

MIROSHNICHENKO, A.

"Technological classification of black coal of Bulgaria."

p.13 (Minno Delo, Vol. 12, no. 3, May/June 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

MIROSHNICHENKO, A.

"Raw material basis and technological peculiarities in the process of coking coal mixtures in Bulgaria."

p.6 (Minno Delo, Vol. 12, no. 5, Sept./Oct. 1957, Sofia, Bulgaria)

Monthly Index of East European Accessions (EEAI) LC, Vol. 7, No. 8, August 1958

GUSEVA, A.A., kand. tekhn. nauk dots.; TROSHINA, V., studentka; SHELKOVNIKOVA,  
M., studentka; MIROSHNICHENKO, A., studentka; BYEDVA, N., studentka

Comparative characteristics of the processes of welting and sewing  
the welt on an automatic single-process flat full-fashioned hose  
machine. Izv. vys. ucheb. zav.; tekhn. leg. prom. no.4:124-137  
'59. (MIRA 13:2)

1. Moskovskiy tekstil'nyy institut. Rekomendovana kafedroy  
tekhnologii trikotazha.  
(Hosiery) (Knitting machines)

MIROSHNICHENKO, A.

Organization of the maintenance and repair by units and sections  
in White Russian automotive transportation units. Avt.transp. 43  
no.5:26-27 My '65. (MIRA 18:6)

1. Nauchno-issledovatel'skaya laboratoriya avtotransporta  
Ministerstva avtomobil'nogo transporta BSSR.

IYANDA, M.N.; MIROSHNICHENKO, A.A.

Flow lines for the polishing and sorting of porcelain products.  
Stek. i ker. 19 no.3:41-43 Mr '62. (MIRA 15:3)  
(Ceramics) (Conveying machinery)

LEKONTSEV, Yu.A.; MIFOSHNIKHENKO, A.A.; PASHKIN, V.I.

Using high-sulfur mazut in blast furnace melting. Metallurg  
10 no.8:7-8 Ag 164.

1. Chusovskoy metallurgicheskoy zavod.

MIROSHNICHENKO, A.A.; LEKONTSEV, Yu.A.; PASHKEYEV, G.G.

Characteristics of the performance of a blast furnace with the  
use of masut. Metallurg 10 no.5:8-10 My '65. (MIRA 18:6)

1. Chusovskoy metallurgicheskiy zavod.

MIROSHNICHENKO, A.B.; Prinizhala uchastiye SOLOVTSOVA, K.M.,  
kand. med. nauk; RECHMEDIN, I.O., kand. geogr. nauk, nauchnyy  
red.; SOLODKIY, D.I., red.; GURVICH, A.G., tekhn. red.

[Dnieper; guidebook]Dnepr; putevoditel'. Kiev, Kievskoe obl.  
knizhno-gazetnoe izd-vo, 1962. 332 p. (MIRA 16:3)  
(Dnieper Valley--Guidebooks)



CHERDANTSEV, G.N.; BASHLAVINA, G.N.; MARUSOV, A.Ya.; MERKULOV, V.A.; FILIPPOV, Yu.V.; LARIN, D.A.; DENZIN, P.V.; KOMKOV, A.M.; KARAVAYEVA, Z.F.; MIROSHNICHENKO, A.F.; KOLDAEV, P.K.; SKVORTSOV, P.A.; PAVLOV, V.V.

Discussion of K.A.Salishchev's report. Brief report of speeches of G.N. Cherdantsev, G.N.Bashlavina A.IA, Marusov, V.A.Merkulov, IU.V.Filippov, D.A.Larin, P.V.Denzin, A.M.Komkov, Z.F.Karavaeva, A.F.Miroshnichenko, P.K.Koldaev, P.A.Skvortsov, V.V.Pavlov. Vop.geog. no.34:14-34 '54.  
(Cartography) (MLRA 7:12)

MIROSHNICHENKO, A.F.

Cartographic basis and methods of using cartographic materials for  
geographical field research. Vest. Mosk. un. Ser. biol., pochv.,  
geol., geog. 12 no.1:237-242 '57. (MIRA 10:11)

1. Kafedra kartografii i geodezii Moskovskogo gosudarstvennogo uni-  
versiteta.  
(Cartography) (Agriculture--Maps)

MIROSHNICHENKO, A.F.

Maps representing natural conditions of the collective farms  
territory. Vost. Mosk. un. Ser. Biol. nauk, geol., map. 19  
no. 1:181-182 '59. (MIRA 1147)

1. Kafedra kartografii i geologii.  
(Agriculture--Maps)

LISITUGA, V., Inzh., MIROSHNICHENKO, A.G., Inzh., NEMCHENKO, D.V., Inzh.,  
KIPPER, I.K. Inzh.

Obtain g high-strength cast iron by smelting in cupola furnaces  
with a mixture of medium-anthracite and coke. Mashinostroenie  
No. 24, 1977, My. 10, 1977. (MIRA) 18:6

MIROSHNICHENKO, A.G., inzh.; NEMCHENKO, G.V., inzh.; KLIMENT'YEV, I.D., inzh.

Charge level indicator for cupola-furnace stack. Mashinostroenie  
no.4:72 JI-Ag '65. (MIRA 18:8)

MIROSHNICHENKO, A. G.

✓ Apparatus for modifying iron in the forehearth. A. G. Miroshnichenko, D. A. Lur'e, and L. I. Levontin. U.S. S.R. 105,783, May 25, 1957. The amt. of modifier fed into the forehearth by a metering device is controlled by the level of the melt. M. Hosh

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for  
MCT

MIROSHNICHENKO, A.G.

Mechanized shop for pig-iron casting. Biul.tekh.-ekon.inform.Gos.nauch.-  
issl.inst.nauch.1 tekh.inform. 17 no.1:37-40 '64. (MIRA 17:2)

MIROSHNICHENKO, A.G.

Economical charge for high-strength cast iron. lit. proizv.  
no.6:36 Je '64. (MIRA 1P:5)



СРЕДСТВА, И.В.; ИСТОЧНИКИ, А.И. ИСТОЧНИКИ, И.В. И.В. И.В.

Trakt. i selkhozmasht. p. 1:4-4. A. 1:5. (M) 1:4:4

1. Tsentra izobrazheniya i razvitiya zhenskogo podpredaniya  
ing. komiteta. (M) 1:4:4. (M) 1:4:4. (M) 1:4:4.

17(2)

SCV/127-50-11-18/50

AUTHOR: . Miroslavichenko, A. I., Major of the Medical Corps

TITLE: About the Atypical Course of Epidemic Parotitis

PERIODICAL: Voenno-meditsinskiy zhurnal, 1955, No. 11, p. 70 (USSR)

ABSTRACT: In 1955, in a garrison hospital, in 4.5% of cases epidemic parotitis took an atypical course. The disease became apparent only by acute orchitis. There was no receding or simultaneous affection of other glands. Typical epidemic conditions (patients with epidemic parotitis while no infectious disease was observed) confirmed the ~~viral~~ <sup>viral</sup> nature of the disease. The disease began suddenly and in acute form. Temperature increased up to 39 to 40. E.S.R. reached 20 mm/hr. The course of the disease was favorable. After 5 to 7 days, orchitis came to an end with critical defervescence, simultaneously general phenomena of intoxication disappeared and full recovery began.

Card 1/2

SOV/177-18-11-38/50

About the Atypical Course of Epidemic Orchitis

There were no residual phenomena observed.  
In case an acute orchitis is suspected to be contagious, prophylactic and healing measures have to be taken at once.

Card 2/2

Miroshnichenko, A.K.

68-5-4/14

AUTHORS: Lipkin, D.S., Kapel'zon, I.G., and Miroshnichenko, A.K.  
TITLE: From experience in replacing anchoring columns on coke ovens in the Magnitogorsk Metallurgical Combine. (Opyt zameny ankernykh kolonn na koksovykh Tsekhakh Magnitogorskogo metallurgicheskogo kombinata).

PERIODICAL: "Koks i Khimiya" (Coke and Chemistry), 1957, No.5, pp.19 - 24 (U.S.S.R.)

ABSTRACT: Procedure adopted in the Magnitogorsk Combine for replacing buck staves and reinforcing frames from the coke side on two batteries is described in some detail and illustrated with diagrams. There are 7 figures.

ASSOCIATION: Teplotekhstantiya and Magnitogorsk Metallurgical Combine.

AVAILABLE:

Card 1/1

MIROSHNICHENKO, A.K.

Reconstruction of fire brick (chamotte) coke ovens. Koks i khim.  
no.2:24-25 '63. (MIRA 16:2)

1. Uglekoksokhimremont.  
(Donets Province—Coke ovens)

L 3179-66 ETC(m) WW

ACCESSION NR: AP5015353

UR/0286/65/000/009/0098/0099  
681.14

AUTHOR: <sup>44.55</sup> Chekalov, D. N.; <sup>44.55</sup> Mulyar, L. G.; <sup>44.55</sup> Krasikov, V. I.; <sup>44.55</sup> Miroshnichenko, A. K.;  
<sup>44.55</sup> Smirnov, N. Ye.; <sup>44.55</sup> Kheyfets, A. I.; <sup>44.55</sup> Smirnov, K. F.; <sup>44.55</sup> Obukhov, Yu. A.; <sup>44.55</sup> Vorontsov, A. M.;  
<sup>44.55</sup> D'yakov, G. M.; <sup>44.55</sup> Dubro, G. B.; <sup>44.55</sup> Alipov, A. N.

