

## 資料室だより

## BISI Translation 紹介

— No 48 —

## BISI Translation の特長

英国鉄鋼業界, BISRA および The Metals Society は共同で BISI を運営しています。この BISI は BISI Translations を発行しています。BISI Translations は世界各国 (英米語を使用する以外の国) の主要鉄鋼誌および学術誌のうち主要論文を全文英訳したものです。これらの論文は、世界各国が発刊する多数の Journals から選択されており、鉄鋼関係の研究者向けの論文を網羅しています。

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 Journal of The Iron and Steel Institute に掲載され、事前にどんな論文が出るかわかるようになっていきます。

BISI Translations を利用すれば英国米国、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す。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 706~707, 709~710

**Management Planning and Control**

BISI 11154 (B. Lineberg)

Safety precautions in heat treatment plants  
[Hart. Techn. Mitt., 1972, 27, (2) 91-99] (G)

BISI 12181 (R. Friedl et al.)

The energy economy of the steel industry in west Germany, and the influence of the world energy economy  
[Stahl u. Eisen, 1973, 93, (2), 920-927] (G)

**Physical Structure of Materials and Crystallography**

BISI 11540 (N. Gernay)

Mathematical theories on damage to metals  
[Rev. M. Mec., 1972, 18 (1), 23-41] (F)

BISI 12238 (H. G. Ellerbrock)

Diffusion of hydrogen in steel with internal cavities.  
[Acta Met., 1972, 20, Jan., 53-60] (G)

**Physical Metallurgy and Metallography**

BISI 11270 (M. Slesar et al.)

Mechanical properties of carbon steels with the widmanstätten structure  
[Kovove materialy, 1972, 10 (6), 527-539] (C)

BISI 11929 (H. J. Neuhauser and W. Pitsch)

Lowering the martensite temperature by incoherent particles in the austenite  
[Arch. Eisen, 1973, 44, (3), 235-240] (G)

BISI 12092 (V. I. Grigorkin)

Effects of carbon and manganese on phase changes in manganese alloys.  
[Izv. VUZ Chern. Met., 1973, (10), 127-131] (R)

BISI 11921 (A. K. Baev, et al.)

Study of the thermal decomposition of iron tetracarbonyl.  
[Obshch. Prikl. Khim., 1972, (4), 25-33] (R)

**Physical Properties and Chemical Analysis**

BISI 11949 (D. M. Ștefănescu, and I. Chiricută)

Rapid analysis for the determination of the equivalent carbon of hypoeutectic cast irons with flaked graphite, using the cooling curves.  
[Metalurgia, 1973, 25, (3), 124-127] (Ru)

BISI 12447 (H. Wubbenhorst)

Immersion measurement of temperatures in metals.  
[Giesserei, 1971, 58, (20), 7th October, 605-611] (G)

BISI 12220 (N. E. Skorokhodov, et al.)

Use of the moire method for investigating the camber in rolled sheets  
[Izv. VUZ Chern. Met., 1973, (12), 80-83] (R)

BISI 11001 (M. Oproiu.)

Simultaneous determination by spectral analysis of Al, Mn, Si in aluminium-alloyed cast irons.  
[Metalurgia, 1972, 24, (7), 486-488] (Ru)

BISI 11608 (L. Habel and J. Steiger)

Determination of the state of bonding in nitrogen in plain-carbon steels containing aluminium.  
[Schweizer Archiv., 1971, 37, Sept. 297-304] (G)

**Mechanical Properties and Material Defects**

BISI 12173 (H. J. Kopineck, et al.)

Non-destructive inspection of working rolls for cold rolling mills  
[Arch. Eisen, 1971, (1), 45, 33-38] (G)

BISI 12127 (E. A. Becker & M. Vogt)

Operation and possible applications of an electro-magnetic test unit for checking structures and confusions of material.  
[Materialprüfung, 1973, (5), May, 182-185] (G)

BISI 12326 (G. Ebneith, et al.)

