GUREVICH, Yu.G., inzh.; ROZIN, B.B., inzh.; GEYFMAN, R.S., inzh.; KHASIN, G.A., inzh.; OKHRIMOVICH, B.P., inzh.

Pouring 1Kh18N9T steel with petrolatum coating of ingot molds. Stal' 20 no. 12:1096-1098 D '60. (MIRA 13:12)

1. Zlatoustovskiy metallurgicheskiy zavod i Chelyabinskiy politekhnicheskiy institut.
(Steel ingots) (Petrolatum)

S/133/60/000/012/005/015
A054/A027

AUTHORS: Gurevich, Yu. G., Engineer, Rozin, B.B., Engineer, Geyfman, R.S., Engineer, Khasin, G.A., Engineer, and Okhrimovich, B.P., Engineer

TITLE: Pouring 1X18H9T (1Kh18N9T) Type Steel in Ingot Molds Coated ith Petrolatum

PERIODICAL: Stal', 1960, No. 12, pp. 1096-1098

TEXT: Since 1959, the Zlatoust Metallurgical Plant, when melting the 1Kh18N9T brand steel by bottom casting, has applied petrolatum instead of carbontetrachloride for the "self-coating" of the 2.7 ton ingot molds without changing their form and their weight. In the establishment of the new technology, P.P. Menushenkov, A.K. Petrov, S.K. Filatov, P.I. Vasil'yev, V.N. Davidyuk, and M.V. Loktionov took part. The smoothness of the ingot surface was assessed by the specific labor spent on removing surface defects from 1 sq m of the metal (by reference to photochronometric observations) and the test results were analyzed by computers. Altogether 472 tests were carried out in the course of which the influence of several factors: temperature, holding time of the metal in the ladle, the velocity of pouring into the ladle, were investigated, for both kinds of coating separately.

Card 1/3

S/133/60/000/012/005/015
A054/A027

Pouring 1Kh18N9T (1Khl8N9T) Type Steel in Ingot Molds Coated With Petrolatum

The tests showed that when the 2.7 ton ingot molds were coated with petrolatum (maintaining the conventional technology used for the 1Khl8N9T brand steel in other respects) the surface of the improved and the time required for removing surface defects decreased by 15-20%. As regards the time required for defects removal, the following data were obtained in two shops:

A/

Temperature:	< 1,550°C	1,580-1,600°C	> 1,600°C
with petrolatum coating, min/m^2	40.1	51.0	88.7
with CCl_4 coating "	77.5	66.0	68.9

B/

with petrolatum coating, min/m^2	100.8	100.9	113.0
with CCl_4 coating "	117.1	134.0	148.7

These figures show that petrolatum coating is superior to CCl_4 coating under 1,600°C. The relationship between the quantity of metal to be subsequently scoured and the time of pouring into the ladles coated with petrolatum was also investigated and it was found that if the pouring time was under 2 minutes, 40 and 71% of the metal had to be subsequently scoured, if between 2-3 minutes:

Card 2/3

S/133/60/000/012/005/015
A054/A027

Pouring 1Kh18N9T (1Khl8N9T) Type Steel in Ingot Molds Coated With Petrolatum

26.0-55.5% and above 3 minutes: 0.0- 31.8% (the first figures stand for Shop A, the second for Shop B). These data show that if the pouring time is shorter the ingot surface deteriorates rather suddenly, which can also be proved by the defects removal times in function of pouring time:

Pouring time, min Average cleaning time, min/m^2	< 2	2-3	> 3
shop A			
with petrolatum coating	60.4	46.9	35.5
with CCl_4 coating	78.0	75.5	45.7
shop B			
with petrolatum coating	116.0	109.2	95.0
with CCl_4 coating	129.0	145.4	114.0

Thus, when pouring time is longer than 2 minutes, the labor required for cleaning the ingot surface decreases by 25%. Tests carried out on the same subject in roll shops yielded analogous results. There are 3 figures and 4 Soviet references.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Plant), Chelyabinskiy politekhnicheskiy institut (Chelyabinsk Polytechnical Institute).

Card 3/3

ROZIN, B.; GEYFMAN, R.

Present-day objectives of the establishment of technical norms in metallurgy. Sots. trud 7 no.8:72-78 Ag '62. (MIRA 15:10)

(Metallurgy—Production standards)

ROZIN, B.B., inzh.

Using mathematical methods in the standardization of rolled products. Stal' 25 no.4:365 Ap '65. (MIRA 18:11)

KHASIN, Gersh Aronovich; OKHRIMOVICH, Boris Pavlovich; DAVIDYUK, Viktor nikolayevich; ROZIN, Bentsian Borisovich; GEYFMAN, Roma Samuilovich; MIKHAYLOVA, Ye.P., red.izd-va; OBUKHOVSKAYA, G.P., tekhn. red.

[Pouring of alloyed steel with the use of petrolatum]Razlivka legirovannoi stali s petrolatumom. Moskva, Metallurgizdat, 1963. 44 p. (MIRA 16:3)
(Steel ingots) (Metalworking lubricants)

SOV/137-59-1-180

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 1, p 25 (USSR)

AUTHORS: Rozin, B. B., Geyfman, R. S.

TITLE: On the Integral Mechanization of the Follow-up of Smelting Charts (K voprosu o kompleksnoy mekhanizatsii ucheta materialov plavil'nykh kart)

PERIODICAL: Tekhn.-ekon. byul. Sov. nar. kh-va Chelyab. ekon. adm. r-na, 1958, Nr 1, pp 45-49

ABSTRACT: The smelting chart (SC) is the fundamental initial document which reflects all the technical and economic indexes of a smelting operation. The materials of the SC are processed with a broad application of mathematical-statistics methods. To determine the effect of various factors, specialized prototype punched cards are being developed. Several examples for the construction of specialized breadboard computers and types of evaluation in the workshop of the Zlatoust plant are adduced.

D. P.

Card 1/1

SOV/133-59-5-27/31

AUTHORS: Rozin, B.B. and Geyfman, R.S., Engineers

TITLE: From the Experience of the Laboratory of Organisation of Production and Labour (Iz opyta raboty laboratorii organizatsii proizvodstva i truda)

PERIODICAL: Stal', 1959, Nr 5, pp 462 - 464 (USSR)

ABSTRACT: On the basis of studies and application of statistical analysis to data collected, the above laboratory worked out a method of calculating production norms for melting and rolling shops as well as some auxiliary shops. As a result of the introduction of their recommendations, the anomalies in the earned pay were removed and the available staff more efficiently utilised.

ASSOCIATION: Zlatoustovskiy metallurgicheskiy zavod (Zlatoust Metallurgical Works)

Card 1/1

ROZIN, B.B., inzh.-ekonomist; GEYFMAN, R.S., inzh.-ekonomist

Labor productivity indices in principal branches of the metallurgical industry. Stal' 12 no.2:167-169 F '59.
(MIRA 12:2)

1. Zlatoustovskiy metallurgicheskiy zavod.
(Metallurgical plants--Labor productivity)

ROZIN, B.B., inzh.; PUCHKOV, L.M., inzh.; PERVAKOV, V.P., inzh.

Using methods of linear programming in planning the charging of steel smelting furnaces. Stal' 23 no.9:845-847 S '63. (MIRA 16:10)

1. Zlatoustovskiy metallurgicheskiy zavod.

SOV/133-59-2-22/26

AUTHORS: Rozin, B.B. and Geyfman, R.S. Engineers - Economists

TITLE: On the Index of Labour Productivity in the Main Branches of the Iron and Steel Industry (O pokazatele proizvoditel'nosti truda v osnovnykh metallurgicheskikh proizvodstvakh)

PERIODICAL: Stal', 1959, Nr 2, pp 167-169 (USSR)

ABSTRACT: This is a contribution to the previously published papers on the subject (ref.1 and 2). In the view of the present authors there should be two types of labour productivity indices: 1) total labour productivity index for the whole works which can be used for the determination of the dynamics of its changes and 2) the labour productivity index for main metallurgical aggregates, which is used for the comparison of the productivity level achieved on similar aggregates and for the analysis of dynamics of its changes. Factors which should be taken into

Card 1/2

On the Index of Labour Productivity in the Main Branches of the Iron and Steel Industry

consideration when determining the above productivity indices are discussed. There are 2 Soviet references.

ASSOCIATION: Zlatoustovskiy Metallurgicheskiy Zavod (Zlatoust Metallurgical Works)

ROZIN, B.B., inzh.; GEYFMAN, B.S., inzh.

Material stimulation of rolling with minus tolerances.
Stal' 18 no.1:51-55 Ja '58. (MIRA 11:1)

1.Zlatoustovskiy metallurgicheskiy zavod.
(Rolling (Metalwork))

Rozin, B. B.

133-1-13/24

AUTHORS: Rozin, B.B., and Geyfman, B.S., Engineers

TITLE: Financial Encouragement for Rolling with Minus Tolerances (Material'noye stimulirovaniye prokatki s minusovymi dopuskami)

PERIODICAL: Stal', 1958, No.1, pp. 51 - 55 (USSR)

ABSTRACT: In 1957, a system of accounting for rolling products was introduced which gave financial encouragement to produce rolling products with minus tolerances. The accounting system was based on the theoretical weight of a rolled product. The authors point out that the system gives little encouragement to operating personnel as it has only a small influence on the level of wages and they propose to modify the system by calculating planned coefficient of metal consumption without taking into consideration the possible economy by rolling with minus tolerances. Due to a large number of small orders, difficulties were encountered on works in calculating the theoretical weight of rolled products. Various methods of calculating tested on works are described and a method based on the summary length of rods in a packet is proposed. There are 3 tables.

