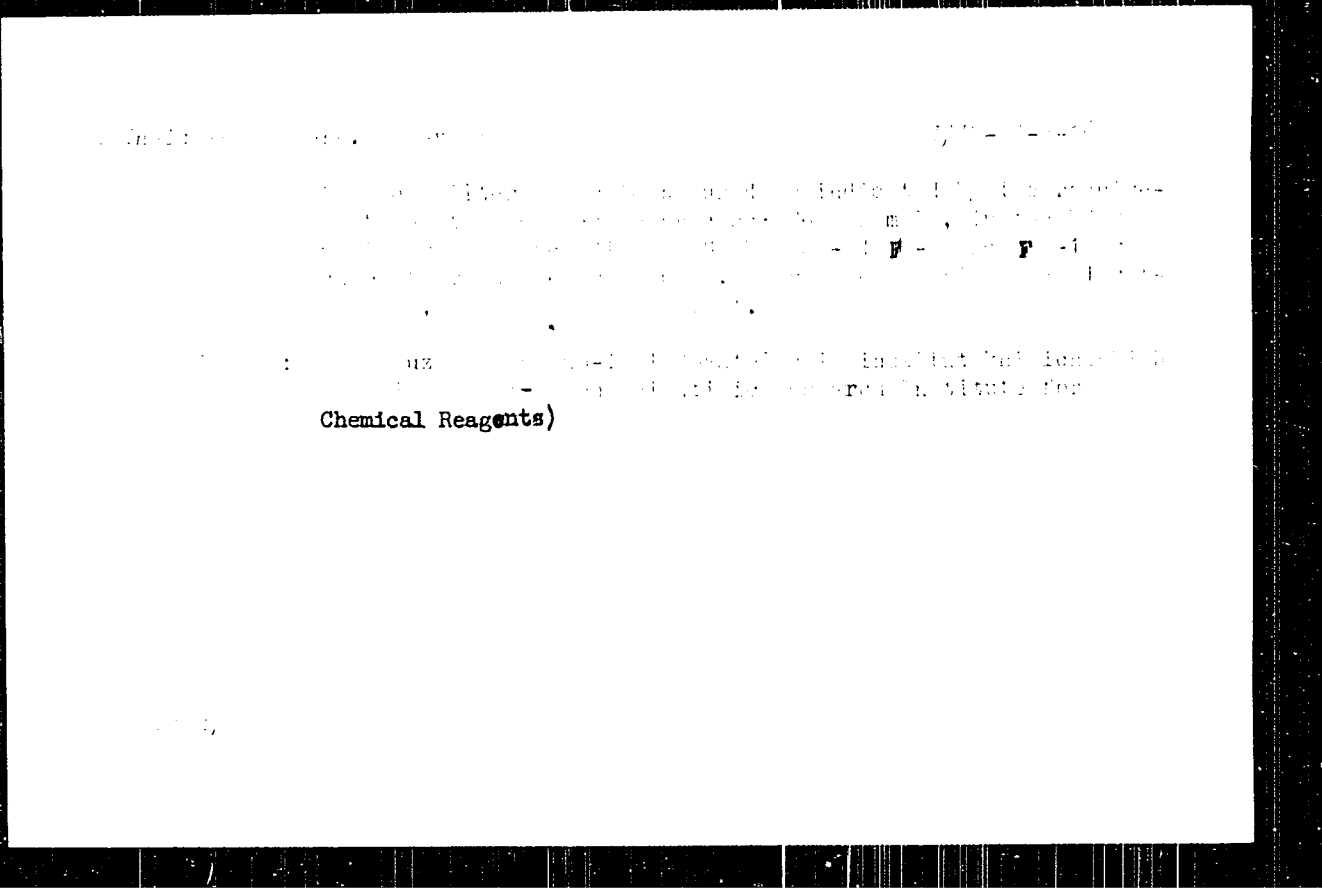
GLEBOVA, Lyeta Ivanovna; ZELENTOV, Vsevolod Alekseyevich; IVANOV,

Vladimir Vladimirovich; NIKULIN, Nikolay Ivanovich; SHILTOVA,
Alla Petrovna; OSHANIN, I.M., prof., red.; VU DANG AT, red.;
SPEKTOROV, L.D.; red.; ZELENTOVA, Ye.B., red.; SOBOL'EVSKAYA,
E.S., tekhn.red.

