

VRUBLEVSKIY, V.I., kand.tekhn.nauk

Determining the parameters of the unit for the composition of cupo-
la-furnace charge. Mashinostroenie no.4:55-58 J1-Ag '63.
(MIRA 17:2)

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

Measuring-out of the ferromagnetic components of cupola furnace
charges using sectional magnetic discs. Avtom. 1 prib. no.3;
10-13 J1-8 '64. (MIRA 18:3)

VRUBLEVSKIY, V.I.

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PHASE I BOOK EXPLOITATION SOV/5729

Nauchno-tekhnicheskaya konferentsiya po razvitiyu proizvoditel'nykh sil Kiyevskogo ekonomicheskogo rayona

Goryachaya obrabotka metallov; trudy konferentsii. vyp. 2. (Hot Working of Metals; Transactions of the Scientific Technological Conference on the Development of the Productive Forces of the Kiyev Economic Region. no. 2) Kiyev, Izd-vo AN UkrSSR, 1960. 142 p. 1000 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Sovet po izucheniyu proizvoditel'nykh sil UkrSSR. Institut litaynogo proizvodstva. Sovet narodnogo khozyaystva Kiyevskogo ekonomicheskogo rayona. Tekhniko-ekonomicheskij sovet.

Editorial Board: Resp. Ed.: A.A. Gorshkov, Corresponding Member, Academy of Sciences UkrSSR, B.B. Tsizin, Engineer, and F.A. Novikov, Engineer; Ed. of Publishing House: T.K. Remennik; Tech. Ed.: O.A. Kadashevich.

PURPOSE: This collection of articles is intended for technical personnel in machine plants and planning organizations, scientific workers, and teachers in technical schools of higher education.

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30V/5789

Hot Working of Metals (Cont.)

COVERAGES: The book is devoted to problems of the introduction of advanced technology and processing in founding and pressworking. Problems in powder metallurgy are also analyzed. No personalities are mentioned. References accompany some of the articles. There are 56 references, mostly Soviet.

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Gershkov, A.A. [Corresponding Member of the Academy of Sciences USSR; Institute litaynogo proizvodstva AN UkrSSR — Institute of Founding of the Academy of Sciences UkrSSR]. Principal Trends in Improving Foundry Techniques

5

Zharov, N.T. [Candidate of Technical Sciences; Institut avtomatiki Gosplana UkrSSR-Automation Institute of the State Planning Committee of the UkrSSR]. The Present State and Outlook for Automation in Founding

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Card 2/6

Hot Working of Metals (Cont.)

SOV/5789

- Golubev, T.M. [Doctor of Technical Sciences; Kiyevskiy politekhnicheskii institut-Kiyev Polytechnic Institute]. Outlook for the Use of Die-Rolled Stock 79
- Gorshkov, A.A., and N.I. Polkin [Engineer, deceased; Institute of Founding of the Academy of Sciences UkrSSR]. New Methods in the Magnesium Treatment of Molten Cast Iron 91
- Kryzhanovskiy, O.M., V.I. Vrublevskiy, and V.Ya. Soltyk [Engineers; Institute of Founding of the Academy of Sciences UkrSSR]. Automatically Sustaining the Maximum Temperature of Overheated Cast Iron in a Cupola 102
- Dubrov, V.V. [Candidate of Technical Sciences; Institute of Founding of the Academy of Sciences UkrSSR]. Replacement of Malleable Cast-Iron Blanks by Those of Nodular Cast Iron 109
- L'vov, G.K. [Docent; Kiyev Polytechnic Institute]. New Processes in the Heat Treatment of Steel 116

Card 4/6

VRUBLEVSKIY, V.I., inzh.; KASHIRIN, Yu.P., inzh.; RAVICH, K.S., inzh.

Automatic unit for ramming reinforced cores of ingot molds.
Mashinostroenie no.2:52-54 Mr-Ap '62. (MIRA 15:4)

1. Institut liteynogo proizvodstva AN USSR.
(Coremaking)

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

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

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

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

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

VRUBLEVSKIY, V.I., kand. tekhn. nauk; ANTONENKO, V.T., inzh.; GORBENKO,
V.H., inzh.

Automatic proportioning of coke and limestone in cupola charging
systems. Mekh. i avtom. proizvod. 18 no.9:1-2 S '64.

(MIRA 17:11)

VRUBLEVSKIY, V.I.; RAVICH, K.S.; SIMANDLYA, A.I.; VAN'CHEV, I.L.

Weighing equipment for the proportioning of a cupola charge.
Lit. proizv. no.3:15 Mr '65. (MIRA 18:6)

KRYZHANOVSKIY, O.M.; VRUBLEVSKIY, V.I.; ZHURLIVYY, R.N.

Computer automatically controlling the charging of a ~~cupola~~.
Lit.proizv. no.7:19-20 J1 '62. (MIRA 16:2)
(Cupola furnaces—Equipment and supplies)
(Electronic computers)

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

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

VRUBLEVSKIY, V.I., inzh.; KRYZHANOVSKIY, O.M., inzh.; PANASYUK, L.S.,
inzh.; RAVICH, K.S., inzh.; SHCHUR, A.G., inzh.; GARNAZHENKO,
I.O., inzh.; LEBEDEV, Ye.I., inzh.; PSAREV, A.M., inzh.;
SALATSINSKIY, V.V., inzh.; SHOKAREV, V.A., inzh.

Over-all mechanization and automation of the composition of
charge. Mashinostroenie no.6845-47 N-D '62. (MIRA 16:2)

1. Institut liteynogo proizvodstva, AN UkrSSR (for Vrublevskiy, Kryzhanovskiy,
Panasyuk, Ravich, Shchur). 2. Toretskiy mashinostroitel'nyy
zavod (for Garnazhenko, Lebedev, Psarev, Salatsinskiy, Shokarev).
(Cast iron--Metallurgy) (Automation)

VRUBLEVSKIY, V.I., inzh.; KRYZHANOVSKIY, O.M., inzh.

Mechanizing the charge feed of cupola charging devices. Mekh.1
avtom.proiz. 14 no.6:21-22 Je '60. (MIRA 13:7)
(Cupola furnaces--Technological innovations)

VRUBLEVSKIY, Vladislav Iosifovich [Vrublevs'kiy, V.I.]; AFONINA, G.
[Afonina, H.], red.; VELICHKO, M., tekhn.red.

[Coal mining with narrow range units] Vymennia vuhillia
vuz'kozakhvatnyy kompleksy. Kyiv, Derzh.vyd-vo tekhn.lit-ry
URSR, 1959. 101 p. (MIRA 13:3)
(Coal mining machinery)

VRUBLEVSKIY, Vladislav Iosifovich; KOCHERGA, N., red.; SHAFETA, S.,
tekhn.red.

