

DOLINA, O.A. (Moskva, ul.Chaplygina,d.13,kv.102)

Use of neuroplegic and ganglion-blocking drugs in radical operations on the lungs under local anesthesia. Grud. khir. l no.3:(9)-75 My-Je '59. (MIRA 15:3)

1. Iz kafedry obshchey khirurgii (sav. - prof. V.I. Struchkov) lechebnogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni Sechenova.

(AUTONOMIC DRUGS)

(LUNGS--SURGERY)

(LOCAL ANESTHESIA)

STRUCHKOV, V.I., prof.; VASIL'YEV, V.S.; DOLINA, O.A.

Comparative oxymetric findings in radical lung operations under local anesthesia alone and under local anesthesia with neuroplegic substances. Khirurgia 35 no.6:52-59 Je '59. (MIRA 12:8)

1. Iz kafedry obshchey khirurgii (sav. - prof.V.I.Struchkov) lechnogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.

(PNEUMONECTOMY, anesth. & analgesia

local anesth., with ganglion blocking agents, comparative eff. of local anesth. alone on blood oxygen (Rus))

(AUTONOMIC DRUGS, ther. use

ganglion blocking agents with local anesth. in radical lung surg., comparative eff. of local anesth. alone on blood oxygen (Rus))

(OXYGEN, in blood

in radical lung surg., comparative eff. of local anesth. with ganglion blocking agents & local anesth. alone (Rus))

STRUCHKOV, V.I., prof. (Moskva, 1-y Trushennikov per., d.19, kv. 37); DOLINA,  
O.A.

Use of neuroplegic drugs in radical lung surgery under local  
anesthesia. Vest. khir. 82 no.6:97-101 Je '59. (MIRA 12:8)

1. Iz kliniki obshchey khirurgii (sav. - prof. V.I. Struchkov)  
1-go Moskovskogo ordena Lenina meditsinskogo instituta im. I.M.  
Sechenova na base bol'nitsy im. Medsantrud (gl. vrach - A. P.  
Timofeyeva).

(LUNGS--SURGERY) (AUTONOMIC DRUGS)  
(LOCAL ANESTHESIA)

DOLINA, O. A., CAND MED SCI, <sup>Use</sup> "~~ADAPTATION~~ OF NEUROPLEGIC  
MATTER IN RADICAL OPERATIVE INTERFERENCES ON THE LUNGS."  
MOSCOW, 1960. (ACAD MED SCI USSR). (KL, 2-61, 217).

-249-

ZOL'NIKOV, S.M., kand. med.; KOLYUTSKAYA, O.D., kand. med. nauk; DOLINA,  
O.A., kand. med. nauk (Moskva)

All-Union symposium on the use of muscle relaxants. Khirurgia  
40 no.3:135-140 Mr '64. (MIRA 17:9)

AKULOVA, R.F., prof.; ANTELAVA, N.V., prof.; AR'YEV, T.Ya., prof.;  
BAIROV, G.A., prof.; VELIKORETSKIY, A.N., prof.; GABAY,  
A.V., prof. [deceased]; GILORYBOV, G.Ye., prof.;  
DOBROVOL'SKIY, V.K., prof.; DOLINA, O.A., kand. med. nauk;  
ZATSEPIN, T.S., prof.; KIRICHINSKIY, A.R., prof.; KOZLOVA,  
A.V., prof.; KOTOV, A.P., prof.; KRAKOVSKIY, N.I., prof.;  
KUZIN, M.I., prof.; L'VOV, A.N., prof. [deceased];  
MITYUNIN, N.K., kand. med. nauk; MIVKELIDZE, Sh.I., prof.,  
[deceased]; NOVACHENKO, N.P., prof., zasl. deyatel' nauki  
USSR; OSIPOV, B.K., prof.; PIKIN, K.I., prof.; POSTNIKOV,  
B.N., prof.; RAKOV, A.I., prof.; STRUCHKOV, V.I., zasl.  
deyatel' nauki RSFSR, prof.; FAYERMAN, I.L., prof.  
[deceased]; FILATOV, A.N., prof.; SIMELEV, I.V., prof.  
[deceased]; PETROVSKIY, B.V., zasl. deyatel' nauki RSFSR,  
prof., otv. red.

[Multivolume manual on surgery] Mnogotomnoe rukovodstvo po  
khirurgii. Moskva, Meditsina. Vol.2. 1964. 771 p.  
(MIRA 18:1)

1. Deystvitel'nyy chlen AMN SSSR (for Antelava, Petrovskiy).
2. Chlen-korrespondent AMN SSSR (for Bairov, Novachenko,  
Struchkov, Filatov).

DOLINA, O.A.; SHTENGOL'D, Ye.Sh.

Oxygen consumption in modern anesthesia. Eksp. khir. i anest. 9  
no.2:55-61 Mr-Apr '64. (MIRA 17:11)

1. Klinika obshchey khirurgii lechabnogo fakul'teta (zav. - chlen-  
korrespondent AMN SSSR prof. V.I. Struchkov) i Moskovskogo ordena  
Lenina meditsinskogo instituta imeni Sechenova i bol'nitsa No.23  
imeni Medsantrud (glavnyy vrach A.N. Lobanova).

DARBINYAN, T.M., doktor med. nauk; DOLINA, O.A.

Minutes of the Anesthesiological Society of the City and Province of  
Moscow (associated with the Society of Moscow Pharmacologists for meet-  
ing No.2 on June 19, 1963. Eksper. khir. i anest. 9 no.2:90-92 Mr-Ap' 64.  
(MIRA 17:11)



FOLINA, O.A.; SPENGOLOV, Ye.Sh.

Some problems of gas exchange during lung surgery under anaesthesia.  
Trudy I-go KMI 33:299-302 '64. (MIRA 18:3)

DOLINA, O.A.; SARKISYAN, S.S.; SHTENCOL'D, Ye.Sh.

Bronchospasm during anesthesia. Eksper. khir. i anest. 9 no.6:  
59-62 N-D '64. (MIRA 18:7)

1. Kafedra obshchey khirurgii (zav. -- chlen-korresp. AMN SSSR  
prof. V.I.Struchkov) lechebnogo fakult'eta I Moskovskogo ordena  
Lenina meditsinskogo instituta im. I.M.Sechenova i Bol'nitsa Nr.  
23 im. Medsantrud (glavnyy vrach A.N.Lobanova).

STRUCHKOV, V.I., prof.; DOLINA, O.Z.

Complications in local anesthesia. Khirurgiia 37 no.4:3-6  
'61. (MIRA 14:4)

1. Iz kafedry obshchey khirurgii (zav. -- prof. V.I. Struchkov)  
lechebnogo fakul'teta I Moskovskogo ordena Lenina meditsinskogo  
instituta imeni I.M. Sechenova.  
(LOCAL ANESTHESIA)

DOLINA, S.A.

Modifications in the convulsion threshold to excitation by  
an epileptogenic pharmacological agent. Pat. fiziol. i eksp.  
terap. 5 no.5:81-83 \*61  
(MIRA 17:1)

DOLINA, S.A.; KONRADI, G.P.

Study of the excitability of the motor zone of the cerebral cortex in rats with different sensitivity to convulsants. Dokl. AN SSSR 143 no.6:1459-1461 Ap '62. (MIRA 15:4)

1. Institut fiziologii im. I.P.Pavlova AN SSSR. Predstavleno akademikom V.N.Chernigovskim.  
(CEREBRAL CORTEX) (CONVULSANTS)

DOLINA, S.A.

Characteristics of the propagation or excitation in the motor zones of the cerebral cortex and brain stem formations in the state of adaptation to spasmodic agents. Dokl. AN SSSR 147 no.5:1244-1246 D '62. (MIRA 16:2)

1. Institut fiziologii im I.P. Pavlova AN SSSR. Predstavleno akademikom V.N. Chernigovukim.  
(BRAIN) (CONVULSIONS)

DOLINA, S.A.

Physiological analysis of the "predisposition to convulsions."  
Zhur. nevr. i. psikh. 63 no.6:867-873 '63. (MIRA 17:6)

1. Laboratoriya fiziologii krivobrazheniya i dykhaniya Instituta fiziologii imeni I.P. Pavlova (direktor - akad. V.N. Chernigorskiy) Leningrad.

L 58384-65 ENG(j)/ENG(x)/EWT(1)/F9(v)-3/ENG(v)/EWG(u)-2/ENG(c) DD  
 UR/0239/65/051/007/0799/0805  
 612.273.2+612.825.3 24  
 23  
 B

ACCESSION NR: AP5017395

AUTHOR: Dolina, S. A.

TITLE: The effects of different degrees of hypoxia on the sensitivity to epileptogenic agents and some functional properties of brain motor formations

SOURCE: Fiziologicheskiy zhurnal SSSR, v. 51, no. 7, 1965, 799-805

TOPIC TAGS: hypoxia, biological effect, Corazole, convulsion, cerebral cortex, CNS, medulla oblongata

ABSTRACT: A study was conducted to elucidate the influence of hypoxia on the relationship between the functional state of motor formations of the brain and the sensitivity of animals to convulsions. The connection between excitations in the motor zone of the cortex and their transmission to motor formations of the medulla oblongata was of special interest. Male rats 4-7 months old were kept for 40 min in an altitude chamber, where hypoxia corresponding to that experienced at altitudes from 1500 to 8000 m was created. Convulsions were induced with Corazole and electrical stimulation of the cortex. In the first group of experiments, Corazole was injected subcutaneously into rats in doses of 40, 60, and 100 mg/kg. It was found

Card 1/4



L 3833-1-65

ACCESSION NR: AP5017395

that ascent to 1500—3000 m in an altitude chamber prevents Corazole-induced convulsions in rats, and eases the course of developed attacks, making them shorter and less intense (see Table 1 of the Enclosure). Sharp oscillations of barometric pressure (ascent to altitude coinciding with the beginning of an attack, or descent after 40-min stay at a given altitude) induced and intensified Corazole convulsions. The second part of the experiment involved implantation of electrodes in the front leg of rats and subsequent unipolar stimulation of the cortex (current frequency, 200 cps; length of pulse, 0.1 msec; duration of period of stimulation, 1 sec). The excitability of the cortical motor zone was determined by the threshold current voltage causing contraction of the front leg. This index was called "the threshold of local contraction." Increased values of current voltage, causing generalized tonic convulsions, were used to indicate the spread of excitations to medullary structures. Excitability of the motor zone was determined in a pressure chamber after 2, 5, 10, 20, 30, and 40 min of hypoxia. Results showed that the threshold of local contraction in rats decreases during mild hypoxia (1500 m) and increases sharply during severe hypoxia (8000 m). On the other hand, the threshold of generalized convulsions and the magnitude of increase of current voltage necessary for conversion of local contraction into generalized seizures increased sharply during mild hypoxia and decreased distinctly during severe oxygen deprivation. A detailed discussion of possible mechanisms underlying these experimental results is presented, including a review of past research. Orig. art. has: 3 tables. [JS]

Cont 2/1

L 58384-65

ACCESSION NR: AP5017395

ASSOCIATION: Laboratoriya fiziologii krovoobrashcheniya Instituta fiziologii im.  
I. P. Pavlova AN SSSR, Leningrad (Laboratory of Circulatory Physiology, Institute  
of Physiology, AN SSSR)

SUBMITTED: 20Jun64

ENCL: 01

SUB CODE: LS

NO REF NOV: 005

OTHER: 016

ATD PRESS: 4046

Card 3/4

L 58384-65

ACCESSION NR: AP5017395

ENCLOSURE: 01

Table 1. The influence of different degrees of hypoxia on convulsive states caused by Corazole

Dose of Corazole (in mg/kg)	Number of animals		Number of convulsive attacks	Number of lethal results	Latent period (in min)	Duration of attacks (in sec)
	Total of group	Number with convulsions				
Control						
50	20	12	12	0	---	---
50	20	20	20	0	12.0	33.3
100	20	20	20	0	7.7	34.5
Hypoxia 1200 m						
50	20	1	1	0	---	---
50	27	11	11	0	[20.3]	[24.5]**
100	21	9	9	0	[12.2]	[23.0]
Hypoxia 1500 m						
50	10	---	---	---	---	---
50	20	13	13	0	---	---
100	10	9	9	0	---	---
Hypoxia 3000 m						
50	20	1	1	0	---	---
50	20	4	4	0	[15.4]	[14.0]
100	10	9	9	0	[16.8]	[17.5]

\* Values in brackets are averages for altitudes of 1500--3500 m  
 \*\* 7 of these 8 rats died from hypoxia without convulsive attacks; one died from convulsions caused by the injection of 100 mg/kg of Corazole

Cord 4/74

DOLINA, S.A.