[Vietnamese-Russian dictionary] V'ietnamsko-rosskii slovar'.
Sost. I.I.Glebova i dr. Pod red. I.M.Oshanina i Vu Dang Ata.
Okolo 36000 slov. Moskva, Gos.izd-vo inostr.i natsional'nykh
slovari, 1961. 616 p. (MIRA 14:4)

1. Vostochnaya redaktsiya Gosudarstvennogo izdatel'stva ino-
strannykh i natsional'nykh slovarey (for Ye.B.Zelentsova,
Spektorov).

(Annamese language--Dictionaries--Russian)



BEREZOVSKIY, V.M.; GLEBOVA, G.D.

New reaction of o-phenylenediamines with violuric acid. Dokl.
AN SSSR 143 no.6:1341-1344 Ap '62. (MIRA 15:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
Predstavleno akademikom B.A.Kazanskim.
(Phenylenediamine) (Violuric acid)

BEREZOVSKIY, V.M.; GLEBOVA, G.D.

New method of synthesizing alloxazines. Condensation of aromatic
o-diamines with violuric acid and its thio analogs. Dokl. AN
SSSR 146 no.2:355-358 S '62. (MIRA 15:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitaminnyy institut.
Predstavleno akademikom B.A. Kazanskim.
(Alloxazine) (Violuric acid) (Amines)

BEPTOVNIY, V.M.; GIBBON, G.D.

Alloxazine and isalloxazine series. Part III: Synthesis of
riboflavin and lumiflavin. Amer. chem. Soc. no. 31104-1017
Br 104. (M.P. 1960)

1. Vsesoyuznyy nauchno-issledovatel'skiy vitanologiy institut.

SMIRNOVA, K.M.; GLEBOVA, G.I.

Amount of mobile compounds in Podzolic soils in the Moscow [with
summary in English]. Pochvovedenie no.8:45-52 Ag '58. (MIRA 11:9)

1. Moskovskiy gosudrastyennyy universitet.
(Moscow Province--Podzol)

ORLOV, D.S.; GLEBOVA, G.I.; MIDAKOVA, K.Ye.

Analysis of the distribution of ferric compounds and humus in
the soil profile based on the curves of spectral brightness.
Nauch. dokl. vys. shkoly; biol. nauki no.1 217-222 '66.
(MIRA 19:1)

1. Rekomendovana kafedroy pochvedeniya Moskovskogo
gosudarstvennogo universiteta. Submitted December 2, 1962.

GLUBOVA, G. O.

RA 27145

USSR/Geology
Pyrites

Sep/Oct. 1947

"New Sulphur Pyrite Lodes in Karelia," G. O. Glubova,
7 pp

"Razvedka Nedr" No 5

In 1940 - 1941 work under the authority of the Leningrad Geological Administration uncovered a new sulphur pyrite lode in the Segezha region of the Karelo-Finnish SSR, some 15 kilometers from Kochkoma Station on the Kirov Railroad. This region is known as Parandovsk and the lode has been named the Parandovsk Lode. Presents a geological map of the area.

LC

27145

GLEBOVA, I.I. [translator]; ZELENTSOV, V.A. [translator]; IVANOV, V.V.
[translator]; MORDVINOV, V.F. [translator]; MIKULIN, N.I.
[translator]; SHILOVA, A.P. [translator]; TERPOKHOV, V., red.;
DANILINA, A., tekhn. red.

[Progress in the restoration of the national economy of the
Democratic Republic of Vietnam, 1955-1956] Uspekhi vosstanovleniia
narodnogo khoziaistva Demokraticheskoi Respubliki V'etnam
(1955-1956 gg). Moskva, Gos. izd-vo polit. lit-ry, 1958. 271 p.
(MIRA 11:5)

(Vietnam, North--Economic conditions)

USSR/Zooparasitology - Parasitic Worms. General Problems.

