SKALA, J., inz., CSc.; KASE, M.; MANDL, M., inz., CSc.

Thermodynamic equilibrum in the iron-oxygen-tantalum system.
Hut listy 18 no.11:770-773 N'63.

1. Vyzkumny ustav hutnictvi zeleza, Praha.

SKALA, J.

RIHA, J.; TLUSTA, D.; SKALA, J.

Some comments on the physical & chemical properties of metals in orthopedic surgery. Acta chir. orthop. traum. cech. 24 no.4:274-284 July 57.

1. OUNZ Cesky Brod. chir. oddeleni a Vyzkumny ustav ocelarsky, Praha.
(ORTHOPEDICS, surg.
phys. & chem. properties of metals used & their eff. on tissues (Cz))

KRYSPIN, J.; SKALA, J.; PALECEK, D.

Spreading electrophysiological reaction in normal and anesthetized human skin. Cesk.fysiol. 9 no.3:243-244 My '60.

1. Laborator plasticke chirurgie CSAV, Praha.
(SKIN physiol)
(ANESTHESIA)

KRYSPIN, J.; HARANTOVA, Zdenka; SAFRANKOVA, Bozena; SKALA, J.; RUZICKOVA, Jana

Physical chemical changes in human skin grafts during the first 24 hours after transplantation. Folia biol. 7 no.5:349-352 '61.

1. Laboratory of Plastic Surgery, Czechoslovak Academy of Sciences, Prague.

(SKIN TRANSPLANTATION)

CZECHOSLOVAKIA/Analytical Chemistry - Analysis of Inorganic Substances. E.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 28463

Author : Skala, J.
Inst : -
Title : An Indicator Method for the Detection of Carbon Monoxide

Orig Pub : Protipoz techn, 5, No 9, 165 (1957) (in Czech)

Abstract : A brief description is given of Czech patent number 79691 according to which the air to be analyzed is first purified of CO_2 by passing it through NaOH or soda-lime and is then passed through a catalyst bed (e.g. hopkalit) in which the CO is oxidized to CO_2 and the CO_2 which is formed is detected by means of indicators (e.g., phenol red or methyl red) which are precipitated on silica gel. The instrument used for this purpose is portable and permits the rapid detection of concentrations of 0.2-5 vol% of CO or CO_2 in air.

Card 1/1

ŠKALA, J.

Repairs and adaptations of cold and hot water pipelines without stoppage according to Pavlovskii's method. p. 127.

Vol. 35, no. 4, Apr. 1956
VODA
Praha, Czechoslovakia

Source: East European Accession List. Library of Congress
Vol. 5, No. 8, August 1956

SKALA, J.

Acetylene burners for carbide mine lamps. p. 32. (Rudy, Vol. 5, No. 1, Jan 1957, Praha, Czechoslovakia)

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

KRYSPIN, J.; SKALA, J.; HARANTOVA, Z.; techn. assist. RUZICKOVA, J.

Electrical properties of skin in patients with burns. Acta chir. plast. 5 no.1:43-47 '63.
(BURNS) (SKIN) (ELECTROPHYSIOLOGY)

Z/037/62/000/005-6/042/049
E140/E520

AUTHOR: Skala, Jar.

TITLE: The molecular generator

PERIODICAL: Československý časopis pro fysiku, no.5-6, 1962, 673-685

TEXT: This is a survey of molecular generators or masers with highly stable frequencies. The theory of the quantum oscillator is treated in two parts - the selection of active molecules and the interaction of molecules with the high-frequency field. The development of molecular oscillators tends towards the following aims: maximum absolute and relative stability; the construction of self-contained closed systems, without cooling and continuous pumping; the attainment of lower frequencies by the use of deuterium loaded ammonia; the design of simplified separators; and the utilisation of slowed molecules. There are 14 figures.

ASSOCIATION: Vojenská akademie Ant. Zápotockého, Brno
(Zapotocký Military Academy, Brno)

Card 1/1

Z/042/63/000/002/002/004
E140/E135

AUTHOR: Skála, Jaroslav, Engineer Major, Candidate of Sciences

TITLE: Theory of active ammonia molecule selection in molecular generators

PERIODICAL: Elektrotechnický časopis, no.2, 1963, 74-90

TEXT: The solution is given for the task of focusing active molecules in an inhomogeneous electric field formed by a quadrupole condenser on the assumption that the external electric field is relatively small, and that the quadrupole condenser forms an angle-independent field. Further, the phenomena connected with the interaction of the nitrogen nucleus quadrupole moment with the internal electric field are neglected and the assumption is made of an equal velocity of all molecules and that the electronic, vibrational and rotational quantum states of the molecule are mutually independent. Under these assumptions the basic construction formulas for the active molecules selector are derived in detail, i.e. the selector length

$$l = \frac{p\pi}{\beta} = \frac{p\pi}{\sqrt{(\alpha/m)}} \cdot \frac{a^2 v}{V} = \frac{\pi a^2}{V} v \sqrt{mh\nu_{iv}} \cdot \frac{J(J+1)}{\mu KM} \qquad (1.44)$$

for p = 1

Card 1/2

SKALA, Jiri, inz.

A new design of large caliber shots. Rudy 11 no.4:145-146 Ap '63.

L 17269-63 EWG(s)-2/EPF(c)/EWT(1)/ Z/003/63/000/009/003/003
EWG(k)/BDS/ES(v) AFFTC/APGC Pw-4/Pr-4/Pz-4/Pe-4 BW/DJ

AUTHOR: Skala, Jiri, Engineer

TITLE: New liquid for hydraulic shock absorbers.

PERIODICAL: Kridla Vlasti, no. 9, 1963, 258-259

TEXT: The vibrations of the blades of helicopters are limited either by friction or hydraulic absorbers. Friction absorbers are simple, but their efficiency cannot be regulated and they are subject to influences of climate. Hydraulic absorbers are heavy, complicated, and expensive. Further there are some problems in the incorporation of these absorbers in the head of the rotor as they must be eccentric to the axis of rotation. Czechoslovak Patent No 86356 of Jaroslav Slechta combines the advantages of the 2 types mentioned, while eliminating their disadvantages. The liquid in the absorbers consists of small steel balls mixed with an oil or another suitable lubricant. This fill is not influenced by the weather and cannot be lost by leakages. It has a high internal friction and its capacity can be adjusted by the size of the balls and the properties of the lubricant. The construction of these absorbers is simple and they

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L 17269-63

Z/003/63/000/009/003/003

0

New liquid for hydraulic...

can be manufactured cheaply. Their use in helicopters has a special advantage because they may be adjusted so that they offer no resistance to the movements of blades in the limits of 3 to 4° in the plane of rotation of the rotor at maximum flight velocities. The capacities of the absorber may be regulated by the shape of the chamber and its size as well as by the fill used. The vertical and horizontal sections of the absorber are shown in Fig. 1 of Enclosure 1.