[Determination of the mechanical properties of rocks in
industry] Opredelenie mekhanicheskikh svoystv gornykh porod
v proizvodstvennykh usloviakh. Kiev, Gos.izd-vo tekhn.
lit-ry USSR, 1961. 86 p. (MIRA 14:4)
(Rocks--Testing)

VRUBLEVSKIY, Vladislav Iosifovich; KOCHERGA, Nikolay Timofeyevich;
PECHKOVSKIY, Vsevolod Ivanovich; CHUMACHENKO, T., red.;
GUSAROV, K., tekhn.red.

[Manual on horizontal and inclined mining operations] Posobie
prokhodchiku gorizonta'lnykh i naklonnykh gornykh vyrabotok.
Kiev, Gos.izd-vo tekhn.lit-ry USSR, 1959. 439 p. (MIRA 13:8)
(Mining engineering)

VRUBLEVSKIY, V.I., kand. tekhn. nauk

Automatic proportioning of the charge mixture and charging
of cupola furnaces. Mekh. i avtom. proizv. 19 no.5:4-7
My '65. (MIRA 18:11)

VRUBLEVSKIY, V.I., kand. tekhn. nauk

Weighing devices for automatic proportioning systems of lumpy
materials. Mashinostroenie no.4866-89 July '64.
(MIRA 17:10)

VRUBIEVSKIY, V.I.; ZHURLIVYY, R.N.

Raising the precision of proportioning the feed cupola charge
materials. Lit. proizv. no.3:23-24 Mr '64. (MIRA 18:9)

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

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

1. Institut Liteynogo proizvodstva AN UkrSSR.
(Cupola furnaces--Equipment and supplies)

30(1)

SOV/26-59-3-35/47

AUTHOR: Vrublevskiy, V. K.

TITLE: A Seal in the Forest

PERIODICAL: Priroda, 1959, Nr 3, p 117 (USSR)

ABSTRACT: The author describes how, on 25 March 1958, a seal was found in the forest near the small geological settlement of the Karel'skaya Geological Prospecting Party. According to the findings of the author, the seal must have come from the ~~Chuprinskaya Bay~~, moved across the frozen Great Pulonga Lake and then into the forest. All in all, the seal managed to traverse about 20 km on land. A note by the editors points out that inhabitants of the coastal regions think that seals, passing across coastal land on the lookout for open sea waters, are guided visually by the reflection of the open sea from the clouds which become darker where they reflect large bodies of water. The skyline of the fringe of a remote forest may have been interpreted by stray seals as the darker cloud reflex from some distant part of the open sea. This induced the ani-

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SOV/26-59-3-35/47

A Seal in the Forest

male to take this particular direction.

ASSOCIATION: Karel'skaya geologorazvedochnaya partiya (Karel'skaya Geological Prospecting Party)

Card 2/2

MIKELADZE, G.Sh.; NADIRADZE, Ye.M.; PKHAKADZE, Sh.S.; GOGORISHVILI, B.P.;
 DGEBAUDZE, G.A.; SOLOSHENKO, P.S.; SEMENOV, V.Ye.; BARASHKIN, I.I.;
 SHIRYAYEV, Yu.S.; POSPELOV, Yu.P.; KATSEVICH, I.S.; ROZENBERG, V.L.;
 Prinimali uchastiye: LORDKIPANIDZE, I.S.; TSKHVEDIANI, R.N.;
 DZODZUASHVILI, A.G.; DUNIAVA, A.G.; PENARSKIY, L.F.; GRITSFNYYUK, Yu.V.;
 ZHELTOV, D.D.; LUZANOV, I.I.; GLADKOVSKIY, V.P.; PODMOGIL'NYY, V.P.;
 VOROPAYEV, I.P.; BRIKOVA, O.V.; VRUBLEVSKIY, Yu.P.; KLYUYEV, V.I.;
 BAYCHER, M.Yu.; LOGINOV, G.A.; SHILIN, V.K.; POPOV, A.I.; ZASLONKO, S.I.

Industrial experiments in the smelting of 45 o/o ferrosilicon in
 a heavy-duty closed electric furnace. Stal' 25 no.5:426-429 My '65.
 (MIRA 18:6)

1. Gruzinskiy institut metallurgii (for Lordkipanidze, Tskhvediani,
 Dzodzuashvili, Guniava). 2. Nauchno-issledovatel'skiy i proyektnyy
 institut metallurgicheskoy promyshlennosti (for Brikova, Vrublevskiy,
 Klyuyev). 3. Vsesoyuznyy nauchno-issledovatel'skiy institut elektro-
 termicheskogo oborudovaniya (for Baycher, Loginov, Shilin, Popov,
 Zaslanko).

VRUBLEVSKIY, V.V., inzh.

Equipment for taking representative average daily samples of
blast furnace gas. Trudy Inst. chern. met. AN URSR 12:159-
162 '60. (MIRA 14:5)
(Blast furnaces--Equipment and supplies)

VRUBLEVSKIY, V.Y. [Vrublievs'ki, V.I.]

Relation between the resistance to cutting in coal on the pitch
of cutting. Sbir. prats' Inst. hir. spravy AN URSR no.6:98-102
'60. (MIRA 13:9)

(Coal mining machinery)

05361

SOV/102-59-1-5/12

AUTHORS: Krizhanovs'kiy, O.M., Vrublevs'kiy, V.Y. and
Soltik, V.Ya.

TITLE: Peak-Holding Control of the Air Blast to a Crucible

PERIODICAL: Avtomatika, 1959, Nr 1, pp 52-57 (USSR)

ABSTRACT: The paper deals with the control of the air blast to crude iron remelted in a crucible, the object of the control being to maximize the temperature. Fig 1 illustrates the object of this operation; it shows the strength and size of the residual graphite as a function of temperature (the metal is cast directly from the crucible). Fig 2 shows how the temperature varies with the air flow rate for several different compositions (not given) of the charge. (The parameters in any case vary with time, since the impurities are burned out.) The simple equations on p 54 relate the temperature T to the air flow rate q , and to the derivative U . Fig 3 illustrates an apparatus used to locate and hold the peak temperature, which varies as burning proceeds; the regulator (developed at the Institute of Electrical Engineering, Academy of Sciences UkrSSR) is of stepping type. The five steps of operation are to measure the

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SOV/102-59-1-5/12

Peak-Holding Control of the Air Blast to a Crucible

initial temperature, to store that temperature, to run the servo controlling the blast briefly, to store direction of displacement and finally to compare the new temperature with the previous value. (The instrument is not described fully.) It would appear that the exact parameters of the regulator have yet to be decided from a full-scale experiment. There are 3 figures and 14 Soviet references.