G.

Abs Jour : Ref Zhur - Biol., No 11, 1953, 48179

Author : Garkavi, B.L., Gletova, I.Ya.

Inst : -

Title : The Development of Cestodes Hymenolepis fraterna (Stiles, 1906) and Hymenolepis nana (Sicotoid, 1852) in the Organism of White Mice.

Orig Pub : Zool. zh., 1957, 36, No 7, 986-991.

Abstract : By means of dissection of white mice, infested naturally by H. fraterna and infested experimentally with the eggs of this parasite and H. nana, there have been ascertained the migration of the larvae of hymenolepis (apparently, during superinfestation) and their growth in the mesentery of the lymphatic nodes. During the growth in the nodes, the larvae pass through the same stages, only at a slower rate.

Card 1/1

GLEBOVA, I. Ya., Cand Vet Med -- (diss) "Derivation of the attenuated vaccine strain of bird pastourellas by the method of subinoculation of guinea pigs." Stavropol', 1960, 15 pp; (Ministry of Agriculture RSFSR, Stavropol' Agricultural Institute); 150 copies; price not given. (KL, 50-60, page 135)

MASYUKOV, A.V., veterinarnyy vrach.; GLEBOVA, I.Ya., veterinarnyy vrach

Living vaccine against pasteurellosis of poultry and materials on
its testing. Veterinariia 38 no.1:47-51 Ja '61. (MIRA 15:4)

1. Krasnodarskaya nauchno-issledovatel'skaya veterinarnaya stantsiya.
(Chicken cholera) (Vaccination)

STURMAN, I.I.; GLEBOVA, I.Ya., kand. veter. nauk

Role of poultry mites in the spread of pasteurellosis. Veterinariia
Zh. no. 19:84-87. B. 165. (1971) (19:1)

I. Zavednyushchiy otselem bolezney ptits El'tyanovskoy oblasti
veterinarnoy laboratorii (for Germany). I. Zh. zhivotnovodstva
biologicheskaya veterinarnaya i parazitologiya (for USSR).

SOROKIN, Nikolay Stepanovich, slesar'-mekhanik; GLEBOVA, L., red.;
TYUNEYEVA, A., tekhn.red.

[A story about workers' pride] Rasskaz o rabochoi gordosti.
Moskva, Gos.izd-vo polit.lit-ry, 1962. 54 p.

(MIRA 15:4)

1. Baltiyskiy sudostroitel'nyy zavod imeni Sergo Ordzhonikidze,
Leningrad.

(Leningrad—Shipbuilding)

YERSHOV, Petr Nikolayevich; GLEBOVA, L., red.; GERASEVICH, Z.,
tekhn. red.

[Chemical rainbow] Khimicheskaja raduga. Kemerovo, Kemerov-
skoe knizhnoe izd-vo, 1962. 181 p. (MIRA 16:7)
(Dyes and dyeing)

GLEBOVA, L.

Authors of books are industrial innovators. Sov. zhakh. 11
no.10:41 0 '62. (MIRA 15:9)
(Coal mines and mining--Technological innovations)

GLEBOVA, L. F.

"Hygiene Appraisal of the Decentralized Exhaust Ventilation in Mills Producing Rayon," Gig. i San., No.6, 1949

Inst. Hygiene and Prophylaxis of Disease, AMB USSR
Ints. Gen. and Communal Hygiene, AMB USSR

CA

Permissible tolerance of hydrogen sulfide in the atmosphere. L. F. Glebova. *Gig. i Sanit.* 1950, No. 4, 19-21. -Expts with children kept in nurseries associated with viscose plants showed typical sulfide-intoxication symptoms caused by the carry-over of toxic materials by the mothers' clothing. The symptoms were evident although detn of CS gave neg. results and H₂S concn. in the air under the clothes was 0.025-0.05 mg. cu. m. or lower. Apparently the effect is caused by cumulative action of the small amts. of H₂S. The solution employed was to transfer the nursing mothers to another department. G. M. Kosolapov.