Card 2/3

SKALA, J.

Intravenous fat emulsions. Cas. lek. cesk. 103 no.25:105-110 19 Je'64

1. Chirurgicka klinika lekarske fakulty hygienicke KU [Karlovy university] v Praze.

Skala, J.

SKALA J.

Oddeleni pro studium a lecbu alkoholismu pri psychiatricke klinice v Praze. /Study and treatment of alcoholism in psychiatric clinic in Prague/ Zdravot. rev. 25:3 31 Mar 50 p. 76-7.

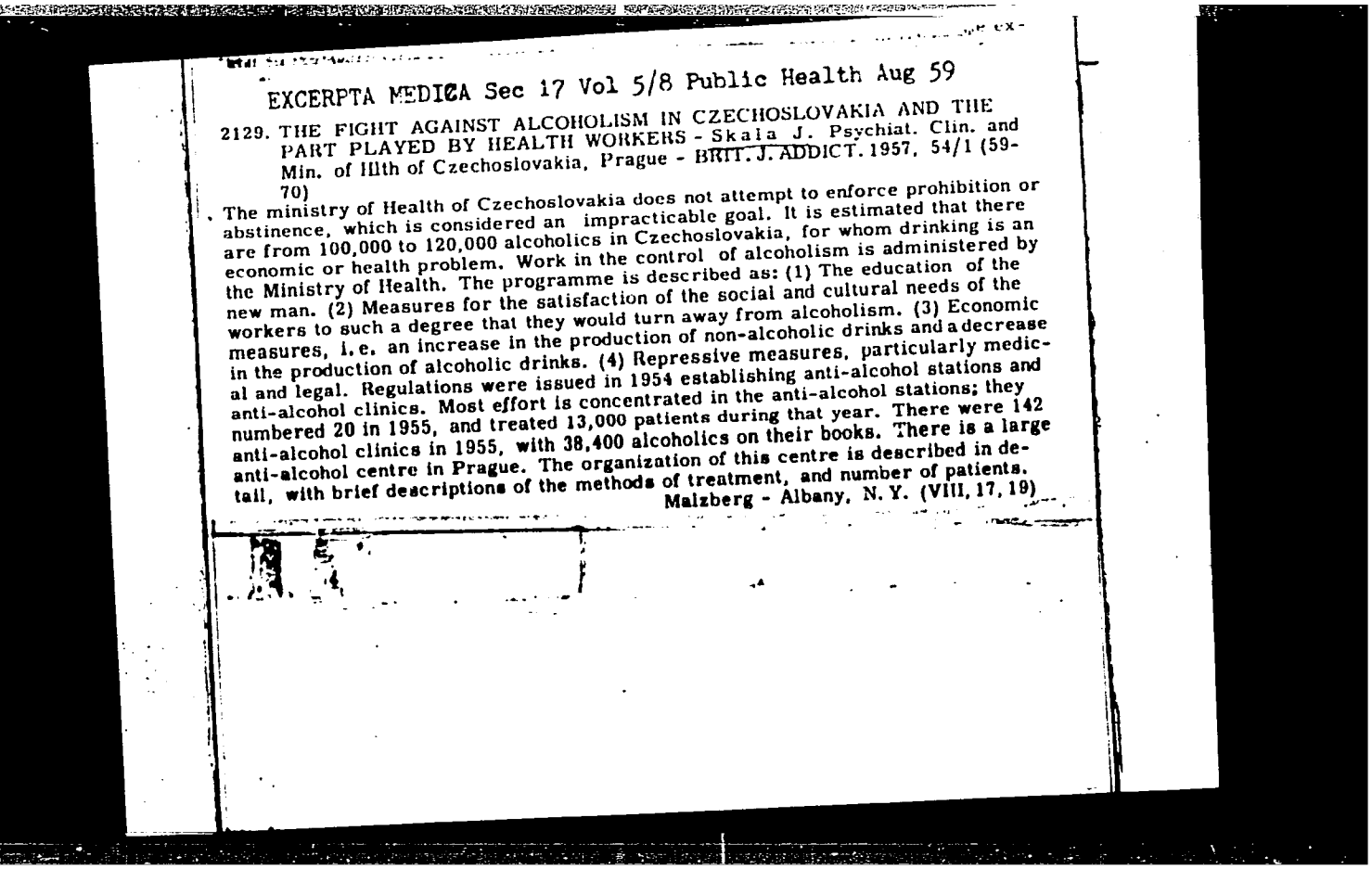
1. Assistant Physician of the Psychiatric Clinic of Charles University, Prague, and Head of the Department for the Study and Treatment of Alcoholism.

CIML 19, 1, July 50

SKALA, Jaroslav, MUDr.; MECIR, Jan, MUDr.; TOMASKOVA, Irena, zdrav. pracovnice.

Experience with anti-alcoholic station in Prague. Prakt. lek., Praha 35 no.18:426-427 20 Sept 55.

1. Z psychiatricke kliniky SFN II v Praze.
(ALCOHOLISM, prevention and control,
in Czech., anti-alcoholic stations)



EXCERPTA MEDICA Sec 17 Vol 5/8 Public Health Aug 59

2129. THE FIGHT AGAINST ALCOHOLISM IN CZECHOSLOVAKIA AND THE PART PLAYED BY HEALTH WORKERS - Skala J. Psychiat. Clin. and Min. of Hlth of Czechoslovakia, Prague - BRIT. J. ADDICT. 1957, 54/1 (59-70)

The ministry of Health of Czechoslovakia does not attempt to enforce prohibition or abstinence, which is considered an impracticable goal. It is estimated that there are from 100,000 to 120,000 alcoholics in Czechoslovakia, for whom drinking is an economic or health problem. Work in the control of alcoholism is administered by the Ministry of Health. The programme is described as: (1) The education of the new man. (2) Measures for the satisfaction of the social and cultural needs of the workers to such a degree that they would turn away from alcoholism. (3) Economic measures, i.e. an increase in the production of non-alcoholic drinks and a decrease in the production of alcoholic drinks. (4) Repressive measures, particularly medical and legal. Regulations were issued in 1954 establishing anti-alcohol stations and anti-alcohol clinics. Most effort is concentrated in the anti-alcohol stations; they numbered 20 in 1955, and treated 13,000 patients during that year. There were 142 anti-alcohol clinics in 1955, with 38,400 alcoholics on their books. There is a large anti-alcohol centre in Prague. The organization of this centre is described in detail, with brief descriptions of the methods of treatment, and number of patients.