ASSOCIATION: Institut mashinoznnavstva AN URSR (Institute of Machine Research AS UkrSSR)

SUBMITTED: September 20, 1958

Card 2/2

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VRUBLEVSKIY, Yu.G., Cand Tech Sci—(diss) "On complex utilization
of crystalline diodes ^{and} ~~in the~~ triodes in the devices of relay ^{protection} ~~safe-~~
~~guards.~~" Mos, 1958. 16 pp ~~State Univ~~ (Min of Higher Education
USSR. Mos Order of Lenin Power Engineering Inst), 100 copies
(KI, 25-58, 112)

-80-

Distr: 4E20(3)

~~Volumetric and polarographic determination of 1-glyoxy-
1-methylurea and investigation of its stability. P. Jandík,
R. Fajár, V. Vaníček, and M. Vrublovská. Collection
Czechoslov. Chem. Commun. 24, 1261 (1969). See C.A.
53, 5084d. M. Hudlicky~~

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VRUBLOVSKY, J.

Safety measures at railroad crossing.

p. 48 (Zeleznicni Technika. Vol. 5, no. 2, Feb. 1957. Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) IC. Vol. 7, no. 2,
February 1958

CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry. B-12

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 22683.

Author : Vrublovsky, Petr; Kubicok, Radovan., Santavy,
Frantisek.

Inst : Not given.

Title : On the Polarographing of Ferrocenemonoaldehyde.

Orig Pub: Chem. listy, 1958, 52, No 5, 974.

Abstract: The polarographic behavior of ferrocenemonoaldehyde (I) in buffer solutions of pH = 2.30 to 10.95 was studied. In acidic solutions, I produces a single-electron wave accompanied by an adsorption pre-wave. In weakly acidic solutions, a second single-electron wave appears. At higher pHs, both waves combine into one two-electron wave accompanied by an adsorption pre-wave. In

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CZECHOSLOVAKIA / Physical Chemistry. Electrochemistry. B-12

Abs Jour: Ref Zhur-Khimiya, No 7, 1959, 22683.

Abstract: weakly acidic solutions, a second single-electron wave appears [sic]. At higher pHs, both waves combine into one two-electron wave [sic], the height of which decreases with the rise in pH.
-- P. Zuman.

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KAUL, J.L.; MOZA, B.K.; SANTAVY, F.; VRUBLOVSKY, P.

Substances from the plants of the subfamily Murrbaecidae and
their derivatives. Pt. 59. Coll Cz chem 29 no.7:1689-1701 J1 '64.

1. Chemical Institute, Medical Faculty, Palacky University, Olomouc.

COUNTRY : Czechoslovakia B-12
CATEGORY :
ABS. JOUR. : RZKhim., No. 1959, No. 85511
AUTHOR : Vrablovsky, P.; Kubicek, R.; Santavy, F.
INST. :
TITLE : Polarography of Ferrocenemonoaldehyde.
ORIG. PUB. : Collect. Czechosl. Chem. Commun., 1959, 24,
No 2, 645-646
ABSTRACT : See RZKhim, 1959, No 7, 22683

CARD:

VRUBOVSKY, P.

Distr: 4E2c(j)

/ Polarography of ferrocenemonoaldehyde. P. Vruble-
ský, R. Kulička, and F. Štáfl (Palacký Univ., Olo-
moú, Czech.). Chem. listy 52, 974 (1958). -- Polarographic
behavior of ferrocenemonoaldehyde was similar to that of
aromatic aldehydes. In acid soln. the substance gave a
1-electron reduction wave which was deformed by a pre-
ceding adsorption wave. At pH 6 a 2nd 1-electron reduc-
tion wave appeared. In neutral soln. both waves coincided
and a 2-electron reduction wave was observed. The height
of this last wave decreased with increasing pH value of the
soln. The values of the corresponding half-wave potentials
were -0.97 v. and -1.065 v. vs. standard calomel electrode
and their shift was 61 mv./pH unit. F. Štáfl

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J.G.

VRUC, D.

"Under Lock and Key; A Sketch", P. 24, (ANIMIA SECRATA, Vol. 5, No. 11,
October 1954, Bucarest, Rumania)

SO: Monthly List of East European Accessions (FEAL), IC, Vol. 4, No. 3,
March 1955, Uncl.

Vrutesvich, A. I.

✓ Methods for the evaluation of the tendency of stainless steels to undergo intercrystalline corrosion. A symposium. Discussion of methods of determination of the tendency of stainless steels to undergo intercrystalline corrosion. I. A. Levin. Zavodskaya Lab. 21, 546 (1955).—A review, with references. Foreign practice of control determinations of the tendency of stainless steels to undergo intercrystalline corrosion. A. I. Vrutesvich. Izv. Vsesoyuzn. nauch. issled. inst. metalloved. 1956, No. 1, 10. Methods for the determination of the existence of intercrystalline corrosion in stainless-steel apparatus. I. I. Rozenfeld, Z. A. Vrutesvich, and M. V. Baganov. Izv. Vsesoyuzn. nauch. issled. inst. metalloved. 1957, No. 1, 10. A flat surface of the app. is ground with an emery wheel, and the grooves produced examd. under a magnification of 75-150 times. Only longitudinal grooves are seen in the absence of corrosion, but they are crosscrossed with cracks when there is intercrystalline corrosion. W. M. ...

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Paul May, 1950-1951

APPROVED FOR RELEASE: 09/01/2001

CIA-RDP86-00513R001961220006-4"

BLINCHEVSKIY, G.K.; NIKIFOROV, V.P.; VRUTSEVICH, Z.A.

Clamps for testing standard flat specimens on the RM-500 machine.
Zav.lab. 22 no.1:123 '56. (MLBA 9:5)

1. Institut fizicheskoy khimii Akademii nauk SSSR.
(Testing machines)

VRUZEVICH, S.A.,
G. V. AKIMOV, Vestnik Metalloprom. 13, No. 9, 59-71 (1933)

VRUZEVITSCH, S. A.