Current concepts on the functional structure of the convulsive seizure. Zhur. nevr. i psikh. 65 no.9:1407-1415 '65.

(MIRA 18:9)

DOLINA, V.A.

~~XXXXXXXXXXXXXXXXXXXXXXXXXXXX~~

Combined application of penicillin and sulfonamides in prevention of wound infection. Vest. khir. 71 no.2:63 1951. (CML 20:8)

DOLINA, V.I., inzhener.

Using an acyclic machine for speed measurement. Elektrichestvo  
no.2:80-82 P '57. (MIRA 10:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut elektrotehniki  
Ministerstva elektrostantsiy.  
(Electric machinery) (Speed indicators)

DOLINA, V.I., inzh.; RAKSTYN'SH, I.K.; CHISTIKOV, A.P., inzh.

Composite oscillograph with twelve vibrators based on a portable  
three-vibrator oscillograph. Trudy VNIIE no.8:264-272 '59.  
(MIRA 13:9)

(Oscillograph)

OKSMAN, Ya.B.; BABAYEV, A.; BOGUSH, G.; DOLINA, Ye.; KOVYNEV, B.; MIRNYI, G.;  
RUBEO, Stelic (Italiya); SING, Ramchand (Indiya); SOMOV, Yu.; KHARSH,  
D'yerd' (Vengriya); YUR'YEV, N.; YANEV, Kirill (Bolgariya); LAPIDUS,  
M.A., red.; BALLOD, A.I., tekhn.red.

[Foreign visitors on Soviet agriculture; impressions of participants  
in the Sixth World Festival of Youth and Students] Zarubezhnye  
gosti o sel'skom khoziaistve SSSR; vpechatleniia uchastnikov VI  
Vsemirnogo festivalia molodezhi i studentov. Moskva, Gos.izd-vo  
sel'khoz.lit-ry, 1958. 239 p. (MIRA 12:4)  
(Agriculture)



DOLINAR, Zlata

Inheritance of the spastic familial paralysis on Krk  
Island. Biol vest 11:115-121 '63.

1. Institut za biologijo Univerze v Ljubljani.

DOLINAR-OSOLETOVA, Zlata

The effect of consanguineous marriages on the distribution of ABO system among the population of the island of Susak. Rad Jugosl. akad. znan. umj. [Med] 323:170-224 '61.

(CONSANGUINITY)

DOI.INAR-OSCLE, Zlata

Upright posture, and walking on two feet. Biol Inst 12:169-173  
16.

1. Biologic Institute of the University of Ljubljana, Ljubljana.

DOLINAY, Istvan

Automatization and mechanization on small scale in the building  
joinery industry. Epites saemle 5 no.2:42-45 '61.

**DOLINAY, VLADIMIR**

SEMO, László, dr.; DOLINAY, Vladimir, dr.

Multiple bullous dermatitis caused by contact with *Ruta graveolens* as occupational disease. Orv. hetil. 95 no.31:854-857 1 Aug. 54.

1. A Szabolcs-Szatmár Megye Tanácsa Kórhaza, Nyiregyháza (igazgató: Zempleni Béla dr.) Bőrgyógyászati Osztályának (főorvos: Szegő László dr.) közleménye

(DERMATITIS, CONTACT, etiology and pathogenesis  
*Ruta graveolens*)

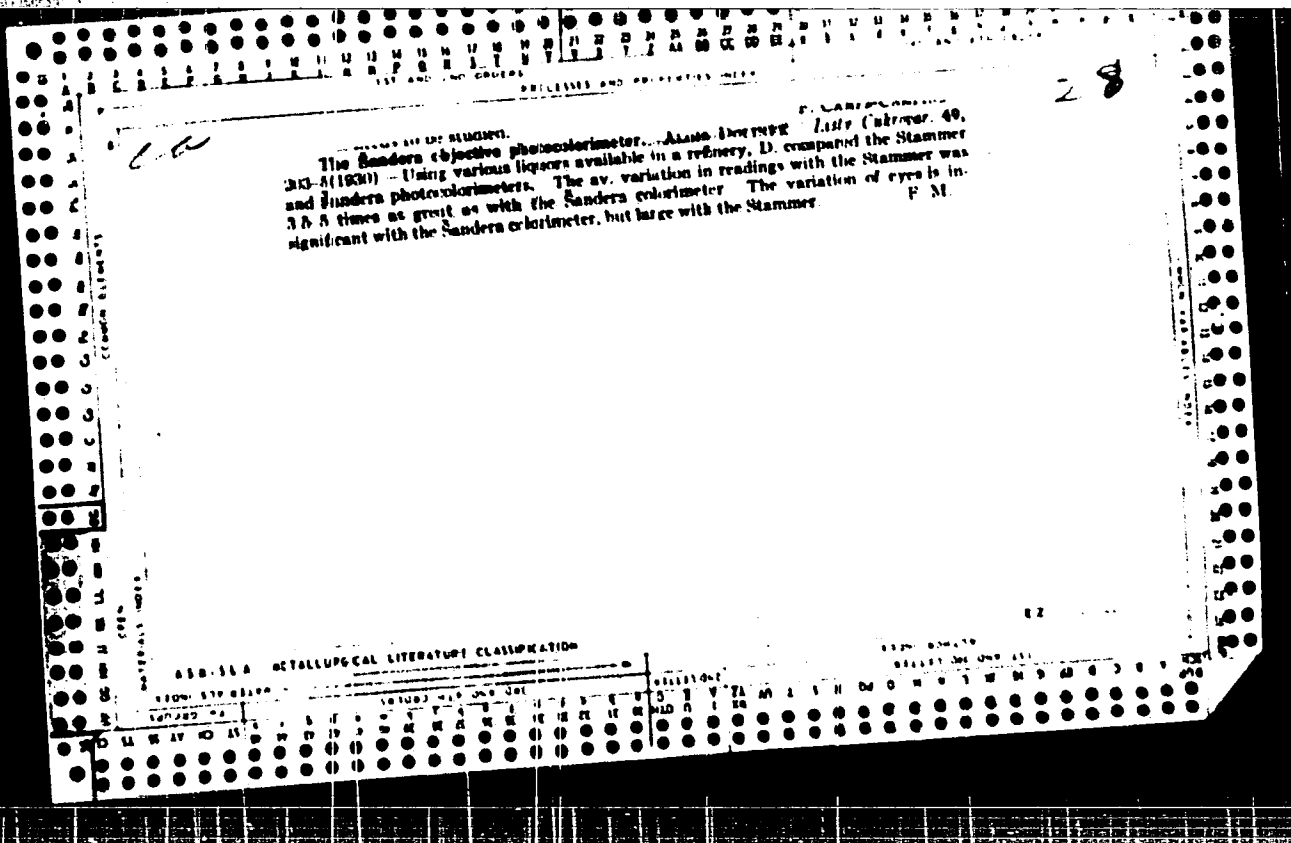
(PLANT:  
*Ruta graveolens*, contact dermatitis)

DOLINEK, A.; KUBIŠA, K.; JAKUBKOVÁ, M.

