

## 資料室だより

### BISI Translation 紹介

— No 71 —

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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。

BISI Translations を利用すれば英國米国、以外の主要製鉄国の主要論文をきわめて容易に知ることが可能で、これによる時間的利得は非常に大きいと考えられます。

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 No. 801~804

#### Management Planning and Control

BISI 14308 (V. N. Chukhman.)

Problems of creating automated control systems for planned metallurgical under-takings.

[Stal', 1976, (1), 61—65] (R)

BISI 14394 (I. Zadny.)

The ways for steelmaking plants to improve savings in steel.

[Hutnik, 1975, (11), 415—420] (C)

BISI 14437 (G. Fleming, et al.)

Monitoring and control by computer at the charge preparation plant at Arbed's Esch-Belval works.

[Int Conference on Iron and Steelmaking, CRM, Brussels, 17 May 1976] (F)

#### Physical Structure of Materials and Crystallography

BISI 14389 (W. Reitzle, and F. Fischer.)

Development and control of residual stresses in wide steel strip for deep-drawing purposes.

[Bänder Bleche Rohre, 1975, 16, (12), 515—519] (G)

#### Physical Metallurgy and Metallography

BISI 13878 (K. Skuin)

Investigation into the transformation behaviour and the mechanical properties of 6.5 to 12% Mn steel.

[Neue Hütte, 1974, 19, (4), 211—215] (G)

BISI 14111 (V. K. Babich, et al.)

Effects of small deformation and tempering on the properties of U8 steel with a lower bainite structure.

[Izv. VUZ Chern. Met., 1975, (10), 124—127] (R)

BISI 14225 (I. N. Bogachev, and T. S. Vetrova.)

Investigation of cementite in deformed white cast iron.

[Izvest VUZ Chern. Met., 1975, (12), 111—114] (R)

BISI 14311 (P. N. Otsrik, et al.)

Kinetic features of the carburization of an iron catalyst in a stream of carbon monoxide.

[Izvest VUZ Chern. Met., 1976, (1), 14—17] (R)

BISI 14374 (A. Ya Krapov, and F. I. Arlovskii.)

Effects of alloying elements on the weakening of graphitized steels at high temperatures.

[Izv. VUZ Chern. Met., 1976, (2), 151—153] (R)

#### Physical Properties and Chemical Analysis

BISI 14276 (F. Kavicka.)

Temperature field in the system steel ingot mould environment. I. Analog method for solving the unsteady temperature field of the system

[Hutn. listy, 1975, (9), 624—629] (C)

BISI 14312 (E. A. Kazachkov, and S. L. Makurov.)

Dynamic calorimetry used for investigating the thermal and physical properties of steels at high temperatures.

[Izvest VUZ Chern. Met., 1976, (1), 18—22] (R)

BISI 14399 (F. Kavicka, et al.)

The temperature field of the steelmaking ingot-mould-environment system 4. The analog solution [Hutn. listy, 1975, (12), 862—868] (C)

BISI 14408 (F. Kavicka, et al.)

Temperature field of the ingot-mould environment system.

[Hutn. listy, 1975, (10), 702—706] (C)

BISI 14434 (J. Eibl.)

Present state of technology, possibilities and limits in the continuous measurements of bath temperature in LD vessels using the "VP" measuring lance.

[Berg. Huttenm. Monats, 1976, 121, (1), 25—30] (G)