TITLE: Electronic instrument for measuring velocity, distance traversed, and time.  
Class 42, No. 170776

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 9, 1965, 98-99

TOPIC TAGS: tellurometer, radio rangefinder, geodetic instrument

ABSTRACT: An Author Certificate, issued for a device which measures velocity, distance traversed, and time, combines a high-precision tellurometer, a phase recorder equipped with a unit for converting sinusoidal signals to pulsed signals, and a unit for measuring phase differences. Readings are made visually. The circuit connections of the device, consisting of a series of computer-type modules, are described in detail.

ASSOCIATION: none

[SP]

Card 1/2

L 3179-66

ACCESSION NR: AP5015353

SUBMITTED: 04Mar63

ENCL: 00

SUB CODE: ES, EC

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4025

PC

Card 2/2

117 AND 118 SERIES  
140 AND 141 SERIES

**MIROSHNICHENKO, R.M.** PROPERTIES AND PROPERTIES INDEX

BC B-T-2

Influence of cooking conditions on yield and quality of the products. I. D. S. Donozov, A. M. Miroshnichenko, and V. N. Chasnikov. II, III. D. S. Donozov, A. M. Miroshnichenko, S. E. Suvorov, and V. N. Chasnikov (Koks i Chim., 1957, No. 2, 39-44; No. 3, 25-32; No. 4-6, 68-64).—I. Optimum yields of tar and  $C_2H_4$  are obtained when the temp. of the gaseous products in the unoccupied space of the oven is maintained at 600-750°.

II. The yield of gas and  $C_2H_4$ , since, and of tar falls, as the  $H_2O$  content of the coal rises from 3 to 4%; this advantage is more than offset by a decline of 12% in the productivity of the ovens.

III. The size of the grains of coal should be  $\propto$  its cooking properties. R. T.

450-11A METALLURGICAL LITERATURE CLASSIFICATION

450-11A METALLURGICAL LITERATURE CLASSIFICATION

450-11A METALLURGICAL LITERATURE CLASSIFICATION

450-11A METALLURGICAL LITERATURE CLASSIFICATION



MIROSHNICHENKO A M)

VODNEV, G.G.; SHEPKOV, A.K.; DIDENKO, V.Ye.; FILIPPOV, B.S.; TSAREV, M.N.;  
ZASHVARA, V.G.; LITVINENKO, M.S.; MEDVEDEV, K.P.; MOLODTSOV, I.G.;  
LGALOV, K.I.; RUBIN, P.G.; SAPOZHNIKOV, L.M.; TYUTYUNNIKOV, G.N.;  
DMITRIYEV, M.M.; LEYTES, V.A.; LERNER, B.Z.; MEDVEDEV, S.M.; REVIYAKIN,  
A.A.; TAYCHER, M.M.; TSOGLIN, M.E.; DVORIN, S.S.; RAK, A.I.; OBUKHOV-  
SKIY, Ya.M.; KOTKIN, A.M.; ARONOV, S.G.; VOLOSHIN, A.I.; VIROZUB, Ye.V.;  
SHVARTS, S.A.; GINSBURG, Ya.Ye.; KOLYANDR, L.Ya.; BELETSKAYA, A.F.;  
KUSHNEREVICH, N.R.; BRODOVICH, A.I.; NOSALEVICH, I.M.; SHTROMBERG, B.I.;  
MIROSHNICHENKO, A.M.; KOPELIOVICH, V.M.; TOPORKOV, V.Ya.; AFONIN, K.B.;  
GOFMAN, M.V.; SEMENENKO, D.P.; IVANOV, Ye.B.; PEYSAKHZON, I.B.;  
KULAKOV, N.K.; IZRAELIT, E.M.; KVASHA, A.S.; KAPTAN, S.I.; CHERMNYKH,  
M.S.; SHAPIRO, A.I.; KHALABUZAR', G.S.; SEKT, P.Ye.; GABAY, L.I.;  
SMUL'SON, A.S.

Boris Iosifovich Kustov, arbitrary. Koks 1 khim. no 2-64 '55. (MLRA 9:3)  
(Kustov, Boris Iosifovich, 1910-1955)

POLAND / Chemical Technology. Processing of Naturally Deposited Solid Fuels. H

Abs Jour: Ref Zhur-Khimiya, No 22, 1958, 75185.

Author : Miroshnichenko, A. M.

Inst : Not given.

Title : Theoretical Concepts for Charging Coals and the Process of Coke Formation.

Orig Pub: Koks, smola, gaz., 1957, 2, No 6, 240-243.

Abstract: Modern hypothetical concepts on the composition and the structure of coals are presented as well as their thermal decomposition in the process of coking and its chemistry. Emphasis is made on the role of polycondensation in coke formation, the role of radicals formed as a result of the thermal decomposition of organic matter of coal and the role of the gluing and cementing processes on the formation of coke lumps.

Card 1/1

68-8-3/23

AUTHOR: Miroshnichenko, A. M., Semchenko, S. Ye., and Sapozhnikov, Ya. Yu.

TITLE: Coking of Stamped Charges. (K kakovaniye trambovannykh shikht)

PERIODICAL: Koks i Khimiya, 1967, No. 3, pp. 10-12 (USSR)

ABSTRACT: Results obtained in 1961-1962 on coking stamped charges from experimental and works blends are given. Properties of coals and the composition of blends used are given in tables 1 and 2, respectively. Coking conditions and properties of coke produced are shown in table 3. It was found that stamped charging of blends containing low rank coals improves the quality of the coke produced. There are 3 tables and 2 references, both of which are Slavic.

Card 1/1

ASSOCIATION: UKhIN

AVAILABLE: Library of Congress

11/11/71

AUTHORS: Ukrainians, A.M., Ukrainian Technical School  
S. I. G. (Ukrainian Technical School)  
TITLES: Resources of Coal Coals for the Southern Part  
(Ughl'nyy. Size of the coal)

ABSTRACT: The development of coal resources in the Southern part of the USSR, in particular in the Dnieper region, is discussed. The authors analyze the geological and technical conditions of coal deposits in the Dnieper region. It is noted that the coal resources in this region are significant and that the coal is of high quality. The authors also discuss the problems of coal production and transportation in the Dnieper region. The authors conclude that the coal resources in the Southern part of the USSR are large and that the coal is of high quality. The authors also discuss the problems of coal production and transportation in the Dnieper region.

ASSOCIATION: UKRAINIA  
AVAILABILITY: Ukrainian Technical School  
Date: / /

AUTHOR:

Miroslav M. M., Institute of Technical Sciences

TITLE:

The Properties of Materials in the Interactions of the Chemical and Physical Processes (Osobnye svoystva vspromozhnykh protsessov khimicheskoy i fizicheskoy prirody)

PERIODICAL:

Standartizatsiya, 1968, No. 11, 1-10, 11R

ABSTRACT:

The properties of substances in a wide range of conditions of a real mixture are varying according to the properties of the component parts. The main property depends on the conditions of the process of metamorphism, petrographic conditions, etc., and on technological factors such as degree of polymerization, etc. The main property is defined as the main property of a substance; to the to the 3. Chemical property is defined as the main property of a substance, which is burning at temperatures of 100 to 200°C. The main-

Card 1/2

The Principles of Metallurgy for the Determination of the Coking and Coking Ability of Coal.

The... clearly different... lumps of... for... also... ties of... This... method... There are... English.

ASSOCIATION:

Ukrainskij Nauchno-Issledovatskij Institut Khimicheskij Khimicheskij Institut

5(1)

PHASE I BOOK EXPLOITATION

SOV/2127

Koksokhimicheskoye proizvodstvo; sbornik statey (By-Product Coking Industry; Collection of Articles) Moscow, Metallurgizdat, 1959. 240 p. 2,500 copies printed.

Ed.: B. S. Filippov; Ed. of Publishing House: A. A. Revyakin; Tech. Ed.: P. G. Islent'yeva

**PURPOSE:** The book is intended for engineers and technicians in the by-product coking industry and in scientific research institutes. The book may also be used by students in secondary and higher technical schools.

**COVERAGE:** The articles in this collection on the by-product coking industry appeared originally either in the periodical Koks i khimiya (Coke and Chemistry) or in other publications during 1955-1958. The book discusses the development of raw-material reserves for coking, technology of the manufacture of coke, quality of coke and further enlargement of the number of chemical coking products obtained. Some articles are devoted to a new procedure for preparing and beneficiating coals, new methods for coking, and to the mechanization and automation of industrial processes. References accompany individual articles.

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307/2127

By-Product Coking Industry (Cont.)

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Shelkov, A. K. [Gosudarstvennyy nauchno-tekhnicheskiy komitet Soveta Ministrov SSSR - State Scientific Technical Committee of the Council of Ministers of the USSR]. Development of the By-Product Coking Industry in the USSR

Miroshnichenko, A. M., and B. I. Shtromberg. [UKhIN]. Coal Base for the Coking Industry in the South 24

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Gryaznov, N. S., I. M. Lazovskiy, and M. G. Fel'dbrin. [VUKhIN] The Basic Principle for Preparation of Coals for Coking by Crushing

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By-Product Coking Industry (Cont.)

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- Didenko, V. Ye. [Gosplan SSSR]. Constancy of the Quality Indices of  
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Technical Sciences, UKhIN]. Improvement of the Heating and Technological  
Regimes of Coke Ovens 156
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- Lerner, R. Z. [Gosplan RSFSR]. Partial Mechanization and Automation in  
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By-Product Coking Industry (Cont.)