Pupillographic changes in amblyopia. *Cesk. oftth.* 15 no.5:361-363  
0 '59

1. Oční klinika FV v Olomouci, přednosta prof. MUDr. V. Vejdovsky.  
(AMBLYOPIA pathol.)  
(PUPIL pathol.)







1ST AND 2ND DEGREE PRIORITIES AND PROPERTIES INDEX

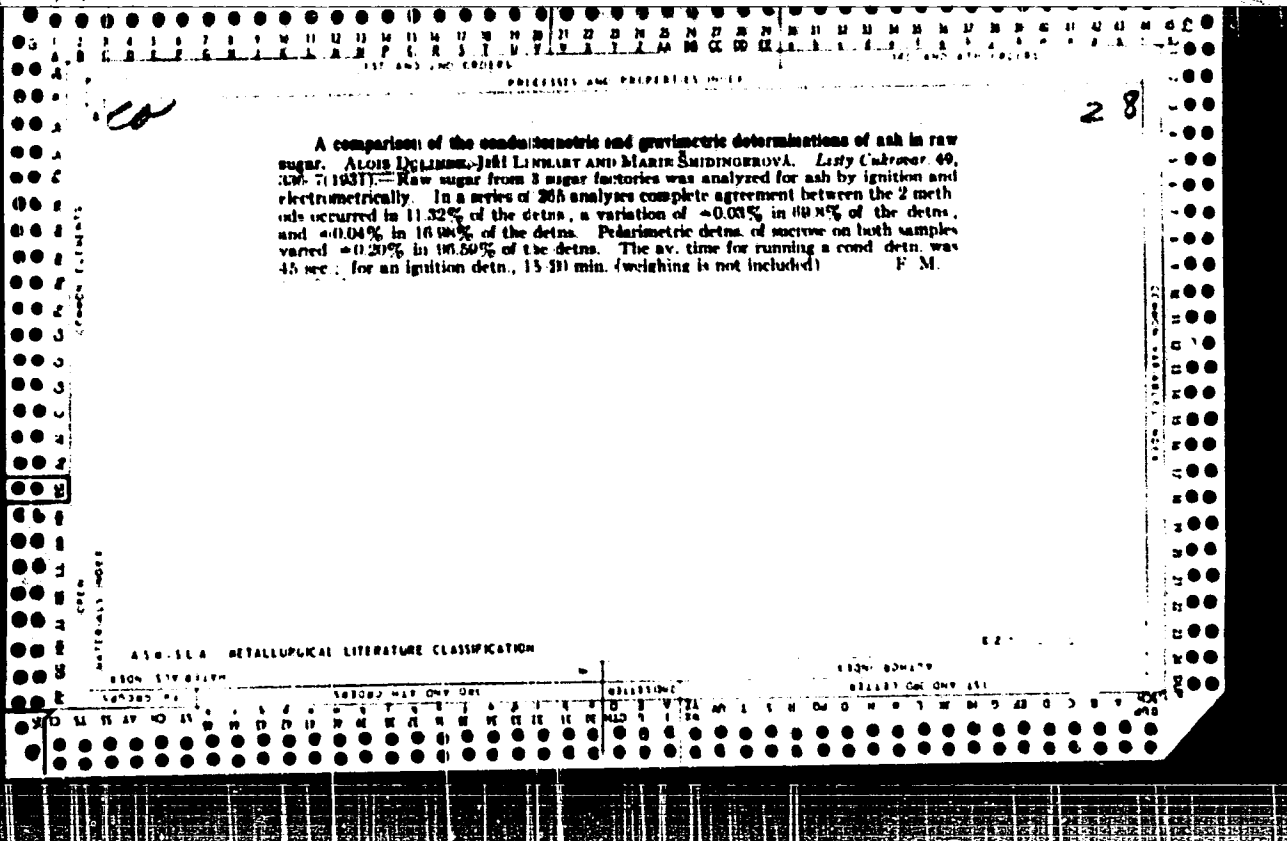
2-7-1

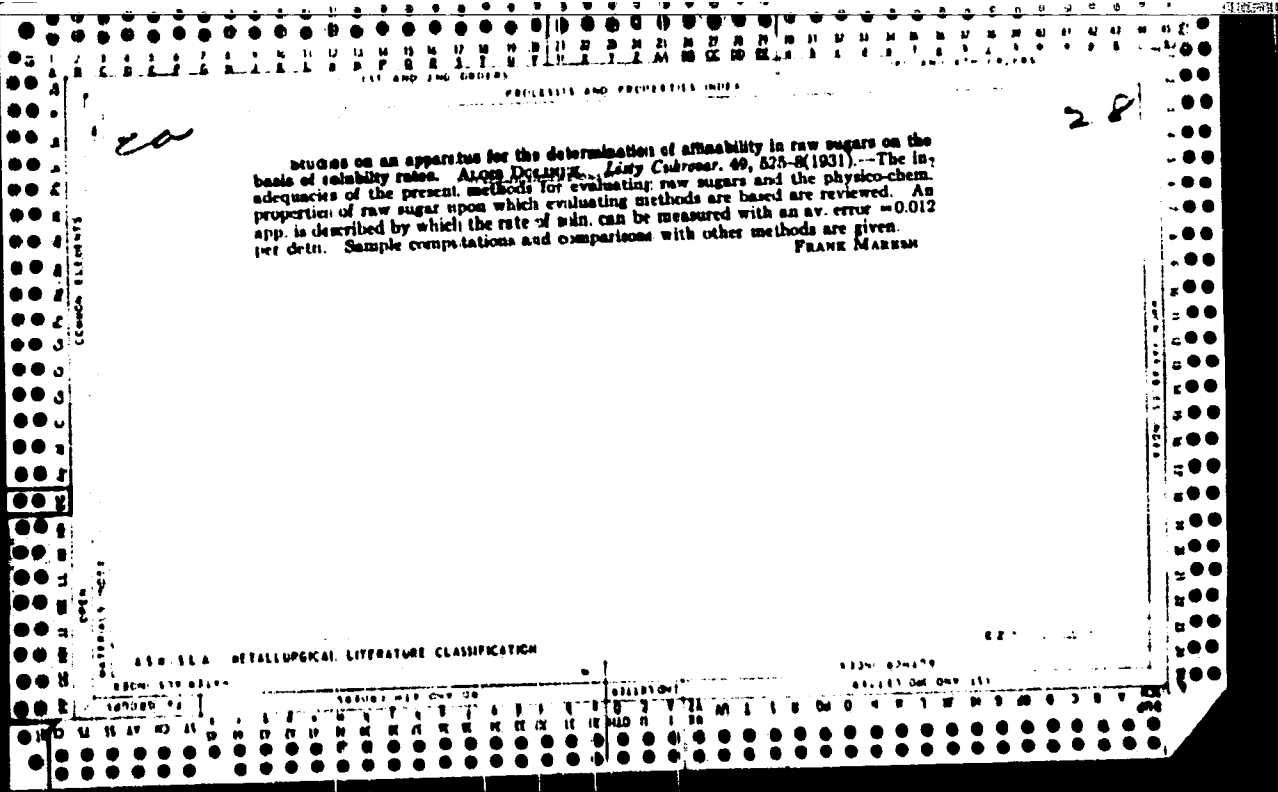
*BC*

**Immersion refractometer.** A. DOLANIK (Z. Znojenski, Czechoslovakia, 1930, 84, 337-339). The "Achromatic" immersion refractometer gives, without change of prism, a refractive-index range of from 1.333 to 1.378, expressed as  $d_1^D(20.000-1.1200)$  (for aqueous solutions), and reads to 0.0001. It is mounted on a small stand with a mirror and a revolving tray holding ten 40-c.c. capsules. It can be used for determining moisture in fairly light-colored products such as raw sugars and refinery masscurites and syrups, the readings being taken on half-normal solutions. Tables for these determinations are given, together with some examples showing a maximum error of 0.02% for the moisture content of raw beet sugars. J. H. LANE.

ABB-SLA METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX										METALLURGY																								
STEEL					NON-FERROUS METALS					METALLURGY					METALLURGY																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30					





28

The colorimetric determination of small quantities of sugar and a quantitative estimation of the turbidity of juices with Sander's photometer. *Annales Pharmaceut. Suisse* (1908), 48, 205 (1911). Ten cc. of the juice to be treated is mixed in a clean vessel with 1 cc. of a freshly prepared 0.5% solution of naphthol soln. To this, 50 cc. distilled H<sub>2</sub>O is added with continual mixing. After cooling, 10 cc. of the mixt is placed in a Naudin photocolourimeter equipped with a yellow filter. The method can be used in the range 0.05-0.1001% sugar; stronger concns. give a soln. too dark for color detns.; more dil. concns. give the same readings as distd. H<sub>2</sub>O. The photometer was replaced by a standard color scale prepd. by dissolving 1.25 g. fuchsine in 500 cc. H<sub>2</sub>O and adding 7.5 cc. methylene blue acid. contg. 0.025 g. of the dye per 100 cc. H<sub>2</sub>O. Dilutions for making a range of standards are given. For this series of standards, 4 cc. of the water is mixed with 0.4 cc. naphthol soln. and 20 cc. concd. H<sub>2</sub>SO<sub>4</sub>. In boiler waters maintained at a fixed alk., the presence of 0.001% sugar is not detrimental, for all acids formed from the decomposition of the sugar are neutralized. If the alk. is not fixed, corrosion of the boiler occurs. Turbidity of liquors was measured in a photometer against a standard soln. prepd. by titrating 0.1 N (NH<sub>4</sub>)<sub>2</sub>C<sub>2</sub>O<sub>4</sub> with 0.1 N CaCl<sub>2</sub>. The dispersed CaC<sub>2</sub>O<sub>4</sub> was used as a standard in the photometer, and the dispersion was reported as mg. of CaC<sub>2</sub>O<sub>4</sub> per l. Tables are given in which the readings of the photometer are given in equiv. mg. CaC<sub>2</sub>O<sub>4</sub> per l.

FRANK MARSH

ASB-564 METALLURGICAL LITERATURE CLASSIFICATION



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

PROCESSES AND PROPERTIES

*Ca*

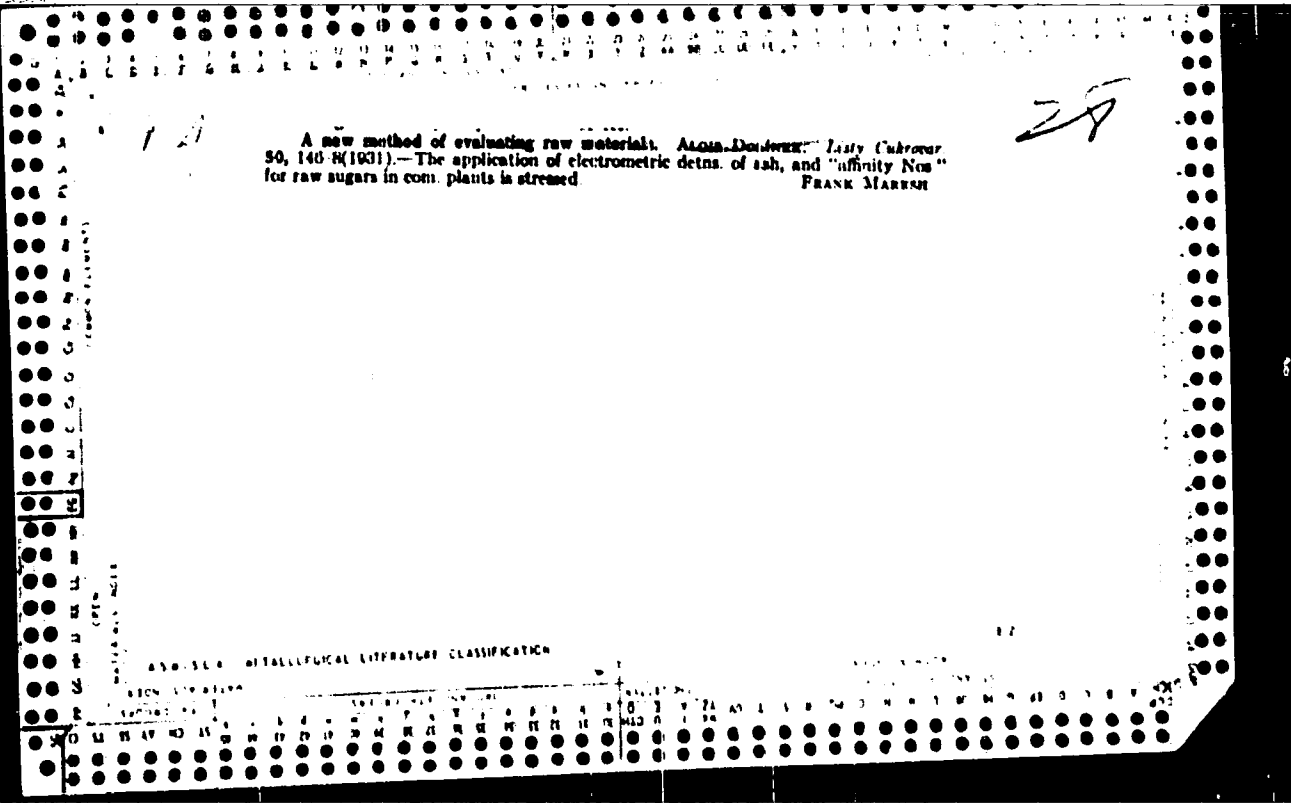
The influence of the addition of sugar upon the "affinity" number of the raw products. Alois Dabrowski. *Listy Chémow.* 49, 731-2(1931).—The detn. of the "affinity" no. (AN) of mixts. of sugars with a variable AN (cf. C. A. 23, 4731) and expressed graphically shows the unfavorable influence of mixing raw materials of unlike phys. and mech. properties upon the resulting "affinity no." No linear relationship holds between the individual "affinity" properties of the raw materials. P. M.

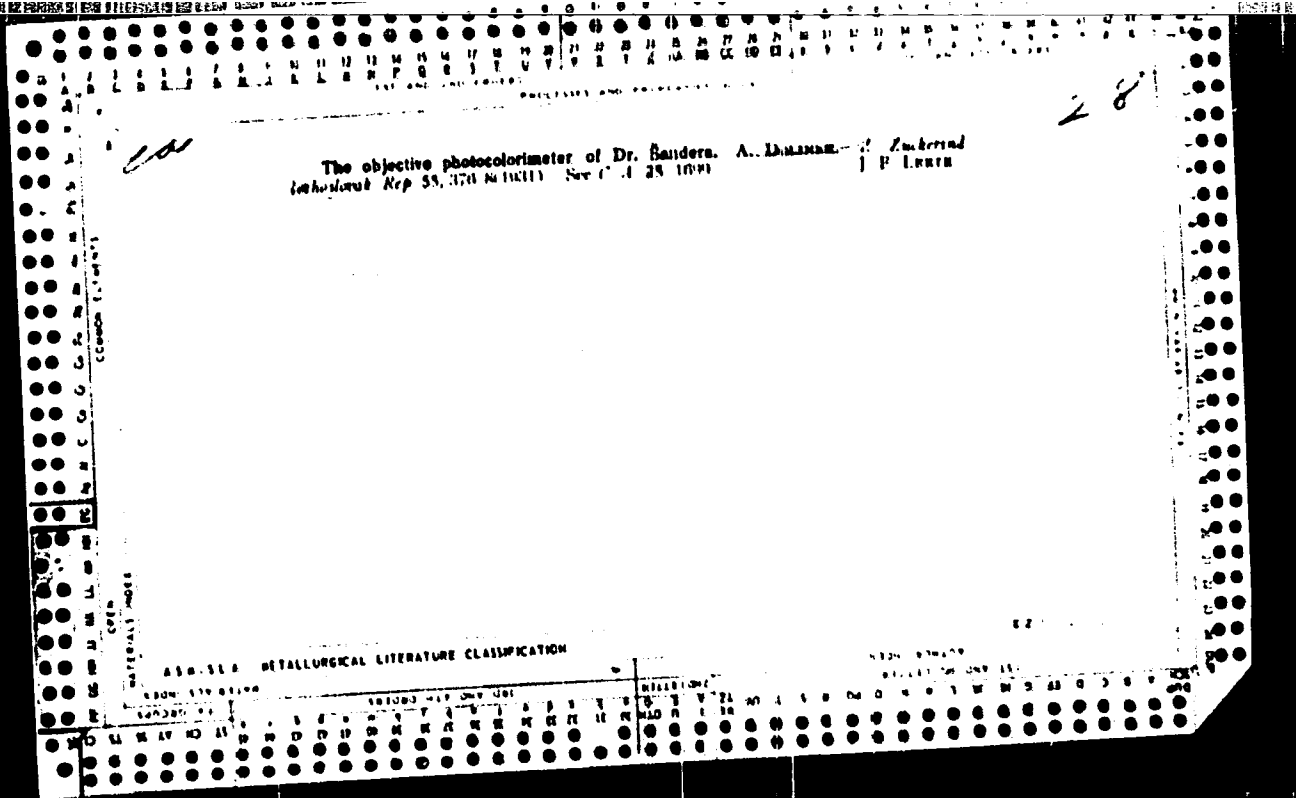
*22*

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100







BC

B-17-2

Comparative analysis of [beet] sugars in the usual way and by the method of single weighing with conductometric ash determination, and the three methods: A. Johann, J. Lomax, and M. Svidomskova (Z. Zuckerind. Carlsbur., 1931, 55,

439-440).—With 265 raw beet sugars, not including molasses, determinations of polarisation and conductometric ash from a single weighing led to readings differing in no case by more than 0.55% and in 208 cases by not more than 0.20% from the readings determined in the usual way involving two weighings and an incineration. The readout could be determined in 1/2 hr. by the former method, compared with 1 1/2 hr. by the latter. J. H. LAKE.