Origin of macrosegregations in the centre zone of conventionally cast steel ingots.

[ESTEL-Berichte aus Forschung und Entwicklung unserer Werke, 1974, (1), 13-24] (G)

### Corrosion and Corrosion Testing

BISI 12394 (W. Machu)

Recent investigations into inorganic and organic coatings on steel, galvanised steel and aluminium using an accelerated corrosion test according to mach uschiffman

[Werkstoffe und Korrosion, 1974, 25, (3), 179-181] (G)

### Protection of Materials

BISI 6997 (P. Rocquet and P. Aubrun)

Contribution to the study of the passivating films on tinplate.

[Corrosion, 1968, 16, (5), August/Sept., 229-234] (F)

BISI 11919 (G. Halle and H. Speckhardt)

The effect of different deposition conditions on some mechanical properties of nickel coatings from the sulphamate solution.

[Z. Werkstofftech., 1973, (2), 66-71] (G)

BISI 11398 (Z. Lubyova and K. Matiasovsky)

Electrolytic metal plating in molten salts. II. zinc plating

[Hutm. Listy, 1973, (1), 59-62] (G)

BISI 12058 (U. Cerboncini, et al.)

Air jet system for continuous strip galvanising

[Met Ital., 1972, 64, (5), 237-242] (I)

BISI 11922 (J. Lammer and F. Benesovsky)

Plasma spraying of sintered carbides using a compound powder.

[Planseeber. PulvMetall., 1973, 21, 18-33] (G)

BISI 12101 (D. L. Grinberg, et al.)

Jet control of the thickness of a zinc coating

[Stal', 1973, (10), 920-922] (R)

### Rolling

BISI 12100 (Yu. A. Semilovich, et al.)

Calculation of the temperature field of a section billet during grooved pass rolling

[Stal', 1973, (10), 917-920] (R)

BISI 11510 (H. Tummes and H. Kottsieper)

High-capacity hot rolling mills for wide strip require better design and higher efficiency of the mill and its facilities.

[Stahl und Eisen, 1973, 93, (5), 176-183] (G)

BISI 12164 (P. Petit, et al.)

Development of a method for measuring the speed of products during rolling.

[Rev. Met., 1972, 69, July-August, 475-482] (F)

BISI 12337 (V. M. Klimenko, et al.)

Development and introduction of a technology for the cold rolling of special hinge sections.

[Stal', 1974, (2), 178-180] (R)

BISI 12278 (J. Escoffet)

Extension of the dunkirk continuous hot mill

[Rev. Met., 1973, November, 823-830] (F)

BISI 11464 (S. P. Antonov, et al.)

Calculation of the contouring of plate mill rolls by means of a digital computer.

[Stal', 1973, (2), 136-140] (R)

BISI 12258 (A. P. Kolikov, et al.)

Investigation of the cross rolling of molybdenum and niobium.

[Izv. VUZ Chern. Met., 1974, (1), 90-92] (R)

BISI 11858 (J. Židek.)

Model Research in roll pass Design of section mills.

[Hutnicke Listy, 1973, (3), 192-196] (C)

BISI 10709 (Euronorm)

Hot rolled non-alloy steel strip. Tolerance on dimensions, size and weight.

[Euronorm, 1965, March, 48-65] (F)

BISI 12162 (R. Hermann)

Process for the determination of elongation and effective diameter in continuous section mills

[German (DBR) patent, 2217 423, 25th Oct. 1973] (G)

BISI 12219 (G. L. Kolmogorov & E. D. Kolegova)

Shape of the lubricant layer during fluid friction rolling

[Izv. VUZ Chern. Met., 1973, (12), 76-79] (R)

BISI 12099 (A. A. Korolev)

Cold-rolling with miscatching of rolling speeds

[Stal', 1973, (10), 906-910] (R)

### Metal Working Excluding Rolling

BISI 12259 (L. N. Sokolv and B. S. Kargin)

Perfecting the technology of forging with combination Heads.

