

## 資料室だより

### BISI Translation 紹介

— No 68 —

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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 Translation List No. 788~792

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

- BISI 13730 (W. Eisenhut, and H. U. Friedrich)  
 The reduction of pollutant emission from coking plant.  
 [Glückauf, 1975, 111, (9), 432—439] (G)
- BISI 13965 (R. Hartmann)  
 Monitoring of a rolling mill with the aid of process control computers.  
 [Stahl Eisen, 1975, 95, (18), 821—825] (G)

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

- BISI 14019 (V. P. Chesnokov, et al.).  
 Effect of chromium and nickel on nitrogen diffusion in liquid iron.  
 [Izv. VUZ Chern. Met., 1975, (9), 13—15] (R)
- BISI 14129 (M. Guttman, and P. Krahe)  
 Temper embrittlement of recovered and recrystallized structures.  
 [Mem. Sci. Rev. Met., 1973, 70 (9), 657—669] (F)
- BISI 14169 (I. Czinege)  
 Correlation between chemical composition and deformation strength  
 [Bany. es Koh. Ladok, (Kohastat), 108, 1975, (7), 300—305] (H)

- BISI 14185 (T. Canta.)  
 Recrystallization study of an austenitic stainless steel hot deformed in simple shear.  
 [Metalurgia, 1975, (1), 4—7] (Ru)

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

- BISI 13307 (R. Bridelle, and A. Michel.)  
 Properties of iron carbonitrides.  
 [Rev. Met. 1955, 52, (5), 397—400] (F)
- BISI 14096 (V. V. Parusov, and R. V. Gvozdov.)  
 Control of processes in interrupted quenching according to the amount of martensite phase

[Stal' 1975, (10), 932—933] (R)

- BISI 14167 (H. Bühler, et al.)  
 The influence of the transformation behavior on residual welding stresses in steel.  
 [Arch. Eisen, 1974, 45, (10), 719—728] (G)
- BISI 14036 (A. V. Cherhoval, and V. V. Kurepina)  
 Morphology of spheroidal graphite.  
 [Izv. VUZ Chern. Met., 1975, (9), 160—164] (R)

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

- BISI 13897 (A. S. Abrodimov, et al.)  
 The surface tension and density of certain perous slags as functions of temperature  
 [Izv. VUZ Chern. Met., 1975, (8), 14—17] (R)
- BISI 14016 (Yu. A. Zhuravlev, et al.)  
 Influence of fuel-firing conditions on heat exchange in steel-melting furnaces of different capacity.  
 [Stal', 1975, (9), 861—863] (R)
- BISI 14022 (O. I. Ostrovskii, et al.)  
 Calculating the enthalpies of formation of binary metallic solutions.  
 [Izvest. VUZ Chern. Met., 1975, (9), 52—56] (R)

- BISI 13912 (V. G. Loffe and V. A. Naumkin.)  
 Fusion of a moving dense layer by a gaseous heat carrier.  
 [Izv. VUZ Chern. Met., 1975, (8), 148—152] (R)

- BISI 13921 (V. D. Chekhranov, et al.)  
 Distribution of temperature over the cross-section and length of rolled stock on a 1300 bloom mill.  
 [Stal', 1975, (8), 711—713] (R)
- BISI 14054 (B. Vareka, and J. Bazan.)  
 Measurement of the temperature of the working surface of the electric-arc steelmaking furnace

lining.

[Sbornik ved. praci VSB Ostrava, 1974, (2), 113—119] (C)

BISI 13829 (V. S. Koche, et al.)

Determining the carbon contents of steelmaking furnace baths.

[Stal', 1975, (7), 601—604] (R)

### Mechanical Properties and Materials Defects

BISI 12921 (O. Lauer.)

Size reduction in a laboratory, basic principles, methods, instruments —Part 2.

[Aufbereitungs-Technik, 1974, (7), pp. 373—381] (G)

BISI 14013 (V. A. Urazova, et al.)

Inclusions in unalloyed electrical steel.

[Stal', 1975, (9), 812—815] (R)

BISI 14171 (E. Varga)

The absence of porosity in cylinder head castings as influenced by the chemical composition of the cast iron and the rigidity of the mould.

[Bany es Koh. Ladok (Ontede), 1975, 26, (82, 169—178) (H)]

BISI 13704 (V. M. Shifrin, and E. I. Kadinov.)

Calculating the segregation of hydrogen in 15 Kh-18 N12S4TYu and Kh18N10T ingots.