Malzberg - Albany, N. Y. (VIII, 17, 19)

VITEK, V.; RYSANEK, K.; VOJTECHOVSKY, M.; SKALA, J.

New findings on the psychotropic activity of alcohol. Activ. nerv. sup. 4 no.2:201-202 '62.

1. Vyzkumny ustav experimentalni terapie, Interni katedra ULD, Ustav pro vyzkum vyzivy lidu, Praha-Krc a Psychiatricka klinika, protialkoholni oddeleni, Praha.

(ALCOHOL ETHYL pharmacol)
(CENTRAL NERVOUS SYSTEM pharmacol)

SKALA, J.; SKALA, I.

Experience with intravenous fat emulsions. Cesk. gastroent. vyz. 19 no.6:359-364 S '65.

1. Chirurgicka klinika lekarske fakulty hygienicke Karlovy University v Praze (prednosta prof. dr. E. Polak, DrSc.) a Ustav pro vyzkum vyzivy lidu v Praze (reditel prof. dr. J. Masek, DrSc.).

CZECHOSLOVAKIA

VOJTECHOVSKY, M.; KRUS,; SKALA, J.; Institute of Pharmacology, Medical Faculty of Hygiene and Psychiatric Clinic, Prague. /Original version not given/.

"Experimental Psychoses Induced by LSD and Benactyzine in Chronic Alcoholics. I. Clinical Phenomenology."

Prague, Activitas Nervosa Superior, Vol 8, No 4, Nov 66, pp 345-346

Abstract: Acute psychotic reactions were investigated on 13 hospitalized adult male alcoholics kept without alcohol for 2-4 weeks. LSD 200 micrograms, benactyzine 40 mg, and a placebo were administered per os; clinical, physiological, psychological, and biochemical characteristics were assessed. Reaction to LSD was different from that to benactyzine. LSD induced delirium with depersonalization, inner restlessnes and limb paresthesia; benactyzine induced trivial delirium with an amnestic syndrome. LSD could be used as a psychedelic drug only in 5 out of the 13; the effect of a strong emotional shock was analogous to the terminal phase of chronic alcohol abuse. No references. Submitted at the 8th Annual Psychopharmacological Meeting at Josenik, 18-22 Jan 66. Article is in English.

1/1

LORENC, J.; JIRAN, B.; SKALA, J.; SEHR, A.; MISAK, J.; CHYBA, J.

On the prevention of postoperative pancreatitis. Rozhl. chir. 43 no.8:533-539 Ag '64.

1. Chirurgicka klinika (prednosta prof. dr. E. Polak, DrSc); rentgenologicke oddeleni (prednosta prof. dr. R. Blaha); Ustav patologicke anatomie (prednosta doc. dr. J. Stolz); lekarske fakulty hygienicke Karlovy University v Praze a Oddeleni klinicke biochemie fakultni nemocnice v Praze 10 (vedouci MUDr. J. Opplt.).

SKALA, J.

Properties and use of graphitized steel. p.47.
(HUTNIK vol. 5, no. 2, Feb. 1955, Praha)

SO: Monthly List of East European Accessions,(EEAL). LC, Vol. 4, No. 11, Nov. 1955, Uncl.

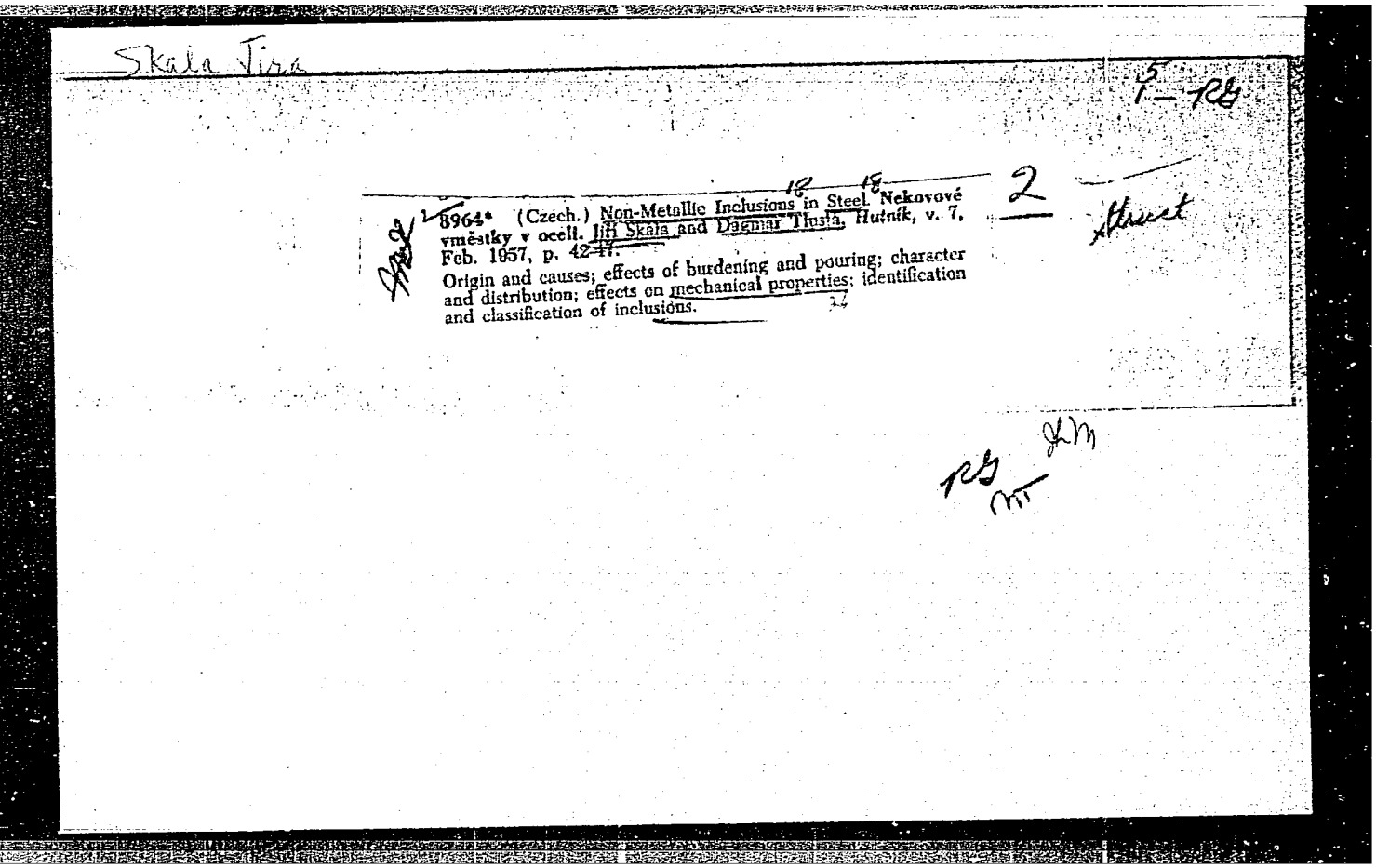
SKALA, J.; TLUSTA, D.

