

## 資料室だより

### BISI Translation 紹介

— No 51 —

#### BISI Translation の特長

英國鉄鋼業界、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、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き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 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、以外の主要製鉄国的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 Tranlations List No. 718~720

#### Physical Structure of Materials and Crystallography

BISI 12455 (A. Diament, et al.)

Surface fatigue behaviour of the carbonitrided and case-hardened layers in relation to the distribution of the residual stresses and the modifications of the crystal lattice occurring during fatigue.

[25th Colloque International, Caen, France, 29-31 May, 1974] (F)

#### Physical metallurgy and metallography

BISI 12050 (J. Sobotka, et al.)

An isothermal decomposition of austenite in 17% Cr, 2% Ni, 0.1% C steel.  
[Hutn. Listy, 1973, (5), 354-359] (C)

BISI 12066 (B. Wozniakova & L. Kuchar)

Transformation of curves of Zr-Al, Zr-Fe and Zr-Sn binary systems used in nuclear technology.  
[Sbornik VSB Ostrava, 1972, (3), 49-62] (C)

BISI 12475 (T. Rosso & M. Sarracino)

Use of the scanning microscope to observe micro-auto radiographs of high resolution and its application to studying sulphur behaviour in  $\alpha$ -iron and 3% Silicon iron.  
[Mem. Sc. Rev. Met., 1972, (12), 869-874] (F)

#### Physical properties and chemical analysis

BISI 11558 (E. Asmus & U. Kossmann)

Photometric determination of tin in steel using 3'-pyridylfluorone.  
[Z. Anal. Chem., 1969, 245, 137-139] (G)

BISI 11753 (P. Konig & K. H. Schmitz)

Testing and evaluation of probes for sampling liquid iron and steel.  
[Arch. Eisen, 1973, 44, (6), 469-476] (G)

BISI 12051 (K. Habel)

Present state of the measuring for the determination of fluorine content in immissions and

emissions.

[Arch. Eisenh., 1973, 44, (9), Sept., 697-702]  
(G)

BISI 12346 (M. K. Kleiner)

Determining the boundary function for the asymmetrical heating of a continuous cylinder.  
[Izv. VUZ Chern. Met., 1974, (2), 156-160]  
(R)

BISI 12424 (M. A. Glinkov, et al.)

Dynamics of a gas jet in a liquid. (communication 2)  
[Izv. VUZ Chern. Met., 1974, (3), 166-169]  
(R)

#### Mechanical Properties and Material Defects

BISI 10574 (C. Chr. Veerman)

Some aspects of the determination of the forming limit diagram for the onset of necking.  
[Hoogovens Report, 1971, Sept., 25] (F)

BISI 12163 (G. Pursche)

Modern systematic discussion of the wear of materials.  
[Technik, 1972, 27, (7), 452-462] (G)

BISI 12468 (J. Granacher, et al.)

The long-term accuracy of temperature in creep testing systems.  
[Materialprüfung, 1973, 15, (4), 116-22] (G)

#### Protection of materials

BISI 12065 (Z. Klika)

Treatment of low-carbon unalloyed steel sheets by pickling before metal coating.  
[Sbornik VSB Ostrava, 1972, (3), 37-48] (C)

BISI 12076 (J. Šturo)

An optimization of the technologies applied in sulphuric acid steel pickling. Based on the phase equilibria within the pickling/regeneration cycle in the pickling liquor.

[Hutnicke Listy 1973, (7), 481-487] (C)

BISI 12232 (L. Tordoir)

- The processing of thin sheet at mardyck works  
[Rev. Met, 1973, 70, (11), 895-906] (F)
- BISI 12290** (J. Zimmermann)  
Steel casings for dry batteries.  
[Verpackungsmagazine, 1973, (17), 43-50] (G)
- BISI 12298** (C. Beauvais & Y. Bary)  
The application of electronic microscopy to the morphology of phosphate crystalline layers.  
[Galvano, 1970 (403), 625-632] (F)
- BISI 12302** (P. Kresse)  
Diffusion processes on pigmented paint systems and their influence of the corrosion protection of the latter.  
[Farbe und Lack 1970, 76, (12), 1209-1220] (G)
- BISI 12355** (L. Bohn)  
The brittle behaviour of slightly plasticised polyvinyl chloride.  
[Kunststoffe, 1963, 53, (11), 826-830] (G)
- BISI 12406** (L. A. Atishev, et al.)  
The effect of process factors on the reversal rolling of heavy-gauge sheets on their thickness variation.  
[Stal', 1974, (3), 242-243] (R)
- BISI 12534** (H. Reihlen)  
Roll stand rigidity and energy requirements for cold-rolling of wide stainless steel strip in 20-roll mills (sendzimir cluster mills).  
[Stahl Eisen, 1974, (5), 195-203] (G)
- BISI 12418** (V. F. Potapkins & Gribinnik)  
Field of slip lines in the unsteady-state process of rolling heavy and medium sheet.  
[Izv. VUZ Chern. Met., 1974, (3), 77-81] (R)
- Metal working excluding rolling**
- BISI 12074** (A. Šálák)  
Properties of parts manufactured by powder metallurgy methods from powder prepared through reduction of iron scale.  
[Strojirenstvi, 1973, 23, (7), 422-426] (C)
- BISI 12276** (W. Panknin)  
Principles of drawing and spinning when forming metal sheets.  
[Zeitschrift fur Metallkunde, 1970, 61, 407-414] (G)
- BISI 12305** (Belgian Patent)  
Improvements in the forming of materials by extrusion.  
[Belgian Patent 804451 (UKAEA)] (F)
- BISI 12382** (M. R. Bonhomme)  
Comparative cutting tests on automatic lathes at the centre technique de l'indu strie du decolletage.  
[Aciers Speciaux, 1974, 24, 4-15] (F)
- BISI 12410** (V. A. Lunev, et al.)  
Determining the outline of the initial blank for drawing special sections.  
[Stal', 1974, (3), 277-279] (R)
- BISI 12411** (V. G. Parshin & S. P. Vasilev)  
Effects of the cold upsetting technology on the mechanical properties of bolts.  
[Stal', 1974, (3), 281-282] (R)