Inst. Gen. + Communal Hygiene, AMS USSR

GLEBOVA, L.F.

All-Russian interdepartmental conference on coordination of scientific research work on air purification of industrial fumes.
Gig. Sanit., Moskva No.1:55-56 Jan 51. (GLML 20:5)

GLEBOVA, L.F., kandidat meditsinskikh nauk

Use of lowered ash catchers for removing floating ash from gases in boiler rooms and electric power stations. Gig. i san. 21 no.6:72-74
Je '56. (MLRA 9:8)

1. Iz Glavnogo sanitarno-epidemiologicheskogo upravleniya Ministerstva zdravookhraneniya SSSR.
(SMOKE PREVENTION)

GLEBOVA, L.F., kandidat meditsinskikh nauk

Detection of dust in nonferrous metal industry. Gig. i san. 21 no.8:
56-57 Ag '56. (MLFA 9:11)

(DUST

of nonferrous metals in air, detection & removal in indust.)

(INDUSTRIAL HYGIENE

dust of nonferrous metals in air, detection & removal)

137-58-o-13962

Translation from: Referativnyy zhurnal, Metallurgiya, 1956, Nr 6, p 393 (USSR)

AUTHOR: Glebova, L.F.

TITLE: Sanitary Requirements for Purification of Exhaust Gases for Nonferrous Metallurgy Plants (Sanitarnyye trebovaniya pri oshistke otkhodyashchikh gazov zavodov tsvetnoy metallurgii)

PERIODICAL: Sb. materialov po pyleulavlivaniyu v tsvetn. metallurgii. Moscow, Metallurgizdat, 1957, pp 13-16

ABSTRACT: Investigations of the nonferrous metal-dust content of the atmosphere in areas adjacent to nonferrous metallurgy plants have shown that the concentration of nonferrous metal dust in the atmosphere is 100-200% higher than in the workshops. It is proposed that methods be developed for the removal of nonferrous metal dust from the air. In particular, good prospects for air purification by means of precipitation filters are noted.
Ye.L.

1. Industrial plants--USSR 3. Public health--Apparatus

С.И. БУСЫЛОВА

GLEBOVA, L.F., kandidat meditsinskikh nauk

Present state of purifying industrial refuse released into the atmosphere from nitrogen oxides. Gig. i san. 22 no.5:93-95 My '57.

(NITROGEN, (MIRA 10:10)

oxides in indust. discharges into atmosphere, purification (Rus))

(AIR POLLUTION,

by nitrogen oxides in indust. discharges, purification (Rus))

GILOVA, I. S., FRANKOV, YU. M., FRANKOVA, M. M.

"The practice of sanitary air protection in the industrial cities
of the USSR. "

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

GLEBOVA, L.F., starshiy nauchnyy sotrudnik; MUROVANNAYA, S.I.,
starshiy nauchnyy sotrudnik

Third All-Union Conference of Hygienic Protection of the Air.
Gig.i san. 25 no.1:107-109 Ja '60. (MIRA 13:5)

1. Iz Instituta obshchey i kommunal'noy gigiyeny imeni A.M. Sygina
AMN SSSR.

(AIR--POLLUTION--CONGRESS3S)

KOVARSKIY, A.G.; MEDOKS, T.S.; Primali uchastiye: GLEBOVA, L.F.;
SHERNOV, S.M.; YANIN, L.V.; ZUDANOV, V.M., "prof.", red.;
KHRISTOV, L.N., red.; KHAKHIN, M.T., tekhn. red.