"Steel for roller bearings"; contribution to a discussion. p. 276.

HUTNIK. Vol. 6, no. 9, Sept. 1956

Praha, Czechoslovakia

SOURCE: East European List (EEAL) Library of Congress, Vol. 6, No. 1, January 1957



Skala Jiri

8964* (Czech.) Non-Metallic Inclusions in Steel. Nekovové vměstky v oceli. Jiří Skala and Dagmar Tlustá. Hutník, v. 7, Feb. 1957, p. 42-47.

Origin and causes; effects of burdening and pouring; character and distribution; effects on mechanical properties; identification and classification of inclusions.

SKALA, J.

Use of a vacuum in the steel industry.

p. 290 (HUTNIK) Vol. 7, no. 9, Sept. 1957,
Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 3,
March 1958

Skala, Jiri

18

✓Effect of sulfur concentration on kinetic parameters of iron desulfurization. Jiří Skála and Oleg V. Travin. *Hutnické listy* 12, 1000–8(1957).—The kinetics of Fe desulfurization in broad limits of S concns. and temps. were studied. The initial S content in Fe was 0.001–0.750% in the temp. range 1410–1750°. It was found that the activation energy of the desulfurization process depends considerably on the S content in Fe. With an initial S content in Fe of 0.750%, the value of activation energy is Q = 59,000 cal./mole, with an initial S content of 0.001% it is only Q = 10,000 cal./mole. It was further found that by low S concn. (below 0.001%) the reaction speed depends only a little on temp. It was shown experimentally that the kinetic order of the desulfurization reaction changes for a temp. increase from 1410 to 1750° from 0.9 to 1.3. Finally it was proved experimentally that the desulfurization speed is practically independent on the slag quantity and that it is inversely proportional to the wt. of the metal for a given size of contact surface between slag and metal. 31 references.

Petr Schneider

5

Skala, J.

SLEVARENSTVI
Nr 1, Vol 6, 1958

4

J. Jilha - J. Skála: Immersion Measurement of the Bath Temperature in Steel-Work Furnaces .....

Immersion Measurement of the Bath Temperature in Steel-Work Furnaces

The authors deal with immersion measurements (using thermocouple) of actual melt temperatures in steel-work furnaces and describe in the first place the practical experience gained in the steel foundry of V. I. Lenin Works in Plzeň. On the basis of operational research, the range of suitable casting temperatures for different steel grades was determined. In open-hearth furnaces it was found that it is suitable to determine the temperature before the beginning of the deoxidation in the furnace, and then shortly before the tapping of the melt. In electric arc furnace usually one temperature determination will be sufficient, i. e. in the reduction period.

Skala, J.

HUTNICKE LISTY
Nr 1, Vol 13, 1958

4/

J. Skala - M. Kmoiek - R. Vokac: Influence of Metallurgical Process on the Watt Losses of Transformer Sheets

Influence of Metallurgical Process on the Watt Losses of Transformer Sheets 18

The purpose of this work is the evaluation of the influence of metallurgical factors on the watt losses of transformer sheets. In test melts performed the present process of the production of transformer steel was compared with the production in which following three technological modifications have been performed: Re-ladling, standing for 15 minutes in the ladle and preliminary deoxidizing with 1 kg Al per ton. In addition to the influence of the production method also the influence of position in ingot and further the influence of melting in two shops were examined. A detailed statistic investigation of the influence of metallurgical factors on the watt losses in current commercial melts preceded these tests. This investigation has shown that the silicon contents in the melt has the most important influence. The results of tests performed were evaluated with the aid of the dispersion and the covariance

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HUTNICKE LISTY
Nr 1, Vol 13, 1958

analysis (upon which the influence of silicon contents was considered to be a constant variable). The test melts underwent further also metallographic and chemical analysis.

The lowest values of watt losses were obtained on re-ladling steel and preliminary deoxidizing with 1 kg Al per ton. This result was evidenced by a number of reexamination melts.

From the work performed it follows that upon suitable modification of the steel production method re-ladling and preliminary deoxidation of steel) the watt losses can be decreased of about 0.07 W/kg.

SKALA, J.; KNITLA, M.; VCELAC, R.

Effect of the metallurgic process on the watt losses of transformer sheets.

P. 14. (HUTNICKE LISTY.) (Brno, Czechoslavakia) Vol. 13, No. 1, Jan. 1958

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, May 1958

CZECH/34-59-7-9/22

AUTHORS: Kašík, Ivan, Ing. and Skála, Jiří, Ing.

