

## 資料室だより

### BISI Translation 紹介

— No 76 —

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またこの翻訳論文の刊行準備のできたものの Title, Abstract および出典について Translations Available (Weekly) が刊行されたり、また Ironmaking and Steelmaking に掲載され、事前にどんな論文が出るかわかるようになります。

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資料委員会では 1965 年より業界の協力のもとに共同購入してまいりました。

次に列記いたしました Title は最近入手したもので、複写は禁止されておりますので閲覧のみに限ります。

“資料室だより”の別刷ご希望の方は調査課までご連絡下さい。無料でさし上げます。Tel. (279) 6021

#### BISI Translations List Nos. 823~826

##### **Management Planning and Control**

###### BISI 15086 (G. M. Aleshchenko)

Assessment of control algorithms for the section steel-rolled products with the use of a simulating model.

[Izv. VUZ Chern. Met., 1976, (9), 89-91] (R)

##### **Physical Structure of Materials and Crystallography**

###### BISI 14977 (E. Berecz, and I. Bader.)

Theoretical principles of metallurgical interface phenomena.

[Bany Koh Lapok (Kohaszat), 1976, 109, (5), 193-199] (H)

###### BISI 15008 (V. L. Kolmogorov, et al.)

Statistical description of ingot ductility.

[Izv. VUZ Chern. Met., 1976, (8), 55-59] (R)

###### BISI 15083 (V. K. Vorontsov, et al.)

Solution of the three-dimensional problem of the steady state plastic flow of metal by the co-ordinate grid method.

[Izv. VUZ Chern. Met., 1976, (9), 77-80] (R)

##### **Physical Metallurgy and Metallography**

###### BISI 14909 (E. S. Filippov.)

Cause of phase transitions on the basis of an investigation of electron-ionic interaction.

[Izv. VUZ Chern. Met., 1976, (7), 121-128] (R)

###### BISI 15002 (V. Ya. Shchedrovitskii, et al.)

Enthalpy of mixing of alloys of the yttrium-silicon system.

[Izv. VUZ Chern. Met., 1976, (8), 5-8] (R)

###### BISI 15003 (A. N. Borodin, and M. G. Krashe-ninnikov.)

Study of the appearance and destruction of a gas bubble on a melt surface.

[Izv. VUZ Chern. Met., 1976, (8), 14-18] (R)

###### BISI 15015 (L. I. Kozhinskii.)

Three criteria for introducing globularizers into graphite.

[Izv. VUZ Chern. Met., 1976, (8), 111-115] (R)

###### BISI 15032 (H. Schlicht.)

Contribution to the theory of rapid heating and rapid cooling of steel.

[Härt-Techn. Mitt., 1974, 29, (3), 184-192] (G)

###### BISI 15076 (A. N. Varenkov, et al.)

Effect of heating temperature on the structure and fine texture of carbon-graphite pan fibres.

[Izv. VUZ Chern. Met., 1976, (9), 9-13] (R)

###### BISI 15077 (S. I. Filippov, et al.)

The rate of carbon elimination from a molten bath and the oxidation of manganese.

[Izv. VUZ Chern. Met., 1976, (9), 19-25] (R)

##### **Physical Properties and Chemical Analysis**

###### BISI 14996 (F. I. Kolesnik, et al.)

Damping of noise in an automatic nail-producing plant.

[Stal', 1976, (8), 747-748] (R)

###### BISI 15095 (G. D. Kovalov, and V. A. Krivandin)

Investigation of the hydrodynamics during the flow of various cross-section axially symmetric jets on to an obstacle.

[Izv. VUZ Chern. Met., 1976, (9), 157-160] (R)

###### BISI 15109 (Yu. I. Blinov, et al.)

Measurement of the wall thickness of tubes with an X-ray thick thickness gauge.

[Stae, 1976, (9), 839-840] (R)

###### BISI 14836 (W. F. Schwenzfeier, et al.)

Measuring the surface temperature of cold rolls.

[Stahl Eisen, 1976, 96, (13), 624-626] (G)

###### BISI 14913 (I. T. Ivanov, and V. K. Orlov)

Use of an exponential model of the absorption band of radiating gases in the analysis of radiant heat exchange in heat furnace.

[Izv. VUZ Chern. Met., 1976, (7), 174-178] (R)

BISI 15080 (A. K. Yatsenko)

Controlling the thermal conditions during the melting of steel in converters.

[Izv. VUZ Chern. Met., 1976, (9), 42-45] (R)

BISI 15096 (M. K. Bezrodnyi, et al.)

Research into the heat transfer crisis in closed circuit two-phase thermosiphons.

[Izv. VUZ Chern. Met., 1976, (9), 161-165] (R)

BISI 15001 (A. G. Yudin, et al.)

An electrochemical sensing element with a solid electrolyte uses for controlling the oxygen content.

[Stal' 1976, (8), 769-771] (R)

BISI 14755 (R. Burger, et al.)

