

## 資料室だより

### BISI Translation 紹介

— No. 59 —

#### BISI Translation の特長

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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 No. 754, 757~759

#### Management Planning and Control

BISI 12121 (H. Seliger)

Work study in steelworks—problems and examples.

[Berg u Huttenm. Monats., 1973, 1, (118), 13—23] (G)

#### Physical Structure of Materials and Crystallography

BISI 13349 (V. L. Kolmogorov, et al.)

Rotation of the axes of anisotropy in the process of plane plastic deformation.

[Izv. VUZ Chern. Met., 1975, (2), p. 80—83]. (R)

BISI 12230 (H. Bühler and O. W. Buchholtz.)

Measurements of residual stresses on flat and non-flat cold strip.

[Arch. Eisenhüttenwes., 1973, 44, (12), 907—912] (G)

BISI 12956 (E. S. Tovpenets, et al.)

The influence of cooling system of large forgings on internal stresses.

[Met. i. Term. Obrab. Met., 1971, (9), 6—11] (R)

#### Physical Metallurgy and Metallography

BISI 13338 (E. S. Levin and G. D. Ayushin)

Investigation of some of the physico-chemical properties of molten Fe-Cr-Al alloys.

[Izv. VUZ Chern. Met., 1975, (2), 5—7] (R)

BISI 13343 (Yu. G. Gurevich, and N. R. Frage)

Thermodynamic properties of titanium carbonitride and conditions under which it is precipitated out of molten steel.

[Izv. VUZ Chern. Met., 1975, (2), 43—46] (R)

#### Physical Properties and Chemical Analysis

BISI 13111 (W. Carl)

Thickness measuring instruments with radio-

nuclides to control strip thickness in cold rolling mill—Part 1.

[Bander Bleche Rohre, 1974, 15, (4), 146—152] (G)

BISI 12672 (V. V. Savchenko)

Influence of solidification rate on the character of grey-iron crystallization.

[Izv. VUZ Chern. Met., 1974, (6), 141—144] (R)

BISI 13455 (P. V. Tsoi, et al.)

A method of calculating temperature stresses.

[Izvest. VUZ Chernaya Met., 1975, (3), 172—178] (R)

BISI 13317 (W. A. Fischer, and B. Schuh)

Aluminium nitride as solid electrolyte in high-temperature measuring cells.

[Arch. Eisen., 1975, 46, (2), 101—104] (G)

BISI 13443 (O. A. Teplov, et al.)

Electrochemical properties and conductivity of  $\text{Al}_2\text{O}_3$  utilized as a solid electrolyte in the measurement of oxygen activity in melts.

[Izvest. VUZ Chernaya Met., 1975, (3), 62—66] (R)

#### Mechanical Properties and Materials Defects

BISI 13294 (L. Gajdos)

Variations in the electrical resistance during the fatigue process.

[Kovové materiály, 1974, (5), 622—636] (C)

BISI 13318 (W. Meister, et al.)

A Method to show gas inclusions in metallographic specimens near to the surface.

[Z. Metallkde, 1974, 65, (8), 554—557] (G)

#### Corrosion and Corrosion Testing

BISI 12855 (C. G. Nestler)

Interface reactions on iron and steel surfaces with oxidation at temperature up to 570°C.

[Terhnik, 1973, 28, (8), 514—518] (G)

BISI 12943 (G. Trabanelli, et al.)

Surface layers on Cu-Ni alloys in synthetic sea water containing sulphide ions.  
[Met. Ital. Atti Notizie, 1973, 28, (7/8), 446—450] (I)

### Protection of Materials

- BISI 13421 (D. Hoffstadt)  
Structural and corrosion protection in eletro-plating plants with reaction plastics.  
[Galvanotechnik, 1972, D. 7968, 63, (10), 941—943] (G)
- BISI 13080 (A/S Fredericia Galvaniseringsanstalt)  
Hot galvanisation process.  
[German Patent 2 146 376] (G)

### Rolling

- BISI 13330 (A. P. Ignatenko, et al.)  
Production of curved sections with a longitudinal periodic corrugation.  
[Stal', 1975, (2), 144—145] (R)
- BISI 13345 (V. B. Lyashkov, et al.)  
Stresses in the deformation zone during the rolling of a three-layer bimetal with tension.  
[Izvest. VUZ. Chern. Met., 1975, (2), 57—59] (R)
- BISI 13027 (D. Schönert)  
Weak points in rolling mill drive systems whose mechanisms are liable to vibrate.  
[Stanl Eisen, 1974, 94, (23), 1141—1148] (G)
- BISI 13182 (V. Bednar and J. Brabec)  
Modernising cooling and lubrication systems in cold strip rolling mills.  
[Hutn. Listy, 1974, (8), 558—565] (C)
- BISI 13262 (Anon)  
The hot strip mill.  
[Bulletin de Liaison SOLMER, Special Number, August 1972, 1—35] (F)
- BISI 10100 (H. Guillevic)  
The sendzimir cold rolling mill type 22 S 26 at pont de roide (Peugeot) works.  
[Rev. Met., 1971, 68, (11), 769—775] (F)
- BISI 13452 (V. V. Glukhov, and V. N. Mochalin)  
Calculation of an optimum rolling schedule for a plate mill.  
[Izvest. VUZ Chernaya Met., 1975, (3), 134—137] (R)
- BISI 13451 (G. G. Grigoryan, et al.)  
Stability of the process of light-gauge sheet rolling with an allowance for transverse flow of the metal.  
[Izvest. VUZ Chernaya Met. 1975, (3), 127—129] (R)