TITLE: Surface Tension of Liquid Metals and Slags. Part I. (Povrchové napětí tekutých kovů a strusek. I. část)

PERIODICAL: Hutnické Listy, 1959, Nr 7, pp 602-608 (Czechoslovakia)

ABSTRACT: The aim of the work described in this paper was to determine the influence of the contents of oxygen and sulphur on the surface tension of metals of various chemical composition and to measure the surface tensions of various melts, with compositions approaching those of slags and non-metallic mixtures. The authors used a method which is based on the maximum pressure of the bubble of an inert gas which is driven into the liquid metal. A description is given of the instrument and Fig 1 shows a diagrammatic sketch of the apparatus used for measuring the surface tension. The basic equation proposed by Cantor in 1892, Eq (8), p 604, has been modified by the author into a simpler equation, Eq (9), p 605. In discussing the results the authors point out the influence of the temperature of the material, the duration of the measurements, the geometrical dimensions of the capillary, the depth of submersion into the fused

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Surface Tension of Liquid Metals and Slags. Part I.

substance and the speed of formation of bubbles. The accuracy of the method is also evaluated. The technique was verified by measuring the surface tension of slags. The measurements included determination of two absolute values of the surface tension in a given type of slag with differing chemical compositions and the obtained results are compared in Table 2 with those obtained by other authors for slags of similar compositions. The values entered in Table 2 were obtained at 1350°C. Furthermore, the surface tension was determined of several steels with initial compositions of 0.05% C, 0.3 to 0.4% Si, 0.5 to 1.5% Mn. During each heat three to seven measurements were made with various quartz capillaries. The determined surface tension values were between 1130 and 800 dyn/cm. In each of the heats the first result was the highest and it dropped towards the end of the heat. Chemical analysis of the samples taken during each measurement has shown that the Mn content dropped down to 0.01% and the Si content dropped down to

Card 2/3 traces. The measured results and the surface tension

Surface Tension of Liquid Metals and Slags. Part I.

calculated from these are entered in Table 3, p 608. Experiments with Cr-Ni steels, the results of which are entered in the graph, Fig 7, p 607, showed that vanadium and titanium influence the surface tension of low alloy Cr-Ni steels. A further part of this paper, to be published later, will be devoted to the determination of the influence of oxygen and sulphur on the surface tension of pure iron and of iron alloys of various compositions in the liquid state and also to measuring the surface tension of certain melts with chemical compositions approaching those of slags and of non-metallic inclusions. Acknowledgments are made to Ing. M. Mandl and M. Kaše for their assistance and comments during the experiments.
There are 6 figures, 3 tables and 7 references, 4 of which are English and 4 Soviet.

ASSOCIATION: Výzkumný ústav hutnictví železa, Praha
(Ferrous Metallurgy Research Institute, Prague)
SUBMITTED: February 5, 1959

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80779

Z/034/60/000/08/004/030
E073/E335

Deep-drawing Sheet Made of Stabilised Non-ageing Steel

are discussed in considerable detail. On the basis of the experiments, the authors found that the ageing of this type of rimming steel can be eliminated by adding 0.03-0.7% V.. Results of laboratory experiments as well as practical extrusion tests have shown that such V -stabilised rimming steel does not age and has more favourable mechanical properties than equal non-stabilised rimming steel or equal Al-killed steel. Within the limits of the quantities added the V has no influence on the boiling of the steel and therefore the ingots retain a sufficiently thick surface layer of pure metal. The V also has a favourable influence on the character of the crystallisation so that segregation occurs only in the uppermost section of the ingot. It is concluded that vanadium-stabilised rimming steel is suitable particularly for the manufacture of deep-drawing sheets. There are 4 figures, 6 tables and 8 references, of which 5 are English, 1 is German, 1 Soviet and 1 Czech.

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80779

Z/034/60/000/08/004/030
E073/E335

Deep-drawing Sheet Made of Stabilised Non-ageing Steel

ASSOCIATION: Výzkumný ústav hutnictví železa, Praha
(Research Institute for Ferrous Metallurgy, Prague)

SUBMITTED: April 13, 1960

Card 3/3

FRIEDRICH, V., inz.; SKALA, J., inz.

Examining the effect of deoxidation elements on the kinetics of iron desulfurization by means of S^{35}; discussion. Hut listy 16 no.10:740-743 O '61.

SKALA, Jiri, inz.

Separation on dry deviation magnetic separators. Rudy 9 no.11: 392-394 N '61.

(Magnetic separation of ores)

SKALA, Jiri, inz.

Present use of prefabricated reinforced concrete part assembly in building electric ppwer plants and the outlook. Energetika Cz 11 no.8: 369-370, 374 Ag '61.

BUZEK, Z.; MYSLIVEC, Th.; SKALA, J.

The 6th Conference on Physical and Chemical Basis of Steel Production in Moscow. Hut listy 17 no.2:139-142 F '62.

SKALA, J., inz.

A new method of sintering iron ore. Rudy 11 no.1:40 Ja '63.

SKALA, J., inz., C.Sc.; KASE, M.; MANDL, M., inz. C.Sc.

Thermodynamic equilibrium in the system iron-oxygen. Hut listy 17 no.12:841-846 D '62.

1. Vyzkumny ustav hutnictvi zeleza, Praha.

SKALA, Jiri, inz., C.Sc.

A national conference of the Czechoslovak Scientific and Technical Society, Section for Metallurgy and Founding. Hut listy 16 no.6: 443-444 Je '61.

Skala, J.

Reduction of the number of insulation boxes in installing AGY conduits according to Knapp and Bily's method. p. 172. ELEKTROTECHNIK. (Ministerstvo strojirenstvi) Praha. Vol. 11, no. 5, May 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

Skala, J.

Distribution panels of phenoplast. p. 202. ELEKTROTECHNIK. (Ministerstvo strojirenstvi) Praha. Vol. 11, no. 6, June 1956.

Source: EEAL LC Vol. 5, No. 10 Oct. 1956

SKALA, J.

A device for automatic reading of a series of thermocouples or low-voltage other elements. p.20. Sdelovaci Technika. Vol. 5, no. 1, Jan. 1957. Czechoslovakia.)

SO: Monthly List of East European Accession (EEAL) LC. Vol. 6, no. 7, July 1957. Uncl.

SKALA, J.

A multiple or single circuit for automatic telephone call recording. p. 183.
(SDĚLOVACI TECHNIKA, Vol. 5, No. 6, June 1957, Praha, Czechoslovakia)

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

SKALA, J.

A regulator of the input of electric power controlled by frequency oscillations.