G. V. AKIMOV, Vest Metal, 1933, 13, n. 9, 59-71

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

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

TITLE: Overall machanization and automation of the cupola process

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

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

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

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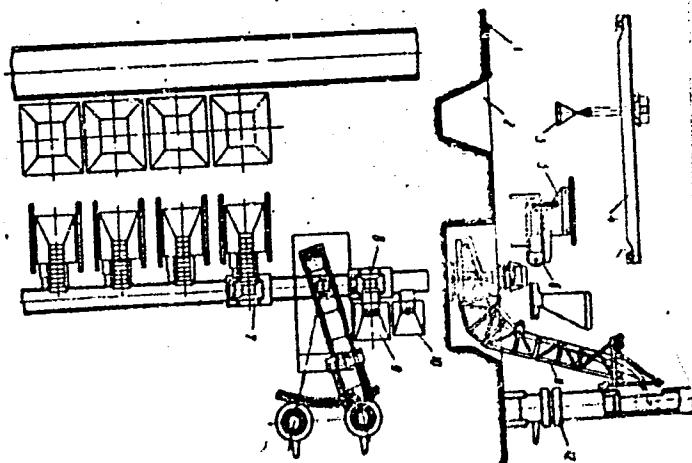
operation principle is based on the extremum of the iron temperature and blast volume ratio, $T = f(q)$ (where T is the liquid iron temperature in °C, and q the volume of blast in $m^3/m^2 \cdot min$). The temperature is measured with a thermocouple with a special protection hood and recorded by a writing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

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

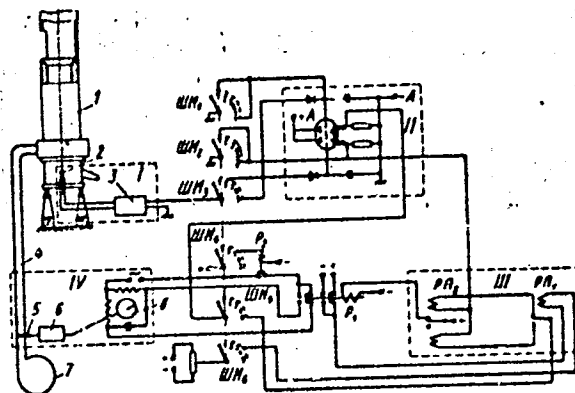


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Overall mechanization and automation ...

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A161/A133

Fig. 4 - The extremal blast regulator: I-the measuring element; 1-the cupola; 2-liquid iron temperature measuring device; 3-amplifier; II-the element determining the temperature growth sign: ШН_1 ; ШН_2 ; ШН_3 ; ШН_4 ; ШН_5 ; ШН_6 ; - step-by-step switch; III-the element multiplying the temperature growth signs and changing the volume of blast; РП_1 ; РП_2 - polarized relay; IV-servo element; 4-air line; 5-air line gate valve; 6-reducing valve; 7-fan; 8-servo-motor.



Card 5/5

KRYZHANOVSKIY, O.M., inzh.; VRYBLEVSKIY, V.I., inzh.; ANTONENKO, V.T., inzh.

Over-all mechanization and automation of founding processes in
cupola furnaces. Mekh.i avtom.proizv. 14 no.11:19-21 N '60.
(MIRA 13:11)

(Cupola furnaces--Technological innovations)
(Automatic control)

VRYDNYK, F.I., LACODYUK, P.Z., GZHITSKY, S.Z., SKOROKHOD, V.I., DOVICHAN, N.YA.,
ROZCOONI, I.I. (USSR)

"The conditions of Maintaining the Chemical Medium in the
lumen in Ruminants."

Report presented at the 5th Int'l. Biochemistry Congress,
Moscow, 10-16 Aug 1961.

VRZAL, B.

Classification of weld defects detected by an X-ray test. p. 114. (Normalisace, Vol. 6, No. 5, May 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

VRZAL, Bedrich, inz.

Revision of the Fine Grooving Standard. Normalizace 11 no.6:179-
184 Je '63.

1. Automobilove zavody Letnany, n.p., zavod Klementa Gottwalda,
Praha.

SUSTER, M., prof. dr., DrSc.; CŠARIK, A.; HAVRILA, L.; KOVAL, J.;
DEMKOV, J.; JABLONICKY S.; STOLINA, J.; SVATY, I.; VRZAL, J.;
ZRUBEC, P.

Incidence of scleroma in eastern Slovakia. Cesk. otolaryng. 14
no.1:10-13 F'65.

1. Otorýngologická klinika Lekárskej fakulty University P.J.
Safarika v Kosiciach (prednosta: prof. dr. M. Suster, DrSc.)
a ORL oddelenia Obvodného ústavu národného zdravia, Presov, Kosice,
Humenne, Spišská Nová Ves, Michalovce, Poprad a Rožnava.

VRZAL, M.

Results of measurements in scrap shearing machines. p. 365.

STROJIRENSTVI. (Ministerstvo tezkého strojirenství, Ministerstvo přesného strojirenství a Ministerstvo automobilového průmyslu a zemědělských strojů) Praha, Czechoslovakia. Vol. 9, no. 5, May 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 10, Oct. 1959. Uncl.

VRZAL, O.

Pod org 17 no.8:384 Ag 63.

"Standardization of material consumption." Reviewed by O.Vrzal.
Pod org 17 no.8:384 Ag 63.

Verz. 0

14817* Advantages Obtained by Verifying Material Consumption Standards. Co přínějši prověcky norem spočěby materiálu. (Czech.) O Vzdělávacího v. 5. on 5. May 1955. p. 100-114.
Importance of correctly calculated standards for the consumption of materials, economies achieved through the testing of standards. Tables, diagrams, graphs.

VRZAL, Vratislav.

SAHANEK, Oldrich, MUDr (Brno-Zabovresky, Dunajevskeho 27); VRZAL, Vratislav,
MUDr klinicti asistenti (Brno, Tabor 22)

Case of fetishism with manifestations of transvestism in advanced
age. Lek. listy, Brno 9 no.15-16:355-358 1 Aug. 54.

1. Z psychiatricke kliniky M.U. v Brne. Prednosta prof. MUDr
Zdenek Lauterer.

(SEXUAL DEVIATION,
fetishism with transvestism in late middle age)

VRZAL VI.

CZECHOSLOVAKIA/Solid State Physics - Structure of Deformed Materials E-9

Abs Jour : Ref Zhur - Fizika, No 5, 1958, No 10707

Author : Vrzal VI.

Inst : Not Given

Title : Optical Meter for Tension For Mechanical Tests of Materials

Orig Pub : Strojirenstvi, 1957, 7, No 8, 610-614

Abstract : Description of a variant of the Ewing tension meter which makes it possible to measure the formation over a wide range. The requirement concerning the dimensions of the measuring range are quoted, and the principle of construction in measurement is described. An estimate is made of the attainable accuracy of the determined values (modulus, elastic limit, etc.).