ASSOCIATION: Zlatoust. Metallurgical Works (Zlatoustovskiy metallurgicheskiy zavod)

AVAILABLE: Library of Congress

Card 1/1

ACC NR: AP6030050 SOURCE CODE: UR/0133/66/000/001/0042/0044

AUTHOR: Gurevich, Yu. G. (Candidate of technical sciences); Rozin, B. B. (Engineer); Geyfman, R. S. (Engineer)

ORG: Chelyabinsk Polytechnical Institute (Chelyabinskiy politekhnicheskiy institut); Zlatousk Steel Plant (Zlatoustovskiy metallurgicheskiy zavod)

TITLE: Use of punch-card tabulators in statistical analysis of operating conditions for electric furnaces

SOURCE: Stal', no. 1, 1966, 42-44

TOPIC TAGS: arc furnace, statistic analysis, punched card, industrial management, data analysis

ABSTRACT: The authors use the simplified method proposed by Sokolov (A. N. Sokolov, "High Speed Steel Smelting in Arc Furnaces," Mashgiz, 1960) for establishing electrical characteristics of arc furnaces from observations of melts. The initial information is subjected to statistical analysis on punch card tabulators so that production data may be used to account for the effect which variable operating conditions have on the principal technical and economic indices of the furnace. A program is briefly described for organizing the information on punch cards for mechanical data analysis. The machine output is in the form of tables for relationships between the basic parameters of the furnace (e.g., melting time as a function of input power). The tabular data are then used for plotting empirical regression lines. These curves are then used as a basis for derivation of optimizing equations. The proposed method of analysis may be used for various types of electric furnaces and various grades of steel. Orig. art. has: 2 figures, 7 formulas and 2 tables. [JPRS: 35,681]

SUB CODE: 09, 13, 11 / SUBM DATE: none / ORIG REF: 003 / OTH REF: 001

UDC: 669.187.2

Card 1/1

ROZIN, B.B., inzh.; GEYFMAN, R.S., inzh.; DANILOV, A.M., inzh.; SLASHCHEVA, V.M., inzh.; GUREVICH, Yu.G., kand. tekhn. nauk

Statistical analysis of causes for changes in the impact toughness of 30KhGSA steel with the use of punched card computer machines. Stal' 24 no.1:74-77 Ja '64. (MIRA 17:2)

1. Zlatoustovskiy metallurgicheskiy zavod i Chelyabinskiy politekhnicheskiy institut.

ROZIN, B.B., inzh.; GEYFMAN, R.S., inzh.

Material stimulation for the reduction of railroad transportation costs in metallurgical enterprises. Stal' 20 no.2:165-168 F '60. (MIRA 13:5)

1. Zlatoustovskiy metallurgicheskiy zavod.
(Metallurgical plants--Equipment and supplies)
(Railroads, Industrial) (Wages)

0.0000

77619
SOV/133-60-2-19/25

AUTHOR: Rozin, B. B., Geyfman, R. S. (Engineers)

TITLE: Incentive System Stimulating Reduction of Railroad Transportation Costs in Metallurgical Works (As Discussion)

PERIODICAL: Stal', 1960, Nr 2, pp 160-168 (USSR)

ABSTRACT: This article is concerned with the railroad transportation of freight within a plant's area and deals with the improvement of service, reduction of costs, and a more advantageous pay scale. Railroad transportation of freight within the plant area is estimated as 70-80% of the total of a metallurgical plant's transportation expense. It is blamed on the existing system of cost compensating, which uses a charging rate of a ton per kilometer. The full loading capacity is not utilized, nor is there proper scheduling of rolling stock. The new system suggested proposes to introduce a charging rate based on the volume of freight (in units of weight) and

Card 1/2

Incentive System Stimulating Reduction of Railroad Transportation Costs in Metallurgical Works (As Discussion)

77619
SOV/133-60-2-19/25

transport services based on the number of freight cars supplied and on labor's loading rate per ton of freight. It will materially compensate, increasing efficiency of both railroad service and loading crews, which in turn reduces operational expenses. There is 1 table.

ASSOCIATION: Zlatoust Metallurgical Plant (Zlatoustovskiy metallurgicheskiy zavod)

Card 2/2

ROZIN, Bentsian Brosovich, inzh.; GEYFMAN, Roman Samuilovich; BRYUKHANENKO, B.A., red.; BRUSHTEYN, A.I., red. izd-va; ATTOPOVICH, M.K., tekhn. red.

[Mathematical methods and computer techniques in the organization of iron and steel making processes] Matematicheskie metody i schetnaia tekhnika v organizatsii metallurgicheskogo proizvodstva. Moskva, Metallurgizdat, 1962. 126 p. (MIRA 15:5)

(Punched card systems--Metallurgy)

ROZIN, D.G.

Mechanism of action of antifeine on the coronary vessels of the heart. Farm. i toks. 27 no.3:323-325 My-Je '64. (MIRA 18:4)

1. Kafedra farmakologii (zav. - deystvitel'nyy chlen AMN SSSR prof. S.V.Anichkov) Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

ROZIN, D.I., kand.med.nauk

Incidence of osteolytic and osteoblastic manifestations of cancer metastases from the breast to bones. Klin. khir. no.1:61-62 '65. (MIRA 18:8)

1. Azerbaydzhanskiy nauchno-issledovatel'skiy institut rentgenologii i radiologii.

ROZIN, D.L.

Clinical aspects of metastases of cancer of the breast into the osseous system. Vop.onk. 6 no.1:98-105 '60. (MIRA 13:10)

(BREAST—CANCER) (BONES—CANCER)

ABASOV, I.T.; ROZIN, D.L.

Condition of the peripheral blood in osseous cancer metastases. Probl.gemat. i perel.krovi 4 no.8:52-56 Ag '59. (MIRA 13:1)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii 9dir. - dotsent M.M. Alikishibekov).
(BONE AND BONES neoplasms)
(BLOOD CELLS)

KRUK, I.N., mayor med.sluzhby., ROZIN, D.L.

External cysts of the larynx filled with air. Voen-med.zhur.no.12:78 D'58 (MIRA 12:1)

(LARYNX—DISEASES)
(CYSTS)
(ALTITUDE, INFLUENCE OF)

USSR / General Problems of Pathology. Experimental Treatment. U-5

Abs Jour : Ref Zhur - Biol., No. 10, 1958, No. 47010

Author : Andreyeva, M. A.; Rozin, D. L.
Inst : Not given
Title : The Use of Radioactive Phosphorus for the Diagnosis of Breast Tumors and Their Complications.

Orig Pub : Tr. 1-y Zakavkazsk. konferentsii po med. radiol. Tbilisi, Gruzmedgiz, 1956, 273-279.

Abstract : The distribution of P^{32} was studied in 55 patients with malignant and benign tumors of the mammary gland. The patients were treated with isotopes in the form of bisubstituted sodium phosphate in a dosis of 0.12 mu curie in a 40 percent glucose solution. The accumulation of P^{32} in the afflicted mammary gland and in the symmetrically located area of the intact gland was determined

Card 1/2

NADZHAROV, A.G.; ROZIN, D.L.

"Radiation therapy of breast cancer" by T.G.Larishchenko.
Med.rad. 8 no.2:76-78 (MIRA 16:11)

*

ROZIN, D. L., Cand Med Sci -- (diss) "Diagnostics of metastases of cancer of the mammary gland into the osteal system." Baku, 1960. 15 pp; (Central Scientific Research Inst of Medical Radiology of the Ministry of Public Health USSR); 200 copies; free; (KL, 51-60, 121)

LUR'YE, A.M., kand.med.nauk; MAMIKONOV, M.G., kand.med.nauk; RAMAZANOVA, L.A.; ROZIN, D.L.

Bronchography, tomobronchography and bronchoscopy in the diagnosis of primary pulmonary cancer. Azerb. med. zhur. no.9:54-61 S '61. (MIRA 14:9)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo instituta rentgenologii i radiologii (direktor - dotsent M.M.Alikishibekov).
(LUNGS—CANCER) (BRONCHI—RADIOGRAPHY)
(BRONCHOSCOPY)

ROZIN, D.L.

Metastasis of cancer of the breast into the bones. Vop.onk. 8 no.8:14-6 '62. (MIRA 15:9)

1. Iz Azerbaydzhanskogo nauchno-issledovatel'skogo Instituta rentgenologii i radiologii (dir. - dots. M.M. Alikishibekov).
(BREAST—CANCER) (BONES—CANCER)

MELIK-ASLANOVA, P.S., kand.med.nauk, ROZIN, D.L.