P. 527. (ENERGETIKA.) (Praha, Czechoslavakia) Vol. 7, No. 10, Oct. 1957

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, May 1958

SKALA, J.

"Methods and devices to determine defects in measuring transformers."

p. 404 (Strojnoelektrotechnicky Casopis) Vol. 8, no. 5, 1957
Prague, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4, April 1958

SKALA, J.

A device for signalizing the overheating of bearings in electric motors. p.175.
(Elektrotechnik, Vol. 12, No. 5, May 1957, Praha, Czechoslovakia)

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

SKALA, J.

Mercury-arc rectifiers. p.175.
(Elektrotechnik, Vol. 12, No. 5, May 1957, Praha, Czechoslovakia)

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

SKALA, J.

A voltage distributor. p.165.
(Elektrotechnicky Obzor, Vol. 46, No. 3, Mar. 1957, Praha, Czechoslovakia)

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

SKALA, J.

"Synchronization equipment for electric switch gear."

ENERGETIKA, Praha, Czechoslovakia, Vol. 8, no. 8, August 1958

Monthly List of East European Accessions Index (EEAI), Library of Congress, Vol. 8, no. 8, August 1959

Unclassified

22355

Z/003/61/000/003/002/002
A205/A126

178000

AUTHOR: Skala, J., Engineer

TITLE: Parachute with aerodynamic Regulator

PERIODICAL: Křídla vlasti, no. 3, 1961, 19

TEXT: K. Hoštálek of Prague designed a parachute for pilots and paratroopers with an aerodynamic regulator for descent rate, registered as Czechoslovak Patent no. 93 013. The design of the novel parachute is shown in Fig. 1. On the apex of the canopy (1) is the aerodynamic regulator which has the shape of a truncated cone (2) with open, circular end planes. The regulator, made of similar material as the canopy, is fastened with the larger plane of the cone to the vent (3) of the parachute. The periphery of the smaller plane (4) is supported by a solid ring, fastened to the center of which is a control cord (5) which leads to the harness. When the canopy extends, the regulator is pushed out and has the same function as a regular stabilization vent. By pulling the control cord, the regulator is pulled inwards with the smaller opening against the direction of descent (Fig. 2). The air flow is thus changed and an increased over-pressure of the entrapped air mass is created between regulator sides and

Card 1/3

22355

Z/003/61/000/003/002/002
A205/A126

Parachute with aerodynamic regulator

Figure 1:

Schematic diagram of Hoštálek's parachute

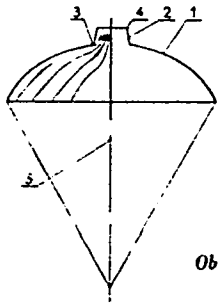


Figure 2:

Schematic diagram of Hoštálek's parachute

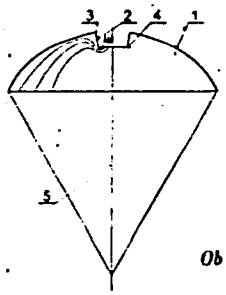
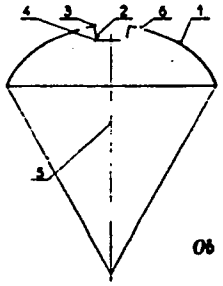


Figure 3:

Schematic diagram of Hoštálek's parachute



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Z/003/61/000/021/001/001
26477 D005/D102

26.1110

AUTHOR: Skála, Jiří, Engineer

TITLE: Coaxial reduction gear for turboprop engines

PERIODICAL: Křídla vlasti, no. 21, 1961, 10-11

TEXT: Professor, Engineer, František Musil of Brno developed a new coaxial reduction gear for turboprop engines, especially suitable for engines of lower output, which was granted Czechoslovak patent no. 96,706. It is based on the conception that a reduction gear need not have the outside diameter smaller than the hub of a variable-pitch propeller behind which the reduction gear is mounted, and further, that the propeller-hub diameter permits the attainment of reduction ratios up to 1:16 already with two pairs of spur wheels. A schematic diagram of the reduction gear is shown in Figure 1. The transmission from the turbine shaft (1) to the propeller (2) is realized by two pairs of gear wheels (3), (4) and (5), (6). The wheels (4) and (5) form the countershaft pair joined by a torsion bar. Two or three such pairs can be arranged parallel on the perimeter of the gear wheels (3) and (6). The countershafts with the wheels (4) and (5) are mounted in antifric-

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D005/D102

Coaxial reduction gear for turboprop engines

tion bearings and housed in a common two-part casing (7), (8) pivoting in bearings (9) and (10). The swivel casing is mounted on the hubs of the fixed casing of the reductor. The torque which is transmitted by the countershaft to the casing (7), (8) is picked up by a toothed rim fitted to the part (8) of the swivel casing and by two to three gear wheels (11) symmetrically arranged on the casing perimeter. As the casing turns, these wheels twist the springs (12) and enable measuring the torque and using this data for engine regulation. Vibrations of the casing are eliminated by a damper. The accessories drive comes from the propeller-shaft wheel (6) at the frontal side of the countershaft casing through an opening in the front part of the casing (8) and is transmitted by spur wheels (13),(14) to the shaft (15). Several such shafts can be fitted. They pass through the openings (16) in the ribbing of the reduction gear casing into the annular casing of the accessories drive (17). A similar derivation of the drive is also possible from the rear side of the countershaft casing. The new reduction gear features the following advanta= ges: The transmission is effected by a minimum of spur wheels which are easy to produce with the required accuracy and easily mounted. (b) The reduction gear is coaxial, short, of high efficiency, produces the required reduction ratios and advantageously utilizes the space behind the propeller hub. (c) The mounting of

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Coaxial reduction gear for turboprop engines D005/D102

countershafts in a common swiveling casing makes possible their accurate centering with respect to the turbine pinion and the gear wheel of the propeller shaft. (d) The mounting of countershafts in a swiveling casing makes it possible to measure the torque either by the deformation of springs or hydraulically. (e) One of the components is affected by the deformations of the fixed casing of the reduction gear or by centrifugal forces. (f) The entire mechanism is dynamically balanced, enables easy assembly, and provides a soft meshing through use of a flexible coupling between the countershaft wheels (4) and (5) by means of a torsion bar. The mechanism is also insensitive to production inaccuracies of the gear wheels since they are offset by mutual swiveling of the wheels (4) and (5). (g) The design also enables the drive of the accessories by accurate spur wheels with minimum requirements on production and assembly. This design can easily be adapted for larger reduction ratios by doubling the pairs of wheels in the swiveling casing. The new design can also be combined with other conventional reduction gear types. It is simple, suitable for quantity production with the available tooling, functionally accurate, and suitable for high peripheral speeds. There are 2 figures. (Photograph by D. Čuda). [Abstracter's note: Essentially complete translation].