[Collection of official materials relating to laboratory work]
Sbornik ofitsial'nykh materialov po laboratornomu delu. Mo-
skva, Medgiz. Book 1. [Manual for laboratory doctors, sanita-
tion doctors, and epidemiologists] V pomoshch' vracham-
laborantam, sanitarnym vracham i vracham-epidemiologam. 1961.
462 p. (MIRA 15:2)

(MEDICAL LABORATORIES) (BIOLOGICAL LABORATORIES)
(CHEMICAL LABORATORIES)

GOL'DBERG, I.M., doktor med. nauk; KHEGVA, L.F., kand. med. nauk;
BENICHASEVA, V.F., kand. med. nauk; FLOREN, A.A., kand.
med. nauk; NEVORTSOVA, N.N., kand. med. nauk; POLESCHAYEV,
N.G., kand. biol. nauk; SENDEIKHINA, E.F., kand. biol.
nauk; KIMINA, S.K., nauchn. sotr. Ibrinimal uchastiye
NEBOZHICHENKO, I.K.; LYUDSKAYA, K.I., tekhn. red.

[Methodological instructions on the organization of research on
the pollution of air and the study of the effect of atmospheric
pollution on the health and sanitary and hygienic living conditions
of the population] Instruktivno-metodicheskie ukazaniya po
organizatsii issledovaniya zagriazneniya atmosferynogo vozdukh
i izucheniya vlieniya atmosferykh za raznizhenii na zdorov'e i sa-
nitarno-gigienicheskie usloviia zhizni naseleniia. Moskva, Med-
giz, 1963. 243 p. (MIRA 16:12)

1. Russia (1923- U.S.S.R.) Vsesoyuznaya gosudarstvennaya sa-
nitarneya inspektziya. G. Starshiy gosudarstvennyy sanitarnyy
inspektor Gosudarstvennoy sanitarnoy inspektzii Ministerstva
zdravookhraneniya SSSR (for Kedo, ichenko).
(Air--Pollution)

V. D. GIZBOVA and A. M. B. KETNIKOV

"Investigation of the Feasibility of Using an Electron Microscope for
Microcrystaloscopic Analysis of Electrovacuum Materials" from Annotations of
Works Completed in 1955 at the State Len. Sci. Res. Inst. Min. of Radio Engineering
Ind.

So: B-2,480,664

Glebova, L.I.

AUTHOR: Glebova, L.I., Engineer

67-6-2/23

TITLE: The Effect Produced by Heat Production Upon the Dynamics of the Adsorption of Steam (Vliyaniye teplovydeleniya na dinamiku adsorbtsii vodyanogo para)

PERIODICAL: Kislord, 1957, Nr 6, pp. 11-18 (USSR)
Received: April 7, 1958

ABSTRACT: In oxygen production active alumina is used as adsorbent of steam from compressed air; as the adsorption process is accompanied by the development of heat, the endeavor is made by this paper to determine the effect produced by this heat on the dynamics of the adsorption itself. In the chapter: Experimental data concerning adsorption dynamics the protective effect of the height of the layer of active alumina on heat emission during adsorption is discussed and compared with the penetration velocity of air into the alumina layer and the heat adsorbed on this occasion, which is shown here in form of 3 diagrams. In the chapter: Calculation of the kinetic adsorption coefficient it is said that the adsorption isotherms of steam by an active alumina layer is a curve which can be computed according to the following formula:

Card 1/4

The Effect Produced by Heat Production Upon the
Dynamics of the Adsorption of Steam

67-6-2/23

$$\frac{c}{c_0} = 0,54 \left[1 - \phi \left(\sqrt{\frac{L\beta}{\omega}} - \sqrt{\frac{h\beta}{\Gamma}} \right) \right]$$

where c , c_0 denote the concentration of steam at the output and input on the adsorbent; ω - the flow velocity of steam; h - the time needed for the work; ϕ - the error integrals; $\Gamma = \frac{a}{c_0}$ - adsorption coefficient (n -dynamic activity), and β - kinetic coefficient. In the chapter: The heat wave in the adsorption layer the effect produced by heat separation on the adsorption dynamics is dealt with, and heat propagation is assumed to be a function of time. As a result of the statement made the following is said: as the adsorbers used in industry are provided with heat insulators and because the surface concerned is of little importance in comparison to the adsorber volume, the loss of heat in the atmosphere is not taken into account, and therefore the maximum temperature along the layer is considered to be constant. Todes and Lesin [Ref. 5] distinguish between 2 different cases of adsorption: Firstly, if the velocity of the heat wave is greater than that of adsorption, the heat effect of adsorption exercises no influence on its dynamics, which is always the case if hydrophile adsorbents