Rare case of primary planocellular keratosic cancer of the renal pelvis. Azerb.med.zhur. no.2:99-100 F '58 (MIRA 11:12)

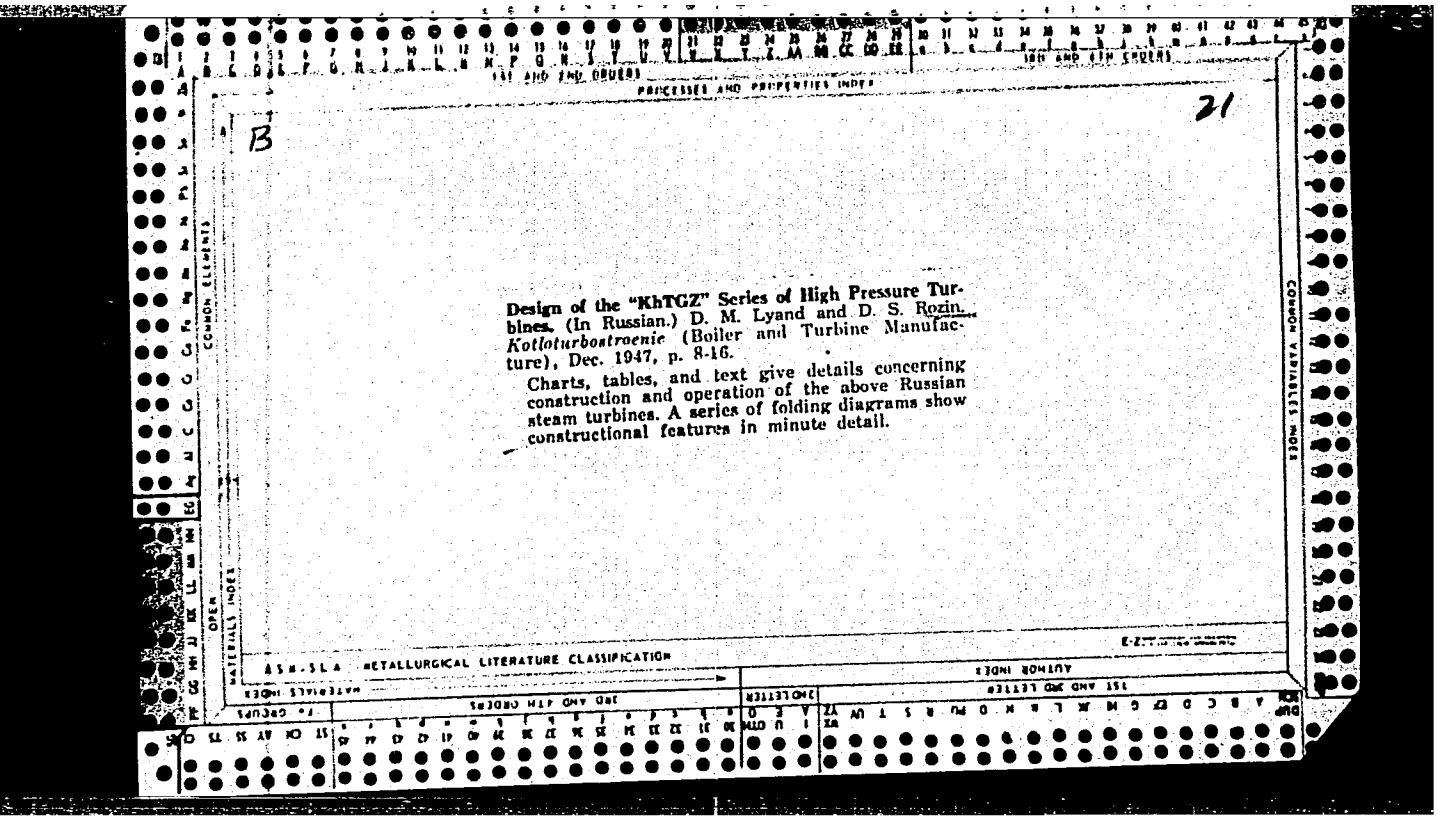
1. Iz Instituta rentgenologii i radiologii Ministerstva zdravookhraneniya Azerbaydzhanskoy SSR (direktor - dots. M.M. Alikishibekov)
(KIDNEYS--CANCER)

ROZIN, D.L.

Correlation between hyaluronic acid and human cancer extracts.
Trudy AMN SSSR 21 no.4:97-103 '52. (MLRA 10:8)

1. Iz kliniki Azerbaydzhanskogo gosudarstvennogo nauchno-issledovatel'skogo instituta rentgenologii, radiologii i onkologii (dir. prof. I.S.Ginzgurg)

(NEOPLASMS,
extracts, reactions with hyaluronic acid)
(HYALURONIC ACID,
determ. in & reactions with human cancer extracts)



Design of the "KhTGZ" Series of High Pressure Turbines. (In Russian.) D. M. Lyand and D. S. Rozin. *Kotloturbostroenie* (Boiler and Turbine Manufacture), Dec. 1947, p. 8-16.

Charts, tables, and text give details concerning construction and operation of the above Russian steam turbines. A series of folding diagrams show constructional features in minute detail.

KISLYY, V.I., inzhener; ROZIN, D.S., inzhener.

Causes and elimination of breaks in high-pressure steam turbine blade rims. Elek.sta. 24 no.5:8-9 My '53. (MLRA 6:7)
(Steam turbines)

ROZIN, D.S., inzh.; TERNOVOY, M.P., inzh.; BONESKO, V.A., inzh.

Damages and repairs of radial-flow Siemens-Schuckert turbines.
Energetik 14 no.1:10-13 Ja '66. (MIRA 19:1)

USSR/Engineering
Turbines
Electric Power Plants Nov 48

"A New Series of High-Pressure Stationary Turbines of the Khar'kov Turbine Factory Imeni S. M. Kirov," Engr D. M. Lyandres, Laureate of Stalin Prize, D. S. Rozin, Engr, 6 pp

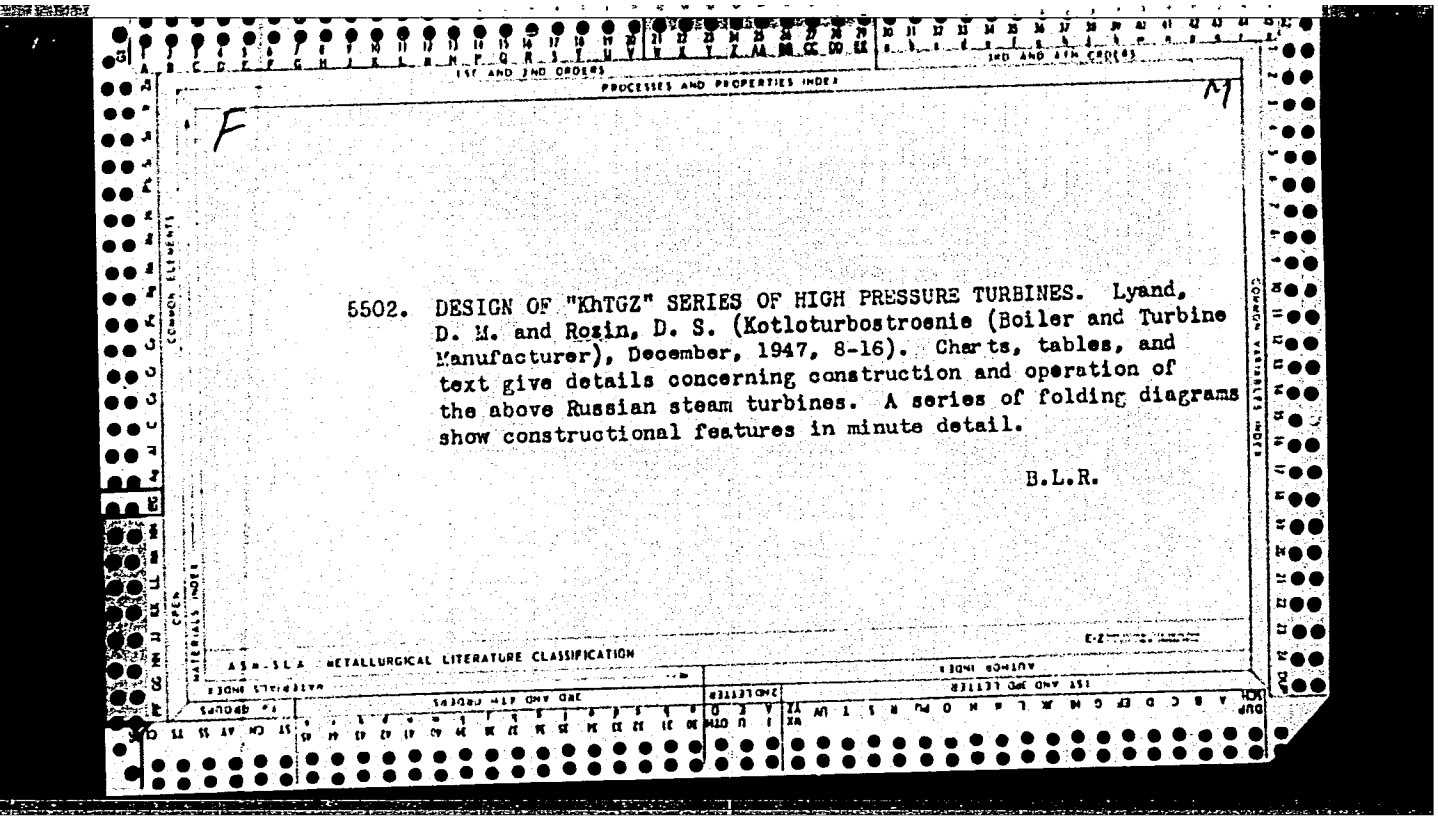
"Elek Stants" No 11

New series of turbines designed by Factory Imeni Kirov includes four machines: (1) condensation turbine VK-50 with a power of 50,000 kw at 3,000 rpm, (2) condensation turbine VK-100 with a power of 100,000 kw at 3,000 rpm, (3) auxiliary turbine VR-25-1 with a power of 25,000 kw at 3,000 rpm with back-pressure of 31 atm. Gives characteristics, dimensions, and parameter, and features of regu ation and protection.