- BISI 14395 (A. Zidek, et al.)  
Reasons for scatter in the magnetic properties in the rolling of OTN coils.  
[Hutnik, 1975, (11), 427—429] (C)
- BISI 14344 (P. Konig, et al.)  
The determination of low-sulphur contents in the production of pipe steels.  
[Arch. Eisen, 1975, 47, 30, 161—165] (G)
- BISI 14296 (W. Balcerowiak, et al.)  
Investigation of the main raw materials of the electrode industry by electron microscopy.  
[Koks Smola Gaz, 1975, 20, (3), 63—66] (Po)
- Mechanical Properties and Materials Defects**
- BISI 14150 (Ya. M. Okhrimenko, et al.)  
Device for stretching specimens under the action of an assigned stress.  
[Izv. VUZ Chern. Met., 1975, (11), 89—92] (R)
- BISI 14433 (G. Katzemeier.)  
Radioisotope tests to determine the influence of surface finish on the wear and load bearing capacity of friction bearings.  
[Motortechnische Zeitschrift, 1973, 34, (6)] (G)
- Corrosion and Corrosion Testing**
- BISI 14267 (A. Kugler, et al.)  
Natural corrosion tests with stainless steels on heligoland.  
[Stahl Eisen, 1976, 96, (1), 21—27] (G)
- BISI 14441 (R. Massini.)  
The corrosion of tinplate by canned foods.  
[Industria Conserve, 1975, 50, (4), 272—283] (I)
- Rolling**
- BISI 14106 (Yu. M. Chizhikov, and S. E. Kondrashin.)  
Effect of the initial ingot cross-section shape on welding up the metal during the rolling of railway track rails.  
[Izv. VUZ Chern. Met., 1975, (10), 71—75] (R)
- BISI 14135 (V. N. Brinza, et al.)  
Action of industrial lubricants in cold rolling and their removal from the surface of electrical steel.  
[Stal', 1975, (11), 1013—1016] (R)
- BISI 14148 (V. N. Khloponin, et al.)  
Investigation on screening rolled stock before the finishing group of a wide strip mill.  
[Izv. VUZ Chern. Met., 1975, (11), 80—83] (R)
- BISI 14209 (L. V. Lebedeva.)  
Rolling lightened economic sections of t-string sheet.  
[Stal', 1975, (12), 1107—1108] (R)
- BISI 14291 (C. D. Wuppermann, et al.)  
Manufacture of merchant bars and wire rod from the technical and economic viewpoint.  
[Stahl Eisen, 1976, 96, (2), 59—66] (G)
- BISI 14307 (E. S. Glukhovskii.)  
Effect of process planning with respect to section rolling mill.  
[Stal', 1976, (1), 49—54] (R)
- BISI 14319 (N. E. Skorokhodov, et al.)  
Stresses in trailing end of strip in cold rolling.  
[Izv. VUZ Chern. Met., 1976, (1), 91—93] (R)
- BISI 14321 (A. B. Chelyustkin, et al.)  