ASB 55A METALLURGICAL LITERATURE CLASSIFICATION

BC

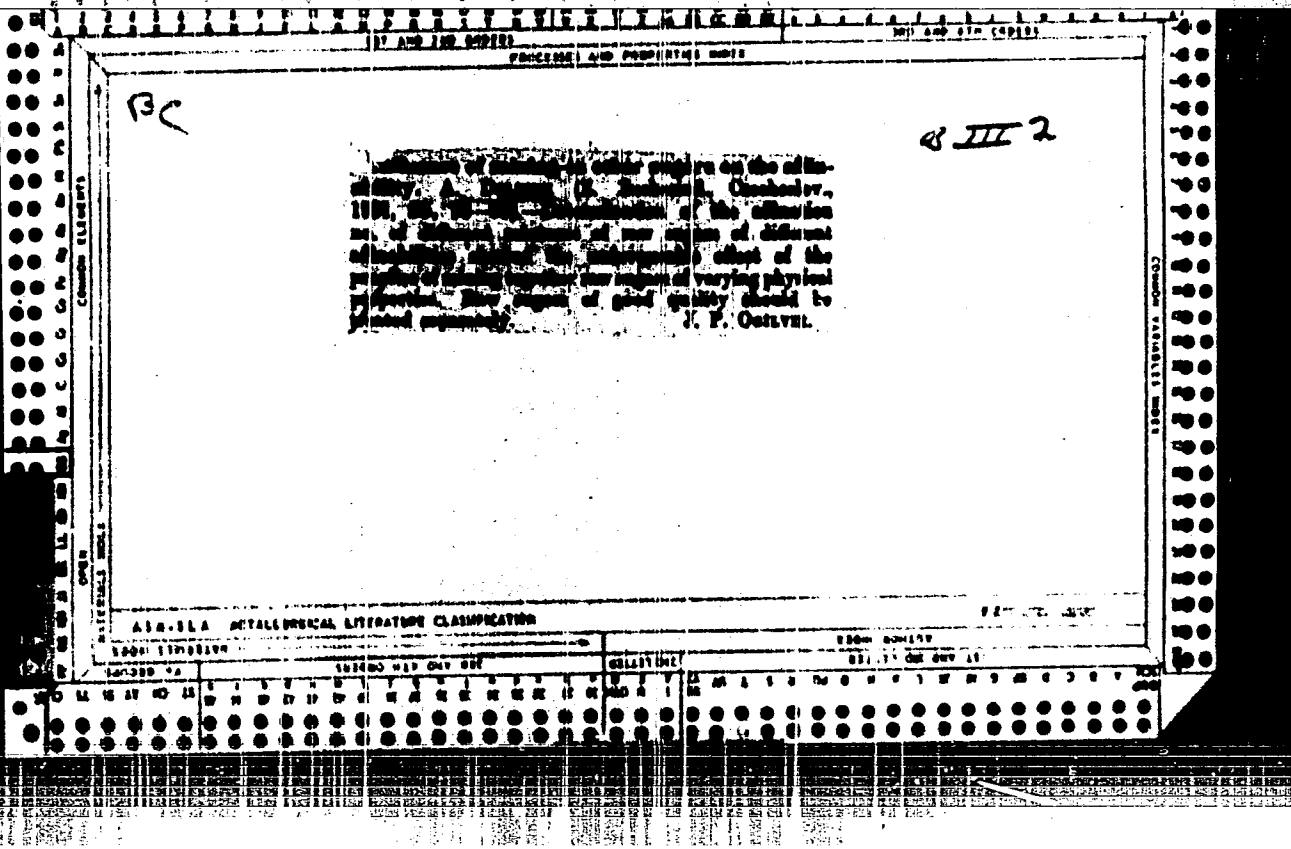
B-III-2

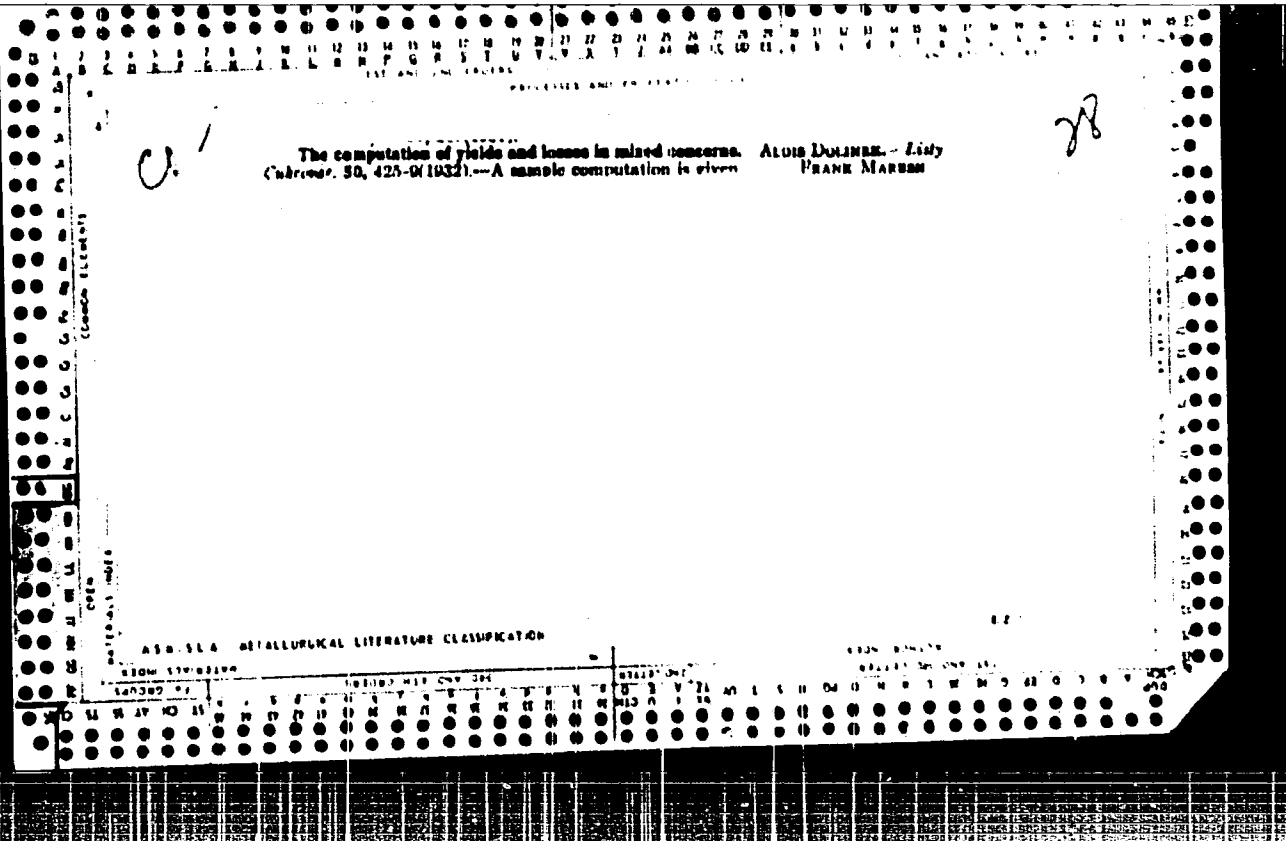
Determination of the sugar content of crushed beet slices. A. DOLANIK (Z. Zecherind. Czechoslov., 1931, 26, 47-48). Comparison was made of the rapid-pressure method, using the "Koston" apparatus, and of the hot-and-cold digestion methods at present in general use. In 100 determinations an average difference of only 0.01% was recorded. The author recommends that this rapid method be included among the official methods for use in Czechoslovakian sugar factories.

J. P. (MILVER.

ASB. I. I. A METALLURGICAL LITERATURE CLASSIFICATION

62-117-2257

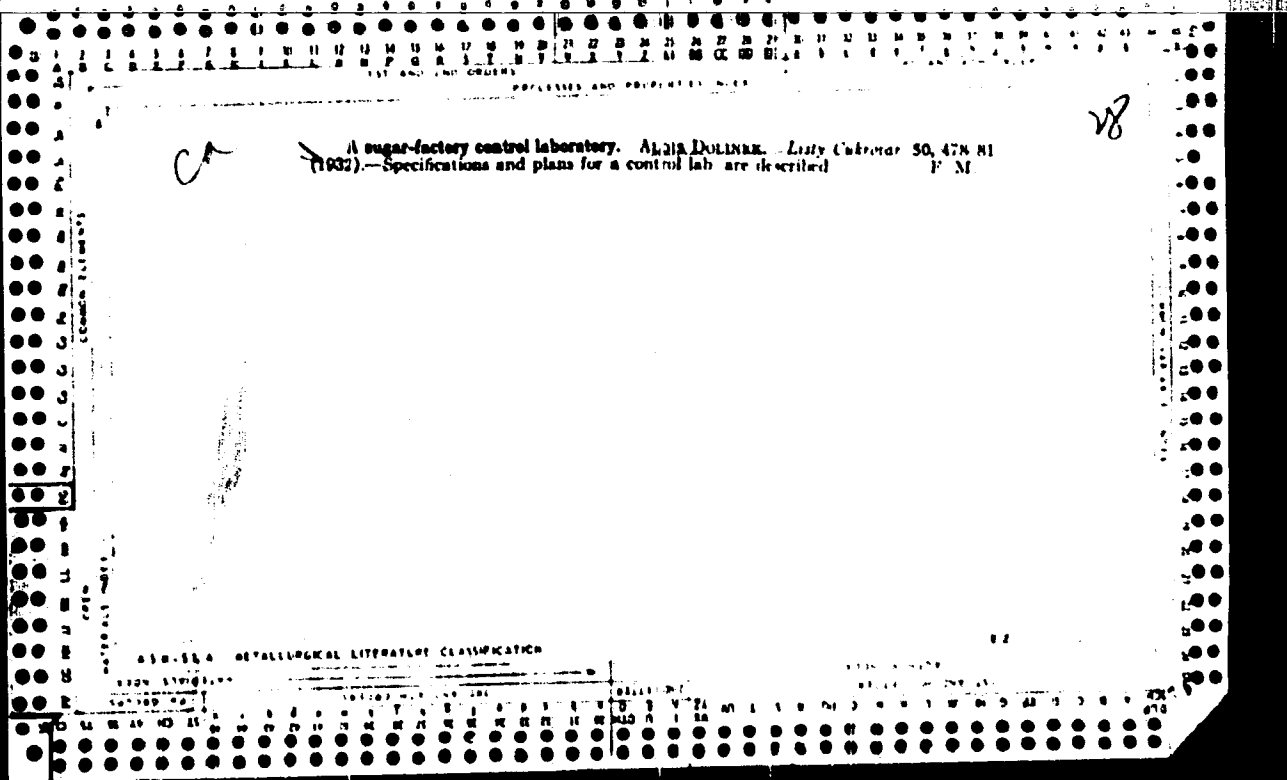




CA

28

The evaporation of diffusion juices during purification in practice and determining its quantity. *Alma-Beaux* *Levy* *Cherese* 50, 443-8 (1952). In evaluating the diln. of satn. and light liquors, it is necessary to consider the evapn. of H<sub>2</sub>O during the purifying manipulations to get a clear picture of the original diln. of the juice which comes from the dil. milk of lime or from large vols. of returned extn. from the presses. The evapn. of H<sub>2</sub>O from juices during their purification depends on the method of nig. evapn. of the juices and time and quality of equipment. It was 2.5% from the diffusion to satn. liquor and 3.75% up to the light liquors on a basis of the consumed beets. In the problems considered, the most probable difference in the polarization of diffusion and light liquors would be greater than 0.8 under the above limits of the evapn. F. M.



CA

28

Rapid and approximate determination of invert sugar in raw sugars. Alois Dolínek, *Lišty Cukrovar*, 50, 495-6; 2. Zuckerind. Czechoslovak. Ref. 57, 190-2(1952).--Raw sugar (16 g.) in 50 cc. H<sub>2</sub>O is placed in a small Jena-glass Erlenmeyer flask and brought to boiling in 3 min. Simultaneously in a 75-cc beaker, 15 cc. of a soln. contg. K<sub>3</sub>Fe(CN)<sub>6</sub> 10.08 g., KOH 37.6 g., 0.1 g. methylene blue and H<sub>2</sub>O 1 l. is brought to boiling and added to the boiling sugar soln; the beaker is rinsed with 10 cc of hot H<sub>2</sub>O. The time required for the transformation of the blue to a yellow-brown color is measured. Sugars of the same invert sugar content checked within 30-45 sec. on consecutive runs.

Sugars of a moderately high invert sugar content (40-60 mg. Cu) required 7-12 min. for reduction. Sugars requiring more than 12 min. contained less than 40 mg. Cu equiv. of invert sugar. Sugars requiring 3-7 min are high in invert sugar and should be checked by other methods. The solns keep for 2 weeks. Most sugars require 7-12 min. for the reduction.