PA 54/49T58

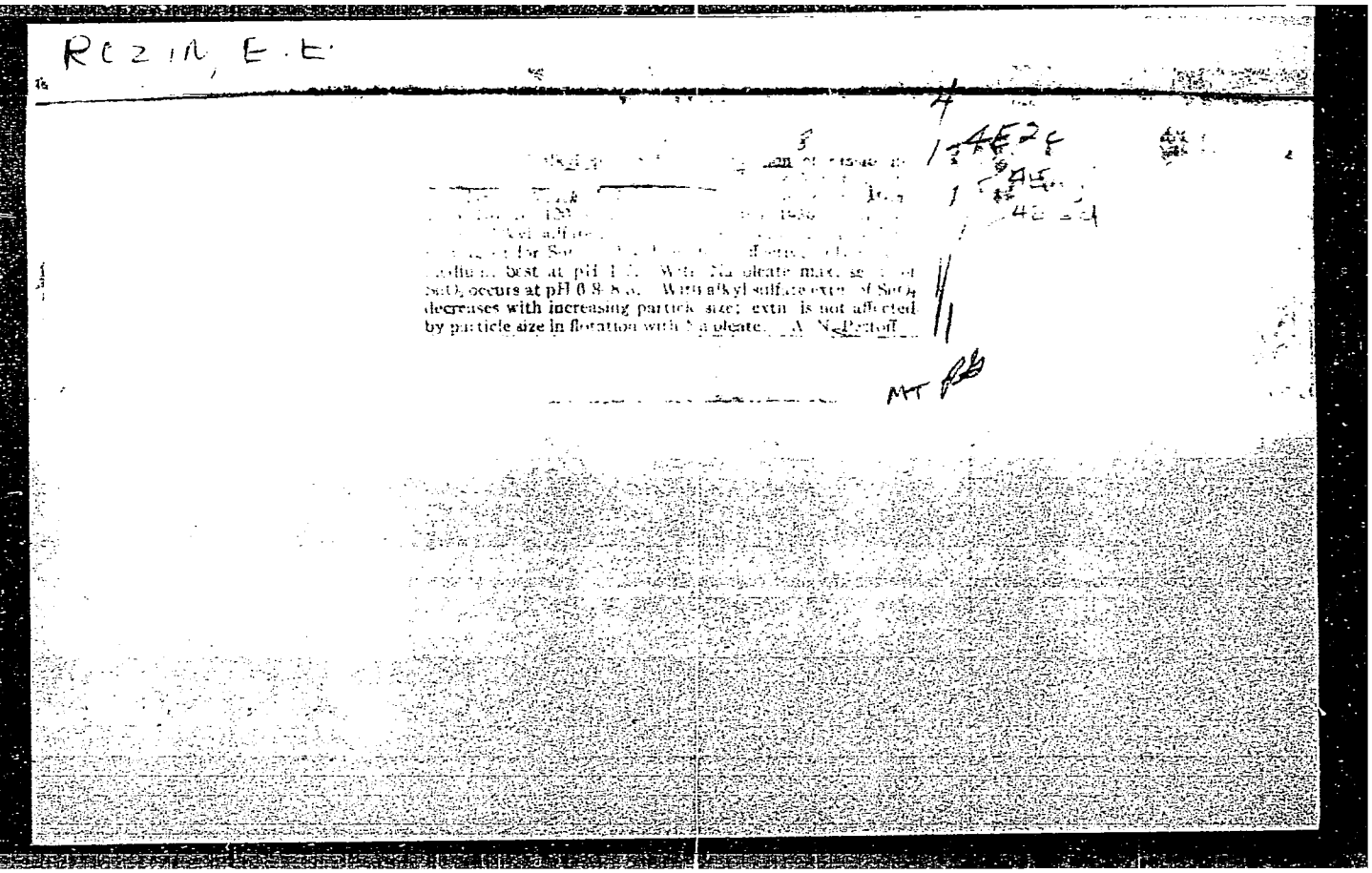
ROZIN, D.S., inzhener; TERNOVOY, M.P., inzhener.

Repairing blades of a radial turbine. Elek.sta. 24 no.11:51-54 N '53.
(MLRA 6:11)
(Blades)



5502. DESIGN OF "KhTGZ" SERIES OF HIGH PRESSURE TURBINES. Lyand, D. M. and Rozin, D. S. (Kotloturbostroenie (Boiler and Turbine Manufacturer), December, 1947, 8-16). Charts, tables, and text give details concerning construction and operation of the above Russian steam turbines. A series of folding diagrams show constructional features in minute detail.

B.L.R.



RCZIN, E.E.

MT RB

L 10200-67 EWT(1) GW (A,N) SOURCE CODE: UR/0413/66/000/015/0062/0062

ACC NR: AP6029899

INVENTORS: Alekseyev, A. M.; Bezruk, I. A.; Bulanov, N. A.; Shchukin, S. N.; Klyuchkin, V. N.; Kulikov, A. V.; Melikadze, S. Ye.; Chinareva, O. M.; Yemel'yanov, A. M.; Mangirova, G. S.; Rozin, G. I. M.; Boltalin, A. P.; Zlatkovich, L. A.; Iova, G. M.; Sokolova, E. D.

ORG: none

TITLE: Geoelectric prospecting device. Class 21, No. 184361 [announced by All-Union Scientific Research Institute of Geophysical Prospecting Methods (Vsesoyuznyy nauchno-issledovatel'skiy institut geofizicheskikh metodov razvedki)]

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 62

TOPIC TAGS: prospecting, geologic instrument

ABSTRACT: This Author Certificate presents a geoelectric prospecting device containing a dc generator, a master oscillator, a thyratron bridge commutator, a reference phase synchropulse shaper unit, a radio station, and a measuring laboratory. The laboratory contains an electromagnetic field receiver, a calibration unit, a selective amplifier, a radio station, a synchropulse shaper unit, an electronic oscillograph, a recorder, a time setting unit, and a detector voltmeter. For generalized utilization of the device in the VP, MPP, and INFAZ methods, to increase the accuracy of measuring the phase angles in the infrasonic frequency range, and to increase the noise

UDC: 550.837

Card 1/2

L 10306-67

ACC NR: AP6029899

protection when measuring pulsed signals, a phase marker in the form of a diode regenerative comparator is placed in the measuring laboratory. The comparator is connected to the output of the selective amplifier. An input signal divider connected to the input of the selective amplifier is used in the calibration unit. A dc amplifier operating in the electrometric mode is connected between the register and recorder (see Fig. 1).

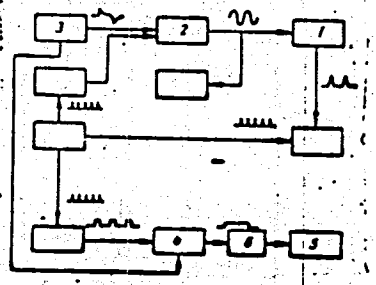


Fig. 1. 1 - phase marker; 2 - selective amplifier; 3 - calibration unit; 4 - register; 5 - recorder; 6 - dc amplifier

Orig. art. has: 1 diagram.

SUB CODE: 09/08/ SUBM DATE: 30Jun64

Card 2/2

31969
S/081/61/000/023/036/061
B138/B101

1.1800 2408

AUTHORS: Kovalenko, P. N., Rozin, G. N., Osipov, O. A., Yevstifeyev, M. M., Kravtsov, Ye. Ye.

TITLE: Anodizing in the presence of chloride ions, and the quality control of oxide films on the alloy Д16Т (D16T)

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 328, abstract 23K154 (Sb. "Fiz.-khim. metody analiza i kontrolya proiz-va", Rostov-na-Donu, Rostovsk. un-t, 1961, 97-102)

TEXT: An investigation is made of the effect of the presence of Cl^- (0.5 g/liter) in the tank, on the potential, depth of oxide film and drop test time in the alloy D16T in the process of anodizing in 20 % H_2SO_4.

It is found to improve the potential of the anodizing alloy, producing more porous oxide films without affecting the depth or rate of growth. It is suggested that clad sheet D16T Duralumin could be anodized in the presence of <0.5 g/liter Cl^-. Optimum conditions for anodizing, with or without chlorides, have been found to be D_a 2 a/dm^2 and 30 mins.

[Abstracter's note: Complete translation.]

Card 1/1

31970
S/081/61/000/023/037/061
B138/B101

11800 2408

AUTHORS: Kovalenko, P. N., Rozin, G. N., Osipov, O. A., Yevstifeyev, M. M., Kravtsov, Ye. Ye.

TITLE: Filling and quality control of the anodised alloy Д16Т (D16T) in the presence of chloride and sulphate ions. II information

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 23, 1961, 328-329, abstract 23K155 (Sb. "Fiz.-khim. metody analiza i kontrolya proiz-va Rostov-na-Donu, Rostovsk. un-t, 1961, 103-114)

TEXT: A study has been made of the effect of the presence of Cl^- and SO_4^- on the process of the filling of oxide films on the alloy D16T in a solution of $K_2Cr_2O_3$ (50 g/liter) at a temperature of 90 to 95°C. The dependence of the quality of the film (drop test and depth of film) on the concentration of the mixed ions is explained. The SO_4^{2-} is found to suppress the adsorption of chromate ions, and this is the reason for the lighter colour of the films. It is recommended that films which are formed at high D_a values should undergo a longer period of filling. It is quite possible to

Card 1/2

31970
S/081/61/000/023/037/061
B138/B101

Filling and quality control ...

increase the permissible impurity maximum in the filling tank from 1.5 to 3 and from 3 to 6 g/liter of chloride and sulphate ions respectively.
[Abstracter's note: Complete translation.]

Card 2/2

ROZIN, K., inzh.

Over-all mechanization of silica brick production. Stroi.mat. 3 no.11:16-20 N '57. (MIRA 10:12)
(Brickmaking) (Silicates)

ROZIN, K., inzh.

Improved equipment for producing buildingceramics. Stroi. mat. 4 no.11:35-37 N '58. (MIRA 11:12)
(Germany, West--Ceramics)

ROZIN, K.B.