[Izv. VUZ. Chern. Met., 1974, (1), 102-103] (R)

BISI 12104 (L. A. Kasil'nikov, and S. A.

Krasil'nikov)

The ductility of wire from carbon steels.

[Stal', 1973, (10), 953-957] (R)

BISI 12358 (W. Schiffgen)

Abrasive cut-off steel with special regard to special steels.

[Stahl und Eisen, 1974, April, (8), 326-335] (G)

BISI 11493 (W. Kramer)

Producing woodscrew threads-chipless method.

[Draht, 1964, 15, (1), 16-18] (G)

BISI 11144 (H. W. Koch and H. D. Oelkers)

Comparative tests on forging hammers and presses with regard to the noise and vibrations generated by them.

[Ind., Anz., 1972, 94, (65), 1603-1606] (G)

BISI 11920 (F. Thümmmler)

Recent developments in powder metallurgy.

[Z. Werkstofftech., 1972, 8, 394-414] (G)

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

BISI 11927 (O. A. Khomenko and A. V. Sazykina)

Anomaly in Young's modulus in dispersion hardening invars.

[Fiz. Metallov Metalloved, 1972, 34, (6), 1170-1177] (R)

BISI 11140 (G. Corrada)

Carbide tools for cutting and bending.

[WT-Z ind. Fertig., 1970, 60, Nov., 636-638] (G)

BISI 11918 (H. Grewe, et al.)

Restriction of grain coarsening in cemented carbides of iso-k type by carbide additions.