### Metalworking, Excluding Rolling

- BISI 13285 (F. Drastík)  
Graphical calculating technique in forging shops.  
[Hutnik, 1974, (11), 427—432] (C)
- BISI 13447 (A. P. Chermareu, et al.)  
Theoretical investigation of the effect of disturbing factors on the wall thickness variation of tubes, rolled on a two-roll reeling mill. Communication 2.  
[Izv. VUZ Chernaya Met., 1975, (3), 93—98] (R)
- BISI 12959 (W. Irmer.)
- Factors affecting hardening during thermal cutting.  
[ZIS-Mitt., 1973, 15, (3), 308—316] (G)
- BISI 13432 (N. P. Skryabin, et al.)  
Effectiveness of correcting edge warping of spring strip steel.  
[Stal', 1975, (3), 248—249] (R)
- BISI 12975 (S. Hlisnikovzky, and O. Juraska)  
Surface treatment of parts manufactured from sintered steel.  
[Strojirenska vyrota, 1974, (7), 488—493] (C)
- BISI 13374 (V. Miskovic, and A. Salak)  
Compressibility of sponge iron powder carburized during reduction of scale.  
[Pokroky praskove metalurgie, 1973, (2), 43—50] (C)

### Steels and Alloys (Technical Applications and Methods of Production), Cerments

- BISI 13190 (B. Glatz.)  
Plate manufactured from low temperature and cryogenic steels.  
[Hutnik, 1974, (6), 217—221] (C)
- BISI 13211 (Anon.)  
Austenitic stainless steel plates for pressure vessels at low and very low temperatures.  
[AFNOR NF A 36 209, 1970, May]. (F)
- BISI 13292 (J. Jech, and J. Siegl)  
Evaluation of the purity of steel for antifriction bearings.  
[Hutn. Listy, 1974, (11), 815—818] (C)
- BISI 13350 (A. Ya. Vibe, et al.)  
Influence of chromium on processes occurring during tempering of cast high-speed steel.  
[Izv. VUZ. Chern. Met., 1975, (2), pp 94—96] (R)

- BISI 12566 (P. Aubrun and P. Rocquet)  
Metallurgical mechanisms in the production of deep-drawing aluminium-killed extra-mild steel sheet.  
[Mém. Sci. Rev. Mét., 1974, 71, (1), 1—8] (F)

- BISI 13334 (G. S. Chernyak, et al.)  
Improving the formability of scaling-resistant alloys by microadditions of alkaline earth metals.  
[Stal', 1975, (2), 162—164] (R)

- BISI 13183 (F. Cechura, and R. Rozspytal)  
Problems of production and acceptance criteria in reinforcing ribbed bard with a 42 kp/mm<sup>2</sup> yield limit.  
[Hutnicka listy, 1974, (9), 647—652] (C)

- BISI 13212 (D. Horstmann)  
The behaviour of micro-alloyed High-strength structural steels during hot-dip galvanizing.  
[Arch. Eisen., 1975, 46, (2), 137—141] (G)

### Casting and Cast Metals

- BISI 13378 (V. Viocna and E. Kubik)  
Manufacture of ingot moulds of nodular cast iron at the TZ VRSR trinec.  
[Hutnik, 1974, (11), 419—421] (C)
- BISI 13158 (G. Ulmer, et al.)  
The coke-gas cupola (4 papers).  
[Fonderie, 1974, 29, (339), 391—408] (F)
- BISI 13327 (M. Z. Levin, et al.)

Optimum parameters of the sinusoidal graph of mould movement of a continuous billet casting machine.