Frank Marash

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

117 AND 118 COPIES      119 AND 218 COPIES

PROCESSES AND PROPERTIES INDEX

B-III-2

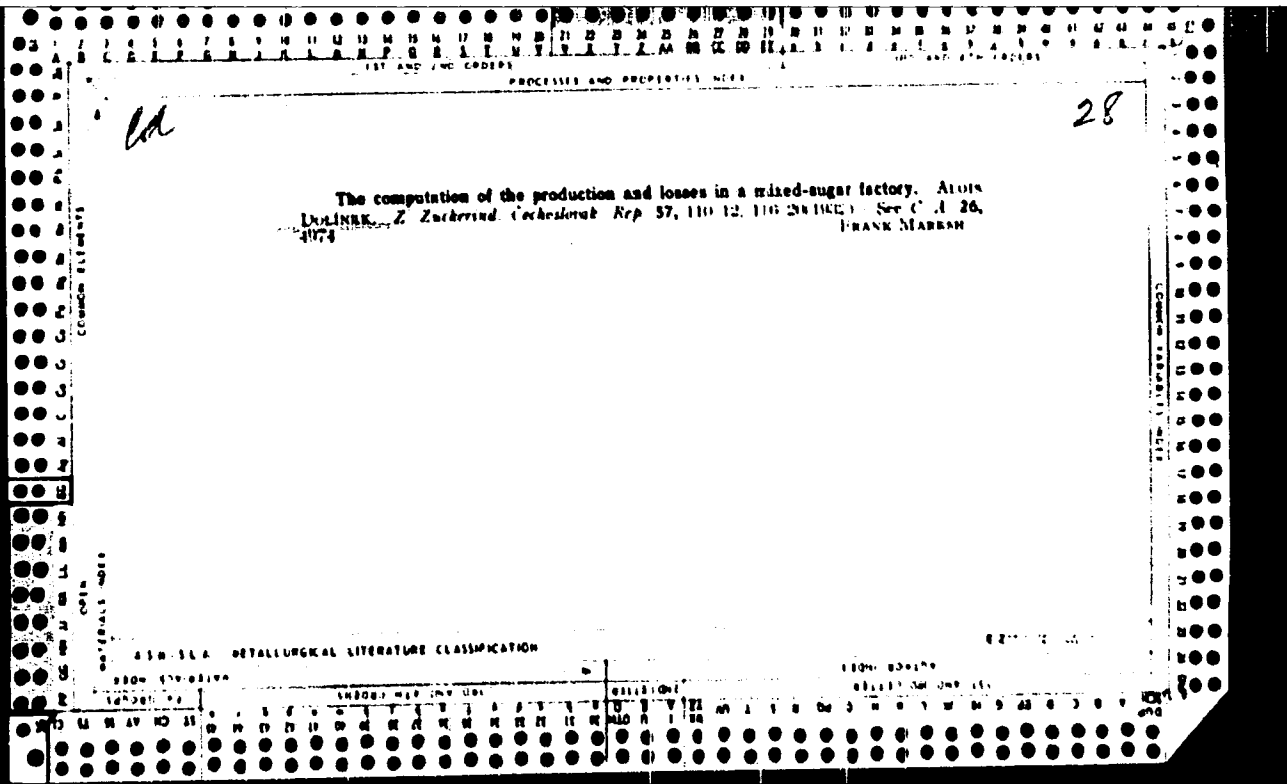
GC

FACTICAL APPLICATION OF THE AMOUNT OF MOLLASSES IN THE RAW (beet) FACTORY. A. Dolinek (Z. Zuckerfab. Csechosl., 1932, 57, 135, 136). Examples are given of formulae utilising the conductivity ash for the calculation of the expected molasses (per 100 roots), one being as follows, in which the sugar content of the molasses is assumed to be 50% and the yield  $0.103 \frac{A_1}{P_1}$ , in which  $Q_1$  TOTAL production of polarisation sugar per 100 roots,  $A_1$  the Ash content of the thick juice, and  $P_1$  the polarisation of the thick-juice. J.P.O.

METALLURGICAL LITERATURE CLASSIFICATION      6-27-52-1472

117 AND 118 COPIES      119 AND 218 COPIES



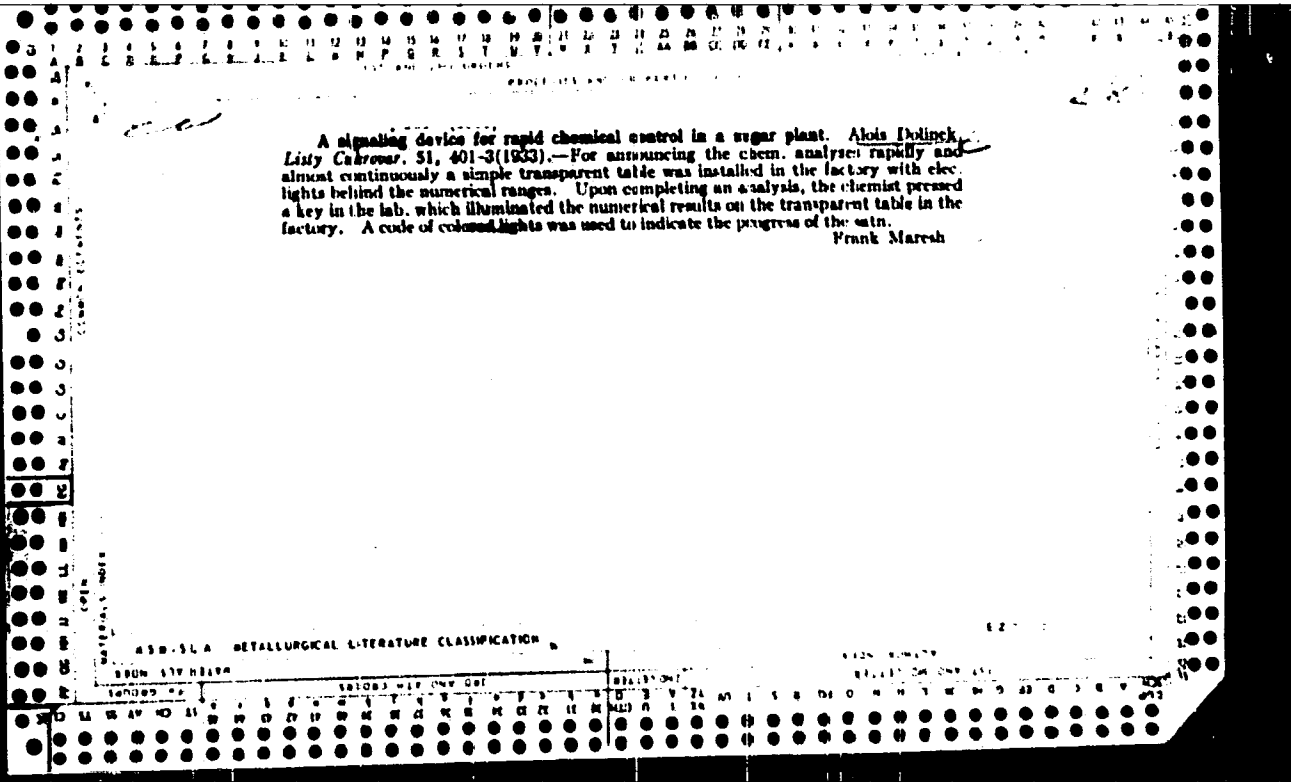


PROCESSES AND PROPERTIES OF BEET

8

Sugar-extraction conditions and flow of juices in diffusers of various capacities. ALUIS DOHLNER, *Listy Cukrovnik* 51, 347-53 (1933). For detg the state of extn in THROUGH DIFFUSERS of various capacities wire baskets filled with beet slices were deposited in critical positions in the diffusers. The poorest extn was found in the upper surface of the charge opposite the inflowing water; this was found in all diffusers irrespective of capacity and is ascribed to an unequal distribution of the juice over the surface of the slices due to an eccentric inflow, constriction at the neck of the diffuser, gases formed during the extn process and filling of the upper strata by residual pulp from preceding batches. The insertion of a perforated sheet metal cone 800 mm in diam and 1195 mm high on the base of the diffuser shortened the circulation distance of the inflowing juice and increased the total daily yield for slices resisting the circulation, as pulpy or soft beets. The degree of extn was not influenced by the cones. Diffusion batteries with a smaller content of cells allowed an easier and more complete total extn of slices than those with a large no. of cells. Slices in the bottom and center of large diffusers were more completely extd than those of the corresponding regions of small diffusers, but the difference did not exceed an av. value of 0.03%. FRANK MARSH

ALUIS DOHLNER. BETA BIOLOGICAL LITERATURE CLASSIFICATION



PROCESS AND PROPERTIES INDEX

B-3-

BC

Rapid approximate determination of invert sugar in raw (beet) sugar. A. P. Linnik (L. Karkhinev, Cherkasov., 1955, 57, 155-156).—Modifying the method of Stanek and Pavlov (B., 1951, 1154), the author employs a reagent containing 10.10 g. of  $K_2Cr_2O_7$ , 37.5 g. of  $K_2CO_3$ , and 0.1 g. of methylene-blue per litre; it should be < 14 days old and shaken before use as the indicator is not completely sensitive. A solution of 10 g. of sugar sample in 20 p.c. of  $H_2O$  is heated in a small Erlenmeyer flask, and 15 c.c. of the reagent are heated separately. As soon as the sugar solution begins to boil, the hot reagent is added, followed by a 10 c.c. rinsing of hot  $H_2O$ . Boiling is continued, and the time required for decolorization is measured from the addition of the reagent (and the rinsing). The following data, selected from the author's table, show % invert sugar in sugar samples, corresponding to different times required for decolorization: for 20, 24, 26, 28, 30, 32, 34, 36, and 38 sec., 0.12, 0.17, 0.18, 0.10, 0.09, 0.08, 0.07, 0.06, and 0.05%, respectively.

J. H. L.

METALLURGICAL LITERATURE CLASSIFICATION

LIST AND PROPERTIES INDEX

PROCESSES AND PROPERTIES INDEX

The significance of the control of affining power of raw sugars. *Alvin Dyllus. Lisy Cukrovary. 52, 570-582 (1934).*—The affining powers of raw sugars from 12 establishments were detd. throughout the campaign. In the sugars from those establishments in which routine affinity nos. were used for controlling the production, the affinity no. ( $AN_p$ ) ranged 0.18-0.40. In establishments where the process was occasionally controlled, the  $AN_p$  of the sugars ranged 0.16-0.55. In plants where the detns. were not made during the operations, the  $AN_p$  of the sugar ranged 0.21-0.66 with 58% of the sugars giving a value above 0.36. An improvement in the  $AN_p$  of the final product followed the control of digestion by periodic  $AN_p$  detns. during the processes and by mixing the sugar from different origins, and of various crystal sizes. *Frank Marsh*