- [Z. Metallk., 1973, 64, 85-93] (G)
- BISI 9907 (M. Bogi)  
Design studies for stainless steel pleasure boats  
[Convegno di Technical Navale, Trieste, 1971, March, 25-27] (I)
- BISI 12327 (C. Strassburger & L. Meyer)  
Ways of further developing unalloyed structural steels  
[Thyssen Forschung, 1971, (1/2), 2-7] (G)
- BISI 11947 (C. Lonescu & P. Iancu)  
Influence of plastic deformation heating conditions on the structural and mechanical characteristics of structural steel micro-alloyed with vanadium  
[Metalurgia, 1973, 25, (3), 109-112] (Ru)
- BISI 12133 (A. F. Kablukovskii et al.)  
Structure and non-metallic inclusions in ball bearing steel ingots.  
[Stal', 1973, (11), 1002-1008] (R)
- BISI 12273 (A. A. Brodov et al.)  
Economic effectiveness of producing new type of electrical engineering steel.  
[Stal', 1974, (1), 74-76] (R)
- BISI 12336 (P. V. Yushin, et al.)  
Reducing the hardenability of 55pp carbon steel.  
[Stal', 1974, (2), 166-168] (R)
- BISI 11834 (V. Cihal)  
On the problems of intercrystalline corrosion of stainless steels  
[Sbornik VSB Ostrava, 1972, 18, (1), 103-22] (C)
- BISI 11428 (V. L. Zyazev and V. L. Yaveiskii)  
Correlation analysis of the quality of open-hearth steel.  
[Izv. VUZ. Chern. Met., 1973, (1), 28-33] (R)
- BISI 11770 (A. G. Nasibov, et al.)  
The effect of vanadium, niobium, carbon and silicon on the properties of low-pearlite steel  
[Metalloved. Term. Obrabot. Met., 1973, (4), 19-24] (R)
- Casting and Cast Metals**
- BISI 11441 (E. Dobiejewska and H. Gumieny)  
Urea as an addition to synthetic moulding mixtures.  
[Przegląd Odlewnictwa, 1971, (4), 119-122] (P)
- BISI 10830 (H. Schenk, et al.)  
Technical and economic possibilities of the continuous steel casting process for the production of semi-finished products with particular attention to the in-works processing costs.  
[Stahl und Eisen, 1972, (17), 17th Aug., 831-840] (G)
- BISI 12198 (W. Patterson, et al.)  
Effect of the cation and anion on the wet strength of clay-bonded foundry moulding sands.  
[Giesserei, 1962, (2), 117-125] (G)
- BISI 11217 (G. Horvath & J. Barnostotter)  
Influence of structure, particularly graphite formation, on the life of thickwalled, lamellar graphite cast iron steelplant moulds.  
[BHM, 1972, 117, (11), 371-381] (G)
- BISI 11007 (A. Pope and R. Zotta)  
Nodular ferrite cast iron. Correlation between the mechanical parameters and the factors affecting them.  
[Metalurgia, 1972, 24, (8), 548-552] (Ru)
- BISI 12246 (R. Zimmer.)  
Ductile iron for gas and water piping: New practical developments.  
[Neue Deliwa Zeitschrift, 1973, (2), 49-52] (G)
- Heat Treatment**
- BISI 11830 (L. Pollak & E. Szabo)  
Mathematical evaluation of hardening coefficient.  
[Zbornik vedeckych pra VST Kosice, 1971, 161-172] (C)
- BISI 11285 (I. Hrivnák)  
Study of hardening of subspinodal Fe-Ni-Al alloy.  
[Kovové Mat., 1972, 5, 415-422] (C)
- BISI 12307 (J. Bonte, et al.)  
Embrittlement and recitification of an XC38 boron steel  
[Mem. Sci. Rev. Met., 1973, (12), 911-926] (F)
- BISI 12126 (B. Edenhofer)  
Ionitriding of steels to increase their wear resistance  
[Plastiques Modernes et Elastomeres, 1973, Dec., 92-103] (F)
- Heatings, Heating Furnaces and Electric Heating**
- BISI 12108 (Rheinstahl Huttenwerke AG)  
Process for the prevention of freckles in electroslag refining  
[Belgian Patent BE 796 261 2-7-73, pp. 7] (G)
- BISI 10512 (L. A. Kamenskii, et al.)  
An investigation of the process of electroslag casting of forged ingots.  
[Sb. Tr. Mosk Vech Met., Inst., 1971, 10, 146] (R)
- Fuel Combustion and Refractories**
- BISI 12225 (V. G. Lesienko, et al.)  
Effects of a mixing device on the development of a natural gas flame.  
[Izv. VUZ Chern. Met., 1973, (12), 126-129] (R)
- BISI 11040 (Z. Hamouz & S. Louda)  
Pulse burners for industrial furnaces.  
[Hutnik, 1972, (5), 180-184] (C)
- BISI 10365 (J. Kasperczyk and W. Simonis)  
High-temperature carbon station of hard coal in the top-charged horizontal chamber oven as a temperature-time reaction.  
[Gluckauf-Forsch., 1971, 32, (1), 23-34] (G)
- BISI 12179 (W. Fassotte & M. Saussez)  
"Evaluation and use of fuels" (A comparative study of the reactivity of performed cokes and normal cokes by a thermogravimetric method)  
[Institut National des Industries Extractives (Belgique)-Technical Bulletin, 1973, July, (42), 38] (F)
- BISI 12167 (C. Cristescu & S. Cristescu)  
Attempts at manufacturing ladle bricks with subsequent expansion

[Metalurgia, 1973, 25, (7), 112-114] (Ru)

### Ores and Minerals Handling and Beneficiations

BISI 11944 (I. Opreacu, et al.)

Complex control of the sintering plant for maximal output.

[Metalurgia, 1973, 25, (1-2), 1-6] (Run)

BISI 11951 (P. Tocu)

Research concerning the increased use of methane gas for iron ore sintering to improve sinter quality and to reduce specific coke consumption [Metalurgia, 1973, 25, 233-238] (Ru)

BISI 10046 (I. Bottero and G. Iurilli)

Behaviour of a polyacrylic resin in the sintering process.

[Bollettino Tecnico Finsider, 1970, (276), 87-94] (I)

### Ironmaking and Ferro-Alloys

BISI 11769 (H. Della Casa, et al.)