Automatic device for silicate bricks and stacking them on steam-chamber cars. Stroi. mat. 6 no.9:21-23 S '60. (MIRA 13:9)

1. Nachal'nik otdela avtomatiki i mekhanizatsii Rosstromproyekta.
(Loading and unloading) (Bricks--Transportation)

33176
S/180/61/000/006/006/020
E111/E335

18.3100 1208 1454 1521

AUTHORS: Rozin, K.M., Vigdorovich, V.N. and Krestovnikov, A.N. (Moscow)

TITLE: Method of continuous zone recrystallization

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Metallurgiya i toplivo, no. 6, 1961, 56 - 73

TEXT: The authors point out that existing methods of zone-refining are discontinuous and inefficient since "dirty" ends are produced. Suggestions for continuous processes (Ref. 1: W.G. Pfann - J. Metals, 1954, v.7, no.2, p. 297; Ref. 2: W.G. Pfann - Zone Melting, New York-London, 1958) have evidently not been followed by realization, probably for theoretical rather than practical reasons. Other proposed methods for improving the ordinary process by removing the contaminated melted zone after its first passage through the ingot (Ref. 4: Aleksandrov, B.N., Verkin, B.I., Lifshits, I.M. and Stepanova, G.I. - FMM, 1956, v.2, no. 1, p.105; Ref. 5: H. Henker - Z.Erzbergbau und Metallhüttenwesen, 1960, v.13, no. 9, p.450) do not solve the problem of intensifying the

Card 1/[illegible]

Method of continuous ....

process. The authors describe their method for continuous zone recrystallization, which both effectively separates the compounds and has a high productivity. These characteristics are obtained by diluting the melted zone at the last section of the separating part of the column, with simultaneous removal of the melted zone at the end of each pass through a special opening in the column. The vertical column is topped by a feeder supplying material of the initial composition to the receiver part of the column. Below this is the separating part of the column, where the material has undergone one or more purifying cycles in the usual manner. This part ends in an outlet. The basic equation for the region of the last fused zone is:

$$C = C_o - (C_o - kC_1)\left(\frac{H - x}{l}\right)^k \qquad (2)$$

where x is the distance of the point considered from the outlet,
H the height of the separating part,
C the impurity concentration at point x ,

Card 2/[illegible] 9

Method of continuous ....

C_o the impurity in the initial material,

k the distribution coefficient,

ℓ the length of the fused zone (length equivalent to volume with the constant cross-sectional area assumed).

For n passes the distribution of impurities is given by:

$$c_m^{(n+1)} = k \sum_{i=1}^{m} \bar{c}_i^n (1 - k)^{m-i} \quad (1 \leqslant m \leqslant p) \qquad (3)$$

where p is the whole number of lengths ℓ in the ingot,

c^{n+1} is the impurity concentration in the m-th section of the ingot after the (n+1)-th pass (m being the serial number of the section in the direction of movement of the zone),

$c_i^{-(n)}$ is the average concentration in the i-th section after n passes of the melted zone.

Card 3/[illegible] 4

Method of continuous ....

Fig. 4 shows the C/C_0 ratio as a function of x for various values of n for the indicated values of the parameters (Π is the length of the empty "plug" in the column). The wavy nature of the limiting curve, (i.e. the curve pertaining to high values of n) is due to the specific nature of the continuous process. Variations in k and Π have the greatest effect on impurity distribution but the more efficient purification obtained by increasing Π leads to a corresponding decrease in productivity. Even without allowing for this effect of "dirty ends" in the ordinary process, its effectiveness is greatly exceeded by that of the proposed continuous process (e.g. by a factor of 35 for $n = 16$). The productivity W is defined by:

$$W = \frac{vpS}{1 + H/\Pi} \qquad (7)$$

where v is the crystallization velocity,
s the column cross-sectional area.

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Method of continuous ....

The useful yield of purified material n is expressed by:

$$\eta = \frac{1}{1 + \ell/\Pi} \quad . \qquad (8)$$

The authors recommend the following procedure (purification coefficient K_2 and the ℓ/Π value associated with the yield of purified product) for designing a continuous-zone refining column: 1) calculate or find empirically the purification coefficient K_1 for any column with the required k and ℓ values; 2) find H_2/Π_2 from:

$$\frac{H_2}{\Pi_2} = \frac{H_1 \lg K_2}{\Pi_1 \lg K_1} \quad ; \qquad (9)$$

3) find Π_2 from the ℓ/Π ratio; 4) find H_2 (the height

Card 5/6

Method of continuous ....

of the separating part) from H_2/Π_2 ; 5) find the receiver height $(\Pi_2 + \ell)$; 6) from design considerations choose the number of heaters p ; 7) select, from experimental data, v and s to determine productivity. In practice, the column could be of many forms including (since some inclination is permissible) simple and complex spirals. The target of the slope of a turn must be greater than $d/2\ell$ for spirals, where d is the diameter or vertical dimension of the cross-section. Heater design is important and many types are possible; good control is obtained with rotating heaters, and heat-exchangers can be used. The authors studied the process with naphthalene in the simplest type of column - Fig. 8 (1 - vertical support; 2 - cantilever; 3 - column; 4-6 - movable heaters; 7 - support; 8 - cable; 9 - pulleys; 10 - drum; 11 - motor; 12 - reduction gear; 13 - bearing; 14 - opening for removing the melted zone; 15 - outlet). A magnetic clutch was incorporated, facilitating complete automation. The transparent column (molybdenum glass) enabled following the behaviour of the added impurities

Card 6/~~10~~ 7

33176
S/180/61/000/006/006/020
E111/E335

Method of continuous ....

(0.2 - 0.5 wt.% alizarin, methyl-red or methylene blue). The feeder was 30 - 80 mm in diameter, 50 - 100 mm high, the corresponding figures for the separating part being 10 - 15 and 200 - 500 mm. The best outlet diameter was 7 - 9 mm. The three column heaters and those on the feeder and the tube from the opening 14 were controlled independently. No separation of components occurred at crystallization velocities over 24 mm/hour; below 6 mm/hour completely colourless naphthalene, mainly in the form of unstable single crystals, was obtained in a single pass. The higher limit is due to bending of isotherms, leading to a funnel-shaped crystallization front; improvement is possible. The cooling velocity largely determines the approach of the transformation to equilibrium and is given by the product of crystallization velocity and the axial temperature gradient. These conceptions are capable of extension to any cases of crystallization. The form of the melting front forming the upper boundary of the "plug" is also closely related to the effects considered and plays the part of a criterion of the homogeneity of the material in the column. Longitudinal

Card 7/~~10~~ 9

Method of continuous ....

temperature distribution in the region of the zone was measured with a copper-constantan thermocouple of 30 μ diameter, Fig. 11. There is appreciable mixing in the continuous process due to the kinetic energy of drops falling through the "plug" from the melting front. Mixing can be increased by rotation of the column about its own axis through 5 - 15°, stopping it sharply. Another feature of the process is that, when the crystallization front is horizontal, there will be no concentration gradient along the front, even with a considerable axial concentration gradient. The crystallization front was found to be little affected by changes in conditions, being protected by the melted zone which acted to damp-out the effects. The authors point out that their process is suitable for in-line use in production processes and complete automation. Its applicability can be extended by addition of "third components", which can alter the distribution coefficient and by the use of several continuous columns arranged to form a cascade. The continuous zone-

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Method of continuous ....

recrystallization method can also be used in physicochemical research, particularly to study reaction of components by determining distribution coefficients and investigation of phase composition and sequence of phase changes in the crystallization of binary and more complex systems.
There are 12 figures, 1 table and 5 references: 1 Soviet-bloc and 4 non-Soviet-bloc. The three English-language references mentioned are: Refs. 1-2 (quoted in text); Ref. 3: H. Reiss - J. Metals, v.6, no.9, 1954, 1053.

ASSOCIATION: Institut tsvetnykh metallov im. M.I. Kalinina
Institute of Non-ferrous Metals im. M.I. Kalinin)

SUBMITTED: March 16, 1961

Card 9/~~FC~~ 9

KRESTOVNIKOV, A.N.; ROZIN, K.M.

Calculation of repeated zonal recrystallization. Izv.vys.ucheb.zav.; tsvet.met. 8 no.2:105-112 '65. (MIRA 19:1)

1. Kafedra fiziko-khimicheskikh issledovaniy protsessov proizvodstva poluprovodnikovykh materialov i chistykh metallov Moskovskogo instituta stali i splavov. Submitted October 10, 1963.

L 61920-65 EWT(1)/EPA(s)-2/EWT(m)/EPF(n)-2/T/EWP(t)/EEC(b)-2/EWP(b)
Pt-7/Pi-4/Pu-4 IJP(c) JD/WW/JG/GG

ACCESSION NR: AP5016348 UR/0149/65/000/002/0105/0112 44 42 B

AUTHOR: Krestovnikov, A. N.; Rozin, K. M.

TITLE: Calculation of multiple-pass zone recrystallization 16

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 2, 1965, 105-112

TOPIC TAGS: zone refining, zone recrystallization

ABSTRACT: An accurate calculation of the processes of zone recrystallization and normal crystallization makes it necessary to consider both the concentration dependence of the distribution ratio and certain necessary changes in the basic parameters of the process: crystallization rate, dimensions of the molten zone, etc. To this end, the authors used a method of calculation in which the continuous motion of the crystallization front along the ingot is replaced by a pulsed motion characterized by the same average velocity and a certain step h. Equations are derived for the concentration of impurities over the entire length of the ingot (with the possible exception of the last zone). The method of calculation permits the solution of complex problems, many of which have no analytical solution. Its scope is

Card 1/2

illustrated with continuous zone recrystallization, in which the calculation is complicated not only by the multiple passes of the molten zone along the column (as in the case of simple zone recrystallization), but also by the continuous displacement of the material along the column. The examples illustrated in the article demonstrate that the method can be used for calculating complex crystallization processes involving separation as well as for most actual processes in which changes in the basic parameters of the process must be taken into account. The method can be used for selecting optimum conditions of the process and for programming changes in its parameters (crystallization rate, zone length, distribution ratios, etc.). Orig. art. has: 6 figures, 1 table, and 5 formulas.