[Izv. VUZ Chern. Met., 1975, (6), 41—45] (R)

### Protection of Materials

BISI 14070 (A. G. Mannesmann.)

Plastic coating of steel pipe. Using extruded polyethylene and adhesive strips.

[German Patent 2 407 427] (G)

BISI 13660 (A. Thyssen-Hutte AG.)

Apparatus for cleaning-off metal during Hot-metal coating of coils.

[German Patent DAS 2,345,157] (G)

BISI 13812 (J. Sturc, et al.)

Method for material balance of recovery system in steel pickling plants.

[Hutn. Listy, 1975, (4), 180—289] (C)

### Rolling

BISI 13868 (J. Tanqueray)

Sacilor continuous billet mill

[La Technique Moderne. Dec. 1969, 478—481] (F)

BISI 13904 (R. V. Lel, et al.)

Radial flattening of the rolls of a two-high mill.

[Izv. VUZ Chern. Met., 1975, (8), 91—93] (R)

BISI 13905 (V. A. Shilov, et al.)

Determination of the elongation coefficients during multiple-groove periodic pass rollings.

Report 2.

[Izv. VUZ Chern. Met., 1975, (8), 93—103] (R)

BISI 13915 (V. A. Voskresenskii)

Mean square loading on the drive of a reversing roughing mill allowing for the pressure variations at the end of a rectangular workpiece.

[Izv. VUZ Chern. Met., 1975, (8), 165—169] (R)

BISI 13922 (V. A. Borovskikh, et al.)

Effect of bloom surface quality and cross-section

shape on section rolled product quality.

[Stal', 1975, (8), 717—719] (R)

BISI 14030 (V. L. Stefanovich, et al.)

Investigation of the productivity of roughing mills as a function of the parameters of the main drive motors.

[Izv. VUZ Chern. Met., 1975, (9), 113—117] (R)

### Metalworking, Excluding Rolling

BISI 13902 (Ya. M. Okhrimenko, et al.)

Features of the metal flow in a splayed open die flash aperture.

[Izv. VUZ Chern. Met., 1975, (8), 82—85] (R)

BISI 14027 (B. N. Matveev)

Determination of the deformation zone leading edge and linear metal displacement during pilger rolling.

[Izv. VUZ Chern. Met., 1975, (9), 92—96] (R)

BISI 14065 (L. Kaisler et al.)

Material and technological problems of tubing and fitting of the A1 nuclear power station primary circuit.

[Hutn. Listy, 1975, (6), p. 419—425] (C)

BISI 13871 (R. Liebergeld.)

Some solutions on development of cold extrusion method for drive shafts and pear axle pinions.

[International Cold Forging Congress, Brighton, October, 1—3, 1975] (G)

BISI 14164 (M. Geiger, and G. Kramer.)

Working stresses in prestressed dies.

[5th International Cold Forging Congress, Brighton, Oct., 1—3, 1975] (G)

BISI 13903 (G. L. Feigin, and V. I. Tarnovskii)

Calculation of forces and optimum shape of die for drawing rod.

[Izv. VUZ Chern. Met., 1975, (8), 86—90] (R)

BISI 14026 (Ya. M. Ikhrimenko, et al.)

Calculation of position of the metal flow interface in open pressing.

[Izv. VUZ Chern. Met., 1975, (9), 83—87] (R)

BISI 14034 (V. N. Antsiferov, et al.)

Effect of chromium and molybdenum on the structure and anti-friction properties of sintered steels.

[Izv. VUZ Chern. Met., 1975, (9), 147—151] (R)

### Steel and Alloys (Technical Applications and Methods of Production), Cermets

BISI 14066 (J. Vrtel and S. Havel)

Requirements for the material for the A1 nuclear reactor pressure vessel.

[Hutn. Listy, 1975, (6), 387—395] (C)

BISI 14094 (V. I. Tsaryuk, et al.)

Experience of the production of non-laminating spring wire.

[Stal', 1975, (10), 922—924] (R)

BISI 12548 (Nippon Steel Corporation.)

Method of producing Grain orientated electrical steel.

[German Patent 2 262 869] (G)

BISI 14033 (B. G. Livshits, et al.)

Effects of the degree of deformation and anneal-

ing on the texture of dynamo steel.  
[Izv. VUZ Chern. Met., 1975, (9), 135—138] (R)

### Casting and Cast Metals

BISI 14037 (V. I. Legenchuk et al.)