Card : 1/1

VRZAL, V.

VRZAL, V. Measuring temperature and its regulation in the heat treatment
of metals. (To be contd.) p. 373.

Vol. 2, No. 9, Sept. 1954.

STROJIRENSKA VYRCEA

TECHNOLOGY

Praha, Czechoslovakia

So: East European Accessions, Vol. 5, No. 5, May 1956

18 18 1
Recrystallization and Intermediate Annealing of Low-
Carbon Steels Subject to Cold Working. A. V. Izrael, *Metallurgiya*
Sbornik, 1956, No. 74, pp. 196-201. The relations between
degree of deformation, annealing temperature and grain size
attained were studied for steel and 10% Mn steel, and opti-
mum annealing schedules in the range 500-815°C were
determined. The grain size of the steels exceeded
12, 15 and 18%, respectively.

VRZAL, V.

Remarks concerning the method of flame straightening. p. 238.
STROJIRENSKA VYROBA. (Ministerstvo strojirenstvi) Praha. Vol. 4,
no. 6, June 1956.

SOURCE: East European Accessions List, Vol. 5, no. 9, September 1956

VRZAL, V.

121-7-9/26

AUTHOR:
TITLE:
PERIODICAL:

VRZAL, V. (Czechoslovakia)
Straightening by Means of a Flame. (Pravka plamenem, Russian)
Stanki i Instrument, 1957, Vol 28, Nr 7, pp 23-25 (U.S.S.R.)

ABSTRACT:

This is brought about by local and short heating of the material on which occasion influence is exercised upon this process by the coefficient of the linear extension of the material, interior tensions in the material (both those already existing and those caused by heating) and by the change of its mechanic properties in dependence on temperature. Straightening is brought about partly by plastic deformation at the time of heating and partly by the change of the nature and the amount of interior tensions. Illustration 1 shows the temperature changes of both surfaces and of the neutral layer of a sheet of iron in dependence on time; the sharply marked maximum will appear only in the case of a sufficient amount of heat being led to a surface unit within one time unit. In the case of insufficient heat input the maximum is only weakly expressed, and the sheet iron will be heated through in its depth and breadth. Illustrations 2 and 3 show the action of local heating upon a plate clamped fast on both sides, and the process is described in detail.

Card 1/2

121-7-9/26

Straightening by Means of a Flame.

According to measurements and geometrical shape one must distinguish between a point-, wedge-, rectilinear, curvilinear, and surface straightening.

Furthermore, illustrations 5, 6, and 7 show and explain three cases of heating up to 300°, 600°, and 900°.

The author then says that straightening by means of a flame is a simple method of changing the shape of the workpiece, but that, at the same time, it causes complicated processes the effect of which is frequently undesirable, particularly because in many cases the extent of these changes can neither be estimated nor measured. In the case of material where structural changes may be expected, such straightening without a foregoing examination of the material is not to the purpose.

ASSOCIATION:
PRESENTED BY:
SUBMITTED:
AVAILABLE:

Not given

Library of Congress

Card 2/2

VRZAL, V.; KLOBOUKOVA, E.

Analysis of behavioral defects in 2 girls in a children's
home, Cesk. pediat. 20 no.8:705-710 Ag '65.

1. Psychiatricke oddeleni fakultni detske nemocnice v Brne
(vedouci MUDr. V. Vrzal).

VRZAL, V.

Economizing on materials in the machinery industry. p.241.
(Strojirenska Vyroba, Vol. 5, No. 6, June 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 9, Sept. 1957. Uncl.

VRZAL, V.

TECHNOLOGY

Periodicals; OUTNICK LISTY, Vol. 13, No. 12, Dec. 1958

BENES, A.: VRZAL, V. Wear of metals and its testing. p. 1123

Monthly List of East European Accessions (EEAI) LC VOL. 8, No. 5 May 1957, Unclass.

VRZAL, V.

Titanium and its alloys in the machinery industry. p. 166. (Strojirenstvi,
Vol. 7, No. 3, Mar 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

VRZAL, V.

Optical extensometer for the mechanical testing of materials. p. 610.
(STROJIRENSTVI, Vol. 7, No. 8, Aug 1957, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

VRANI, V.

Measurement of temperature and its regulation in the heat treatment of metals. P. 154.

SO: East European Accessions List, Vol. 3, No. 9, Sept. 1954, Lib. of Congress

VRZAL, V.

"Measurement of Temperature and Its Regulation in the Heat Treatment of Metals." p. 154.
Praha, Vol. 2, no. 4, 1954.

SO: East European Accessions List, Vol. 3, No. 9, September 1954, Lib. of Congress

VRZAL, V.; KLOBOUKOVA, E.

Our experiences with Phenmetrazine in pedopsychiatric practice. Aktiv. nerv. sup. 4 no.2:234 '62.

1. Psychiatricka ambulance detske nemocnice, Brno-Cerna Pole.

(PHENMETRAZINE ther)

(MENTAL DISORDERS in inf & child)

VRZAL, Vratislav

Adolescent psychology. Cesk. psychiat. 58 no.3:149-156 Je '62.

1. Psychiatricka ambulance Krajske detske nemocnice v Brne.

(ADOLESCENCE psychol)

VRZAL, Vratislav

SAHANEK, Oldrich, MUDr, klinicky asistent (Brno-Zabovresky, Dunajevskeho
27); VRZAL, Vratislav, MUDr, klinicky asistent (Brno, Tabor 22)

Fetishism; essay of interpretation according to the theory on the
higher nervous function. Lek. listy 9 no.13:301-303 J1 '54.

1.2 Psychiatricke kliniku M.U. v Brno. Prednost: prof. MUDr
Zdenek Lauterer.

(SEXUAL DEVIATION,

*fetishism, physiol. & psychol. aspects)

VRZAL, Vratislav; VRZALOVA, Eva

Psychiatric out-patient services. Cesk. psychiat. 54 no.3:159-163 June 58.

1. Psychiatricka klinika MU a KUNZ v Brne.

(OUTPATIENT SERVICES,

psychiatric outpatients (Cz))

(MENTAL DISORDERS, therapy

psychiatric outpatient serv. (Cz))

VRZAL, Vratislav, MUDr

~~Psychiatric social care. Neur.psychiat.cesk. 18 no.3:162-168~~
May 55.