Temperature variation of hot-rolled strip in conditions of forced interstand cooling.  
[Izv. VUZ Chern. Met., VUZ (1), 100—105] (R)
- Metalworking, Excluding Rolling**
- BISI 14396 (R. Barteczek, and L. Beck.)  
Forging of ingots with cooled down surface with use of temperature after stripping the mould.  
[Hutnik, 1975, (11), 430—432] (C)
- BISI 14400 (M. Kartas.)  
Calculation of pressure in forward extrusion.  
[Hutn. listy, 1975, (12), 869—872] (C)
- BISI 14329 (N. S. Besalov, et al.)  
Question of the possibilities of the decantation methods.  
[Izv. VUZ Chern. Met., 1976, (1), 171—173] (R)
- BISI 14318 (V. K. Vorontsov, et al.)  
Experimental mechanics methods of formulating and solving the three-dimensional problems of plastic flow. Report 1.  
[Izv. VUZ Chern. Met., 1976, (1), 79—84] (R)
- BISI 13388 (P. Mathon.)  
Measurement techniques for the physical characteristics of powders.  
[Oberflächentechnik, 1974, 51, (1), 22—26] (G)
- BISI 14412 (V. Mihalik, et al.)  
Improvement of quality of iron powder by electrostatic and magnetic treatment.  
[Hutn. listy, 1975, (9), 634—637] (C)
- Steels and Alloys (Technical Applications and Methods of Production), Cermets**
- BISI 11455 (T. Greday, et al.)  
Structural engineering steels with dispersoids III: vanadium steels.  
[Report published by CRM, Liege, June 1972] (F)
- BISI 14195 (I. Frantiu.)  
Corrosion rate and pickling time of austenitic stainless steel in acid solutions.  
[Metalurgia, 1975, (2), 79—80] (Ru)
- BISI 14301 (A. Lex, and D. Radtke.)  
Investigations of dynamo steel after addition of 0.05wt% zirconium.  
[Estel Ber., 1975, (4), 177—185] (G)
- BISI 14419 (G. Lankau.)  
Concrete reinforcement steel in the DDR with special reference to steels St T-III and St T-IV.  
[Neue Hütte, 1976, 21, (2), 81—85] (G)
- BISI 14403 (K. Riha.)  
Pouring of killed steel using casting fluxes.  
[Hutn. listy, 1975, (11), 777—783] (C)
- Casting and Cast Metals**
- BISI 14207 (Yu. A. Samoilovich, et al.)  
Study of the temperature field in sheet ingots during the continuous casting of steel on vertical machines.  
[Stal', 1975, (12), 1087—1092] (R)
- BISI 14282 (M. Jagos, et al.)  
Simulating the thermal resistance of the gap between the casting and the metallic moulds by the analog method.  
[Slevarenstvi 1975, (6), 234—237] (C)
- BISI 14316 (E. M. Kitaev.)