Effect of the thermophysical factors on the formation of two-layer tubes and billets under a flux during centrifugal casting.  
[Izv. VUZ Chern. Met., 1975, (9), 165—170] (R)

BISI 13246 (L. Steier)

Cast iron discs for gate valves. part 11.  
[Neue Deliwa Zeitschrift, 1974, (6), 223—226] (G)

BISI 13252 (L. Steier)

Cast iron discs for gate valves—part 1.  
[Neue Deliwa Zeitschrift., 1974, (4), 137—139] (G)

BISI 14182 (A. Schutz)

Foundry materials dangerous to health.  
[Giesserei, 1975, 62, (25), 653—658] (G)

BISI 14192 (I. Harbuz et al.)

Contributions to the increase in the service life of the 25-ton ingot moulds made in the ingot foundry of the integrated iron and steel works—galati  
[Metalurgia, 1975, (2) p 70—73] (Ru)

BISI 14170 (J. Zambo and By. Bobok)

Experiments aimed at reducing the drying time of "ladelite" sand ram ladies  
[Bany. es koh. laook, (Kohaszat), 1975, 108, (10), 453—457] (H)

BISI 13770 (K. Hagen, et al.)

Continuous casting for sheet.  
[Tech. Mitt. krupp. werksber., 1975, (2), 33, 95—100] (G)

BISI 14180 (R. Mai, and H. Schumann)

Introduction and use of the gisacodur process.  
[Giessereitechnik, 1975, 21, (4), 126—128] (G)

### Heat Treatment

BISI 14193 (D. Ionescu, and C. Traistaru)

Possibilities of salt bath nitridation or gas nitridation of Cr-Mo-Al steel.  
[Metalurgia, 1975, (2), 74—78] (Ru)

BISI 14196 (H. Nicula, et al.)

Influence of the austenitizing temperature on the hardenability of 40 bc 10 steel.  
[Metalurgia, 1975, (3), 109—119] (Ru)

BISI 13565 (J. Tacikowski, and J. Zysk)

Short-times carbonitriding in gas at temperatures below Al.  
[Trattamenti dei Metalli, 1969, 66, 16—24] (I)

BISI 13926 (M. L. Bernstein, and P. D. Odesski)

Advantages of thermomechanical strengthening of steels for metal structures.  
[Stal', 1975, (8), 731—735] (R)

BISI 13927 (V. T. Zhadan)

Influence of rolling temperatures during high-temperature thermomechanical treatment on the structure and properties of steel.  
[Stal', 1975, (8), 735—738] (R)

### Heating, Heating Furnaces and Electric Heating

BISI 14333 (L. Hallot.)

Some considerations on electric induction furnace melting.

[Hommes et Fonderie, 1972, (1), 13—20] (F)

### Welding and Joining

BISI 14099 (S. M. Gazman, et al.)

Some features of the arc welding of radiation tubes from the cast alloy Kh28n48v5.  
[Stal', 1975, (10), 959—961] (R)

BISI 13779 (O. Ewald)

Defects in flash butt welds of high pressure fitting of 14 MoV 63 steel  
[VGB Krafterkstechnik 1975, 55, (9) 603—608] (G)

BISI 14062 (A. Bendis.)

Mechanical properties of joints fabricated in heavy-duty welding presses.  
[Zvaranie. 1975, (7), 205—213] (C)

### Ores and Minerals Handling and Beneficiation

BISI 13772 (H. Schimmelbusch and K. Zeitler)

Mining projects and Long-term operations planning

[Erzmetall, 1975, 28, (3) 102—105] (G)

BISI 13896 (V. M. Lopatin, et al.)

Reaction kinetics of sintering-mix components with ferruginous slags.

[Izv. VUZ Chern. Met., 1975, (8), 5—8] (R)

BISI 14174 (J. Horvath et al.)

Correlation between the basicity, degree of oxidation and reducibility of sinter

[Bany. es koh. lapok, (kohaszat) 1975, 106, (9), 393—395] (H)

BISI 14090 (Z. I. Nekrasov, et al.)

Ways of obtaining pellets that do not break down during reduction heat treatment.

[Stal', 1975, (10), 876—881] (R)

BISI 13913 (S. F. Kiselev, et al.)

Determined the temperature at the surface of the materials during concentration.

[Izv. VUZ Chern. Met., 1975, (8), 158—160] (R)

BISI 14005 (L. B. Garcia.)