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Kashchenko, D. S. [Metallurgizdat], and S. A. Sazonov [Gosplan RSFSR] 197  
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Metallurgical Combine]. Methods of Increasing the 60-80 mm Fraction of  
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Litvinenko, M. S., and I. M. Nosalevich [UKhIN]. Prospects of the 227  
Development of Processing Chemical Obtained in the By-Product Coking  
Industry in the USSR. During 1959-1965

Nosalevich, I. M. [UKhIN]. Progress in Developing a Larger Number of 234  
Primary Products in the Processing of Coal Tar

AVAILABLE: Library of Congress

Card 4/4

TM/mg  
10-30-59

SCV/68-59-5-1/25

**AUTHORS:** Miroshnichenko, A.M., and Shtromberg, B.I.

**TITLE:** An Investigation of the Donets Coals using Methods Adopted in the International Classification of Coals (Issledovaniye donetskikh ugley metodami, prinyatymi v mezhdunarodnoy klassifikatsii)

**PERIODICAL:** Koks i khimiya, 1959, Nr 5, pp 5-10 (USSR)

**ABSTRACT:** An investigation of the typical coals from the Donets Basin using methods adopted for the international classification of coals and the comparison of the results obtained with indices obtained using the plastic method of L.M. Sapozhnikov, is described. A comparison of the Roga number and thickness of the plastic layer for the typical Donets coal is shown in Table 1 and Fig 1; the relationship between the classification parameters of the Donets coals according to GOST 8180-56 and the parameters of the international classification in Table 2; the relationship between the maximum expansion and the thickness of the plastic layer in Fig 2; the distribution of Donets coals according to types of the international classification in Table 3; and the distribution of Donets coals on

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SOV/60-5-5-3/25

An Investigation of the Donets Coals using Methods Adopted in the International Classification of Coals

the diagram: thickness of plastic layer - volatile matter content in Fig 3. On the basis of the results obtained the following conclusions are drawn. Swelling index, due to the subjectiveness of its evaluation is not recommended for characterising the caking ability of the Donets coals. The Roga method can be utilised mainly as an additional parameter for differentiating Donets lean non-caking coals from lean weakly-caking coals. The method does not characterise technological properties of all well caking coals. The division of coals into 4 groups, adopted in the international classification, is insufficient for characterising the caking ability of a large number of coals. In respect of Donets coals, 1-2 additional groups are necessary. The deficiency of the dilatometric method consists in that it is insufficient for the division into subgroups of coals which are evaluated by this method not by the maximum expansion but only by the maximum contraction of specimens. Subjective evaluation of the results obtained by the Grey King method presents its main

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SOV/68-59-5-3/25

An Investigation of the Donets Coals using Methods Adopted in the International Classification of Coals

deficiency. The coals and anthracites investigated can be divided according to the international classification into 23 types (out of 61 types in the classification) and 10 groups (out of 11). The plastometric index - thickness of the plastic layer can be recommended as a parameter of the coking ability of coals for the international classification.

Card 3/3

There are 3 tables and 3 figures.

ASSOCIATION: UKhIN

MIROSHNICHENKO, A.M., SHTRONBERG, B.I., GARBAR, A.K., MOISEYEVA, Kh. M.,  
STRUYEV, M.I., SAVKOVA, V.P., CHUGUNOVA, A. Ye.

Technological properties of lower carboniferous coals in the  
Western Donets Basin. Koks i khim. no.3:3-8 '60. (MIRA 13:6)

1. Trest "Ukruglegeologiya" (for Struyev, Savkova, Chugunova).
  2. Ukrainskiy uglekhimicheskiy institut (for Miroshnichenko,  
Shtronberg, Garbar, Moiseyeva).
- (Donets Basin--Coal)

MIROSHNICHENKO, A.M.; SHTROMBERG, B.I.; DAVIDOVICH, A.Z.; KAPLUN, A.I.;  
MATSIEVICH, L.F.; POTASHNIKOVA, M.M.; KUL'MAN, R.K.;  
GERLANETS, L.M.

Differentiation of leaned out weakly caking coals and lean  
noncaking coals of the Donets Basin. Koks i khim. no.5:9-10  
(MIRA 13:7)  
'60.

1. Ukrainskiy uglekhimicheskiy institut (for Miroshnichenko,  
Shtromberg, Davidovich, Kaplun, Matsiyevich). 2. Stalinskiy  
koksokhimicheskiy zavod (for Potashnikova, Kul'man, Gerlanets).  
(Coal--Classification)

Shukler, E. D., Shukler, E. D., Shukler, E. D.,  
Shukler, E. D., Shukler, E. D., Shukler, E. D.,  
Shukler, E. D., Shukler, E. D., Shukler, E. D.,  
Shukler, E. D., Shukler, E. D., Shukler, E. D.,

Magnesite bricks for the use of regenerators in  
North Furnaces

REF ID: A6: Ogneupory, 1960, No. 1, pp. 197-201

TEXT: A. S. Frenkel' found out that the cause underlying the  
cracking of magnesite bricks hitherto used in gas generator checkerworks  
was the taking place in the volume of iron oxides contained in the  
bricks, particularly felt in an increased magnesioferrite content and  
at temperatures over 800° (Fig. 1). Magnesite has a higher heat conduction coefficient  
and a higher heat capacity (Fig. 3) than fire-clay and Dinas clay.  
Frenkel', K. M. Shukler of the Ukrainskiy Institut Ogneuporov (Ukrainian  
Institute of Refractories) tested magnesite bricks in regenerators in  
checkerworks. Bricks 380 x 150 x 75 mm large were produced by the

Card 1-3



... for Checkerworks of  
...th Furnaces

...  
...

UNIIC (Test Plant UNIIC). Table 1 shows the characteristics of the products before their utilization, and table 2 after utilization. If they are used in the unburned state, in the checkerworks, the checkerworks showed good stability, and no important differences were observed between burned and unburned products. With a view to conducting experimental tests, a set of 120 tons of burned and unburned magnesite bricks 140 x 150 x 65 mm large was produced under the supervision of the "K. Marx" at the Panteleymonovskiy zavod im. K. Marksa (Panteleymonovskiy zavod im. K. Marx) in accordance with the standards of the USSR. The bricks were produced in compliance with specifications laid down by the "K. Marx". The usual magnesite powder, the grain size of which is 0.075 mm, was used for the purpose. Table 4 describes the raw materials used by volume of brick clays, and table 5 shows the properties of the experimental sets. After 345 melts in the gas regenerator of the open-hearth furnace, both unburned and burned magnesite bricks were in good condition (Figs. 4 and 5). Table 6 shows the indices of performance with magnesite and fire-clay checkerworks. Table 7 shows the chemical composition of the bricks after their use, as well as the

Magnesite Bricks for Checkerworks of  
Regenerators in Open-hearth Furnaces

5,137,200  
B0113001

results of the petrographic analyses conducted by M. Ye. Drizhenko. It was stated in conclusion that metallurgical magnesite powder products with low water contents do not loosen up in gas regenerator checkerworks of open-hearth furnaces and exhibit high stability. Also checkerworks of burned magnesite bricks in gas regenerators of 370-ton furnaces, for which the experimental technique was used, exhibited high stability. There are 6 figures, including 1 Soviet reference.

Card 3/3

SHTROMBERG, B.I.; MIROSHNICHENKO, A.M.; MOYSEYEVA, Kh.M.; KRIVOKON', Yu.G.;  
BRUK, A.S.; VOLKOVA, Z.A.; GEYD, G.P.; OBUKHOVSKIY, Ya.M.

Investigation of the coals of the Lvov-Volyn' Basin. Koks i khim.  
no.1:12-17 '61. (MIRA 14:1)

1. Ukrainskiy uglekhimicheskiy institut (for Shtromberg, Mirosh-  
nichenko, Moyseyeva, Krivokon'). 2. Dnepropetrovskiy metallur-  
gicheskiy institut (for Bruk, Volkova, Geyd, Obukhovskiy).  
(Lvov-Volyn' Basin--Coal)

MIROSHNICHENKO, Anisim Maksimovich; ARONOV, G.S., red.; LEKHT,  
I.A., red.izd-va; KUROVINA, N.A., tekhn.red.

[Scientific principles of coal classification for coking  
purposes] Nauchnye osnovy klassifikatsii uglei dlia kok-  
sovania. Moskva, Metallurgizdat, 1963. 109 p.  
(MIRA 17:2)

MIROSHNICHENKO, A.M.; SHTROMBEG, B.I.; KRIVOKON', Yu.G.; SHINKAREVA, T.V.;  
DRUY, G.N.; DVUZHIL'NAYA, N.M.; GUTMAN, L.M.; KUL'MAN, R.K.;  
KOVALEVSKAYA, K.M.

Coking of a charge containing 40% gas coals and blast-furnace  
smelting with coke obtained by this method. Koks i khim. no.2:20-24  
'63. (MI A 16:2)

1. Ukrainskiy uglekhimicheskiy institut (for Miroshnichenko, Shtromberg,  
Krivokon', Shinkareva, Druy). 2. Donetskii nauchno-issledovatel'skiy  
ugol'nyy institut (for Dvuzhil'naya). 3. Donetskii koksokhimicheskiy  
zavod (for Gutman, Kul'man, Kovalevskaya).  
(Coke) (Metallurgical furnaces)

ZASHKVARA, V.G.; VOLOSHIN, A.I.; MIROSHNICHENKO, A.M.