A simple method for quantitative X-ray fluorescence analysis using pure standard reference elements.

[Mikrochimica Acta-Supplementum 1968, (3), 27-36] (G)

BISI 15053 (I. Kraus, and R. Kralova)

The X-ray diffraction method of residual macrostress measurement in austenitic steels.

[Kovove Mat., 1976, (2), 166-169] (C)

### Mechanical Properties and Material Defects

BISI 13962 (A. Baus, and H. P. Lieurade)

Endurance under torsion and resistance to cracking by fatigue of three grades of steel for rails.

[Rev. Met., 1975, 72, (5), 373-386] (F)

BISI 14886 (I. K. Nikolaev, et al.)

New method of reducing the tensile stresses in the surface layers of wire.

[Stal', 1976, (7), 640-641] (R)

BISI 15052 (L. Gajdos)

An estimate of the limited service life of notched parts.

[Strojirenstvi, 1976, (5), 289-292] (C)

BISI 14691 (H. Wustenberg, et al.)

Focusing probes for the improvement of flaw size determination in the ultrasonic inspection of thick-walled reactor.

[Materialprufung, 1976, 18, (5), 152-161] (G)

### Protection of Materials

BISI 14954 (W. Betz, et al.)

The assessment of protective coatings to combat hot gas corrosion on gas turbine blades.

[Z. Werkstofftechnik, 1976, 7, (5), 161-166] (G)

### Rolling

BISI 14438 (U. Langer, et al.)

The heat balance in hot rolling.

[BHM 1976, 121, (3), 74-83] (G)

BISI 14663 (B. Berger, et al.)

The elastic deformation of rolls in four-high rolls stands.

[Arch. Eisenhuttenwes., 1976, 47, (6), 351-356]

(G)

BISI 14991 (A. A. Petrovskii, et al.)

Use of lubricating-cooling agents during the cold rolling of alloy metal.

[Stal', 1976, (8), 725-730] (R)

BISI 14993 (V. L. Barbarov, et al.)

Mastering the rolling of special sections of the lateral chutes of scraper conveyors.

[Stal', 1976, (8), 735-736] (R)

BISI 14994 (M. F. Stoletnii, et al.)

Effect of the amount of deformation in a three-roll reeling mill on the productivity of the unit.

[Stal', 1976, (8), 737-739] (R)

BISI 14995 (A. M. Kogos, et al.)

Design and experience in the operation of domestic cold rolling multiple roll mills.

[Stal', 1976, (8), 744-747] (R)

BISI 14998 (A. A. Bykov, et al.)

Economic comparison of bimetal production by the methods of pack rolling and explosive welding.

[Stal', 1976, (8), 759-761] (R)

BISI 15010 (V. A. Shilov, et al.)

Investigation of the conditions of metal gripping by the rolls and the stability of stock when rolling in grooves with a simple geometry. Communication 1.

[Izv. VUZ Chern. Met., 1976, (8), 65-70] (R)

BISI 15011 (Kh. M. Saprygin)

Investigation of the processes of rolling complex angle sections.

[Izv. VUZ Chern. Met., 1976, (8), 71-75] (R)

BISI 15018 (Yu. V. Denisov, et al.)

Temperature stresses in rolling mill rolls. Report 1.

[Izv. VUZ Chern. Met., 1976, (8), 125-128] (R)

BISI 15043 (J. Konvicny, and M. Hajduk)

Establishing the second metal volume under continuous rolling conditions in simple roll passes.

[Hutnické Listy, 1976, (6), 410-413] (C)

BISI 15050 (J. Pribyl)

Casting and solidification of rolling-mill rolls.

[Sbornik VSB Ostrava, 1975, (2), 25-62] (C)

BISI 15085 (V. N. Vydrin, et al.)

Forward flow when rolling in multiple-roll passes.

[Izv. VUZ Chern. Met., 1976, (9), 85-88] (R)

BISI 15087 (V. N. Zaveryukha)

Effect of roll wear on the annual productivity of a sheet mill.

[Izv. VUZ Chern. Met., 1976, (9), 99-101] (R)

BISI 15089 (Kh. V. Gemskaya, et al.)

Optimization on the operation of reversing roughing mills.

[Izv. VUZ Chern. Met., 1976, (9), 117-120]

(R)

**Metalworking, Excluding Rolling**

BISI 14905 (B. M. Gotlib, and I. A. Dobychin)  
Determination of the probability of metal fracture during hot extrusion.

[*Izv. VUZ Chern. Met.*, 1976, (7), p. 84-87]

(R)

BISI 15090 (V. V. Tatarnikov)

Relationship between the forces on the slide stop of circular saws and the saw parameters and the cutting conditions.

[*Izv. VUZ Chern. Met.*, 1976, (9), 121-124]

(R)

BISI 14335 (M. Sodeik, et al.)

The manufacture of cans from tinplate by deep drawing.