ASSOCIATION: Kafedra fiziko-khimicheskikh issledovaniy protsessov proizvodstva poluprovodnikovykh materialov i chistykh metallov, Moskovskiy institut stali i splavov (Department of Physicochemical Research on Production Processes for Semiconductor Materials and Pure Metals, Moscow Institute of Steel and Alloys)

SUBMITTED: 10Oct63 ENCL: 00 SUB CODE: MM

NO REF SOV: 004 OTHER: 012

ROZIN, K.M. (Moskva); VIGDOROVICH, V.N. (Moskva); KRESTOVNIKOV, A.N. (Moskva)

Method of continuous zonal recrystallization. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.6:56-73 N-D '61. (MIRA 14:12)

1. Institut tsvetnykh metallov im. M.I. Kalinina.
(Zone melting) (Crystallization)

S/180/62/000/002/005/018
E021/E635

AUTHORS: Vigdorovich, V.N. and Rozin, K.M. (Moscow)

TITLE: A method of determining the effective coefficients of distribution during zone refining

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Metallurgiya i toplivo no. 2, 1962, 63 - 65

TEXT: Several methods of determining the effective coefficients of distribution during zone refining have been proposed up to the present time. These methods take into account the initial part of the ingot and in these sections the real distributions obtained do not correspond to the theoretical values. Also, these methods are not accurate enough. In the present paper a method for determination of the effective coefficient of distribution is proposed using the end section of the ingot and based on a large number of experimental determinations of the concentration along the length of the ingot after zone refining. With a large number of passes of the molten zone, the change in concentration of

A method of determining ...

impurities along the length of the ingot approaches the so-called limit distribution, which obeys the exponential relationship given by W. G. Pfann ("Zone melting", New York - London, 1958):

$$C(x) = Ae^{Bx}$$

where C - impurity concentration at the distance x from the beginning of the ingot, C_o - initial concentration B tangent of the angle of the plot representing the function lnC(x). The coefficient of the distribution can be determined from the ratio

$$k = B\ell / (e^{B\ell} - 1)$$

where ℓ is the width of the molten zone. If the coefficient B is determined experimentally the distribution coefficient k can be calculated. It was found that the function $k = B\ell$, if plotted in the co-ordinates lgk - $B\ell$, is only slightly curved and within certain intervals can be considered linear. On the

A method of determining ...

basis of piece-wise linear approximation calculations can be carried out with the error being of the order of 4 - 5%. Furthermore k can be determined from a graph expressing k as a function of Bℓ. The proposed method was used for quantitative estimation of the influence of preliminary filtration and degassing on the purification of aluminium by zone melting. After zone refining aluminium ingots subjected to filtration showed more effective purification. The calculated value of the effective distribution coefficient was 0.78 in the experiment without filtration and 0.56 in the experiment with filtration.

For degassed aluminium the removal of impurities by zone refining was somewhat worse. Experimental curves of the distribution confirm that for the end part of the ingot a linear relationship applies in accordance with Eq. (1) . The behaviour of admixtures of silicon, copper and magnesium which was also studied, was found to be similar. The limit

S/180/62/000/002/005/018
E021/E635

a method of determing ...
the and
distribution is attained faster the smaller k the shorter the ingot. The described method permits determining k from results of analysis of the end portion only, where analysis for the impurities is simpler.

Card 4/4

VIGDOROVICH, V.N.; ROZIN, K.M.; KRESTOVNIKOV, A.N. (Moskva)

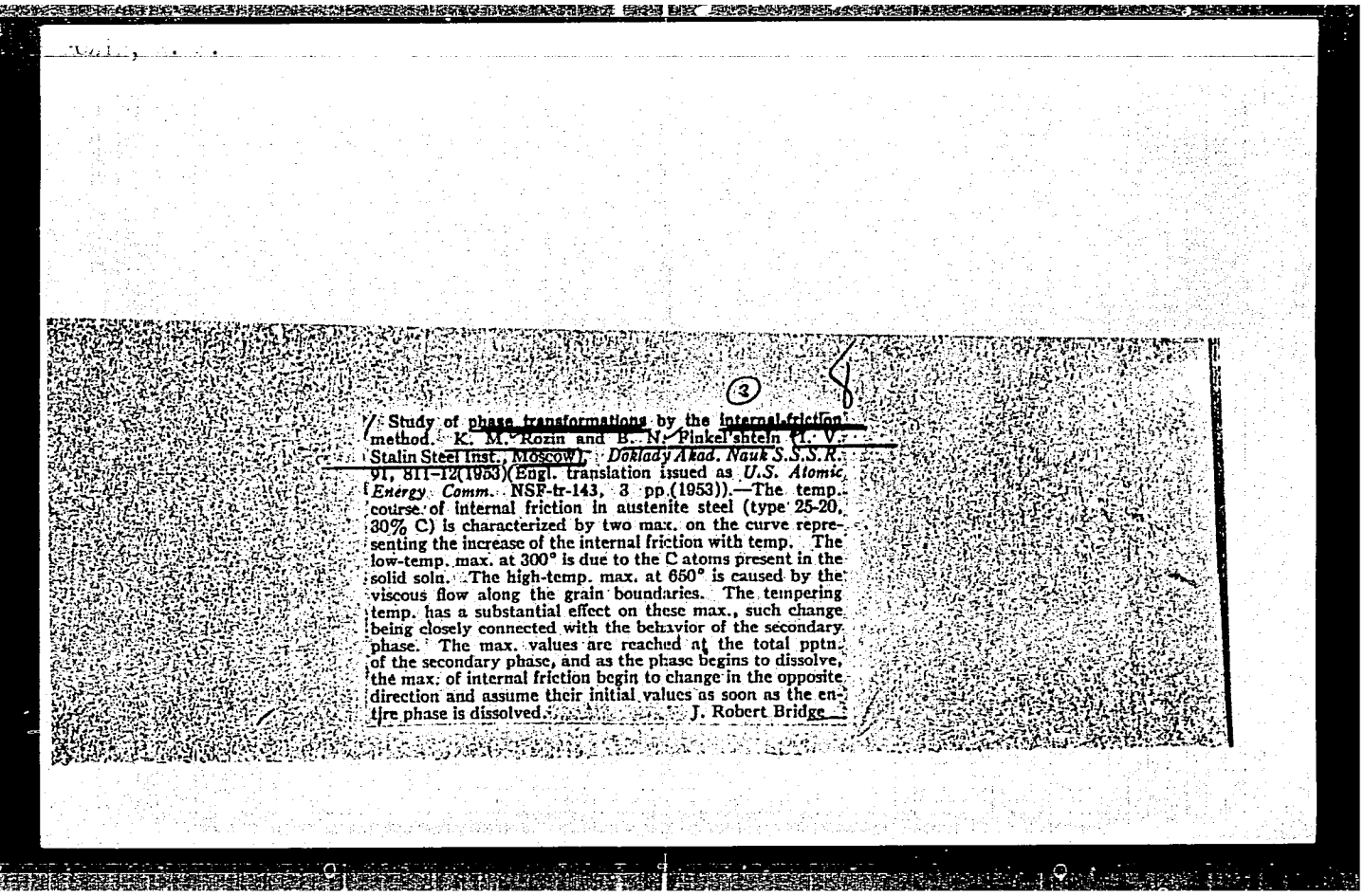
Rate (intensity) of phase transitions. Zhur.fizh.khim. 35 no.8:1752-1758 Ag '61. (MIRA 14:8)

1. Institut tsvetnykh metallov imeni M.I. Kalinina, kafedra fizicheskoy khimii

(Phase rule and equilibrium)

VIGDOROVICH, V.N. (Moskva); ROZIN, K.M. (Moskva)

Method of determining effective distribution coefficients during zonal recrystallization. Izv. AN SSSR. Otd. tekh. nauk. Met. i topl. no.2:63-65 Mr-Ap '62. (MIRA 15:4)
(Zone melting) (Crystallization)



③

Study of phase transformations by the internal-friction method. K. M. Rozin and B. N. Pinkel'shtein (I. V. Stalin Steel Inst., Moscow). *Doklady Akad. Nauk S.S.S.R.* 91, 811–12(1953)(Engl. translation issued as *U.S. Atomic Energy Comm.* NSF-tr-143, 3 pp.(1953)).—The temp. course of internal friction in austenite steel (type 25-20, 30% C) is characterized by two max. on the curve representing the increase of the internal friction with temp. The low-temp. max. at 300° is due to the C atoms present in the solid soln. The high-temp. max. at 650° is caused by the viscous flow along the grain boundaries. The tempering temp. has a substantial effect on these max., such change being closely connected with the behavior of the secondary phase. The max. values are reached at the total pptn. of the secondary phase, and as the phase begins to dissolve, the max. of internal friction begin to change in the opposite direction and assume their initial values as soon as the entire phase is dissolved. J. Robert Bridge

DAVIDOVICH,Ya.G.; ROZIN,K.M.; FIALKOV,A.S.

An instrument for the measurement of specific electric resistance
Zav.lab.21 no.6:742-743 '55. (MLRA 8:9)
(Electric resistance--Measurement)

26543
S/076/61/035/008/006/016
B101/B218

24,7300 also 1413, 1418

AUTHORS: Vigdorovich, V. N., Rozin, K. M., and Krestovnikov, A. N.