Tasks for the improvement of the quality of blast-furnace gas,  
facing the coke and coal chemicals plants in the Ukraine. Koks i  
khim. no.11:35-41 '63. (MIRA 16:14)

1. Ukrainskiy uglekhimicheskiy institut.

......KOSHCHENKO, A.M., kand. tekhn. nauk; FANCHENKO, S.I., doktor tekhn. nauk; SPYCHALINSKI, B.I., kand. tekhn. nauk; PAVLOV, V.D., kand. tekhn. nauk; BALDANOV, P.A., inzh.; ...S., doktor tekhn. nauk; ZASEKVARA, V.G., doktor tekhn. nauk; LAZOVSKIY, I.M., kand. tekhn. nauk; MAKHICHEV, A.T., inzh.; FEL'DMAN, M.G., kand. tekhn. nauk; SARU, B.A., inzh.; BARAT, B.M., inzh.; VUZIYY, G.F., kand. tekhn. nauk; MIRHAL'NIK, A.I., inzh.; TCFOVKO, V.Ya., kand. tekhn. nauk; FLORINSKIY, I.V., inzh.; KHAYET, A.N., inzh.; SHELKOV, A.K., inzh., red.; AUGUST, S.G., doktor tekhn. nauk, red.; LEUSHAZHENSKIY, P.I., inzh., red.

[Manual for coke chemists in six volumes] Spravochnik koksokhemika v shesti tomakh. Moskva, Izd-vo "Metallurgiya." Vol. 1.  
[Source of raw materials and preparation of coal for coking] Sylevaia baza i podgotovka uzlei k koksovaniyu. 1964. 400 s.  
(IRA 17:4)

MIROSHNICHENKO, A.N.; VINOKUR, S.B.; ANTONOV, G.I.; MINKOVICH, B.D.;  
MOLCHANOVA, M.M.; PAYNERMAN, B.A.; KHIL'KO, M.M.

Magnesite brick for the checkerwork of open-hearth furnace  
regenerator. Ogneupory 25 no.5:197-207 '60. (MIRA 14:5)  
(Firebrick) (Open-hearth furnaces)



PETROV, A.P., doktor tekhn. nauk, prof.; TULUPOV, L.P., kand. tekhn. nauk; KRYUKOV, N.D., kand. tekhn.nauk; GUNDOBIN, V.N., inzh.; VASIL'YEV, G.S., kand. tekhn. nauk; GRISHIN, M.S., kand. tekhn. nauk; MOROZCVA, K.N., inzh.; ROZE, V.A., inzh.; LEVSHIN, G.L., inzh.; BERNGARD, K.A., doktor tekhn. nauk, prof.; BIKCHENTAY, M.A., inzh.; B'YANOV, V.A., inzh.; ILOVAYSKIY, N.D., inzh.; MUKHAMEDOV, G.A., kand. tekhn.nauk; MIRC SHNICHENKO, A.P., inzh.; ANDRIANOV, V.P., inzh.; BUTS, V.D., inzh.; KAZIMOV, A.A., inzh.; KIREYEV, O.P., inzh.; DYUFUR, S.L., kand. tekhn. nauk; USTINSKIY, A.A., kand. tekhn. nauk; MIKHAYLOV, S.M., inzh.; NESTEROV, Ye.P., kand. tekhn. nauk, retsenzent; LIVSHITS, V.N., inzh., retsenzent; PREDE, V.Yu., inzh., red.; VOROTNIKOVA, L.F., tekhn. red.

[Control of transportation processes using electronic digital computers] Upravlenie perevozochnym protsessom s primeneniem elektronnykh tsifrovyykh vychislitel'nykh mashin. Pod obshchei red. A.P.Petrova. Moskva, Transzheldorizdat, 1963. 207 p.

(MIRA 16:8)

1. Chien-korrespondent AN SSSR (for Petrov).  
(Railroads--Management) (Electronic digital computers)

1. W. D. WYLLIE, JR., MEMORANDUM FOR THE DIRECTOR,

2. DATE: 1/10/53.

3. MEMORANDUM FOR THE DIRECTOR,

7. MEMORANDUM FOR THE DIRECTOR, DEPARTMENT OF STATE, FROM THE DIRECTOR, NATIONAL SECURITY AGENCY.

9. Monthly List of Russian Accessions, Library of Congress. \_\_\_\_\_ 1953. Unclassified.

**MIROSHNICHENKO, A.Z.**

Zooplankton of newly built ponds of the forest steppe and steppe  
regions of the Ukrainian S.S.R. Trudy Inst.gidrobiol.AN URSS  
no.32:67-99 '55. (MLBA 9:9)  
(Ukraine--Zooplankton) (Fish ponds)

MIROSHNICHENKO, A.Z.

Fecundity of the fresh-water mollusk *Viviparus viviparus* L.  
[with summary in English]. Zool. zhur. 37 no.11:1635-1644 B '58.  
(MIRA 11:12)

1. Institut gidrobiologii AN USSR (Kiyev).  
(Dnieper River--Snails)

KOTIK, I., inzh.; MIROSHNICHENKO, B., inzh.

Expansion of inland water transportation in the Ukrainian S.S.R.  
Rech.transp. 19 no.8:11-12 Ag '60. (MIRA 14:3)  
(Ukraine--Inland water transportation)

MIROSHNICHENKO, B.A., inzh.

Introducing industrial methods for electric wiring. Svetotekhnika  
4 no.12:26-27 D '58. (MIRA 11:12)

1. Novosibproyekt.  
(Electric wiring)

ACCESSION NR: AT4018284

S/2905/63/000/96-/0019/0027

AUTHOR: Kozhevnikov, S.N.; Prazdnikov, A.V.; Miroshnichenko, B.I.

TITLE: Electronic simulation of dynamic processes in hydraulic mechanisms

SOURCE: AN SSSR. Institut mashinovedeniya. Teoriya mashin i mekhanizmov (Theory of machines and mechanisms), no. 96-97, 1963, 19-27

TOPIC TAGS: electronic model, simulation, electronic simulation, hydraulic mechanism, hydraulic prime mover, prime mover, hydraulic model

ABSTRACT: Hydraulic prime movers, in addition to electrical and pneumatic ones, are presently beginning to be used more and more in the metallurgical industry. Equations for the transient processes in hydraulic systems were therefore investigated on an electronic model, by the Institut chernoy metallurgii AN Ukr SSR (Institute of Non-Ferrous Metallurgy AN Ukr SSR). The system included an automatic manipulator and a blooming mill later. These two parts are very complicated, because it is very difficult to automate them using electronic drives. An electronic device was therefore designed to simulate the equations for the hydraulic system. (See Fig. 1 of the Enclosure.) This device produced oscillograms showing the operation of the system. Although the data obtained for the entire investigation

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ACCESSION NR: AT4018284

were incomplete, they showed the wide possibilities of electronic models for solving similar problems. Orig. art. has: 5 figures and 10 equations.

ASSOCIATION: Institut mashinovedeniya AN SSSR (Institute of Mechanical Engineering AN SSSR)

SUBMITTED: 00

DATE ACQ: 19Mar64

ENCL: 01

SUB CODE: EC

NO REF SOV: 000

OTHER: 000

Card 2/3



ACCESSION NR: AT4018284

ENCLOSURE: 01

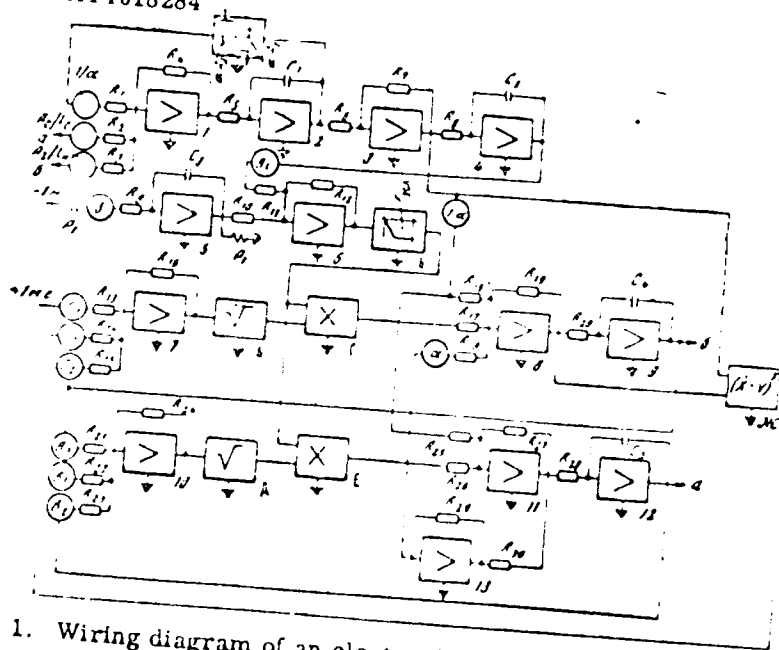


Fig. 1. Wiring diagram of an electronic model of a hydraulic drive.

CARD 3/3

SOROKIN, G.M.; OLEYNIK, I.P., doktor ekon. nauk; RYABUSHKIN, T.V., doktor ekon. nauk; DUDINSKIY, I.V., kand. ekon. nauk, MIROSHNICHENKO, B.P., kand. ekon.nauk; SERGEYEV, V.P., kand. ekon. nauk; TARNOVSKIY, O.I., kand. ekon. nauk; STGROZHEV, V.I., kand. ist. nauk; KONOVALOV, Ye.A., kand. ekon. nauk; GERTSOVICH, G.B., kand. ekon. nauk; POPOV, K.I., kand. ekon. nauk, red., ZEVIN, L.Z., red.; NIKOLAYEV, D.N., red.; PAK, G.V., red., GERASIMOVA, Ye.S., tekhn. red.