METALLURGICAL LITERATURE CLASSIFICATION

MATERIALS INDEX

COMMON ELEMENTS

SECTION

SUBJECT

PAGE

DATE

AUTHOR

TITLE

JOURNAL

VOLUME

NUMBER

YEAR

PAGES

ABSTRACT

NOTES

REFERENCES

INDEXING

SERIALS

PERIODICALS

BOOKS

PATENTS

STANDARDS

TECHNICAL REPORTS

CONFERENCE PROCEEDINGS

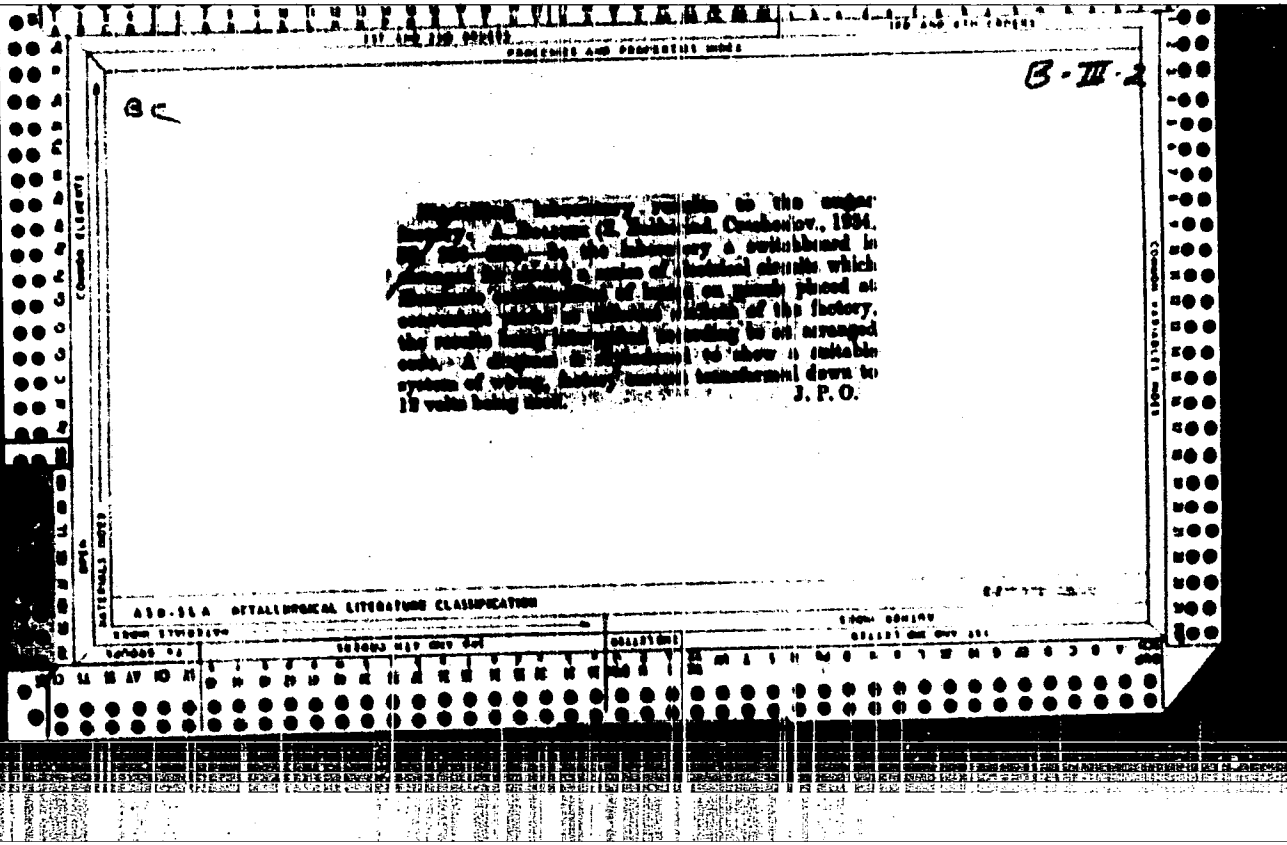
OTHER

PROCESSES AND PROPERTIES OF LIME

The determination and significance of the optimal alkalinity of the juices in the last saturation. Alois Holmek. *Leitz Verfahren*. 32, 485-501, Oct 5(1931).

Using the Sprengel-Böttger method for detg. the optimal alky. in the last satn., D. observed that juices with a good natural alky. gave an excellent optimum, for the change from yellow to red with the methyl red indicator was sharp. In well-limed juices the change in color was indefinite, and the red was not permanent. To prevent an oversetn. of juices on the basis of a minimal content of dissolved Ca salts shown by the preceding titration, it was necessary to titrate against methyl red until the red color did not turn to an orange for 30 sec. The max. allowable difference between the alky. of the final satn. and the optimum was  $\pm 0.002\%$  CaO for lightly limed liquors and  $\pm 0.001\%$  CaO for those contg. more than 8 mg. CaO per 100 g. of liquors at 16-17 Hg. In order to prevent invid. incrustations of Ca salts in the evaporators. During an increase of the CaO of the liquor, the optimal alky. changed disproportionately until it attained a const. continuous level. By increasing the lime in the liquors from 3 to 10 mg. CaO per 100 cc. the decline of the optimal alky. of the last satn. amounted to 0.002%. A regulation of the optimal alky. of the final satn. based on the detn. of the min. mol. Ca salts by titrimetric means enabled the plants to carry the evapn. to completion without any complications. Frank Maresch.

ASS. S. A. METALLURGICAL LITERATURE CLASSIFICATION







137 AND 140, 1400101  
PROCESSING AND PROPERTIES UNIT  
140 AND 141, 1400101

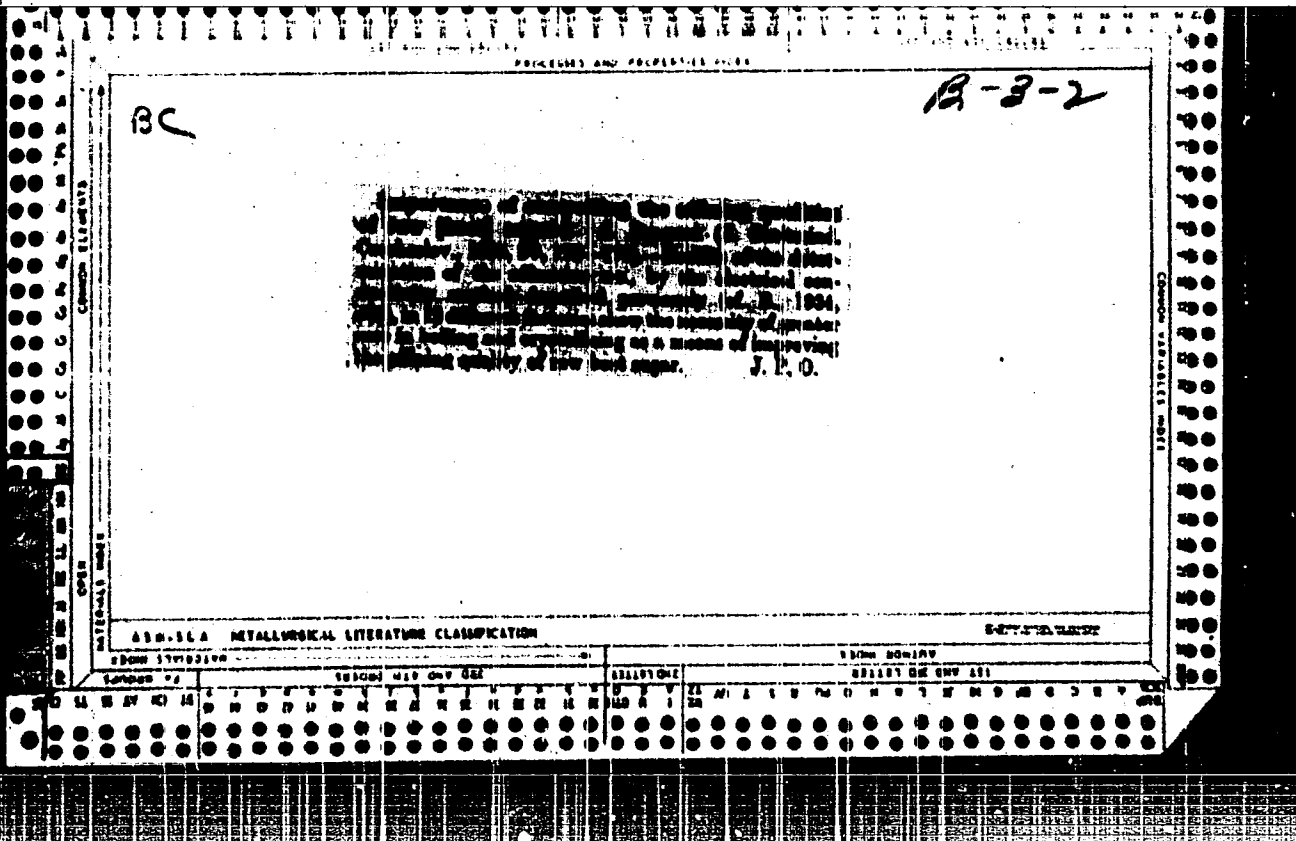
28

The influence of the sugar content of beets upon the production and products of a sugar factory. Akas Dobirek. *Listy Cukrovar.* 34, 37-9(1935).—Since the sugar content of beets in Czechoslovakia during the 1934-35 season ranged from 16 to 20%, D. presents computations to show that the capacity of the diffusion battery is increased, the vol. of H<sub>2</sub>O evapd. in the evaporators is decreased, the sp. gr. of the exit. is increased, the wt. of the liquor is increased, the vol. of the exit. is decreased, the yield of molasses is increased, and the yield of raw sugar is increased when sugar beets contg. 16% sugar are replaced by beets contg. 20% sugar in the same factory and under the same operating conditions. The computations indicate that the operation of a sugar mill depends not only upon the method of operation and upon the capacity of the diffusion battery but also upon the compn. of the sugar beets. In the compn. of the beets, the sugar concn. is the most important factor influencing the operation of the mill.

Frank Marek

ASB-11A METALLURGICAL LITERATURE CLASSIFICATION

1400101





1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

PROCESSES AND PROPERTIES

Control of the alkalinity by determining the  $pH$  of the terminal saturation by the Stank-Pavlas method. Abs. 1444. *Inst. Chem. 30, 420 (1950)*. During the 1947-48 campaign D. cooked samples of the liquor and detd. the  $pH$  of the soln. (instead of the alk.). By this method of control the compn. (alkalies) of light liquors did not undergo change before the evapn. and desuptn. was slight during the evapn. In the evaporators the amt. of incrustation was decreased, the deposits being coarse grained and removed easily. The formation of  $CO_2$  and  $NH_3$  was decreased. Frank Marsh

28

ASS. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

28

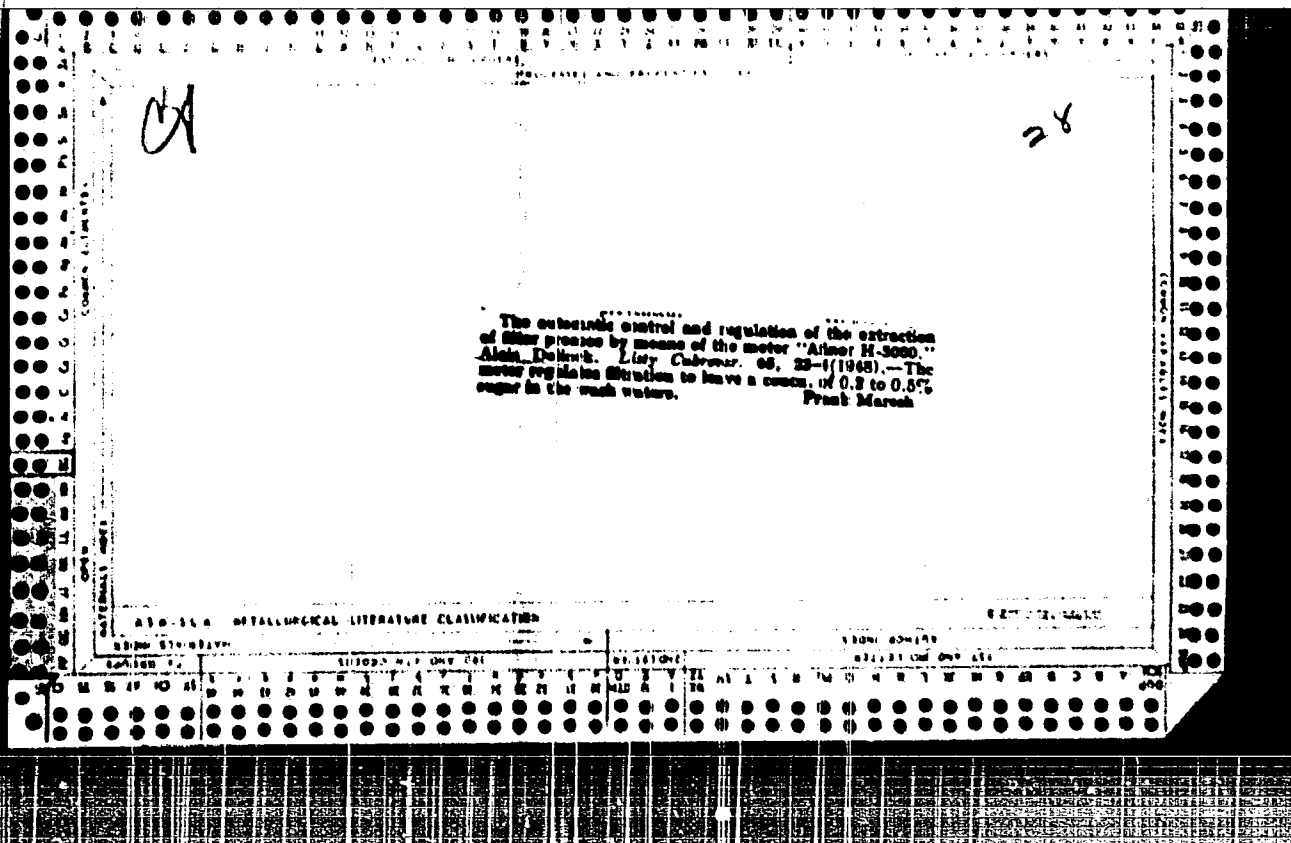
CA

Equations for a practical estimation of the quantity of molasses and crude products of a specified composition in a sugar factory. Akis Dalibek, *Livny Uchebnik*, 66, -12 (1947). - A theoretical development of 7 equations for different situations. Frank Marek

Vertical text on the left margin of the document page.