- Solidification times of casting and ingots as functions of the excess melt heat.  
[Izv. VUZ Chern. Met., 1976, (1), 58—64] (R)
- BISI 14391** (V. Enenkl.)  
Radiation between ingot moulds  
[Strojnický Casopis, 1975, (2), 175—186] (C)
- BISI 14402** (V. Enenkl, et al.)  
The temperature field of the steel ingot-mould environment system. 3. The associated conditions for solution.  
[Hutn. listy, 1975, (11), 773—777] (C)
- BISI 14504** (B. Velička.)  
Effect of the working conditions on the service life of the ingot moulds.  
[Hutnik, 1975, (8), 294—296] (C)
- BISI 14330** (O. S. Komarov.)  
Calculating the depth of the ledeburite layer in grey cast iron casting.  
[Izv. VUZ Chern. Met., 1976, (1), 174—177] (R)
- BISI 14415** (J. Bradík.)  
The relationship between the casting wall thickness cooling rate and crystallization of cast iron.  
[Slevarenství, 1975, (8), 314—316] (C)
- BISI 14184** (L. Sofroni, et al.)  
Ladle iron alloying using exothermal alloys and blends.  
[Metalurgia, 1975, (1), 1—3] (Ru)
- BISI 14199** (L. B. Kogan.)  
Synthetic cast iron. Its characteristics and experience in its industrial manufacture.  
[Metalurgia, 1975, (3), 133—138] (Ru)
- BISI 14409** (J. Bečvar.)  
Utilization of nickel leaching residue as raw material for the product-iron of Cr and Ni-alloyed pig iron.  
[Hutnik, 1975, (8), 288—293] (C)
- Heat Treatment**
- BISI 14113** (A. A. Gol'denberg, et al.)  
The structure of white cast iron investigated by quantitative metallography methods.  
[Izv. VUZ Chern. Met., 1975, (10), 137—140] (R)
- BISI 14197** (D. Raseev, and M. Marcu.)  
Stresses and dimensional changes in steel hardening.  
[Metalurgia, 1975, (3), 124—129] (Ru)
- BISI 14226** (A. Ya. Khrapov, and F. I. Arlovskii.)  
Investigation of oxidation kinetics in graphitized steels.  
[Izv. VUZ Chern. Met., 1975, (12), 115—117] (R)
- BISI 14251** (R. Chatterjee-Fischer.)  
Some research into the problems of case hardening.  
[Härterei Tech. Mitt., 1975, 30, (5), 261—267] (G)
- Heating, Heating Furnaces and Electric Heating**
- BISI 14235** (M. Tsymbal.)  
Refractory linings of induction channel furnaces for steel.  
[Paper given at the BBC Reunion, Dortmund,
- 12—13 Mar. 1970, 232—240] (G)
- BISI 14158** (N. M. Itskovich, et al.)  
Intensification of the operation of straight-through rolling furnaces.  
[Izv. VUZ Chern. Met., 1975, (11), 170—177] (R)
- BISI 14281** (J. Fessl.)  
Experiments on the control of the thermal regime of soaking pits by an argus 500 computer.  
[Automatizace, 1975, (7), 180—183] (C)
- Fuel, Combustion and Refractories**
- BISI 14310** (V. D. Pashkov.)  
Fuel and energy balance and thermal power supply systems at steel-works.  
[Stal', 1976, (1), pp. 91—93] (R)
- BISI 13488** (V. Bulina.)  
Problems in designing convection tube recuperators.  
[Hutn. listy, 1975, (2), 108—113] (C)
- BISI 13865** (R. Paoletti.)  
Contribution to the study of the mechanical degradation of coke.  
[GDS C. I. T. 1975, (5), 1087—1128] (F)
- Welding and Joining**
- BISI 14166** (P. Bouvard, and R. Paradis.)  
Plasma arc welding of spheroidal graphite cast irons.  
[Soudage et Techniques Connexes, 1975, 29, (3—4), 113—122] (F)
- Ores and Minerals Handling and Beneficiation**
- BISI 14117** (D. A. Storozhik.)  
Method of calculating the power of the sintering-machine drive.  
[Izv. VUZ Chern. Met., 1975, (10), 174—176] (R)
- BISI 14217** (G. G. Efimenko, et al.)  
Production of highly basic iron-ore pellets for steelmaking.  
[Izv. VUZ Chern. Met., 1975, (12), pp. 29—31] (R)
- BISI 14313** (O. D. Zhitnikov, et al.)  
Effectiveness of using fuel in sintering practice.  
[Izv. VUZ Chern. Met., 1976, (1), 23—27] (R)
- BISI 14314** (S. G. Bratchikov, et al.)  
Thermo-physical characteristics of iron-ore pellets. Communication 1.  
[Izv. VUZ Chern. Met., 1976, (1), 32—35] (R)
- BISI 14442** (O. Grega)  
Production experience gained with sinters of different basicity.  
[Bányász Koh. Lapok (Kohászat), 1975, 108, (11), 507—509] (H)
- Ironmaking and Ferro-Alloys**
- BISI 14112** (M. N. Klyuchnik, et al.)  
Behaviour of magnesium particles in the melt during desulphurization of pig iron outside the blast furnace.  
[Izv. VUZ Chern. Met., 1975, (10), 132—136] (R)
- BISI 14203** (A. Annichini, and C. Thirion.)  
Commission of blast furnaces p. 135—p. 987.—operations of the casting platform of the Nippon