[The building of communism in the U.S.S.R. and cooperation among the socialist countries] Stroitel'stvo kommunizma v SSSR i sotrudnichestvo sotsialisticheskikh stran. Pod obshchei red. G M.Sorokina. Moskva, Ekonomizdat, 1962. 334 p. (MIRA 16:2)

1. Akademiya nauk SSSR. Institut ekonomiki mirovoy sotsialisticheskoy sistemy. 2. Chlen-korrespondent Akademii nauk SSSR (for Sorokin).

(Communist countries--Foreign economic relations)

MIROSHNICHENKO, B.P.; BOMBLEVSKIY, Z. [Bomblewski, Z.], (Pol'skaya narodnaya Respublika); GZHI BOVSKIY, Z. [Grzybowski, Z.], (Pol'skaya narodnaya Respublika); SHCHEGEL'NYAK, V. [Shchehel'niak, V.], (Pol'skaya Narodnaya Respublika); TOMAN, I. (Chekhoslovatskaya SSR); ENGERT, M. (Germanskaya Demokraticheskaya Respublika); PIFLOV, K. (Germanskaya Demokraticheskaya Respublika); BOYTEL', B. LOZE, E. (Germanskaya Demokraticheskaya Respublika); LAZAR, L. [Boitel, B.], (Germanskaya Demokraticheskaya Respublika); NIKIFOROV, V., (Narodnaya Respublika Bolgariy); GERTSOVICH, G.B., red.; STUPOVA, A.D., red.; NIKOLAYEV, D.N., red.; PAK, G.V., red.; GERASIMOVA, Ye.S., tekhn. red.

[Planning in European socialist countries] Planirovanie v evropeiskikh stranakh sotsializma. Moskva, Ekonomizdat, 1962. 270 p. (MIKA 15:6)

1. Akademiya nauk SSSR. Institut ekonomiki mirovoy sotsialisticheskoy sistemy. (Europe, Eastern--Economic policy)

- MIROSHENICHENKO, B.P., otv. red. Prinsipialni uchastiye: STUPNOV, A.D., red.;  
GERTSOVICH, G.B., red.; YEVSTIGNEYEV, R.N., red.; NIKOLAYEV, D.N.,  
red.; PONOMAREVA, A.A., tekhn. red.

[Improving the forms of industrial management in the European  
people's democracies] Sovershenstvovanie form upravleniia pro-  
myshlennost'iu v evropeiskikh stranakh narodnoi demokratii. Mo-  
skva, Izd-vo ekon. lit-ry, 1961. 236 p. (MIRA 14:10)

1. Akademiya nauk SSSR. Institut ekonomiki mirovoy sotsialisticheskoy sistemy.

(Europe, Eastern--Industrial organization)

MIROSHNICHENKO, B.

Russia - Industries

Kinds of goods and quality of output are the most important problems of the State plan. Plan.khoz. no. 3, '52.

Monthly List of Russian Accessions, Library of Congress, September 1952. Unclassified.

MICROFILM EDITION, 1980.

Please refer to the original document for the 7 page(s) of the original document, 1953.

SP: Microfilm Edition of Russian Appeal, 1953, 7 pages, 1953.

MIROSHNICHENKO, B.

Coordination of the economic plans of socialist countries.  
Vop. ekon. no.3:31-43 Mr '60. (MIRA 13:2)  
(International economic relations)

MIROSHNICHENKO, B.

Several problems of planning the national economy at the  
present stage. Vop. ekon. no.11:28-41 N '60. (MIRA 13:11)  
(Russia--Economic policy)



MIROSHNICHENKO, B.

Improve the national economic planning in the U.S.S.R. to meet new  
tasks. Vop. ekon. no.1:3-18 Ja '62. (MIRA 15:1)  
(Russia--Economic policy)

MIROSHNICHENKO, B.; SONIN, M.

"Planning the national economy of the U.S.S.R.; problems of theory and organization" by G.M.Sorokin. Reviewed by B. Miroshnichenko, M.Sonin. Vop. ekon. no.8:116-119 Ag '62.  
(Russia--Economic policy) (Sorokin, G.M.)

MIROSHNICHENKO, B.

New stage in the economic cooperation of socialist countries.  
Vop. ekon. no.12:25-37 D '62. (MIRA 16:1)

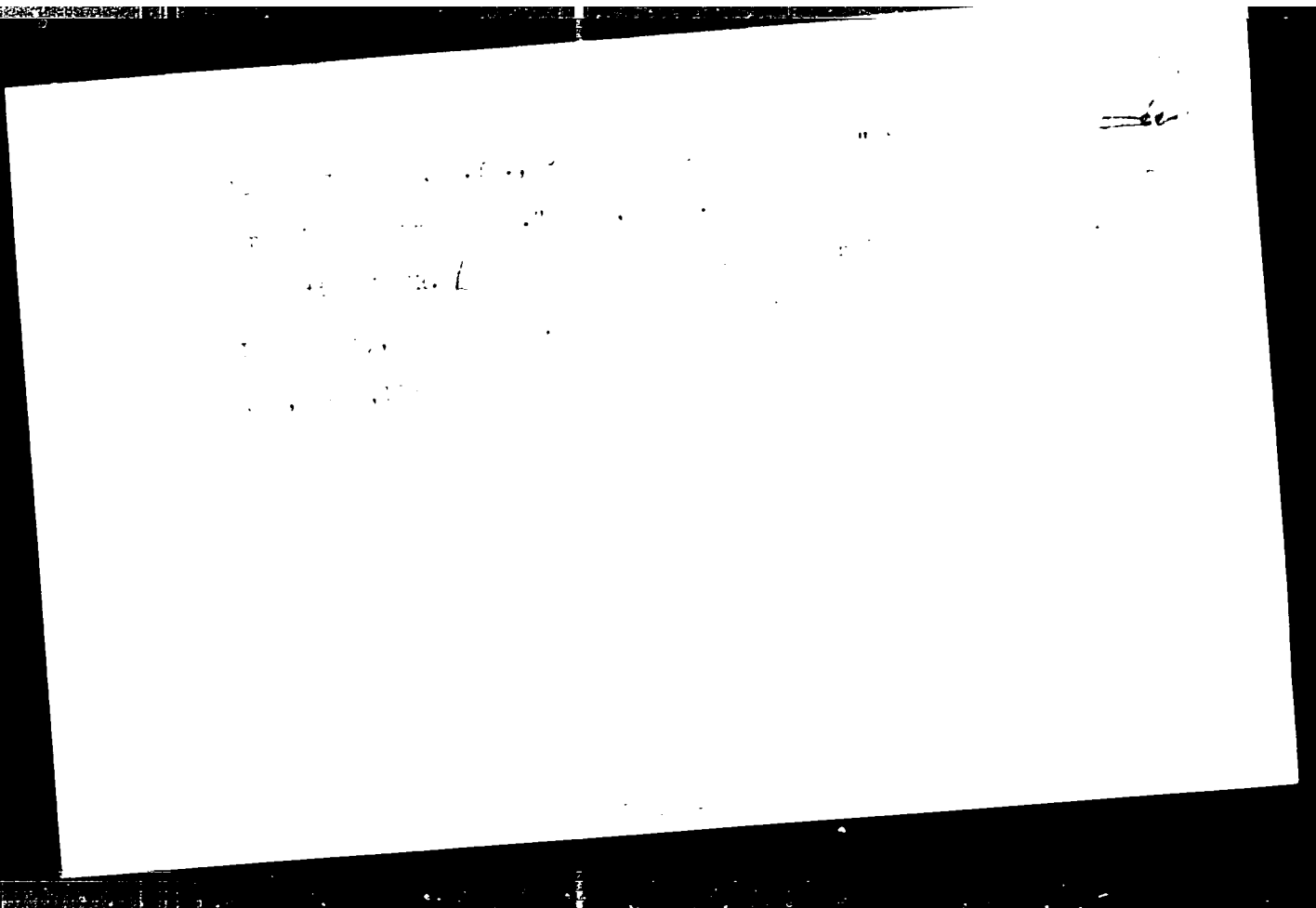
(Mutual Economic Assistance Council)  
(Europe, Eastern—Economic policy)

MIROSHNICHENKO, B.

Current problems of economic cooperation among the members of the  
Mutual Economic Assistance Council. Vop. ekon. no. 9:10-28 '63  
'63. (MIRA 1:9)  
(Mutual Economic Assistance Council)

MIROSHNICHENKO, B.Ya., inzh.; SUKHOV, I.V., inzh., red.; FREGER, D.P.,  
tekhn.red.

[New instruments and devices for marking and modeling in the  
machinery industry] Novye instrumenty i prispособleniia dlia  
mashinostroitel'noi razmetki-shablony. Leningrad, 1955. 13 p.  
(Leningradskii dom nauchno-tekhnicheskoi propagandy. Informatsionno-  
tekhnicheskii listok, no.55(743)) (MIRA 10:12)  
(Measuring instruments)



MIROSHNICHENKO, Boris Yakovlevich; BUKHVALOVA, K.I., inzh., red.vypuska;  
KUZNETSOV, N.S., inzh., red.; GAVRILOV, P.G., kand.tekhn.nauk, red.;  
SOMOVA, T.M., inzh., red.; MARCHENKOV, I.A., tekhn.red.