Combustion tests of hydrocarbons in the absence of air with a view toward their massive injection in blast furnaces.

[Gen. Doc. Siderurg. Circ. d'Inform. Tech. 29 (1972), 2345-2373, No. 11] (F)

BISI 12270 (Yu. V. Chemelenko, et al.)

Smelting high-carbon ferromanganese in high-capacity electric furnace.

[Stal', 1974, (1), 40-43] (R)

BISI 1989 (P. S. Soloshenko, et al.)

75% Ferrosilicon melted in enclosed electric furnaces.

[Stal', 1973, (8), 727-728] (R)

### Steelmaking

BISI 11863 (J. Cengel)

Note on theory of direct reduction.

[Hutn. Listy, 1973, (6), 385-389] (C)

BISI 12267 (G. M. Glinkov, et al.)

Study of the heterogeneity of a liquid open-hearth bath by means of radioactive isotopes.

[Izv. VUZ Chern. Met., 1974, (1), 185-188] (R)

BISI 11356 (U. Feldman, et al.)

Metallurgy of the Production of low-nitrogen steel in the oxygen converter steel plant.

[Stahl Eisen, 1973, 93, (3), 85-93] (G)

BISI 11735 (H. Ottmar, et al.)

Relationship between the electrotechnical and thermo-technical parameters in high capacity electric arc furnaces.

[Radex Rundschau, 1973, (3), July, 519-527] (G)

### Extraction and refining

BISI 12332 (V. A. Medvedev)

Progress in developing and introducing new technological processes in steelmaking to improve steel quality.

[Stal', 1974, (2), 123-125] (R)

BISI 11946 (A. Bender, and I. Erdei)

Influence of some factors upon the combustion of manganese in the deoxidation of steel in the open hearth furnace.

[Metalurgia, 1973, 25, (1-2), 11-13] (Ru)

BISI 12252 (M. A. Glinkov et al.)

Mathematical portrayal of the processes of oxidation of impurities during continuous steel melting.

[Izv. VUZ Chern. Met., 1974, (1), 34-36] (R)

BIBI 12362 (R. Tovini)

Treatment of killed steel for tubes in the ladle with argon blowing.

[Bollettino Tecnico Finsider, 1973, (1), 19-24] (I)

### Engineering

BISI 12262 (B. E. Levin, et al.)

Structure and Properties of magnesium-zinc ferrite and alloyed with cupric oxide.

[Izv. VUZ Chern. Met., 1974, (1), 139-141] (R)

BISI 12200 (DNA)

Lifting hooks-technical delivery conditions for laminated hooks.

[Din 15 404, 1967, Sheet 2, December] (G)

### 「溶接技術の基礎と問題点」講習会

主催 溶接学会 協賛 日本鉄鋼協会, ほか

#### 1. 題目及講師

第1日

9:30 自動, 半自動溶接法の基礎と問題点  
名 大 益本 功

11:30 溶接設計の基礎と問題点  
阪 大 佐藤 邦彦

13:30 溶接材料と溶接冶金 新日鉄 鈴木 春義

第2日

9:30 溶接施工の基礎と問題点  
石井鉄工 吉田免四郎

13:30 溶接検査法の基礎と問題点  
阪 大 仙田 富男

#### 2. 会 期

大阪会場 昭和50年1月30日(木), 31日(金)

東京会場 昭和50年2月20日(木), 21日(金)

#### 3. 会 場

東京会場 土木学会図書館講堂

東京都新宿区四谷1丁目 電話 03-351-5138

大阪会場 科学技術センター

大阪市西区靱 1-118 電話 06-443-5321

#### 4. 受講料

会 員 20,000円 (協賛学協会の会員は)

非会員 25,000円 (会員料金とします.)

#### 5. 受講申込

両会場とも定員(各100名)になり次第締切らせていただきますので, 所定の申込書に受講料を添えて早目にお申込ください。(電話でも仮受付いたします)

#### 6. 問い合わせ先

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