1. Z psychiatrické kliniky MU v Brně, zast. přednosta as MUDr
O.Sahanek

(PUBLIC HEALTH

in Czech., psychiatric soc. care)

(PSYCHIATRY

in Czech., soc. care)

ACCESSION NO: AP5019218

UR/0056/65/049/001/0080/0084

AUTHOR: Urbanets, Ya.; Vrzal, Ya.; Liptak, Ya.

TITLE: Investigation of the intensities of hard γ transitions in the capture of resonance neutrons by Ba^{138}

NOTE: Zhurnal eksperimental'noy teoreticheskoy fiziki, v. 49, no. 1, 1968, pp. 54

SYNOPSIS: Gamma transition, barium, gamma spectrum, neutron capture, gamma neutron reaction

ABSTRACT: A single-crystal scintillation spectrometer and a three-dimensional analyzer were used to measure the spectra of hard γ quanta emitted when resonant neutrons are captured by Ba^{138} at neutron energies 18--1500 eV. The procedure was described for the most part in an earlier paper by one of the authors (Urbanets, 1967, v. 47, no. 1, p. 144). The measurements were carried out with the IBP reactor of the Institute of Nuclear Research, using an improved multi-dimensional analyzer with magnetic tape for the recording of the three-dimensional spectrum. The samples used had cross section areas 120 and 240 cm² and consisted of powdered barium oxide. The measurements covered the γ range from 4 MeV to the neutron binding energy (9.23 MeV). Plots are presented of the time spectra for different

Card 1/1

L 04733-00

ACCESSION NR: AP501921B

γ -ray energies and for the renormalized amplitude spectra for several resonances of Ba^{135} . The 24.5-eV resonance exhibits a noticeable anomaly in the intensities of the transitions to the ground and first excited level, which are determined for eleven resonances of Ba^{135} ; the results are tabulated. Several possible explanations for the observed anomaly in the 24.5-eV resonance are proposed. "The authors thank V. L. Shapiro for interest in the work and valuable discussions, G. P. Zhukov and V. G. Tichin for adjusting the analyzer, Ya. Bronika for help with the measurements, and L. B. Pikel'ner and his co-workers for reporting some experimental data." Orig. art. has: 3 figures, 3 formulas, and one table.

ASSOCIATION: Ob"vedinenyy institut yadernykh issledovaniy (Joint Institute of Nuclear Research)

SUBMITTED: 29 Jan 65

ENCL: 00

SUB CODE: NT

NR REF SOV: 003

OTHER: 003

Card 2/2

L 09236-67 EMT(m)/EM(t)/MTI IJP(c) JD/JG
ACC NO: AP7002793

SOURCE CODE: UR/0048/66/030/008/1260/1264

AUTHOR: Anisimov, E. A.; Vizal, Ya.; Dzhelelov, B. S.; Liptak, Ya.; Urbanets, Ya.; Khol'nov, Yu. V.

43
41

ORG: none

TITLE: Gamma ray spectrum of Nd sup 147

SOURCE: AN SSSR. Izvestiya, Seriya fizicheskaya, v. 30, no. 8, 1966, 1260-1264

TOPIC TAGS: gamma spectrum, pulse analyzer, gamma spectrometer

ABSTRACT: The γ -ray spectrum of Nd^{147} was investigated with the aid of a Ge(Li)-detector built in the Prague Institute of Solid-State Physics. The spectrum was recorded by means of 2048- and 512-channel pulse analyzers. The Nd^{147} source was obtained from enriched Nd^{146} with the aid of the reaction $Nd^{146}(n,\gamma)Nd^{147}$. Four series of measurements with an average exposure time of 3 hr were carried out. Findings: The intensities of all γ -lines decrease in time with a period equal to the half-life of Nd^{147} . The recorded intensities and energies of the γ -rays of Nd^{147} were tabulated and compared with the E_γ and I_γ obtained by means of a magnetic γ -spectrometer, a scintillation spectrometer, and a β -spectrometer of the $\pi\pi$ type. Peaks corresponding to the γ -transitions at 542, 590, 610, 622 kev could be plotted for the first time. The presence of 310-kev γ -rays corresponding to the transition $720 \rightarrow 410$ kev, which was observed by Gunyo et al. (Sov. Phys. Rev., 124,

Card 1/2

0425 1678

L 09236-67

ACC NR: AP7002793

172 (1961)), could not be confirmed (the intensity of the corresponding quanta was below 0.2 of the intensity of the transition $E\gamma = 531$ kev); "The authors are indebted to L. N. Moskvina for chemical purification of the preparation Nd^{147} source/ and to T. I. Sidorova for assistance in analyzing the findings." Orig. art. has: 3 figures and 1 table. [JPRS: 39,040]

SUB CODE: 20 / SUBM DATE: none / ORIG REF: 001 / OTH REF: 002

L 09229-67 EMT(m)/EMP(t)/ETI IJP(c) JD/JG
 ACC NO: AR7002792 SOURCE CODE: UR/0048/66/030/008/1253/1259

AUTHOR: Arutyunyan, E. A.; Vezel, Ya.; Bachelevov, B. S.; Liptak, Ya.; Urbanets, Ya.; Khol'nov, Yu. V.

76
74

ORG: none

TITLE: Gamma ray spectrum of Ce sup 143

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 8, 1966, 1253-1259

TOPIC TAGS: gamma radiation, gamma spectrum, radioactive decay, radioisotope, cesium

ABSTRACT: The γ -radiation of Ce^{143} was investigated with the aid of a Ge(Li) -spectrometer. Detector characteristics: depth of sensitive layer 6 mm; working volume, 5 cm^3 ; half-width of the γ -lines of Co^{60} , 4 kev. The source was prepared by the (n, γ) reaction of a specimen of Ce^{142} enriched to 89.7%. The γ -spectrum was measured over the energy range of up to 2000 kev with the aid of 512- and 2048-channel pulse analyzers, the average exposure time being three hours. The values obtained for the energies and relative intensities of the γ -rays of Ce^{143} are tabulated. Twenty-six γ -lines were obtained. The finds are generally in agreement with the findings of other investigators. Major difference in intensities are observed for the transitions with energies of 372, 587, 795, (triple line), and 936 kev, however. The transitions $E = 392, 500, 556, 804, 1000, 1029, 1044, 1058, 1325$ kev do not fit in the scheme of Pr^{143} proposed by Gopinathan et al. (Phys.

Card 1/2

0925 1676

L 09229-67

ACC NR: AP7002792

Rev., 136, 1247 (1964)) (measurements with scintillation spectrometers). The scheme of the decay of Ce^{143} will be discussed later. "The authors are indebted to L. N. Moskvina for chemical purification of the preparation and to T. I. Sidorova for assistance in analyzing the findings." Orig. art. has: 4 figures and 1 table.
[JPRS: 39,040]

SUB CODE: 20,18 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 002

KLUSKA, V.; MACKU, M.; VRZALA, S.