[Layout precision in the manufacture of machinery] Tochnost'  
mashinostroitel'noi razmetki. Sverdlovsk, Gos.nauchno-tekhn.izd-vo  
mashinostroit.lit-ry, 1960. 86 p. (Biblioteka razmetchika, no.4).  
(MIRA 14:1)

(Laying out--Machine-shop practice)

DESHEVOY, G.M.; MIROSHNICHENKO, B.Ya.; LASTOCHKIN, S.V. Prinimali  
uchastiye: BURDIN, N.K.; GUDKOV, N.M.; SERGEYEV, M.A., inzh.,  
retsensent; YAKOVITSKIY, G.N., red.; LEYKINA, T.L., red.izd-  
va; KUREPINA, G.N., red.izd-va; SHCHETININA, L.V., tekhn. red.;  
SPERANSKAYA, O.V., tekhn.red.

[Manual for a lay-out mechanic] Spravochnik razmetchika-  
mashinostroitelia. Moskva, Mashgiz, 1962. 375 p. (MIRA 16:1)  
(Laying-out (Machine-shop practice))



DESHEVOY, Sergey Mikhaylovich; KON, Aleksandr Aronovich;  
MIROSHNICHENKO, B.Ya., red.

[Rapid layout of medium and large sized parts; Opyt skorostnoi razmetki detalei srednikh i krupnykh gabaritov.  
Leningrad, 1964 29 p. (MIRA 17:11)

MIROSHNICHENKO, B.Ye.; BYKOVA, M.S., kandidat geologo-mineralogicheskikh nauk, otvetstvennyy redaktor; FUM, A.I., redaktor; BAZEMINA, G.N., tekhnicheskiy redaktor; SHECHERAKOV, A.V., tekhnicheskiy redaktor

[Carboniferous lamellibranchia mollusks of the Karaganda Basin]  
Kamennougol'nye platinchatozhabernye molliuski Karagandinskogo basseina. Alma-Ata, Izd-vo Akademii nauk Kazakhskoi SSR, 1953. 77 p.  
(MIRA 9:12)

(Karaganda Basin--Lamellibranchiata, Fossil)

15-57-2-1260  
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 2,  
p 8 (USSR)

AUTHOR: Miroshnichenko, B. Ye.

TITLE: Paleontological Characteristics of the Supra-Karaganda  
and Dolinskiye Strata of the Karaganda Basin  
(Paleontologicheskaya kharakteristika nadkaragandinskoy  
i dolinskoy svit Karagandinskogo Basseyna)

PERIODICAL: Tr. Labor. geologii uglya AN SSSR, 1954, Nr 2,  
pp 160-165

ABSTRACT: Bibliographic entry

Card 1/1

LIPKOVICH, Z.; ESTRIN, G.; MIROSHNICHENKO, D.; TRUBITSYN, N.;  
STRELKOV, I., master; LARIONTSEV, A.; ROMANOVICH, K.

Experience of innovators and efficiency promoters. Stroitel'  
8 no.10:25-26 0 '62. (MIRA 15:11)

1. Predsedatel' komiteta professional'nogo soyuzã rabochikh  
stroitel'stva i promyshlennosti stroitel'nykh materialov  
stroitel'nogo uchastka No.108 tresta Mosstroy No.18  
(for Lipkovich).

(Building—Technological innovations)

MIROSHNICHENKO, D., преподаvatel' esteticheskogo vospitaniya

Readers' letters on aesthetic training. Prof.-tekh. obr. 22 no.9:42  
8 '65. (MIRA 18:9)

MIROSHNICHENKO, D.F.

Toward new successes in the new year. Kryl. rod. 3 no.1:8-9  
Ja '52. (MIRA 8:8)

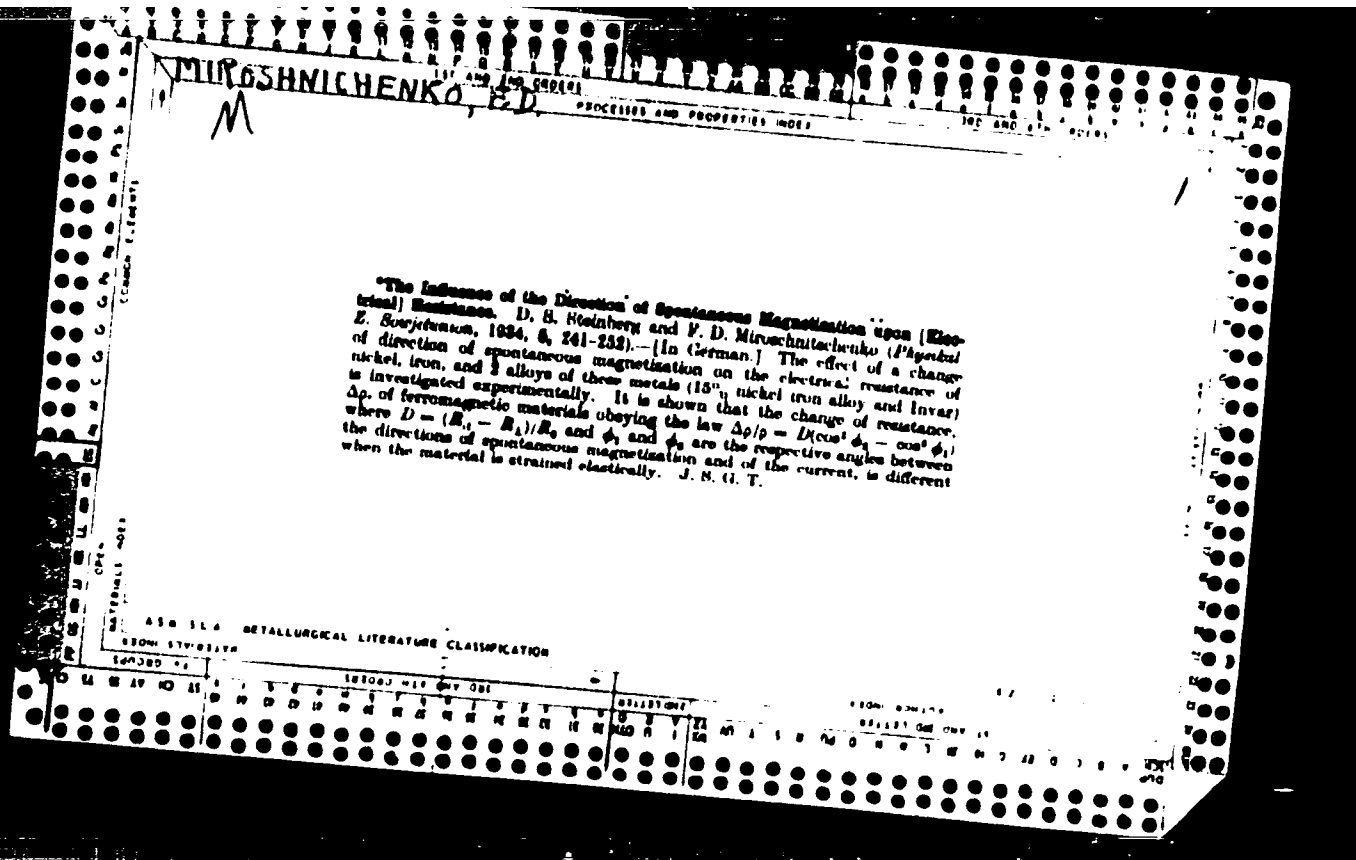
1. Sekretar' partiynoy organizatsii 3-go Moskovskogo gorodskogo  
aerokluba Dobrovol'nogo obshchestva sodeystviya armii, aviatsii  
i flotu SSSR.

(Aeronautics--Societies)

MIROSHNICHENKO, F. D.