[Stal', 1975, (2), 123—124] (R)

#### Heat Treatment

BISI 13352 (A. M. Petrichenko, et al.)  
Nomogram for selecting suitable regimes for induction hardening of castings of spheroidal-graphite cast iron.  
[Izvest. VUZ. Chernaya Met., 1975, (2), 109—111]. (R)

BISI 12934 (I. Montevercchi)  
Adaptation of the carbon steel equilibrium diagrams calculated for endothermic atmospheres for use with alloy steels.  
[Met. ital., 1973, 65, (12), 684—698] (I)

BISI 13091 (A. Leutgöb, et al.)  
Decarburisation behavior of Fe-C and Fe-X-C alloys with simultaneous scaling of the metal surface.  
[Arch. Eisen., 1974, 45, (12), 871—880] (G)

BISI 13189 (V. Smid and J. Pesa)  
Producing reinforcing bars by hardening from the rolling temperature.  
[Hutnik, 1974, 24, (6), 213—216] (C)

BISI 13450 (R. I. Shukyurov, et al.)  
Influence of upsetting the ends of drill pipe on the structure and properties of the steel.  
[Izvest. VUZ Chernaya Met., 1975, (3), 124—126] (R)

BISI 13326 (E. I. Astrov, et al.)  
Melting low hardenability steel in basic arc and open hearth furnaces.  
[Stal', 1975, (2), 120—123] (R)

BISI 13434 (S. I. Shapovalov, et al.)  
Effects of accelerated heat treatment on the properties of cold upset wire.  
[Stal', 1975, (3), 257—258] (R)

#### Heating, Heating Furnaces and Electric Heating

BISI 12313 (H. Rangs.)  
Furnaces for the scale-free heating of steel.  
[Gaswarme Int., 1973, 22, (10), 393—398] (G)

BISI 13337 (M. A. Glinkov, et al.)  
An optimum system for controlling the heating of metal in the continuous furnace of a plate-rolling mill.  
[Stal', 1975, (2), 176—179] (R)

#### Fuel, Combustion and Refractories

BISI 12625 (J. Volny, and V. Sindel.)  
Effect of the shape of nozzles and the steam pressure on the efficiency of fumeless charging of coal into coke ovens.  
[Hutnik, 1974, (2), 41—45] (C)

BISI 13114 (W. Wenzel, et al.)  
Reducing gas generation from lignite.  
[International Iron and Steel Congress, Dusseldorf, 1974, May Paper 2.1.2.6] (G)

BISI 13355 (V. M. Baboshin.)  
Calculating the combustion of fuel oil in a lined chamber of limited size. Report 2.  
[Izvest. VUZ. Chernaya Met., 1975, (2), 133—137] (R)

#### Welding and Joining

BISI 13320 (H. J. Schuller, et al.)  
Cracks in the welded seam region of shaped parts in superheated steam connections.  
[Der Maschinenschaden, 1974, 47, (2), 69—74] (G)

BISI 12836 (V. Ruža)  
New data for material sheets of brazing solders and soldering fluxes.  
[Zvaranie, 1974, 23, (2), 56—61] (C)

#### Ironmaking and Ferro-Alloys

BISI 13299 (V. Kucera, et al.)  
Experience with variable diameter stockline armour in 1. Blast furnace at trinec iron and steel works.  
[Hutnické listy, 1974, (9), 620—627] (C)

BISI 13188 (B. Kolarz)  
The design of large blast furnaces.  
[Hutnik, 1974, (6), 205—208] (C)

BISI 13382 (K. Pierchala, and K. Klus)  
Evaporative cooling of shaft and bosh of blast furnace 6 in the iron and steel works at trinec.  
[Hutnicke listy, 1974, (11), 772—778] (C)

#### Steelmaking

BISI 13341 (V. B. Okhotskii)  
Assessing the assimilation of oxygen when injecting metal in the converter from the composition of the gas phase. Communication 1.  
[Izv. VUZ. Chern. Met., 1975, (2), p. 28—31] (R)

BISI 13119 (E. Steinmetz)  
Possibilities of continuous steel manufacture with the use of the elecromagnetic countercurrent chute.

[International Iron and Steel Congress, Dusseldorf, May, 1974, Paper 3.3.2.2.] (G)

BISI 13427 (A. L. Klein, et al.)  
Prevention of slopping during the melting of steel in a 250 tonne converter.  
[Stal', 1975, (3), 215—218] (R)

BISI 13356 (V. I. Grankovskii, et al.)  
Predicting the parameters of pig iron in the mixer.  
[Izvest. VUZ. Chernaya Met., 1975, (2), 138—141] (R)

#### Extraction and Refining

BISI 13289 (Z. Motloch, et al.)  
Some results obtained in applying the dortmund-hoerder method of varcum degassing.  
[Hutnické listy, 1974, (11), 778—784] (C)

BISI 13480 (J. Krüger, and H. Winterhager)  
On the electrolytic recovery of metallurgical intermediate products, particularly from ores and mixtures.  
[Erzmetall, 1973, 26, (6), 268—275] (G)

BISI 13290 (Z. Buzek, and V. Schindlerova)  
The effect of scandium, yttrium, lanthanum and cerium on sulphur activity and solubility in iron at 1600°C.  
[Hutnicke listy, 1975, (11), 784—790] (C)

BISI 13365 (P. Riboud)  
Phase relationships in the CaO-P<sub>2</sub>O<sub>5</sub>-Iron