TITLE: Study of the rate (intensity) of phase transformations

PERIODICAL: Zhurnal fizicheskoy khimii, v. 35, no. 8, 1961, 1752-1758

TEXT: The term "rate (or intensity) of crystallization" is defined as increase in crystals of the solid phase g referred to the temperature change. Thus, it holds for the intensity $i = -dg/dt$ (1). This relation may be applied to any phase transformation taking place in a temperature interval. The authors start from a phase transformation $\beta \rightarrow \alpha$ in a phase diagram, the heterogeneous domain of which is limited by the lines $L_1(t)$ and $L_2(t)$ (Fig. 1). For the portion of phase α at t" and t' they derive: $g'' = b''d''/a''b''$, and $g' = b'd'/a'b'$. The following fundamental equation is found for the intensity of phase transformations:

$$i = -\frac{c[L_1'(t) - L_1'(t)] + L_2(t)L_1'(t) - L_2'(t)L_1(t)}{[L_2(t) - L_1(t)]^2}, \quad (2).$$

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Study of the rate (intensity) ...

Here, c denotes the concentration of the second component in the melt, $L_1'(t)$ and $L_2'(t)$ are the temperature-differential quotients of the lines that limit the heterogeneous domain. The applicability of Eq. (2) to several special cases is illustrated: a) For a phase diagram with a simple eutectic, it holds: $i = -cL'(t)/L^2(t)$ (3). For a straight liquidus: $L(t) = -kt + b$ (4), and $i = kc/(b - kt)^2$ (5). On the liquidus line along the straight $L(t) = -kt + b$, it holds for the intensity function: $i_L = k/c$ (6), since in this case $c = -kt + b$. Based on these equations, the authors discuss the change of intensity which occurs with a change in temperature of the melt and a change in concentration of its second phase. It follows from Eq. (6) that for $c \to 0$ it holds: $i_L \to \infty$. b) In the case of a concave course of the curve of the phase transformation, $L''(t) > 0$, the "iso-rate line" $\varphi(t)$ is calculated, which touches the line $L(t)$ of the phase equilibrium: $\varphi(t) = L(t)$; $\varphi'(t) = L'(t)$ (7). By substituting Eq. (7) into Eq. (3), and based on $\varphi(t) = -iL^2(t)/L'(t)$, the authors obtain for the minimum intensity on the boundary of the phase equilibrium: $L(t)'' = [L'(t)]^2/L''(t)$ (8). For c = constant, the changes of i are derived

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Study of the rate (intensity) ...

as a function of temperature. c) For a phase diagram that represents the equilibrium of two solutions, the authors write down: $L(t) = \alpha(1 - \beta t)/[\alpha + (1 - \alpha)\beta t]$ (12), where α is a parameter determining position and shape of the curve, and β is a scale factor. If coefficient α_1 corresponds to the curve $L_1(t)$, and coefficient α_2 to the curve $L_2(t)$, then it holds:

$$i = -\beta \frac{c\,[\alpha_1\alpha_2(1-\beta t)^2 - (\beta t)^2] - \alpha_1\alpha_2(1-\beta t)^2}{(\alpha_2-\alpha_1)(\beta t)^2(1-\beta t)^2}. \qquad (13).$$

This function becomes discontinuous for $t = 0$, $t = 1/\beta$, and $\alpha_1 = \alpha_2$. The course of the intensity function is discussed for several values of α_1 and α_2. The analytic method developed is suggested for solving practical tasks in connection with crystallization processes, physico-chemical studies, material cleaning etc. There are 6 figures and 5 references: 4 Soviet-bloc and 1 non-Soviet-bloc.

ASSOCIATION: Institut tsvetnykh metallov im. M. I. Kalinina, Kafedra fizicheskoy khimii (Institute of Nonferrous Metals imeni M. I. Kalinin, Department of Physical Chemistry)

BAKHMUTOV, V.A., kand.tekhn.nauk; UL'YANOV, F.G., kand.tekhn.nauk; ROZIN, M.A., red.; PEVZNER, V.I., tekhn.red.; SOKOLOVA, N.N., tekhn.red.

[Mechanizing the growing of pulse crops]Mekhanizatsiia vozdelyvaniia zernobobovykh kul'tur. Moskva, Sel'khozizdat, 1962. 141 p. (MIRA 16:3)
(Legumes) (Agricultural machinery)

ROZIN, L.A.

40-5-3/20

AUTHOR: ROZIN, L.A. (Leningrad)

TITLE: An Approximative Method for the Integration of the Equations of the Instationary, Laminar Boundary Layer of an Incompressible Fluid (Priblizhennyy metod integrirovaniya uravneniy nestatsionarnogo laminarnogo pogranichnogo sloya v neszhimayemoy zhidkosti).

PERIODICAL: Prikladnaya Mat.i Mekh.,1957,Vol.21,Nr 5,pp.615-623 (USSR)

ABSTRACT: For the solution of the boundary layer equations for instationary, laminar boundary layers in general method of stepwise approximation is applied. Because of the essential difficulties of calculation connected with this method, however, one has repeatedly tried to find other, simpler ways. The author tries to obtain such a simple method by starting from the impulse equations and by applying a certain, one-parameter family of velocity profiles. It is well-known that with such methods one can obtain relatively good results in the consideration of stationary problems. The author starts from the well-known plane equations for the instationary, laminar boundary layer and neglects the volume forces. The initial equation is transformed into the so-called impulse equation

Card 1/2

ROZIN, L.A. (Leningrad)

Approximate method for calculating nonstationary turbulent boundary layers in uncompressible liquids. Prikl.mat. i mekh. 22 no.6:842-847 N-D '58. (MIRA 11:12)
(Boundary layer)

14(10) SOV/98-59-5-13/21

AUTHOR: Rozin, L.A., Engineer

TITLE: Hydrodynamic Water Pressure on a Dam's Sloped Surface During a Seismic Movement

PERIODICAL: Gidrotekhnicheskoye stroitel'stvo, 1959, Nr 5, pp 40-42 (USSR)

ABSTRACT: The article deals with determining additional pressure exerted on a dam's sloped surface by an earthquake. In this connection, the name of Westerhardt and the method of approximation of T. Karman and its numerous formulae are given. In conclusion, the EGDA-method and the Laplace equation are mentioned. There are 3 graphs and 2 American references.

Card 1/1

83321

S/179/60/000/04/026/027
E031/E135

10,4000 (new)

AUTHOR: Rozin, L.A. (Leningrad)

TITLE: The Growth of the Laminar Boundary Layer on an Infinite Disc and a Sphere Rotating about an Axis

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1960, No 4, pp 176-178

TEXT: The disc, which is assumed to have infinite radius, is in a viscous incompressible fluid and begins to rotate in its plane with an angular velocity proportional to t^n (t is the time and n is greater than or equal to zero). Solutions of the boundary layer equations (in cylindrical coordinates r, φ, z) are sought in a form proportional to the product of t^{2n+1} or t^n or $t^{2n+3/2}$ and a function of $\eta = z/2(\nu t)^{1/2}$. This leads to the solution of a system of (ordinary) differential equations of the first approximation for the functions of η. For two of the functions the solution is obtained by quadrature, but for the third a recurrence relation can be derived, and the remaining function is expressed in terms of the functions in the recurrence relation.

Card 1/2

83321

S/179/60/000/04/026/027
E031/E135

The Growth of the Laminar Boundary Layer on an Infinite Disc and a Sphere Rotating about an Axis

The moment of the drag force of a disc of finite radius, ignoring edge effects, is given. The case of an angular velocity proportional to $e^{\tau t}$ (τ greater than zero) is discussed. Returning to the previous problem, it is remarked that the case $n = 0$ has been considered by K.H. Thiriot (Ref 3), S.D. Nigam (Ref 4) and D.Ye. Dolidze (Ref 5). It has also been shown that the functions of η for the velocity components in the case $n = 0$ remain the same for a sphere starting to rotate from rest if the components of velocity in spherical coordinates are written in a particular way (S.O. Nigam, Ref 6). It is remarked that this is also true for $n \neq 0$ and for the case $e^{\tau t}$.
There are 6 references: 2 English, 1 German and 3 Soviet.

SUBMITTED: March 7, 1960

Card 2/2

ROZIN, L.A. (Leningrad)

Differentiation method in the theory of shells. Prikl. mat. i mekh. 25 no.5:921-926 S-O '61. (MIRA 14:10)
(Elastic plates and shells)

ROZIN, L. A.

AID Nr. 986-6 10 June

CALCULATION OF BOUNDARY LAYER BY DECOMPOSITION METHOD (USSR)

Rozin, L. A. IN: Leningrad. Universitet. Vestnik, no. 7: Seriya matematiki, mekhaniki i astronomii, no. 2, 1963, 128-142. S/043/63/007/002/006/008

An approximate method of solving the laminar boundary layer equation, based on the decomposition of the differential operator into two operators and introduction of some function f_0, is presented. The relationship of this method to other approximate calculation procedures is analyzed and discussed. The calculation of the boundary layer using the single-parameter solution is developed, and the results are presented in graphs and tables. Various ways of developing the method are outlined, and some multiparameter solutions are proposed. [ANB]

Card 1/1

GRIMZE, L.B. ;MOYSA, V.O. ;ROZIN, L.A. (Leningrad)

"The principles of factorisation and calculation of arbitrary shells of revolution on electronic computers".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 Jan - 5 Feb 64.