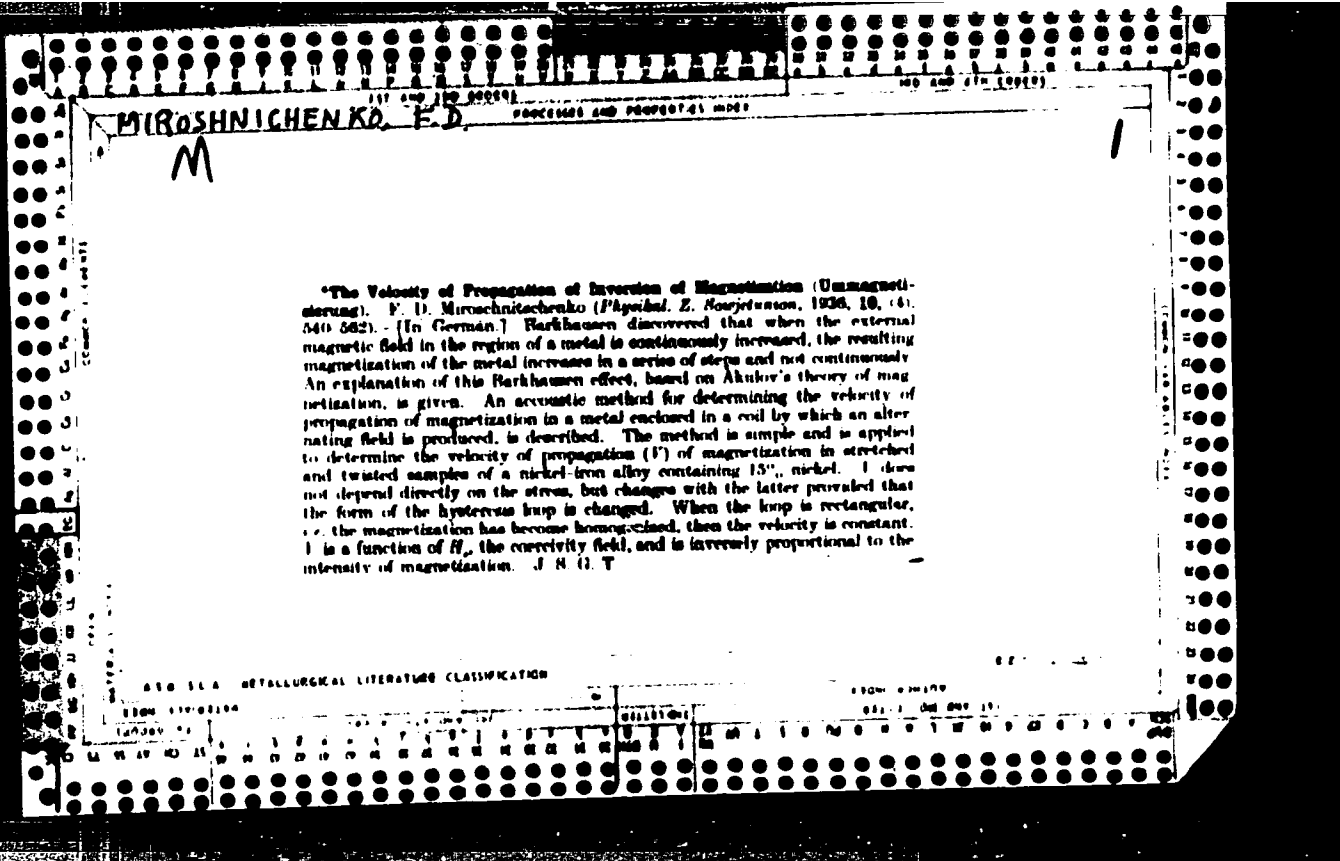
4261. Influence of Barkhausen Magnetization Jumps on the Electrical Conductivity. D. S. Steinberg and F. Miroshnichenko. *Phys Zeits J Sowjetunion*, 5 6 pp 602 605, 1933 In German Of the two methods of magnetization, (a) by slow rotation of the magnetizing vector and (b) by momentary change of direction of the vector by 180° only the first has any effect on the electrical conductivity, the second having no effect at all. In so far as the Barkhausen magnetization jumps can be represented as sudden changes of direction of the magnetization vector through 180°, they have no effect on the electrical conductivity.

МЕТАЛЛУРГИЧЕСКАЯ ЛИТЕРАТУРА КЛАССИФИКАЦИЯ



"The Influence of the Direction of Spontaneous Magnetization upon (Electrical) Resistance. D. S. Holsberry and V. D. Mirgshnichenko (*Physikalische Zeitschrift*, 1934, 6, 241-252).—[In German.] The effect of a change of direction of spontaneous magnetization on the electrical resistance of nickel, iron, and 3 alloys of these metals (15% nickel iron alloy and Invar) is investigated experimentally. It is shown that the change of resistance,  $\Delta\rho$ , of ferromagnetic materials obeying the law  $\Delta\rho/\rho = D(\cos^2\phi_2 - \cos^2\phi_1)$  where  $D = (R_1 - R_2)/R_0$  and  $\phi_1$  and  $\phi_2$  are the respective angles between the directions of spontaneous magnetization and of the current, is different when the material is strained elastically. J. S. (I. T.





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S/170/60/003/005/010/017  
B012/B056

24.2200

AUTHOR: Miroshnichenko, F. D.

TITLE: The Influence of Plastic Tensions on Maximum Magnetic Susceptibility  $\chi$

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960. Vol. 3. No. 9.  
pp. 100 - 102 ✓

TEXT: In the present paper, the influence exerted by plastic deformation upon the magnetic susceptibility of polycrystalline samples is investigated. The author proceeds from the statistical theories of the domains of spontaneous magnetization. It is assumed that within the domain of maximum magnetic susceptibility, magnetization is mainly caused by irreversible boundary shifts between the spontaneous domains. Formula (4) is derived for the maximum magnetic susceptibility. It was experimentally checked. For this purpose, a soft nickel wire annealed in hydrogen, and having a diameter of 0.5 mm and a length of 60 cm was used. The experiment is briefly described, and Fig. 1 illustrates the experimental results. The latter shows that the characteristic of the family

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P2593

The Influence of Plastic Tensions on Maximum Magnetic Susceptibility S/170/60/003/005/010/017  
B012/B056

of curves (magnetic susceptibility as a function of the field H) is a hyperbola of the second order:  $\kappa_{\max} H_{\infty} = \text{const}$ . It is shown how this formula was brought into relation with the internal stress  $\sigma_1$  of the sample, and that in the present case, like in the case of non-annealed nickel wires (Ref. 7), the experiment confirms the correctness of formula (4):  $\kappa_{\max} = \text{const}/\sigma_1$ . In this way, the existence of a particular law,  $\sigma_1^{-1} H_{\infty} = \text{const}$ , for the shift of the maximum magnetic susceptibility in plastically stretched nickel wires may be considered to be established. There are 2 figures and 7 references: 6 Soviet and 1 US.

ASSOCIATION: Pedagogicheskiy institut, g. Zaporozh'ye (Pedagogical Institute, Zaporozh'ye)

Card 2/2

88017

S/139/60/000/006/012/032  
E032/E314

9.6160

AUTHOR: Miroshnichenko, F.D.

TITLE: Magneto-elastic Method for the Determination of g

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,  
Fizika, 1960, No. 6, pp. 89 - 92

TEXT: In a previous paper (Ref. 1) the author discussed the maximum magnetic susceptibility of hard Ni as a function of elastic stress. It was shown there that when the magnetising field H and the stress  $\sigma$  are in the direction of the longitudinal axis of a wire then the average magnetisation of a specimen may be written down in the form

таким формулой:

$$I = I_s \frac{\int_0^{\pi/2} e^{W \cos^2 \theta + a \frac{1}{2} \cos^4 \theta} \cos \theta \sin \theta d\theta}{\int_0^{\pi/2} e^{W \cos^2 \theta + a \frac{1}{2} \cos^4 \theta} \sin \theta d\theta} \quad (1)$$

Card 1/8

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S/139/60/000/006/012/032  
E032/E314

Magneto-elastic Method for the Determination of  $g$

where  $\lambda_s$  is the isotropic magnetostriction coefficient,

$I_s$  is the saturation magnetisation,

$W \cos \mathcal{Y}$  is the energy associated with the magnetising field,

$\alpha(3/2)\lambda_s \sigma \cos^2 \mathcal{Y}$  is the energy associated with the elastic stresses, and

$\mathcal{Y}$  is the angle between the spontaneous magnetisation and magnetising field vectors.

Using the substitution  $\cos \mathcal{Y} = x$  and  $\alpha(3/2)\lambda_s \sigma = a$ ,

Eq. (1) may be replaced by

$$I = I_s \frac{\int_{-1}^1 e^{Wx+ax^2} dx}{\int_{-1}^1 e^{Wx+ax} dx} \quad (2)$$

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E032/E314

Magneto-elastic Method for the Determination of  $\delta$

If Eq. (2) is differentiated with respect to  $W$ , then one obtains the following result

$$\frac{\partial I}{\partial H} = \frac{\partial I}{\partial W} \frac{\partial W}{\partial H} = I, W' \frac{\partial}{\partial W} \frac{\int_0^1 e^{Wx+ax^2} x dx}{\int_0^1 e^{Wx+ax^2} dx} \quad (3)$$

$$\chi_m = I, W' \frac{\int_0^1 e^{ax^2} x^2 dx}{\int_0^1 e^{ax^2} dx} = I, Af(a) \quad (4)$$

As was shown in Ref. 1, the maximum value of the susceptibility is obtained when  $W = 0$ , in which case, Eq. (3) becomes

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E032/E314

Magneto-elastic Method for the Determination of  $g$

$$f(a) = \frac{1}{3} \left( 1 + \frac{4}{15} a + \frac{8}{315} a^2 + \dots \right) = \frac{1}{3} f_1(a). \quad (5)$$

The function  $f(a)$  can be shown to be of the form of Eq. (5). It is then clear that

$$\kappa_m = \frac{1}{3} I_s^2 A e^{\frac{1}{4}a} \quad (6)$$

when  $a = 0$ ,  $\kappa_m = \kappa_0 = (1/3) I_s^2 A$ . Substituting

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E032/E414

Magneto-elastic Method for the Determination of  $g$

$a = a(3/2)\lambda_s \sigma$ , one finally obtains

Eq. (7) 
$$\kappa_m = \kappa_0 e^{\pm(3/8)\alpha\lambda_s\sigma} \quad (7)$$

where the signs  $\pm$  are associated with different signs of the magnetostriction. If this expression is rewritten in the simpler form

Eq. (8) 
$$\kappa_m = \kappa_0 e^{-b\sigma} \quad (8)$$

then one finds that  $\sigma$  is given by

Eq. (10) 
$$\sigma = nm g = \frac{1}{b} \ln \left( \frac{\kappa_0}{\kappa_m} \right) \quad (10)$$