Card 3/4

SKALA, J., inz.

Small searchlight signalling device. Elektrotechnik 17 no.6: 173 Je '62.

SKALA, J., inz.

Increasing the bending strength of high voltage oil cables.
Elektrotechnik 17 no.7:201-202 Jl '62.

SKALA, J., ing.

Bushing for transformers. Elektrotechnik 18 no.6:169 Je '63.

SKALA, J.

Flexible lead-in cable. Elektrotechnik 18 no. 12:363-364 D '63.

SKALA, J.

Interaction of the ultrahigh frequency field with molecules.
El tech cas 15 no.1:47-55 '64.

SKALA, J.

Protection of contact pins of electric socket plugs from an unintentional finger contact. Elektrotechnik 19 no.8: 233-234 Ag '64.

SKALA, Jaroslav, inz., C.Sc.; NESPUREK, Stanislav, inz.

Czechoslovak molecular generator. Slaboproudy obzor 23 no.6: 349-351 Je '62.

1. Vojenska akademie Antonina Zapotockeho, Brno.

L 26340-65 EWT(d)/EEO-2/EEC-4/EED-2 Z/2510/62/000/004/0071/0075
ACCESSION NR: AT4042073

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AUTHOR: Skala, Jaroslav (Engineer major, Engineer, Candidate of sciences)

TITLE: Optimum method for detecting periodic signals in Gaussian noise

SOURCE: Brunn. Vojenske akademie. Sbornik. Rada B, no. 4, 1962, 71-75

TOPIC TAGS: periodic signal detection, Gaussian noise, optimal receiver

ABSTRACT: The article investigates the theoretical basis for the design of an optimal radio signal receiver. The problem of signal detection is as follows: Let us assume that the observer is following a voltage which is changing in time and with regard to which it is necessary to decide in the course of a certain time interval whether the source of the voltage is a signal or a signal plus noise. The problem then is what method must be used to be able to make this decision, and what kind of a receiver must be available to use this method. Regardless of what optimal method from the published literature is used, the receiver would have to be such that the output voltage is equal to the reliability function of the input voltage in the observation interval. The optimal observer simply chooses the operating level and draws the conclusion that the signal at the receiver input

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originates from the signal plus noise only when this level exceeds the output voltage of the corresponding reliability function of the receiver. It is shown that, on the assumption that a useful periodic signal is chosen that does not fluctuate in amplitude or in phase below a noise level with a Gaussian probability distribution with the aid of a linear system, this system must effect the mutual correlation of the signal [s(t)] and of the signal plus noise [x(t)], i.e., perform the operation

$$\int_0^T x(t)s(t)\,dt$$

in order to be optimal. The reliability function l(x) tells us how many times greater is the probability that the choice of x belongs to a mixture of signal and noise (SN) than the probability that the choice of x belongs only to noise. The calculation of the reliability function is made first for the so-called noise signal and then for the precisely known signal. The reliability function is the relation of $f_{SN}(x)$ to $f_N(x)$. If the signal is precisely known, then the probability for such a signal is 1, and the probability for any other of the possible signals not included in it is zero. It is concluded that mutual correlation of signals and signal plus noise is the operation which, in principle, makes possible

L 26340-65
ACCESSION NR: AT4042073

the design of an optimal receiver. Orig. art. has: 9 formulas.

ASSOCIATION: none

SUBMITTED: 29May62 ENCL: 00 SUB CODE: EC

NO REF SOV: 000 OTHER: 008

Card 3/3

SKALA, Karel, inz.

Viscosity measurement. Automatizace 5 no.10:286-287 O '62.

FOFCV, Viktor, inz.; SKALA, Karel, dr.

The heavy-liquid dressing of magnesite in Kosice plant. Rudy 10 no. 4: 111-115. Ap '62

1. Ustav pro vyzkum rud, Praha.

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Use of computers in chemical industries. Automatizace 5 no.3:81 Mr '62.

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Thermal inertia of thermocouples. Automatizace 5 no.7:203-204 Jl '62.

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Tensometric pressure feelers. Automatizace 5 no.12:348 D '62.

SKALA, Karel, inz.

Possibilities for pneumatic devices. Automatizace 12 no.5:230
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Graphical determination of the reciprocal of a complex number.
Automatizace 6 no.1:22 Ja '63.

SKALA, Karel, inz.

Measurement of high gas temperatures. Automatizace 6 no.11:291 N '63.

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Experimental identification of systems. Automatizace 6 no.4:81-86 Ap '63.

1. Ustav teorie informace a automatizace, Ceskoslovenska akademie ved.

POPOV, Viktor, inz.; SKALA, Karel, dr.

Pelletization of magnesite flue dust from rotary furnaces. Rudy 11 no.8:256-258 Ag '63.

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Measurement of fast changing temeperatures of electroconductive bodies by thermocouples. Automatizace 7 no. 6:166 Je '64.

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P. 269. (STAVBA.) (Bratislava, Czechoslovakia) Vol. 4, No. 9, Sept. 1957

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GORGOL, Vaclav, inz.; SKALA, Ladislav, inz.

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1. Stavby silnic a zeleznic, Prague (for Gorgol).
2. Konstruktiva, Prague (for Skala).

SURNAME, Given Names

Country: Czechoslovakia

Academic Degrees: [not given]

Affiliation: Institute of Work Hygiene and Occupational Diseases and Professorial Chair of Inorganic Chemistry of Charles University (Institut fuer Arbeitshygiene und Berufskrankheiten und Lehrstuhl fuer anorganische Chemie der Karls-Universitaet), Prague

Source: Leipzig, Zeitschrift fuer Anorganische und Allgemeine Chemie, Vol 312, No 1-2, October 1961, pp 26-31

Data: "On the Preparation and Properties of Complex Argentates(III)."

Authors:
JENSOVSKY, Lubor
SKALA, Martin

Skala, M.