DETALLURGICAL LITERATURE CLASSIFICATION





CA

21

The production and yield of a uniform raw sugar with a high rendement. Alois Dolinek. Lily Cukrovar. 00, 20-11(1949). Frank Mareš



BA

B III - 2

(a) Automatic instrument for fluid saturation (Abstract 1.) K. LON.  
(b) Automatic instrument GMA 80 for control of fluid saturation  
fluid saturation. A. J. Hatch and V. Vucelja (*Inst. Contr.*, 1949, 50,  
88, 107-108; 1951, 49, 200-201; *Eng. Ind. Abstr.*, 1951, 10, 4) --  
(a) An apparatus is described for controlling Humana-type con-  
tinuous first saturation, based on conductivity measurement, with  
control of CO<sub>2</sub> flow.  
(b) Similar apparatus is described which has a relay for positive  
control of gas flow, and embodies recent improvements.  
P. S. Anup.

DIMLER, A.

Czechoslovakia

CA: 47:12851

"Effect of defecation on the structure of filter cake and its sweetening-off."

Listy Cukrovar. 66, 213-15 (1949-50); Sugar Ind. Abstr. 12, 174 (1950).

87

87  
2

**Two-stage continuous countercurrent saturation at high temperatures.**  
 A. Dittick (*Leach Chem.*, 1951, 67, 102-104; *Eng. Ind. Abstr.*, 1951, 22, 102).—Good saturation is affected by presence of Mg and Si in the lime. In order to attain optimum alkalinity with min. scale formation in the evaporator, second saturation is carried out first at 97-100° when  $\text{HCO}_3^-$  is converted into  $\text{CO}_3^{2-}$  (especially with stirring) and the CaO is reduced from 0.078 to 0.43%, and then in a second vessel at 108° (heated by a superheated-steam coil) where the final alkalinity (dependent on feed composition) is attained by a finely-controlled gas stream. The flow of juice is upward in each vessel; juice is sampled between the vessels. After saturation, the juice is heated to b.p. (102°) in a third vessel where the oxides are hydrolyzed to  $\text{NH}_3$  and org. acids. For min. scale formation, liming before saturation is best carried out with progressive pretreating stages.  
 P. S. Anur.

DOLINEK, A.

Czechoslovakia

CA:47:11779

"Simple equations for the calculation of the amount of molasses of a given chemical composition and of sugar 100R in the sugar factory."

Listy Cukrovar. 68, 165-7(1952); Sugar Ind. Abstr. 14, 150(1952)0

DOLINER, A.

(2)

3

Control of diffusion according to (state of) extraction of cassettes  
 by the "Dota" indicating and measuring instrument. A. Doliner  
 and J. Dittler (Litzly *Chem.*, 1953, 80, 113; *Ind. Eng. Chem. Anal. Ed.*,  
 1953, 15, 97).--Small modifications in the apparatus which measures  
 pulp sugar contents from the conductivity of the pulp press  
 water (cf. B., 1953, 111, 31) are described. In practice, changes in  
 pulp-sugar content are too frequent or irregular for assessment by  
 laboratory analyses, but are well recorded by the instrument.  
 Variations may be due to cassette quality, the method of filling,  
 late: diffusers, etc.  
 F. S. ARUP.

10-13-54  
mlg

A DOLINEK

CZECHOSLOVAKIA / Chemical Technology, Chemical Products and  
Their Application. Part 3 - Carbohydrates  
and Their Treatment.

H-25

Abs Jour : Ref. Zhur. Khimiya, No 4, 1958, 12743.

Author : A. Dolinek

Inst : Not given

Title : Technological Hints Concerning Thermal Energy Economy at  
Sugar factories.

Orig Pub : Listy cukrovarn., 1957, 73, No 8, 25 - 26.

Abstract : Technical measures for decreasing the heat (and fuel)  
consumption at granulated and refined sugar factories and  
by their boiler houses are discussed.

Card 1/1

3

Investigation of steel rails  
The investigation of steel rails  
in the USSR is carried out  
in the following manner:  
The rails are subjected to  
a series of tests to determine  
their mechanical properties  
and to establish the causes  
of their failure. It was  
established that the main  
cause of failure is the  
formation of cracks in the  
head of the rail. It was  
also shown that the  
formation of cracks is  
caused by the presence of  
defects in the metal.

DOLINENKO, O. V.

BUL'SKIY, M.T., inzhener; SVIRIDENKO, F.F., inzhener; ALIMOV, A.G., inzhener;  
DOLINENKO, O.V., inzhener.

Rail steel ingot weighing 9.75 tons. ~~Steel~~ 17 no.4:305-310 Ap '57.  
(MLRA 10:5)

1.Zavod "Azovstal'".

(Steel ingots) (Railroads--Rails)



TARASOVA, L.P., inzh.; KALASHNIKOV, A.G., inzh.; DOLINENKO, O.V., inzh.;  
NAZARENKO, Ye.T., inzh.; BUL'SKIY, M.T., inzh. [deceased];  
SVIRIDENKO, F.F., inzh.; Prinsipali uchastiye: LAPINA, A.M., inzh.;  
KORNIYENKO, D.I., inzh.

Nonmetallic inclusions in rail steel. Stal' 23 no.8:738-740  
Ag '63. (MIRA 16:9)  
(Railroads--Rails) (Steel--Inclusions)

DERFEL', A.G.; KRAVTSOVA, I.P.; DYUBIN, N.P.; SVIRIDENKO, F.F.; POPOVA, A.N.;  
DOLINENKO, O.V.; SHAROV, B.A.; Prinsipalni uchastiye: DYUBINA, A.V.;  
TARASOVA, L.P.; LESENKO, I.I.; LEVCHENKO, N.D.; BONDARENKO, A.V.

Using ferrotitanium for the deoxidation of rail steel and  
its properties. Sbor. trud. UNIIM no.11:365-378 '65.  
(MIRA 18:11)

KULIKOV, V.O.; BORNATSKIY, I.I.; ZARUBIN, N.G.; DOROFEYEV, G.A.;  
KALUZHSKIY, Ye.A.; KAZAKOV, A.A.; KOVAL', R.F.; KORNEVA, N.K.;  
TRET'YAKOV, Ye.V.; TRUNOV, Ye.A.; Primalni uchastiye: ANDREYEV, V.I.;  
GORDIYENKO, V.V.; GRINEVICH, I.P.; GUBAR', V.F.; DOLINENKO, V.I.;  
ZHERNOVSKIY, V.S.; ZHIGALOVA, Z.I.; KOMOV, N.G.; KURAPIN, B.S.;  
OLESHKEVICH, T.I.; PRIKHOZHENKO, Ye.

Mastering the operations of 650- and 900-ton (mega - gram) capacity  
open-hearth furnaces at the Il'ich metallurgical plant. Stal' 25  
no.8:805-807 S '65. (MIRA 18:9)

1. DONNIICHERMET i Zhdanovskiy metallurgicheskiy zavod imeni Il'icha.

ROMANIA

I. JACOBEMAN and S. DOLEBESCU, Iasi Branch of Institute for Medical Research of Rumanian Academy of Sciences (Institutul de cercetari medicale, Academia R.P.R., Filiala Iasi) [Republica Populara Romina, Rumanian Peoples' Republic] Iasi.

"Pathological Morphology of Chronic Hepatitis. Anatomical Clinical and Experimental Data on Vacuolation of Hepatic Cell Nucleoli."

Bucharest, Studii si Cercetari de Inframicrobiologie, Vol 13, No 6, 1962; pp 689-695.

Abstract [English summary modified]: Nucleolar changes in hepatoses seen in post-mortem biopsy specimens from various human and experimental liver affections may be an index of nucleic acid metabolism. Highest number of giant vacuolated nucleoli was seen in chronic infectious hepatitis. (With slides, 3 French, 2 Soviet and 6 Rumanian references.)

1/1

DOLINGER, A. (Leningrad)

Collection of secondary raw materials conducted by apartment  
house offices. Zhil.-kom.khoz. 9 no.6:23 '59.

(MIRA 12:10)

(Leningrad--Refuse and refuse disposal)

DOLINGO, A.I., vrah

Concerning bone fractures due to excessive foot strain. Zdrav.  
Turk. 7 no.1:29 Ja '63. (MIRA 16:3)

(EXTREMITIES, LOWER--FRACTURES)

DOLININ, A.A.

"Finland," abridged collected geographical works [translated from the Finnish]. D.N.Koshevnikov, ed. Reviewed by A.A.Dolinin. Izv. Vses.geog.ob-va 86 no.4:381-383 J1-Ag '54. (MLRA 7:9)  
(Finland--Geography) (Geography--Finland)

BORISOV, Anatoliy Aleksandrovich; DOLININ, Aleksey Arkad'yevich; DOROSHKE-  
VICH, Lyudmila Ivanovna; NIKOLAYEVA, Ekaterina Vasil'yevna; TRUBITSYN,  
V.I., redaktor; GLEYKH, D.A., tekhnicheskii redaktor

[Finland; a sketch of its economy and geography] Finliandiia; eko-  
nomiko-geograficheskii ocherk. Moskva, Gos.izd-vo geogr.lit-ry,  
1955. 143 p. (MIRA 9:1)

(Finland--Economic conditions)



DOLININ, A.A.

Natural resources of the German Democratic Republic. Geog.v shkole  
19 no.2:24-28 Mr-Ap '56. (MIRA 9:7)  
(Germany, East--Mines and mineral resources)

*DOLININ, A.A.*

VOLKOV, A.V.; DOLININ, A.A.; TIKHOMIROV, V.P., otvetstvennyy redaktor;  
BELEN'KIY, A.B., redaktor; GLEYKH, D.A., telchaicheskiy redaktor

[Argentina, Peru, Chili, Falkand Islands] Argentina, Peru, Chili,  
Folklendskie ostrova. Moskva, Gos. izd-vo geogr. lit-ry, 1957. 30 p.  
(South America--Geography)

VOL'SKIY, V.; ~~DOLININ, A.~~; VOLKOV, A.; TIKHOMIROV, V.P., otvetstvennyy red.;  
CHIZHOV, N.N., red.; VILNENSKAYA, N.N., tekhn. red.

[Brazil, Bolivia, Paraguay, Uruguay] Brasiliia, Bolivia, Paragvai,  
Urugvai, Moskva, Gos. izd-vo geogr. lit-ry, 1958. 31 p.

(Brazil) (Bolivia) (Paraguay) (Uruguay) (MIRA 11:?)

BARSOV, Nikolay Nikolayevich, dotsent, kand.geograf.nauk; BONIFAT'YEVA, Lidiya Ivanovna, dotsent, kand.geograf.nauk; BURENKO, Sergey Fedorovich, dotsent, kand.geograf.nauk; GITLITS, Semen Aleksandro- vich, dotsent, kand.ekonom.nauk; GUREVICH, Priam Vladimirovich, prof.; DARINSKIY, Anatoliy Viktorovich, dotsent, kand.geograf.nauk; DOLININ, Aleksey Arkad'yevich, dotsent, kand.geograf.nauk; DOROSHEVICH, Lyudmila Ivanovna, dotsent, kand.geograf.nauk; YEFIMOVA, Yelena Se- manovna, kand.geograf.nauk; LAVROV, Sergey Borisovich, dotsent, kand. geograf.nauk; LEDOVSKIKH, Stepan Ivanovich, dotsent, kand.geograf. nauk; NEVEL'SHTEYN, Grigoriy Solomonovich, dotsent, kand.geograf. nauk; NIKOLAYEVA, Nadezhda Vasil'yevna, dotsent, kand.geograf.nauk; OGAISSOV, Vladimir Artem'yevich, kand.geograf.nauk; PINKHENSON, Dmitriy Moiseyevich, dotsent, kand.geograf.nauk; POSPELOVA, Nata- liya Georgiyevna, prof., doktor ekonom.nauk; SEMEVSKIY, Boris Nikola- yevich, prof., doktor geograf.nauk; SUTYAGIN, Pavel Grigor'yevich, dotsent, kand.geograf.nauk; SHTEYN, Viktor Moritsovich, prof., doktor ekonom.nauk; YEROFEEV, I.A., red.; SMIRNOVA, N.P., red.; TYUTYUNNIK, S.G., red.kart; BORISKINA, V.I., red.kart; KOZLOVSKAYA, M.D., tekhn.red.

[Economic geography of foreign countries; student manual] *Ekonomi- cheskaya geografiya zarubezhnykh stran; posobie dlia studentov.* Moskva, Gos.uchebno-pedagog.izd-vo M-va prosv.RSFSR, 1960. 702 p. # maps (MIRA 13:12)

(Geography, Economic)

SEMEVSKIY, B. N.; DOLININ, A. A.