Generalized vaccinia in an infant. Cesk. pediat. 20 no.10:
902-906 0 '65.

1. Infekčni oddelení Fakultní detské nemocnice v Brně (vedoucí
doc. dr. V. Kluska) a Detské oddelení Obvodního ústavu národního
zdraví ve Vsetíně (vedoucí MUDr. S. Vrzala).

VHIZALA S. Tuberkulosa prostějovských školaku Tuberculosis in school children of
Prosteo Casopis Lekaru Ceskych, Prague (Czechoslovakia) 1947, 86/19 (575-576)

The author examined 1,229 school children aged five to fifteen years for tuberculosis. He used the reactions of Mantoux, Pirquet, Monrad and Moro. Each child was also examined clinically and by X-rays. The proportions of positive reactions were: at five years 18.1 per cent, at six years 8.5 per cent, at seven years 10 per cent, at eight years 17 per cent, at nine years 22 per cent, at ten years 23.7 per cent, at eleven years 41.3 per cent, at twelve years 22.5 per cent, at thirteen years 33.5 per cent, at fourteen years 27 per cent, at fifteen years 38 per cent, and over fifteen years 88 per cent, collectively 22 per cent. The Pirquet reaction was the most frequently positive. Blechline-Prague

So: Medical Microbiology and Hygiene, Section IV, Vol. I, #1-6

VRZALA, Slavoj, MUDr (Vsetin, Smetanova 1533); HORKY, Josef, MUDr
(~~OUNE~~, Kromeriz)

Atypical course of mediastinal form of malignant lymphogranulomatosis
in a 7-year-old boy. Lek. listy, Brno 9 no.22:512-513 15 Nov 54.

1. Z detskeho oddeleni nemocnice na Vsetine. Prednosta prim. MUDr
S.Vrzala.

(HODGKIN'S DISEASE, in infant and child,
mediastinal, atypical case)

(MEDIASTINUM, neoplasms,
Hodgkin's dis. in child., atypical case)

BUDASHINSKI, B. [Budesinsky, B.]; BEZDEKOVA, A.; VRZALOVA, D.

Determination of uranium in its oxides and salts by a modified
Kimunen-Wennerstrand method. Coll Cz Chem 27 no.7:1528-1532
Jl '62.

1. Institut yadernykh issledovaniy, Chekhoslovatskaya
Akademiya nauk, Rzhesh pod Pragoy [Rez u Prahy].

VRZAL, Vratislav; VRZALOVA, Eva

Psychiatric out-patient services. Cesk. psychiat. 54 no.3:159-163 June 58.

1. Psychiatricka klinika MU a KUNZ v Brne.

(OUTPATIENT SERVICES,

psychiatric outpatients (Cz))

(MENTAL DISORDERS, therapy

psychiatric outpatient serv. (Cz))

VRZALOVA, Eva

Data on the problem of legal protection of psychiatric patients. Cesk.
psychiat. 54 no.6:364-368 Dec 58.

1. Psychiatrické oddelení KUNZ v Brně.

(MENTAL DISORDERS

legal protection of psychiatric patients (Cz))

(MEDICINE, LEGAL

same)

VRZALOVA, J., inz., Sc.C.

Examining the relations of some traits of quantity and quality indexes of soja (*Glycine hispida* Max.). Rostlin vyroba 9 no.2:143-156, F '63.

1. Vysoka skola zemedelska, katedra rostlinne vyroby, Brno.

VRZGULA, D.

Distr: 4E2c(j)/4E3d

~~V~~Trichlorobenzenes from hexachlorocyclohexanes. ~~Djanić~~

~~VRZGULA, Zdeněk Štola, and Jaroslav Auerhan. Czech.~~
~~92,749, Nov. 15, 1959. The title procedure is carried out in~~

~~several steps at normal pressure with catalysis by alk.~~
~~hydroxides. L. J. Urbánek~~

jk

1/
1-79(NB)
2

VRZGULA, D.

The production of melted phosphate.

P. 337 (Chemicky Prumysl. Vol. 7, no. 7, July 1957, Praha, Czechoslovakia)

Monthly Index of East European Accessions (FEAI) LC. Vol. 7, no. 2,
February 1958

VRZGULA, DIONYŤA

CZECHOSLOVAKIA / Chemical Technology. - Fertilizers. Chemical
Products and Their Application. Part 2.

H-9

Abs Jour : Referat. Zhurnal Khimiya, No 4, 1958, 11893.

Author : Ladislav Kacer, DionyŤa Vrzgula.

Inst : Not given

Title : Manufacture of Fused Phosphate.

Orig Pub : Chem. prumysl, 1957, 7, No 7, 337 - 339.

Abstract : Fused phosphate (3.7 tons daily) containing 19.8% of
total P_2O_5 and 16.3% of assimilable P_2O_5 was produced from
natural phosphate in lumps in a shaft furnace with the sole
in the shape of a bath and heated with natural gas. The
waste gases contained HF in the amount of 1.67 g/n.m³. The
consumption of the fuel gas was 1240 cub.m or 9.7 millions

Card 1/2

CZECHOSLOVAKIA

VRZGULA, L.; GOOVIN, T.; Chair of Internal Diseases, Veterinary Faculty, College of Agriculture (VSP, Veter. Fakulta, Katedra Vnútorných Chorob a ornokopytníkov), Kosice.

"Content of Na, K, Ca, P, and Mg in the Blood Serum of Sheep."

Prague, Veterinarni Medicina, Vol 11, No 11, Nov 66, pp 661-665

Abstract [Authors' English summary modified]: The levels of Na, K, Ca, P, and Mg in the blood serum of 215 mature sheep, of 32 gimmers, and of 29 breeding rams of the merino breed, determined during the grazing season are reported. 2 Tables, 12 Western, 7 Czech, 2 Russian, 1 Polish reference. (Manuscript received 9 Mar 66).

S/123/62/000/004/005/014
A004/A101

The effect of the...

The authors recommend to choose suitable steel grades and gas cyaniding conditions to ensure definite properties of the cyanided layer and of the component. There are 8 figures and 7 references.

V. Pryanikova

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/003/127/191
A052/A101

AUTHOR: Vrzhashch, E. I.