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Magneto-elastic Method for the Determination of  $g$

where  $m = 10^5$  g/cm<sup>2</sup> and  $n = 1, 2, 3 \dots$  From this equation it follows that

Eq. (11)

$$g = \frac{1}{nmb} \ln \left( \frac{x_0}{x_m} \right) \quad (11)$$

The quantity  $1/b$  in this equation is determined experimentally, and by substituting the experimental values for  $x_0$  and  $x_m$  one can obtain values for  $g$ . However, the results obtained by the present author were not very accurate and so a modification of the method is now described. This consists of the following. According to Eq.(8), the sensitivity of the method is given by

Eq. (12)

$$\frac{\Delta g}{\Delta x_m} = \frac{e^{bnmx}}{bnmx_0} \quad (12)$$

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Magneto-elastic Method for the Determination of  $\sigma$

and this is a maximum when  $\sin \alpha = 1$ . Since  $\Delta \sigma_m$  can be determined to a high degree of accuracy it follows that the final expression for the maximum sensitivity is given by

$$\frac{\Delta \sigma}{\Delta \sigma_m} = \frac{2.7183 \times 10^{-2}}{b \sigma_m} \left( \frac{\Delta \sigma_m}{0.01} \right)^2 \quad (13)$$

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When materials having  $\sigma \approx 10^5$  are employed an extremely high sensitivity can be achieved. Thus the magneto-elastic method may be successfully used to determine  $\sigma$ . The Department of Physics of the Zaporozhe Pedagogical Institute is studying the accuracy of this method for Fe-Ni alloys. There is 1 Soviet reference.

Ref: 78

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Magneto-elastic Method for the Determination of

ASSOCIATION Zaproshtskiy podrazdeleniye  
Vysokozhnyy Tekhnologicheskoy Institut

REMITTED August 15 1959

X

1 3 3

MIROSH NICHENKO, F.D.; MEL'DBYUM, I.S.

Methods for improvement of the magnetic parameters and temperature stability of ferrate rings made from "Oksifer-2000" material. Izv. vys.uchn.b.sav.;fiz.no.2:167-171 '63.

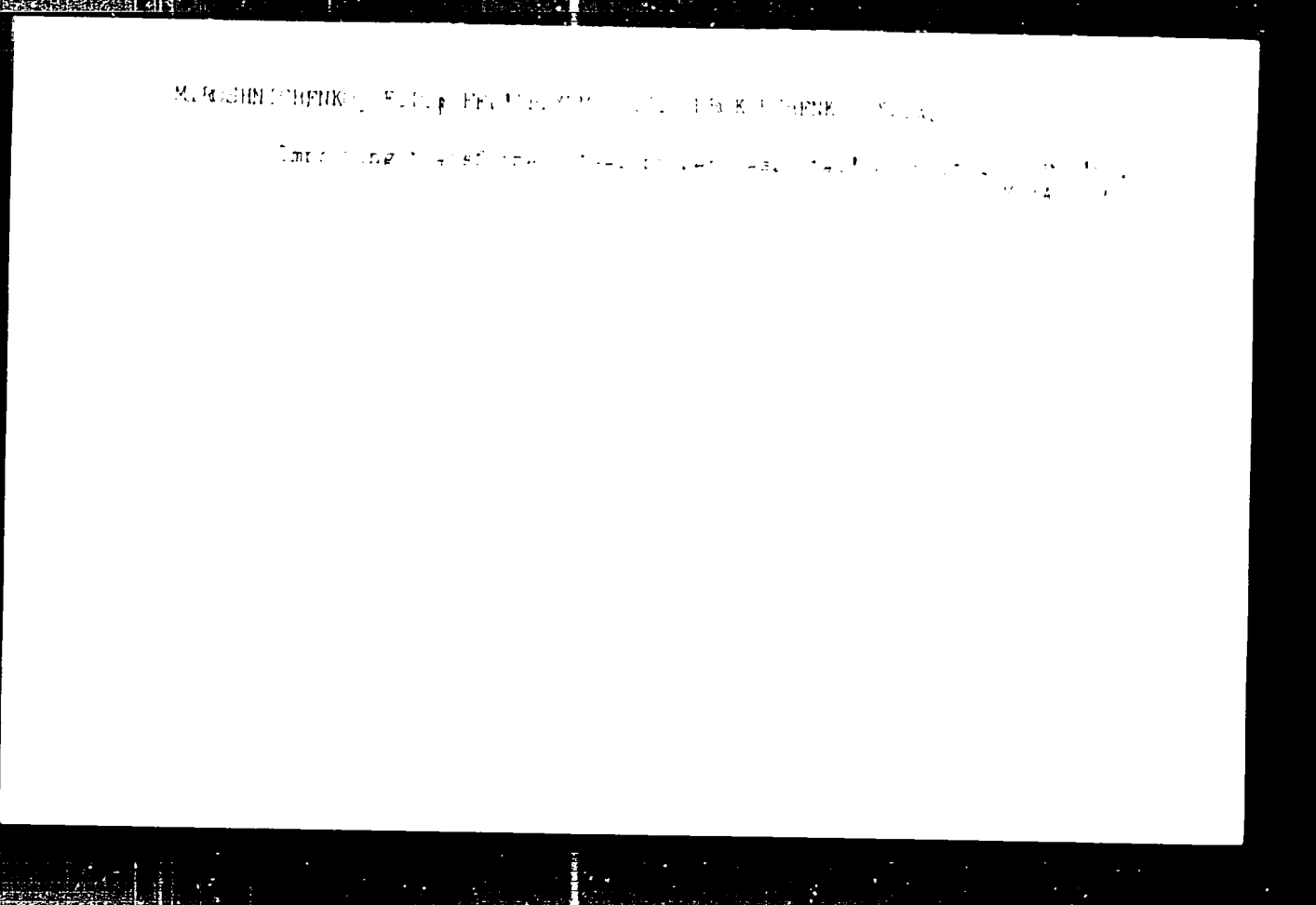
(MIRA 16:5)

1. Zaporozhskiy gosudarstvennyy pedagogicheskiy institut.  
(Ferrates—Magnetic properties)  
(Ferrate—Thermal properties)

МЕРГАНЧИЕНК, Ф.П.

Maximum magnitude of the earthquake is 2.0  
cyc. length. 2.0. P. 2.0. 2.0.

1. Zapronezheniy... (The text is extremely faint and difficult to decipher.)



MIROSHNICHENKO, F.S., inzh.

Mechanized changing of mandrels on automatic pipe rolling mills.  
Stal' 21 no.9:826-827 S '61. (MIRA 14:9)

1. Nikopol'skiy yuzhnotrubnyy zavod.  
(Pipe mills--Equipment and supplies)

L 23360-65 EWT(a)/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pf-4 - NJW/JD/HW  
ACCESSION NR: AR5000590 S/0137/64/000/008, DO40/DO40

SOURCE: Ref. zh. Metallurgiya. Sv. t., Abs. 8D233

AUTHOR: Miroshnichenko, F. S. B

TITLE: Hot rolling of pipes on KhPT mills

CITED SOURCE: Metallurg. i gornorudn. prom-st'. Inform. nauchno-  
tekh. sb., No. 1 (25), 1964, 45-46

TOPIC TAGS: pipe, rolling mill, hot rolling/ KhPT mill, steel  
1K18N9T

TRANSLATION: There has been introduced into the Southern Pipe Plant  
a technique for hot rolling pipes which was developed by the UkrNITI  
together with specialists from the plant. It has been established  
that rolling of pipes of steel 1K18N9T at a temperature of 300°  
gives the best results. The tendency toward hardening and resistance  
to deformation are decreased by almost two times making it possible  
to increase the drawing coefficient and the supply of billets. The  
billets are heated with a high frequency current inductor installed

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ACCESSION NR: AR5000590

on a cold rolling pipe mill directly before the entrance into the working hearth. The inductor is fed from a high frequency apparatus (8000 cycles/sec, 400 volts, 100 kilowatt). For hot rolling of pipes of steel Kh18N9T the lubricant consists of sodium nitrate (40%), silver graphite (30%) and water (30%). A lubricant consisting of a mixture of silver graphite (17-20%) and liquid glass was also used; the specific weight of the liquid glass was 1.45-1.50. To remove the lubricant the rolled pipes are washed in hot water (70-80°), being put into the bath twice for a period of 5 minutes, treated with a melt of potassium nitrate (20%) and caustic soda (80%), heated to 420-450°, and again washed, this time in running water. Then the pipes are pickled in a bath with a 23% solution of sulfuric acid for a period of 10 min and are again washed. With the introduction of hot rolling, the production method for pipes with a diameter of 38 mm and a wall thickness of 2-3 mm has changed in the following manner. In cold rolling from billets 89 x 5 mm on KhPT mills, after the first pass an intermediate billet with dimensions of 57 x 3.2 mm is produced which after heat treatment is rolled into a finished pipe 38 x 2.5 mm on a KhPT-55 mill. In hot rolling, the finished pipe with dimensions 38 x 2.5 mm is produced from billets 89 x 7 mm in

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one pass on a KhPT-75 mill. Thus the pipe production cycle is reduced to one pass and all auxiliary operations - removal of lubricant, heat treatment, trimming, coppering - are shortened.  
K. Ursova

SUB CODE: MM

ENCL: 00

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AVERBUKH, N.I.; MIROSHNICHENKO, F.V.

Casting one half of the face plate of a vertical boring and turning  
lathe. Lit.proizv. no.8:24-26 N '54. (MLRA 8:1)  
(Founding) (Machine tools)