"Peoples of America," edited by A. P. Efimov, S. A. Tokarev.  
Reviewed by B. N. Semevskii, A.A. Dolinin. Izv. Vses. geog.  
ob-va 96 no. 2:145-147 Mr-Apr '64. (MIRA 17:5)

1. DOLININ, A. S.
2. USSR (600)
4. Pushkin, Aleksandr Sergeevich, 1799-1837
7. Pushkin in Herzen's works and life. Uch. zap. Len. un. No. 158, 1952.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, Uncl.

L 15737-65 EWT(m)/EWA(d)/EWP(t)/EWP(b) NJW/JD  
ACCESSION NR: AP4045656

S/0133/64/000/009/0809/0812

AUTHOR: Shved, F. I.; Khasin, G. A.; Dolinir, D. P.; Karyakin, A. P.; Veksler,  
G. D.; Bakhtiarov, N. F.

TITLE: Crystallization and structure of vacuum-arc-melted ingots

SOURCE: Stal', no. 9, 1964, 809-812

TOPIC TAGS: steel, ShKh15 steel, steel vacuum arc melting, heat resistant alloy  
melting, alloy vacuum arc melting, vacuum arc melting

ABSTRACT: To determine optimal conditions for vacuum-arc melting of steel and alloys, the crystallization and structure of ShKh15 steel ingots melted in a mold 280 mm in diameter have been studied. It was found that the temperature of the metal bath surface depends upon the current and can vary from 1540C at 3.3 kamp to 1720C at 5.6 kamp. The excess of heat dissipates rapidly from the surface into a layer 40—60 mm thick which corresponds to the part of the ingot in contact with the mold. Therefore, the temperature of the metal bath remains roughly constant. Only the depth of the bath increases with increased current. In ingots 260—280 mm in diameter melted with a current of 3—6 kamp, two structural zones were found: a peripheral zone with fine oriented dendrites and a central zone with large

Card 1/2

L 15737-45  
ACCESSION NR: AF4045656

oriented dendrites. The distance between dendrites, the dendritic inhomogeneity, and the content of sulfide and nitride inclusions increase with prolonged crystallization time, i.e. the time during which metal remains in the two-phase region. Nitrides and sulfides are formed as a result of dendritic segregation of impurities (titanium and nitrogen). Formation of various ingot defects is associated with a prolonged duration of the two-phase state which occurs under the effect of a sudden current drop. Dense and uniform steel and alloy ingots are obtained only with a current maintained within certain limits. Melting of StKh15 steel in a mold 280 mm in diameter should be done with a current of 4 kamp max; melting of a heat-resistant alloy in a mold 380 mm in diameter, with a current of 4.5 kamp max. Orig. art. has: 6 figures.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: NM

NO REF SOV: 005

OTHER: 002

Card 2/2



SHVED, F.I.; KHASIN, G.A.; POLININ, D.P.; KARVAKIN, A.P.; VEKTER, G.P.;  
BAKHTIAROV, H.F.

Crystallization and structure of an ingot made by vacuum arc melting.  
Stal' 24 no.9:809-812 S 1964. (SIRA 17:10)

L 16306-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(b) NJW/JJ  
ACCESSION NR: AP4045639 8/0133/64/000/009/0836/0839

AUTHOR: Gavrilov, O. T.; Boyerphinov, V. A.; Shalimov, Al. G.;  
Dollinin, D. P.; Khasin, G. A.; Kolyasnikova, N. K.; Savenok, L. L.

TITLE: Quality of vacuum-arc-melted ball-bearing steel. 18

SOURCE: Stal, no. 9, 1964, 836-839

TOPIC TAGS: ball bearing steel, ShKh 15 ball bearing steel, vacuum arc melted ShKh 15 steel, high grade ShKh 15 steel, improved melting method

ABSTRACT: A study has been made to determine the causes of flaws in consumable-electrode vacuum-arc-melted ShKh 15 steel for ball bearings and to find the means to eliminate them. As a result, several improvements in melting technique have been adopted, so that it now is possible to obtain high-grade steel for precision and special-purpose ball bearings by a single vacuum-arc melting of the ShKh 15-steel consumable electrodes. The "spot" inhomogeneity of the ingots, formerly the cause of 90% of the rejects, was fully eliminated by using symmetrical coaxial current conductor and by eli-

Card 1/2

L 16306-65

ACCESSION NR: AP0045659

minating nonsymmetrical magnetic masses. Light stringers, or stratified crystallization, were completely eliminated by automatic control of the electrode feed. Another type of ingot flaw, bright spots containing 0.04--0.05% less carbon than the bulk of the metal, was eliminated by improving the electrode holders and by leaving a portion of the electrode, 100--200 mm long, unmelted. The ingot pipe was eliminated by gradually decreasing the arc current from 4.0--4.4 Ka to 0.8--1.2 Ka during the last 10--15 min of melting. Orig. art. has: 10 figures and 3 tables.

ASSOCIATION: TsNIChM and Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant)

SUBMITTED: 00

ENCL: 00

SUB CODE: MM, IE

NO REF SOV: 000

OTHER: 000

Cord 2/2

4(563-65 EWT(m)/EWA(d)/T/EWP(t)/EWP(e)/EWP(h)/EWA(c) MJW/JD  
ACCESSION NR: AP5008495 11/0141/66/000/001/0043/0049

AUTHOR: Khazin, G.A.; Shved, F.I.; Dolinin, D.P.; Havenolt, L.L.; Veksler, G.D.

TITLE: Influence of electric parameters on the conditions of metal crystallization during vacuum arc melting

SOURCE: IVUZ. Chernaya metallurgiya, no. 11, 1965, 43-49

TOPIC TAGS: vacuum arc melting, metal crystallization rate, electric steel refining, vacuum steel, steel S1K15

ABSTRACT: The purpose of this article was to establish the conditions under which electric arc melting for purifying steel from nonmetallic admixtures and gases can be carried out at a predetermined rate of crystallization and solidification in a water-cooled crystallizer. The consumable electrodes were provided with small inserts of iron sulfide at different levels, permitting the identification of various melting zones. The depth and volume of the liquid bath, the linear and gravimetric crystallization rate, and the time during which a metal particle remained in the liquid phase were determined. This indicated the average gravimetric solidification rate in each zone as compared to the rate of melting. Currents from 4.0 to 6.0 kilo amps and voltages from 26 to 28 v were imposed. The data are consolidated in diagrams and a table.  
card 1/2

L 40543-65  
ACCESSION NR: AP6003495

The depth shape of the liquid bath (from 35 to 55 mm) depends on the current. The rates of melting corresponding to currents of 4.0 and 6.0 kilowatts are 2.27 and 3.60 kg/min, respectively. The origins of the formation of the so called "dense spot" in vacuum steel ShKh15 are described. Orig. art. has: 6 figures, 4 formulas and 1 table.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust metallurgical works); Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii (Chelyabinsk metallurgical scientific research institute)

SUBMITTED: 23 Mar 64

ENCL: 00

SUB CODE: MM

NO REF SOV: 003

OTHER: 000

Cord 2/2 348

(N) L 11790-66 EWI(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) IJP(c) MJW/JD

ACC NR: AP6001683

SOURCE CODE: UR/0148/65/000/012/0057/0063

AUTHOR: Dolinin, D. P.; Morozov, A. N.; Khasin, G. A.; Shved, F. I.; Soskov, D. A.; Savenok, L. L.

ORG: Chelyabinsk Scientific Research Institute of Metallurgy (Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii); Zlatoust Metallurgical Plant (Zlatoustovskiy metallurgicheskiy zavod)

TITLE: Removal of oxygen and nitrogen in vacuum arc melting of ShKh15 steel

SOURCE: IVUZ. Chernaya metallurgiya, no. 12, 1965, 57-63

TOPIC TAGS: steel, chromium steel, ball bearing steel, steel melting, vacuum arc melting, steel refining, steel degassing, oxygen removal, nitrogen removal/ShKh15 steel

ABSTRACT: The behavior of oxide and nitride inclusions and the mechanism of the removal of oxygen and nitrogen from ShKh15 (AISI E2100) ball-bearing steel in vacuum arc refining have been investigated. Steel ingots were melted in a 20-t electric furnace and forged into consumable electrodes, 180 mm in diameter, which were remelted twice in a vacuum of  $(1-5) \cdot 10^{-2}$  mm Hg. The first and the second vacuum remelting decreased the oxygen and nitrogen content from the initial 0.00400 to 0.00110 and 0.00095% O, and from 0.0084 to 0.0060 and 0.0045% N. The respective initial content of  $Al_2O_3$  and  $SiO_2$  inclusions decreased from 0.00400 and

Card 1/2

UDC: 669.141.247.083.4.054

L 11790-66

ACC NR: AP6001683

3

0.00270% to 0.00060% each after the first remelting, and to 0.00051 and 0.00026% after the second. Oxygen and nitrogen are removed for the most part as oxide and nitride particles. Hence, a more complete refining can be achieved by promoting the formation in the initial metal of inclusions with a low specific weight and a high interphase energy at the metal-inclusion interface. The high-alumina inclusions which are formed by the deoxidation of the initial metal with an increased amount of aluminum enjoy these properties. Removal of nitride inclusions is promoted by lowering to a minimum (0.002—0.003%) the content of titanium in the initial metal. Orig. art. has: 3 figures and 4 tables. 27 [MS]

SUB CODE: 11/ SUBM DATE: 15Jul64/ ORIG REF: 005/ OTH REF: 001/ ATD PRESS: 4178

HW  
Card 2/2

KHASLIN, G.A.; SHVED, F.I.; DOLININ, D.P.; SAVENOK, L.L.; VEKSLER, G.D.

Effect of electric conditions on the conditions of metal crystallization during vacuum arc remelting. Izv. vys. ucheb. zav.;  
chern, met. 8 no.1:43-49 '65 (MIRA 18:1)

1. Zlatoustovskiy metallurgicheskiy zavod i Chelyabinskiy nauchno-issledovatel'skiy institut metallurgii.



DOLININ, G.A.; STEPANYAN, A.N., veter. vrach.; YESHCHEENKO, N.A.; OREKHOVSKIY, V.K.; LYSENKO, I.F., veter. vrach (Tiraspol' Moldavskoy SSR); SARAYKIN, I.M., prof.: POGUIYAY, V.D., veter. vrach (Romanovskiy rayon, Altayskogo kraya.); BOGDANOVSKIY, A.V.; SAVUSHKINA, Ye.T., kand. veter. nauk

Prophylaxis and treatment of dyspepsia in calves. Veterinaria  
41 no.1:72-75 Ja '64. (MIRA 17:3)

1. Glavnyy veterinarnyy vrach sela Uren', Gor'kovskoy oblasti (for Dolinin). 2. Ivanovskaya mezhrayonnaya veterinarnaya laboratoriya Khersonskoy oblasti (for Stepanyan). 3. Starshiy veterinarnyy vrach sovkhosa "Kamenskiy" Moldavskoy SSR (for Saraykin). 4. Moldavskiy sel'skokhozyaystvennyy institut (for Saraykin). 5. Glavnyy veterinarnyy vrach sovkhosa "Berestovoy", Donatskoy oblasti (for Bogdanovskiy).

DOLININ, G.F.; KOBRINSKIY, I.I., inzh.; FALEYEV, F.A.; CHURILOV, M.F.

Leveling out track located on heaving soils. Put' i put. khoz. no.2:  
6-7 F '58. (MIRA 11:3)

1. Starshiy dorozhnyy master Mginskoy distantzii, Oktyabr'skoy dorogi  
(for Dolinin). 2. Machal'nik Mginskoy distantzii, Oktyabr'skoy dorogi  
(for Kobrinskiy). 3. Starshiy inzhener Mginskoy distantzii Oktyabr'-  
skoy dorogi (for Faleyev). 4. Glavnyy inzhener sluzhby puti Mginskoy  
distantzii Oktyabr'skoy dorogi (for Churilov).  
(Railroads--Track)

DOLININ, G.F.; ~~KOBRINSKIY, I.I.~~, inzh.

Some remarks on switch boxes. Put' i put. khoz. no.2:30-31 F '59.  
(MIRA 12:3)

1. Starshiy dorozhnyy master, st. Mga Oktybr'skoy dorogi (for  
Dolinin).

(Railroads--Switches)

DOLININ, I. A.

23337. Nuzhno rasshirit' Proizvodstvo tel' ya iz trikotazha. Legkaya Prom-  
St', 1949, No. 6, c. 12-13

SO: LETOPIS' NO. 31, 1949