- BISI 12416** (Ya. M. Okhrimenko, et al.)  
Temperature in the immediate die contact zone during the stamping of heat-resistant steel blades.  
[Izv. VUZ Chern. Met., 1974, (3), 61-64] (R)
- BISI 12600** (H. Huber & U. V. Munz)  
The influence flow relieving means have on the cold hobbing properties of high alloy steels.  
[Maschinenmarkt, 1974, 80, (41), 777-780] (G)
- Steel and alloys (technical applications and methods of production) cermets**
- BISI 9906** (L. Fassina)  
The use of stainless steel for the construction of ships' hulls.  
[Convegno di Tecnica Navale, 1971, Trieste, March, 25-27] (I)
- BISI 12112** (W. Dahl, et al.)  
Influence of very low sulphur content on the mechanical properties of St 52 steel.  
[Arch. Eisen, 1973, 44, (11), 843-846] (G)
- BISI 12409** (I. Ya. Sokol, et al.)  
Non-aging titanium electrical steel E10T-E12T  
[Stal', 1974, (3), 265-267] (R)
- BISI 12427** (R. Oppenheim)  
Recent developments in sheet and strip made from stainless and heat-resistant steels for the automobile industry.  
[Stahl u. Eisen, 1974, 94, (10), 426-434] (G)
- BISI 12441** (X. Wache, et al.)  
Some features of the instability of nickel-rich superalloys.  
[Mem. Sci. Rev. Met, 1972, 69, (7/8), 543-556] (F)

#### Casting and Cast Metals

- BISI 10930** (G. Gettwert, et al.)  
New results on the carbon dioxide setting process.  
[Giesserei, 1972, 22, 649-661] (G)
- BISI 11839** (J. Pribyl)  
Continuous horizontal casting of grey cast iron semi-products.  
[Strojirenstvi, 1973, (2), 91-98] (C)
- BISI 12482** (R. Alberny & M. Wilhelm)  
Influence of electromagnetic stirring on the structure of continuously-cast products.  
[CDS Circ., 1974(4), 833-852] (F)
- BISI 12564** (J. Motz & D. Roth)  
The influence of melting in large induction furnaces on grain structure and strength properties of cast iron with lamellar graphite in wall thicknesses of 15 to 160 mm.  
[Giesserei, 1974, 61, (13), 397-402] (G)

#### Heating, heating furnaces and electric heating

- BISI 11393** (M. Kepka & Z. Kletečka)  
Some knowledge obtained from the electroslag remelting of steels.  
[Hutn. Listy, 1973, (1), 13-17] (C)

#### Welding and joining

- BISI 11482** (K. Derlin)  
Welding and rail material.

[Elsners Taschenbuch der Eisenbahntechnik, 1971, 25-44] (G)

BISI 12392 (A. Pfeuffer)

"Flying strand shearing" current state of development of automatic flame cutters for continuous cast machines.

[Bander Bleche Rohre, 1974, (5), 194-199] (G)

BISI 12609 (J. Donati, et al.)

Study of weld cracking in the heat-affected zones of austenitic 18-10 type steels stabilised with titanium influence of boron content.

[Mem. Sci. Rev. Met., 1973, 70(12), 939-951] (F)

#### Ores and minerals handling and benefications

BISI 12536 (H. W. Gerling, et al.)

Relationship between the properties, structure, and chemical analyses of sinters.

[Stahl Eisen, 1974, 94, (2), 41-46] (G)

#### Ironmaking and ferro-alloys

BISI 12175 (P. Konig, et al.)

Composition and properties of taphole mixtures [Stahl Eisen, 1973, 93, (26), 1255-1261] (G)

BISI 12393 (F. Lenger & J. Knoop)

Stockline measurement in the blast furnace.

[Techn. Mitt. Krupp., 1974, 32(1), 15-19]

(G)

BISI 12334 (F. I. Bityukov & N. V. Steblyanko)

The electrical schedule of reactangular ferro-alloy furnaces with a paired number of electrodes in phase.

[Stal', 1974, (2), 131-134] (R)

#### Steelmaking

BISI 12413 (P. R. Kaplun, et al.)

Hydrodynamic and diffusion processes in an installation for the continuous conversion of pig iron.

[Izv. VUZ Chern. Met., 1974, (3), 28-31] (R) (R)

#### Engineering

BISI 12239 (E. Volke)

The bridge across the river in line with the mannheim-ludwigshafen (kurt-schumacher) bridge part 1: construction and statistics.

[Stahlbau, 1973, 43, (4), April, 97-104] (G)

BISI 12449 (AFNOR)

Steel tubes-carbon steel sockets for threaded gas line pipe.

[French Standard, NF A 49-100 A 49-100 August, 1973] (F)