L 44012-66 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWP(k) IJP(c) WW/EM

ACC NR: AP6032106 SOURCE CODE: UR/0424/66/000/002/0063/0070

AUTHOR: Rozin, L. A. (Leningrad)

ORG: none

TITLE: Plan of dividing equations in the theory of shells

SOURCE: Inzhenernyy zhurnal. Mekhanika tverdogo tela, no. 2, 1966, 63-70

TOPIC TAGS: shell theory, differential equation

ABSTRACT: An earlier work contained a suggested method consisting of dividing the operator B of the differential equation $Bu=f$ into B_1+B_2 and dividing the boundary conditions accordingly. The initial equation then becomes two: $B_1u=f_1$, $B_2u=f-f_1$. Resolving B_1 and B_2, the author produces an integral equation relative to the new unknown function f_1. As a result of this, the problem becomes one of finding new unknown functions like f_1 and the solutions of several integral equations. The method is used for construction of a four-layered and continuous rod system of an equivalent shell. Orig. art. has: 2 figures and 4 formulas. [JPRS: 36,712]

SUB CODE: 20, 12 / SUBM DATE: 13Sep65 / ORIG REF: 002

Card 1/1

ACC NR: AT6024066 SOURCE CODE: UR/2944/66/000/003/0034/0050

AUTHOR: Rozin, L. A.; Grimze, L. B.

ORG: none

TITLE: Algorithm for the calculation of rotating shells by the partition method

SOURCE: Leningrad. Universitet. Kafedra vychislitel'noy matematiki i Vychislitel'nyy tsentr. Metody vychisleniy, no. 3, 1966, 34-50

TOPIC TAGS: shell theory, algorithm, boundary value problem

ABSTRACT: A general algorithm adapted for computer use is given for the calculation of forces for the case of axis-symmetric deformation of a rotating shell of variable thickness and having an arbitrary meridian, arbitrary limiting conditions, and an arbitrary load. The case in which the shell may be in a linearly elastic medium with a pliability matrix of nine components is also considered. The method used is that of partitioning the operators of the equilibrium equations of shell theory along their main curvatures. Numerical examples are presented in graphical form to illustrate the use of the algorithm for different numbers of partitions. Orig. art. has: 48 formulas, 1 figure, 5 tables.

SUB CODE: 12,20 / SUBM DATE: 10Nov63/ ORIG REF: 004

Card 1/1

ROZIN, L.A.

Analogy of the Maxwell-Mohr method in the theory of elasticity (two-dimensional problem). Issl. po uprug. i plast. no.3:24-39 '64.

Maxwell-Mohr formulas in the theory of shells. Ibid.:40-51 (MIRA 18:4)

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Boundary deformation conditions in the theory of elasticity.
Izv. AN SSSR Mekh. i mashinostr. no.4:96-101 Jl-Ag '64
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Analogs of Maxwell-Mohr's method in the theory of elasticity (two-dimensional problem). Issl. po uprug. i plast. no.3:24-39 '64.

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ORLOV, A.N., dotsent; ROZIN, L.B.

Characteristics of blood transfusion in patients with burns. Probl. gemat. i perel. krovi 9 no.9:30-32 S '64. (MIRA 18:7)

1. Khirurgicheskaya klinika (Nachal'nik - Prof. T.Ya.Ar'yev) Voyenno-meditsinskoy ordena Lenina akademii imeni S.M.Kirova, Leningrad.

TERENT'YEV, Aleksey Vasil'yevich; LIKHOTA, G.N., retsenzent; ROZIN, L.N., retsenzent; KOSSOVA, O.N., red.; KISINA, Ye.I., tekhn.red.

[Automated and mechanized production lines for herring salting and packaging on ships and in shore plants] Avtomatizirovannye i mekhanizirovannye linii dlia posola i uborki sel'di na sudakh i beregovykh predpriiatiiakh. Moskva, Pishcheprom-izdat, 1963. 106 p. (MIRA 16:6)
(Herring fisheries—Equipment and supplies)

ROZIN, L.F.

Sudden death of a 8 -month-old infant caused by idiopathic myocarditis complicated by heart rupture. Sud.-med. ekspert. 7 no. 2:56 Ap-Je '64. (MIRA 17:7)

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VOYTOV, Pavel Ivanovich, kand. sel'skokhoz. nauk; ROZIN, M., red.; SHKOL'NIKOV, A., red.; KUZNETSOVA, A., tekhn. red.

[Machines and attachments for the placement of liquid fertilizers] Mashiny i prisposobleniia dlia vneseniia zhidkikh udobrenii. Moskva, Mosk. rabochii, 1963. 85 p. (MIRA 16:6)
(Fertilizer spreaders)

REYSLER, Yuriy Veniaminovich; NIKOLAYEV, Yuriy Alekseyevich; SHKOL'NIKOV, A., red.; ROZIN, M., red.; USTINOVA, S., tekhn. red.

[Over-all mechanization of pea harvesting]Kompleksnaia mekhanizatsiia uborki gorokha. Moskva, Mosk. rabochii, 1962. 93 p. (MIRA 15:10)

(Peas--Harvesting)

30(1) SOV/99-59-5-7/9

AUTHORS: Karus, G.V., (Tallin) and Rozin, V.A., Candidate of Technical Sciences

TITLE: From Abroad - Agricultural Melioration Works in Finland

PERIODICAL: Gidrotekhnika i melioratsiya, 1959, Nr 5, pp 52-60 (USSR)

ABSTRACT: The article describes the situation regarding melioration for agricultural purposes in Finland. There are 7 photos and 1 diagram.

ASSOCIATION: SevNIIGiM

Card 1/1

AUTHOR: Rozin, L.A. (Leningrad) SOV/40-22-3-18/21

TITLE: The Development of the Laminar Boundary Layer on a Plate Which is Suddenly put Into Motion (Razvitiye laminarnogo pogranichnogo sloya na plastinke, privedennoy impul'sivno v dvizheniye)

PERIODICAL: Prikladnaya matematika i mekhanika,1958,Vol 22,Nr 3, pp 407 - 412 (USSR)

ABSTRACT: In the present short paper the author considers the non-stationary motion of an incompressible viscous liquid in a boundary layer which originates by the starting of a plate. He assumes that the plate from the state of rest suddenly moves with constant velocity in a direction in parallel with the plate plane. For the calculation the problem is inverted, i.e. a fixed plate is flown around by a medium suddenly set in motion. At first the author shows that the method of step by step approximation often applied for the solution of boundary layer problems must fail in this case, since already the first approximation leads to errors. This is essentially caused by the neglect of the convective terms in the first approximation.

With other methods of approximate calculation of boundary layers it is possible to obtain two domains for the present problem which differ by the character of their stream field. In one region the edge itself has no influence on the instationary motion. On the other hand the flow in the other region corresponds to the well-known solution of Blasius. This kind of approximate calculation, however, has the disadvantage that one velocity component suffers a jump on the transition point of both regions. Therefore another step by step approximation is carried out. Here it is taken into account that the flow represents a potential flow in the first moment of the starting of the flow. For this flow a stream function is set up and introduced into the initial equations. In this way the differential equations for the correction terms can be calculated. Also this approximate calculation leads to the result that the flow field is to be subdivided into two regions which essentially correspond to the regions mentioned above. Only the boundary line has a somewhat changed course. The differences of the different calculation methods are given in two diagrams.

There are 2 figures, and 8 references, 4 of which are Soviet, 3 English, and 1 French.

ROZIN, L.A., Cand Phys-Math Sci— (diss) " Certain problems of the theory of a non-stationary ~~marginal~~ boundary layer." Len, 1958. 11 pp (Min of Higher Education USSR. Len Polytechnic Inst im M.I.Kalinin). 110 copies. Bibliography at end of book. (KL, 20-58, 93)

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Distr: 4E4f/4F1

PRIBLIZHENNYI METOD INTEGRIROVANIIA URAVNENII NESTATSIONARNOGO LAMINARNOGO POGRANICHNOGO SLOIA V NESZHIMAEMOI ZHIDKOSTI. L. A. Rozin. Prikl. Mat. i Mekh., Sept.-Oct., 1957, pp 615-623. In Russian. Development of an approximate method of integration for the equations of a nonstationary laminar boundary layer in an incompressible fluid. The solution is based on the equations of momentum and a certain one-parametric family of velocity profiles. The applications of this method of solution to stationary problems are outlined.

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Approximate method of integrating equations of a nonstationary boundary layer in an incompressible liquid. Prikl. mat. i mekh. 21 no.5:615-623 S-O '57. (MLRA 10:11)
(Approximate computation) (Boundary layer)
(Differential equations, Partial)

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Modeled motions of an incompressible liquid in a nonstationary laminary boundary layer. Prikl.mat. i mekh. 21 no.3:361-367 My-Je '57. (MIRA 10:10)

(Hydrodynamics) (Boundary layer)

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Nekotoryye Sluchai Avtomodel'nykh Dvizhenii Neszhimaemoi Zhidkosti v Neodnorodnom Laminarnom Pogranichnom Sloe. L. A. Rozin. *Prikl. Mat. i Mekh.*, May-June, 1957, pp 181-187. In Russian. Study of the motion of an incompressible fluid in a nonstationary laminar boundary layer, including cases where the solution of boundary-layer equations can be reduced to the integration of ordinary differential equations.

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GEL'MAN, Boris Mikhaylovich, inzhener-mekhanik; LETNEV, B.Ya., redaktor; ROZIN, M.A., redaktor; BALLOD, A.I., tekhnicheskiy redaktor

["Universal" tractors] Traktory "Universal." Moskva, Gos. izd-vo sel'khoz. lit-ry, 1956. 311 p. (MLRA 10:5)
(Tractors)