- Kokan blast furnace 1 of Fukuyama (+).  
[Centre Document Sid C. I. T., 1974, (10), pp. 2099—2107] (F)
- BISI 14204 (I. V. Kotel'nikov, et al.)  
Effectiveness of using dipping blast tuyeres in blast furnace.  
[Stal', 1975, (12), 1075—1077] (R)
- BISI 14397 (M. Prouza.)  
Control of counter-current flow in a blast furnace.  
[Hutn. listy, 1975, (12), 850—854] (C)
- BISI 14492 (I. Janousek.)  
System design of automatic control for blast-furnace cooling circuits.  
[Sbornik VSB Ostrava, 1975, (1), 157—171] (C)
- BISI 14519 (A. Mocsy, et al.)  
Experiments for producing intermediate graphite cast iron.  
[Bany. es Koh. Lapok (Ontode) 1975, 26, (12), 265—271] (H)
- BISI 14520 (J. Horvath.)  
Possibilities and probable results of the use of reducing gases in pig iron production  
[Bany. es Koh. Lapok (Kohaszat), 1975, 108, (12), 531—534] (H)
- BISI 14221 (A. V. Rabinovich, et al.)  
Investigation of the interaction mechanism of nitrogen with solid ferro-chrome.  
[Izv. VUZ Chern. Met., 1975, (12), 54—58] (R)
- BISI 14227 (Yu. G. Bobro, et al.)  
Development of the optimum composition for structural aluminium iron containing graphite in platelet form.  
[Izv. VUZ Chern. Met., 1975, (12) 118—121] (R)
- Steelmaking**
- BISI 14104 (V. A. Denisov, et al.)  
An investigation by means of a cold model of the hydrodynamics of an open hearth bath with sub-surface injection.  
[Izv. VUZ Chern. Met., 1975, (10), 41—43] (R)
- BISI 14211 (S. I. Sobkin, et al.)  
Industrial trials on producing metal cord and cables of steel melted in oxygen blown converters.  
[Stal', 1975, (12), 1120—1121] (R)
- BISI 14105 (S. Jaklova, et al.)  
Present day problems in ironmaking for melting in the tandem furnace.  
[Hutnik, 1975, (10), 365—371] (C).
- BISI 14146 (B. T. Chuikov, and A. V. Egorov.)  
Hydrodynamic of the baths of arc steelmaking furnace employing electro-magnetic stirring.  
[Izv. VUZ Chern. Met., 1975, (11), 54—56] (R)
- BISI 14306 (V. S. Rozentsveig, and A. V. Khvoshchinskii.)  
Contemporary design solutions for electric steelmaking shops.
- [Stal', 1976, (1), 35—39] (R).
- Extraction and Refining**
- BISI 14147 (G. A. Sokolov, et al.)  
The physical properties of lime-silicate slags.  
[Izvest. VUZ Chern. Met., 1975, (11), 57—60] (R)
- BISI 14215 (E. M. Rybalkin, et al.)  
Reaction kinetics of an iron-carbon melt with oxygen in an ideal mixing reactor.  
[Izv. VUZ Chern. Met., 1975, (12), 6—10] (R)
- BISI 14218 (F. N. Listin, and A. S. Nevskii.)  
Experimental research into heat and mass transfer during the melting of steel in bubbled molten iron-carbon mixtures.  
[Izv. VUZ Chern. Met., 1975, (12), 40—42] (R)
- BISI 14219 (A. M. Bigeev, et al.)  
Oxidation of pig-iron impurities in the gas phase during spray refining.  
[Izv. VUZ Chern. Met., 1975, (12), 43—45] (R)
- BISI 14317 (A. I. Kochetov, et al.)  
Deoxidizing capacity of carbon in vacuum.  
[Izv. VUZ Chern. Met., 1976, (1), 65—71] (R)
- BISI 14495 (M. Benda, and J. Janecek.)  
Homogenization of arc furnace bath composition in the reduction period of melting.  
[Hutnicke listy, 1976, (1), 7—13] (C)
- BISI 14255 (W. E. V. Rijswijk de Jong.)  
The re-processing of tin-coating scrap material.  
[Metallurgie 1973, 13, (2), 64—67] (Ho)
- BISI 14491 (V. Jarkovsky.)  
Role of price as an important factor in metal recovery from scrap in metallurgical works.  
[Hutnicke listy, 1976, (3), 194—210] (C)
- Engineering**
- BISI 14160 (Permanent Way Dept. Sao Paulo, Brazil.)  
Technical specifications for the supply of steel rails with a minimum tensile strength of 885 N/mm<sup>2</sup> (90 kgf/mm<sup>2</sup>).  
[Sao Paulo Railway Specification, SPV-07 23.10.75] (Brazil)
- BISI 14525 (Ministere De L'Equipement et du Logement.)  
Supply and installation of flexible galvanised steel safety rails-types a and b. (F)
- BISI 14309 (K. S. Trubitsyn, and V. I. Tiverovskii.)  
Development of general plan and transport economy of metallurgical works.  
[Stal, 1976, (1), 69—73] (R).
- BISI 14527 (S. Hager, and P. Hagsbacher)  
Series production of lorry axles.
- BISI 14229 (T. S. Stanev, et al.)  
Certain results of cleaning gases from open ferroalloy furnaces with the aid of wet slotted dust-collectors.  
[Izv. VUZ Chern. Met., 1975, (12) 138—142] (R)