Card 2/4

The Effect Produced by Heat Production Upon the
Dynamics of the Adsorption of Steam

67-8-2/23

are used; otherwise, the temperature curve has a maximum at that point of the adsorber which corresponds to the position of the adsorption front. In the chapter: Calculation of the heat conductivity coefficient from the adsorber to the gas the ratio:

$Nu = 0,23Re^{0,863}$ is given as a rule according to Fedorov; this rule governs the Re-values of 15 + 160. In the chapter: The effect produced by the heat conductivity coefficient upon the distribution of heat in the layer it is said that this coefficient is usually insignificant and that therefore the development of heat by adsorption leads to the heating of the layer, which is connected with the diffusional progress made by the vertical adsorption front. In the course of computations the value of the heat conductivity coefficient of the volume = 0.0027 cal/cm² sec.°C is obtained. In the chapter: The effect produced by the temperature of the grains of the adsorbent on its adsorptive power it is shown that the said adsorption power is reduced considerably if the adsorbent is heated, which must, of necessity, be taken into account when calculating its dynamic activities. The conditions holding for such calculations are given.

Card 3/4

The Effect Produced by Heat Production Upon the
Dynamics of the Adsorption of Steam

67-6-2/85

There are 7 figures and 14 Slavic references.

AVAILABLE: Library of Congress

Card 4/4

Glebova, L.

57-1-17/20

AUTHOR: Glebova, L. I., Engineer

TITLE: Answers to Letters to the Editor (otvety o'itatel'nyam)
To: Scientific Abstracts; Lening, (rev. Substov-
va, p. Lening, (rev. Substov.))

PERIODICAL: Highland, 1951, No. 1, pp. 41 - 44 (USSR)

ABSTRACT: Question: What adsorbents are used for air drying towers and where can they be obtained?
Answer: Active alumina is used for this purpose which can be provided by the Chemical Kombinat imeni Kuybyshev in Voskresensk (Moscow district). (The officially confirmed data for the mentioned adsorbent are following).

Question: Where can the ceramic insert for the drying vessel and the adsorbent filter filling for the plant KCH-30 be obtained?

Answer: The porous ceramic inserts in question are produced in the Scientific Research Institute Stroykharunka (Address: Station Machine, Leningrad district). The ceramic filters are

Card 1/2

Answers to Letters to the Editor - E. Conrad, S. Hestrov; Livny, Crlov
Oblast

67-1-17/30

manufactured there in the form of hollow cylinders of different
sizes. (A table of data is quoted here). There is 1 table.

AVAILABLE: In part of Congress

1. Alumina-Adsorption-Applications
2. Ceramics

Card 2/2

AUTHOR: Glebova, I.I., Consulting Engineer 67-58-3-14/18

TITLE: Technical Consultation (Tekhnicheskaya konsul'tatsiya)
Reply to Readers' Questions (Otvety chitatel'nyam)

PERIODICAL: Izvestia, 1951, Nr 3, pp. 45-45 (USSR)

ABSTRACT: To Tav. G.V. Leskov, Shostka, Sumy District:
Question: Is it possible to regenerate the sorbent in the drying block by blowing through hot undried air from the high-pressure ventilator?
Answer: The said regeneration can be carried out by means of any hot, undried gas or air, but for the cooling of the adsorbent dry air should be used.
Question: Up to what temperature is it possible to heat air in the regeneration of alumogel and silica gel?
Answer: When steam is removed from the adsorbent the air should be heated up to 180-200° when the adsorbent is filled with silica gel, and in the case of an active alumina filling up to 240-260°C. The process of regeneration can be looked upon as completed if the gas at the output of the adsorbent has a temperature of 60-70° at silica gel filling, and in the case of an active alumina filling

Card 1/2

Technical Consultation. Reply to Readers' Questions

67-58-3-14/18

+ 80-90°C.