[*Verpackungs-Rundschau*, 1975, (11), 1402-1407] (G)

BISI 14835 (W. Sommer, and O. Stowasser)

Producing round blanks without much wastage.

[*Bleche Rohre Profile*, 1976, 23, (2), 39-44]

(G)

BISI 15088 (L. M. Mikhoyan, et al.)

Investigation of the shearing of the defective layer from hollowbiliets for the production of large-diameter tubes.

[*Izv. VUZ Chern. Met.*, 1976, (9), 105-109]

(R)

BISI 14999 (V. B. Akimenko, et al.)

Experience of the roof firing of muffle furnaces in powder metallurgy.

[*Stal'*, 1976, (8), 764-767] (R)

**Steels and Alloys (Technical Application and Methods of Production), Cermets**

BISI 13882 (R. Roik, et al.)

Analysis and design of concrete-filled steel tube columns.

[Ruhr-University, Bochum, Institute für Konstruktiven Ingenieurbau, Technical Report No. 75-74, May 1975] (G)

BISI 14610 (H. Bibring)

Orientated eutectics for turbo jets present state of research.

[*Materiaux Tech.*, 1975, (5), 219-226] (F)

BISI 14939 (H. J. Grabke, et al.)

Carburization of chromium-nickel steels in a carbon bed.

[*Werkstoffe Korrosion* 1976, 27, (5), 291-296] (G)

BISI 14997 (R. D. Mininzon, et al.)

Effects of technological parameters on the ductility of R6M5 steel.

[*Stal'*, 1976, (8), 754-755] (R)

BISI 15046 (J. Purmensky, and V. Foldyna)

Structural stability of CrMoV low-alloy heat-resistant steel.

[*Hutnicke Listy*, 1976, 31, (6), 421-425] (C)

BISI 15047 (M. Mrkvica)

The machinability of 17247 austenitic steel.

[*Strojirenska Vyroba*, 1976, (6), 401-409] (C)

BISI 13887 (V. Faccenda, et al.)

Influence of manganese on bending in low alloy

and carbon steels.

[*Metal. Ital.*, 1973, 65, (3), 133-140] (I)

BISI 13969 (W. Holzgruber)

Trends towards development in the melting of special alloy steels.

[*Berq-u. Huttenmannische Monatshefte*, 1975, 120, (9), 408-415] (G)

BISI 15006 (S. M. Belokurov, et al.)

Alloying of steel with niobium. Part 2.

[*Izv. VUZ Chern. Met.*, 1976, (8), 44-47] (R)

**Casting and Cast Metals**

BISI 15049 (J. Pribyl)

The problem of the materials for ingot moulds.

[*Sbornik VSB Ostrava*, 1975, (2), 63-93] (C)

BISI 15004 (V. G. Pyzhov)

Factors influencing the carbon content in foundry pig iron. Communication 2.

[*Izv. VUZ Chern. Met.*, 1976, (8), 19-22] (R)

BISI 15056 (D. M. Stefanescu, and Pridvornic)

Contribution to the study of plastic deformation in spheroidal graphite cast iron.

[*Giesserei-Praxis*, 1974, (9), 165-170] (G)

**Heating, Heating Furnaces and Electric Heating**

BISI 14601 (D. Yerouchalmi)

Development of the high-temperature rotary furnace heated axially by a plasma of arcs and ultra-refractory oxide fusion tests.

[*High Temp.-High Press.*, 1971, 3, 271-286]

(F)

BISI 14947 (J. Antoine, et al.)

Principal findings in respect of a steelworks channel-type induction furnace.

[Colloquium "Electrothermics in the refining of metals" Paris, 25-26 March 1971, 28 pp.] (F)

BISI 14641 (G. N. Suntsov, et al.)

More effective use of shielding gas in roller-hearth furnaces with tambours.

[*Stal'*, 1976, (5), 472-473] (R)

**Fuel, Combustion and Refractories**

BISI 14741 (M. Draignaud, et al.)

X-ray fluorescence spectrometric analysis of chrome and magnesia refractories and their raw materials.

[*Bull. Soc. Fr. Ceram.* 1974, 105, 65-68] (F)

BISI 14877 (A. A. Ustyugov, et al.)

Roof lives of open-hearth and two-bath furnaces.

[*Stal'*, 1976, (7), 604-607] (R)

BISI 14976 (K. D. Nekrasov, et al.)

Lightweight refractory concretes: methods of utilization and compacting.

[*Bull. Soc. Franc. Ceram.*, 1975, 107, (3), 3-6] (F)

BISI 15000 (A. G. Marants, et al.)

Continuous furnaces with solid hearths used for heating transformer steel.

[*Stal'*, 1976, (8), 767-769] (R)

BISI 15055 (S. Cernoch)

Thermo-technical principles of the substitution of fuels in industrial furnaces.

[*Strojirenstvi*, 1975, (4), 197-202] (C)