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p. 145 ELEKTROTECHNIK. (Ministerstvo strojirenstvi) Praha.
Vol. 11, no. 5, May 1956.

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Technological development of the casting of torsion bar girders. Slevarenstvi 11 no.10:425-426 O '63.

1. Tatra, n.p., Koprivnice.

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SKALA, Maxmilian

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SKALA, Maxmilan

Designing of high-tension transformers from the viewpoint of reliability and economy of operation. El tech obzor 50 no.11: 609-615 N '61.

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Regulating single-phase transformers for feeding the 25kV, 50 Hz electric locomotives. Elektrotechnik 18 no.4:97-100 Ap '63.

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Impulse voltage of high voltage and very high voltage transformers. Energetika Cz 15 no.2:65-69 F '65.

1. Ceskomoravska-Kolben-Danek National Enterprise, Prague.

SKALA, Milous, inz.; SEIDEL, Jaromir, inz.

Southern switching yard in Prague. Zel dop tech 12 no.8:213-214 '64.

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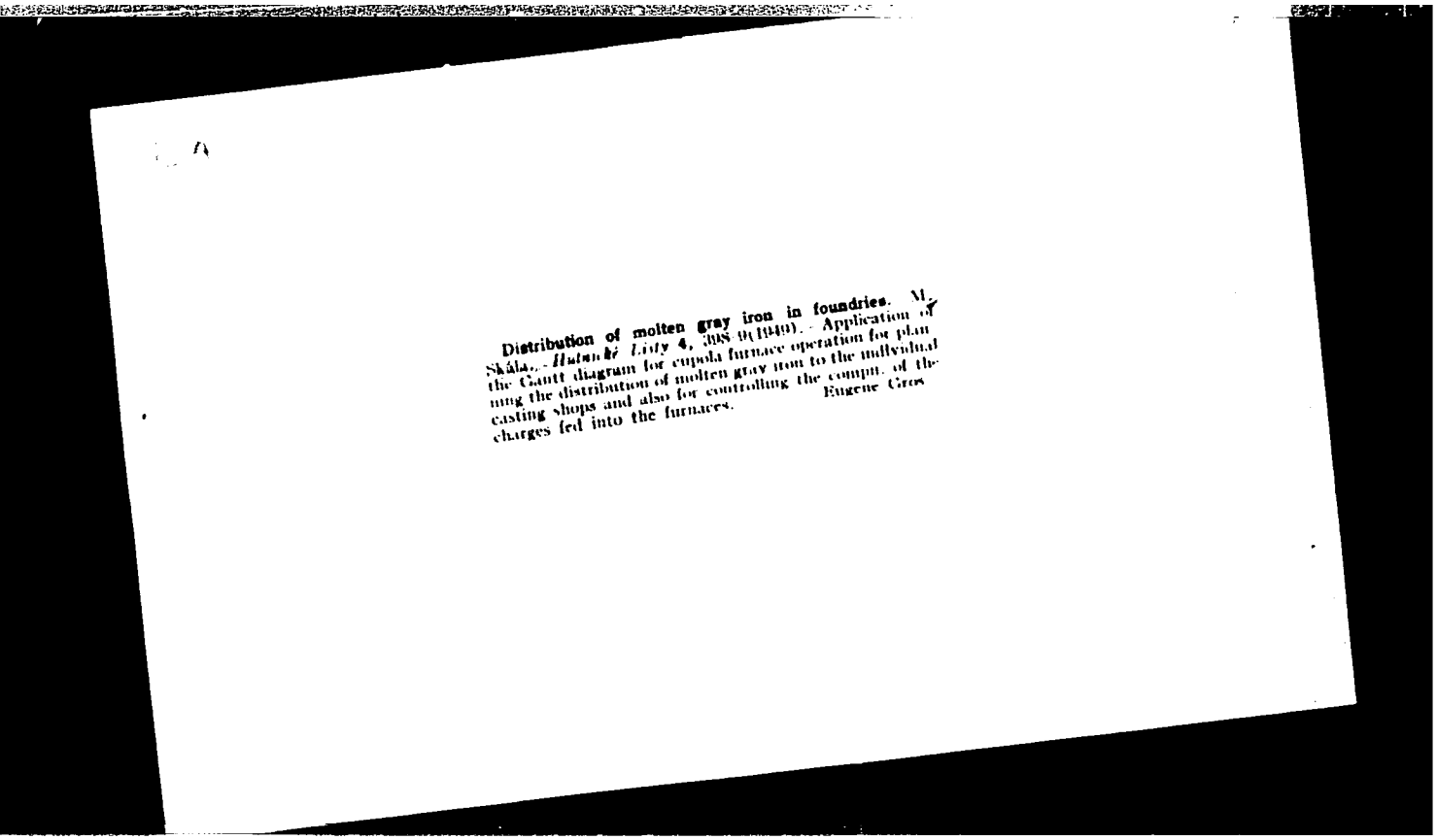
MATYASOVA, J.; SKALKA, M.; Institute of Biophysics, Czechoslovak Academy of Sciences (Biofysikalni ustav CSAV), Brno.

"Changes in the Sensitivity of the Desoxyribonucleoprotein Complex After Irradiation."

Prague, Ceskoslovenska Fysiologie, Vol 14, No 5, Oct 1965; p 386.

Abstract: There was a straight dose:effect relationship in the radiation-induced decrease in the free desoxyribonucleic acid following irradiation in the rat spleens. 3 Czech references. Paper presented at the Scientific Meeting of the Biophysics Section of the Czechoslovak Biology Association at the Czechoslovak Academy of Sciences, in joint meeting with the Biophysical Institute of the Czechoslovak Academy of Sciences in Brno, 23 Jun 65.



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L 8824* (Czech.) Tilt Pouring of Steel Castings. Reversní odlévání ocelových odlitků. Miroslav Skala and Zdenek Kosnovsky. *Slévárenství*, v. 5, Jan. 1957, p. 2-4.

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MIROSLAV SKALA

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DEMETR, Imrich, Dr., odb. asistent; SKALA, Robert, Dr., odb. asistent

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1. Interma klinika LFUK v Kosiciach, prednosta docent Dr. Frantisek Pos.
(SYPHILIS, case report
gastric (Cz))
(STOMACH, dis.
syphilis (Cz))