Question: What quantity of gas is necessary for regeneration of the adsorbent?

Answer: For the regeneration of the adsorbent in the drying block of the type KGN-50 a gas current of 35 mm³ per hour is used (data not given)

1. Adsorbent: Hot Air-Heating

Card 2/2

AUTHOR: Glebova, L. I., Engineer 307/67-58 4-23/29

TITLE: Reply to Readers (6) (Otvety chitatelyam)

PERIODICAL: Kislород, 1956, Jr 4, pp. 44 (USSR)

ABSTRACT: To: A. G. Apostolov of Nikolayev oblast.
Question: Which is the highest possible content of moisture of silica gel and active alumina when used in drying blocks ?
Answer: Under working conditions active alumina, as adsorbent, absorbs steam in quantities of 3-4% of its dry weight; with silica gel this is the case up to 8-9%.
Question: Up to what temperature should silica gel be heated for the purpose of regeneration ? Answer: In this case the silica gel filling is blown through with nitrogen heated up to a temperature of 180-200°C and with a velocity of 1 min/cm².
Question: What danger exists in connection with the conveying of dust from adsorbents into the fractionating apparatus ?
Answer: Crushed particles of active alumina or of silica gel can in this case be conveyed into the fractionating apparatus, where they might stick to the plates of the apparatus if they contain deposits of fat; this may disturb the operation of the apparatus.

Card 1/2

Reply to Readers (6)

SOV/67-58-4-23/29

If the same particles stick to the bottom of stop valves, the operation of these valves may be disturbed so that premature repairs become necessary. A remedy against this disadvantage is the fitting of ceramic filters before the said valves.

1. Silicon dioxide--Properties 2. Silicon dioxide--
Processing 3. Silicon dioxide--Hazards

TITLE: Silica gel

Card 2/2

5(1)

NOV/67-50-6-3/22

AUTHORS:

Mirolavskaya, Yu. A., Engineer, Kuznetsov, M. G., Candidate of Technical Sciences, Glebova, L. I., Engineer

TITLE:

Gasifier of Liquid Oxygen With Vacuum Insulation (Gasifikator zhidkogo kisloroda s vakuumnoy izolyatsiyey)

PERIODICAL:

Kislorod, 1958, Nr 6, pp 8 - 15 (USSR)

ABSTRACT:

The gasifier mentioned mainly consists of two concentric balloons and a vacuum between them. The inner balloon has a capacity of 28 l. A funnel leads to it, with a tube for the supply of liquid oxygen, which also serves the purpose of discharging the surplus vapor, and a U-shaped feed tube for vaporous oxygen from the receivers for the first production of overpressure. The inner liquid oxygen feed tube also serves the purpose of discharging the oxygen into the vaporizer. An absorbing device is fastened to the outer wall of the inner balloon to absorb any oxygen that might leak through tiny cracks or pores. The whole device and the inner balloon separately were checked by means of a leakage detecting instrument of the PTI-4A type. More leakage was found to come from the inner container, which made the application of an

Card 1/3

Gasifier of Liquid Oxygen With Vacuum Insulation

017/07-96-1-3/20

absorber necessary. Investigations were carried out of the effectiveness of several absorbing materials depending on temperature and pressure, and silica gel KSM (GOST 3956-54) proved to be the most suitable. A thermal calculation was carried out of the whole device. The entire heat conductivity of the device, leading to an additional vaporization of the liquid oxygen in the inner balloon, consists of:

Q_1 of the heat conductivity of residual space in the vacuum;

this was calculated according to reference 6 taking into account the device to be $q_1 = 0.12$ kcal/hour, from Q_1 and Q_2

the heat conductivity of the metallic parts of the balloon and of the outer parts of the supply funnel.

Q_2 was calculated to be 0.77 kcal/hour.