The first pelletisation plant with a circular grate in the state of chihuahua, mexico.

[Journees internationales de siderurgie paris, Oct. 24—28] (F)

### Ironmaking and Ferro-Alloys

BISI 14082 (M. Gottwald et al.)

High-temperature hot-blast stoves

[Sbornik ved. praci VSB Ostrava, li74, (1) 29—40] (C)

BISI 14084 (I. Janousek)

Indication of the failure of cooling plates and wedges in the blast furnace

[Sbornik ved. praci VSB Ostrava, 1974, (1), 101—109] (C)

BISI 13917 (V. V. Kas'yan)

Theoretical combustion temperature as a combined blast parameter.

[Stal', 1975, (8), 684—687] (R)

BISI 14175 (O. Farkas.)

Some Questions of co utilization in blast furnaces.  
[Rany. es Koh. Lapok (Kohaszat). 1975, 108,

(9), 389—392] (H)

BISI 13916 (Yu. I. Gokhman.)

Technological assessment of various regimes of Blast-furnace operation for conditions at a new works.

[Stal', 1975, (8), 679—683].

BISI 14092 (O. S. Bobkova, et al.)

Regulation of nitrogen concentration in carbon-free ferrochrome.

[Stal', 1975, (10), 899—900] (R)

### Steelmaking

BISI 13866 (A. Moyaux.)

The basic bessemer steel plant of usinor-valenciennes converted to an O. B. M. plant.

(Rev. met., 1975, 72, (6), 511—518] (F)

BISI 13914 (V. N. Buintsev, et al.)

Stage-by-stage adjustment of a mathematical model of the process of decarbonitization of open-hearth furnace heats.

[Izv. VUZ Chern. Met., 1975, (8), 161—164] (R)

BISI 13918 (G. N. Elauskii et al.)

Choice of steelmaking control parameters in the production of high grade steel in an open hearth furnace.

[Stal', 1975, (8), 691—695] (R)

BISI 13846 (V. B. Ckhotskii)

The aggregate condition of the slag in the basic oxygen furnace.

[Izv. VUZ Chern. Met., 1975, (7), 45—52] (R)

BISI 14012 (V. I. Yavoiskii, et al.)

Continuous inspection of the carbon content of the metal in a two-bath furnace by the c.m.f. method.

[Stal', 1975, (9), 805—807] (R)

BISI 14098 (N. N. Aksyuchits, et al.)

Design of a swivelling roof burner and its effect of open hearth furnace performance.

[Stal', 1975, (107, 957—959] (R)

### Extraction and Refining

BISI 14091 (V. A. Boyarshinov)

Impurity evaporation principles during vacuum remelting.

[Stal', 1975, (10), 895—897] (R)

BISI 14020 (V. S. Krasil'nikov, et al.)

The deoxidizing capacity of silicon in the presence of chromium.

[Izv. VUZ Chern. Met., 1975, (9), 27—30] (R)

BISI 14040 (A. V. Yavoiskii, et al.)

An apparatus for investigating the kinetics of steel refining processes

[Izv. VUZ Chern. Met., 1975, (9), 179—182] (R)

BISI 14144 (A. I. Kozin, and O. S. Bonkova)

The effect of atmosphere on the surface tension of liquid slags.

[Izv. VUZ Chern. Met., 1975, (11), 19—21] (R)

BISI 14055 (T. Peprica, and J. Skála)

Applicability of  $UF_4$  and  $MgF_2$  for metallurgical purposes.

[Sbornik ved. praci VSB Ostrava, 1974, (2), 69—81] (C)

BISI 14187 (M. Golumba and C. Alexandru.)

Experimental equipment for electroslag remelting of steels.

[Metalurgia, 1975, (1), 21—24] (Ru)

### Engineering

BISI 14293 (W. Schiefer, et al.)

Use of radio-controlled locomotives at an iron and steelworks.

[Stahl. u. Eisen. 1975, 95, (20), 931—936] (G)

BISI 13930 (E. P. Egorov, and V. L. Stefanovich)

Modernization of electric drives at steel-works.

[Stal', 1975, (8), 764—768] (R)

BISI 13549 (G. Bierett)

Contributions to the design of heavy-duty crane and crane-gantry girders, especially for steelworks cranes.

[Stahl Eisen, 1970, 90, (2), 63—70] (G)

BISI 13751 (F. Hofmann)

Safety clearances for bridge cranes.

[Fordern Heben, 1959 (3), 108—114] (G)