TITLE: X-ray investigation of a cyanided steel 20 layer

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 3, 1962, 37, abstract 3I226
(Izv. Irkutskogo s.-kh. in-ta", no. 16, 1960, 134-153)

TEXT: The composition of phases forming at cyaniding CT 20 (St.20) at 850°C with a 1 - 3 hours' soaking and hardening was investigated by the X-ray diffraction method. On the diffraction pattern of the surface of the sample subjected to an hour's cyaniding the lines of carbonitride with a cubic lattice were recorded as well as the lines of austenite, martensite and low intensity lines of FeO. The ϵ -phase was not detected. R_c of the sample = 42-45. At a distance of 0.1 mm from the surface the carbonitride phase and FeO were not detected. On the diffraction pattern of a sample after 3 hours' cyaniding the lines of austenite, carbonitride phase and weak lines of γ' -phase (Fe_4N) were recorded. Also a considerable amount of cementite was observed in the structure of the layer. R_c of the samples = 63. Thus an hour's soaking at 850°C at cyaniding St.20 is not sufficient for obtaining a high hardness and wear resist-

Card 1/2

X-ray investigation of a cyanided steel 20 layer

3/137/62/000/003/127/191
A052/A101

ance. After tempering at 100°C martensite becomes less tetragonal but the hardness of the samples does not decrease. In the samples tempered at 250°C the lines of martensite with a low tetragonality and weak lines of nitrous cementite were recorded. R_c of the samples dropped to 56-58. There are 12 references.

N. Kalinkina

[Abstracter's note: Complete translation]

Card 2/2

S/137/62/000/005/093/150
A006/A101

AUTHORS: Ostrovskiy, I. M., Vrzhashch, E. I.

TITLE: The effect of the chemical composition of steel on the nature and properties of a cyanided layer

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 58 - 59, abstract 51341 ("Izv. Irkutskogo s.-kh. in-ta", 1960, no. 16, 93 - 104)

TEXT: An investigation was made with the following steel grades: "20", Cr.3 (St.3), 18XGT (18KhGT), 20 X (20Kh), 30XPCA (30KhGSA), "40", 40X (40Kh), 40 XHMA (40KhNMA), "45", 45 X (45Kh), Y 8 A (U8A), Y 10 A (U10A), XBT (KhVG) and P 9 (R9). Cyaniding was performed under 5 different conditions at 850°C during 1, 2, 3, 4 and 5 hours; the temperature of pyrolysis was 850°C, the amount of cementing gas supplied was 3 l/min and of NH₃ - 1 l/min. Quenching was performed directly in water. Microhardness was measured (at 100 g pyramide load) every 0.05 mm. It was established that the chemical composition of the steel affected considerably the results of the process of high-temperature gas cyaniding. So, for instance, in alloyed steels of the cementable type, such as 18KhGT and

Card 1/2

S/137/62/000/005/093/150
A006/A101

The effect of the...

20Kh, the depth of the layer at equal holding time was less than in St.20 steel. The depth of the layer in St18KhGT and 20Kh steels at different holding times is less than in "20" grade steel, and in 40Kh and 45Kh steels it is somewhat higher than in "40" and "45" grade steels. In the structure of the cyanided layer and in particular of alloyed steels, subjected to extended holding, an increased amount of residual austenite was observed; this entailed a decrease in hardness. The characteristic features of the cyanided layer in various steel grades are described and some recommendations relating to the process are given. The selection of the steel grade for the manufacture of parts to be cyanided should be based on their particular features of operation. There are 7 references.

A. Babayeva

[Abstracter's note: Complete translation]

Card 2/2

RUSHKOVSKIY, T.V.; ZUBCHENKO, P.I., nauchnyy sotr.; ZUBCHENKO, T.S.,
nauchnyy sotr.; YARMOLENKO, I.M., nauchn. sotr.; VRZHESHCH, Ye.S.,
nauchn. sotr.; ZAPOL'SKAYA, V.A., nauchn. sotr.; VIKTOROV, Ye.P.,
nauchn. sotr.; RYMANENKO, V.S., agronom; BUSLENKO, I.T., agronom;
SAZONOV, V.V., red.; LEVINA, L.G., tekhn. red.

[Sugar beet in Siberia] Sakharная svekla v Sibiri. Moskva, Izd-vo
M-va sel'.khoz.RSFSR, 1960. 206 p. (MIRA 15:1)

1. Glavnyy agronom po sakharной svekly Altayskogo krayevogo uprav-
leniya sel'skogo khozyaystva (for Rushkovskiy). 2. Biyskaya
opytno-selektsionnaya stantsiya po sakharной svekly (for Zubchenko,
P.I., Zubchenko, T.S., Yarmolenko, Vrzheshch, Zapol'skaya, Viktorov).
(Siberia--Sugar beets)

VRZHEESHCH, Ye.S.

VRZHEESHCH, Ye.S.

Role of the sugar beet root in vegetative hybridization. Izv.
AN SSSR. Ser.biol. no.4:33-40 J1-Ag'55. (MIRA 8:10)

1. Opytno-selektsionnaya sveklovichnaya stantsiya, Biysk
(Sugar beet breeding)

VRZ HESHCH, Ye, Ya.

AUTHORS: Koval'skiy, A.Ye., Litvintsev, A.I., Vrzheshoh, Ye.Ya. 32-12-42/71

TITLE: AnX-Ray Camera for the Exposure of Polished Sections (Rentgenovskaya kamera dlya s"yemki shlifa).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 12, pp. 1501-1502 (USSR)

ABSTRACT: The new construction of an X-ray photographic camera suggested by this paper consists in the fact that in this case the film is fixed in a semicyclo, whereas the sample is located in the center of the circle. In the same manner as in Debye's camera it is possible to take X-ray pictures at angles of from 0 to 90° (strictly speaking between 16 and 82°). If all lines are intended to be obtained on one film (for example when investigating phase composition), this can be brought about by taking repeated pictures on one and the same film at different angles. The remaining parts of the film surface are, on this occasion, covered by lead strips. The camera is described as follows: On a base plate, which rests upon 3 screws, 2 rests are firmly mounted, which serve as a base and means of fastening an adjustable curved photo film holder. Above it a screen of similar shape is fitted which is provided with an adjustable slit. The sample is fastened on a movable holder in the curvature axis of the

Card 1/2

An X-Ray Camera for the Exposure of Polished Sections

32-12-42/71

film holder. This holder rests upon 2 brackets which are mounted on the base plate. There is 1 figure.

ASSOCIATION: ~~All-Union~~ Scientific Research Institute for Hard Alloys
(Vsesoyuznyy nauchno-issledovatel'skiy institut tverdykh splavov).

AVAILABLE: Library of Congress

Card 2/2 1. X-ray cameras-Operation 2. X-ray cameras-Application