Q_2 for the discharge and supply tube of liquid oxygen was calculated according to Egg's formula (Ref 7); $q_2 = 0.74$ kcal/hour;

Q_3 the heat radiation from the outer to the inner balloon

Card 2/3

Gasifier of Liquid Oxygen With Vacuum Insulation

SPV/00-00-0-0, 01

through the funnel 3.5 kcal/hour.

$Q = Q_1 + Q_2^I + Q_2^{II} + Q_3$, averaged 4.62 kcal/hour within the temperature range of +20° and -5°.

Practical experience has shown that 20-25 g of liquid oxygen vaporize, corresponding to a heat flow of 4.1-5.1 kcal/hour, which is in good agreement with the calculated value of 4.62 kcal/hour. It was found that heat radiation in the air gaps of losses. The results are given in 2 tables, and 8 references, 6 of which are Soviet. The gasifier was constructed by PHTHALASEN and has already been introduced in production.

Card 3/3

1-2-63/60

A Device for the Determination of the Humidity in Liquid Carbon Dioxide

With the help of the hygrometer it is possible to determine the dew point down to a temperature of -70°C , that is to say, a humidity of carbon dioxide of 0.001 %. A comparison of this method with others showed good agreement of the results. There are 1 figure, and 4 references, 2 of which are Slavic.

ASSOCIATION: All-Union Institute of Scientific and Technical Information on Machine-Building Industry
(formerly Machine-Tool Institute, Institute of Machine-Building)

AVAILABLE: Library of Congress

1. Liquid carbon dioxide-Moisture content 2. Humidity-Measurement

Doc 2/3

KAGNER, M.G., kand. tekhn. nauk; GLEBOVA, L.I., inzh.

Thermal conductivity of insulating materials in a vacuum, Kislored
12 no.1:13-18 '59. (MIRA 12:6)
(Insulating materials) (Heat--Conduction)

KAGANER, M.G., kand.tekhn.nauk; GLEBOVA, L.I.

Vacuum-powder insulation in vessels for liquefied gases. Trudy
VNIKIMASH no.3:36-50 '60. (MIRA 13:9)
(Liquefied gases) (Insulation (Heat))

GLEBOVA, L. I., Cand. Techn. Sci. (diss) "Investigation of Process of Drying of Air by Activated Alumina," Moscow, 1961, 14 p. (Moscow Inst. of Chem. Machinebuilding) 100 copies (KL Supp 12-61, 200).

GLEBOVA, L. I., and KAGANER, M. G.

"The Effect of Various Factors on Heat Transfer Through Porous
Materials in Vacuum."

Report submitted for the Conference on Heat and Mass Transfer,
Minsk, BSR, June 1961.

KAGANER, M.G., kand. tekhn. nauk; SEMENOVA, R.S., inzh.; GLEBOVA, L.I., inzh.

Expanded perlite sand as heat insulating material for apparatus
operating at low temperatures. Trudy VNIKIMASH no.5:108-118 '62.
(MIRA 18:3)

GLEBOVA, L.I.

AID No. 988-3 12 June

EFFECT OF BULK DENSITY OF POROUS MATERIAL ON HEAT TRANSFER
(USSR)

Kaganer, M. G., and L. I. Glebova. Inzhenerno-fizicheskiy zhurnal, no. 4,
Apr 1968, 27-32. S/170/68/000/004/032/017

The effect of residual air pressure and the bulk density of insulating material on heat transfer in insulation of liquid oxygen containers was studied with microporous rubber of density, 20 to 58 kg/m³, silica gel, and glass wool at inner and outer wall temperatures of 90 and 200°K, respectively, and pressures ranging from atmospheric to 0.1 new/m². The experiments were conducted with a spherical vessel enclosed in an evacuated jacket containing the test material. The vessel was filled with liquid oxygen and immersed in a thermostated bath equipped with an electric heater. The flow rate of evaporated oxygen and the heat input were measured. The relationship between apparent thermal conductivity and pressure was in good agreement with theoretical data; the effect of bulk density on heat transfer was found to be of a complex nature. [PV]

Card 1/1