

資料室だより

BISI Translation 紹介

— No 54 —

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 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 730~734

Management Planning and Control

BISI 11439 (T. Hettinger)

Salient points of ergonomic analysis in the steel industry.

[Stahl Eisen, 1972, 92, (23), 1165-1169] (G)

BISI 12120 (K. Kelnhagauer)

Integrated functional maintenance in large plants (voest model)

[BHM, 1973, 118, (3), 80-86] (G)

BISI *12462 (R. Zeller)

Determining productivity at steelworks and refractory brickworks.

[BHM, 1973, 118, (5), 141-144] (G)

Physical Structure of Materials and Crystallography

BISI 12799 (S. V. Zemskii et al.)

Diffusion of nickel from an intermediate nickel layer during the annealing of bimetal.

[Izv. VUZ Chern Met., 1974, (8), 99-102] (R)

Physical Metallurgy and Metallography

BISI 11651 (M. Slesar and J. Kurian)

Analysis of the effect of widmanstatten structure on the properties of carbon steels

[Zvaranie, 1972, 9, 260-263] (C)

BISI 12693 (P. Furrer and H. Warlimont)

Precipitation of iron from very rapidly solidified aluminium-iron alloys.

[Z. Metallkunde, 1973, 64, (4), 236-248.] (G)

BISI 12780 (S. Schmidtmann and H. Hlawiczka)

The effect of thermomechanical treatment on transformation behaviour in the pearlite and martensite stages.

[Arch Eisen, 1974, (7), 529-537] (G)

BISI 12792 (G. P. Vyatkin et al.)

Use of the simplex-squares method for calculating the equilibrium diagram of the Fe-Cr-Al System.

[Izv. VUZ Chern Met. 1974, (8) 9-12] (R)

BISI 12800 (R. I. Mints, et al.)

Morphotrophy (morphological types) of marten-site in a lunar nickel-containing iron

[Izv. VUZ Chern. Met., 1974, (8), 107-110] (R)

Physical Properties and Chemical Analysis

BISI 11561 (K. Slickers)

The purification of inert gases used for spectro-analytical purposes

[Spectrochimica Acta, 1971, 27B, 265-9] (G)

BISI 12544 (W. Pluschell, et al.)

Reproducibility of oxygen measurements in steel melts by the electrochemical method

[Stahl u. Eisen, 1974, 94, (12), 539-542] (G)

BISI 12603 (L. Danguy et al.)

Ultrasonic method of measuring the thickness of plates at temperatures up to 200°C.

[Rev. Soud., 1972, 28, (1), 54-56] (F)

Mechanical Properties and Material Defects

BISI 12804 (V. M. Grebenik et al.)

The effect of stress concentration and scale factor on fatigue curve parameters.

[Izv VUZ Chern Met. 1974, (8) 172-178] (R)

BISI 12492 (M. Kepka)

The origin and formability of non-metallic inclusions in steel

[Hutnik, 1973, (10), 370-373] (C)

Corrosion and Corrosion Testing

BISI 11778 (E. Beranek and K. Barton)

The definition of "Corrosion aggressivity" of the atmosphere with regard to carbon steels

[Werkstoffe korr, 1973, 24, (5) pp 372-8] (G)

Protection of Materials

BISI 11489 (W. Metzger and R. Orr)

Depositing nickel dispersion layers—The elnisil process.

[Blasberg Mitt., 1971, 22, (Feb) 4-7] (G)

- BISI 12774 (J. Rones)
Cleaning and degreasing with special reference to phosphating
[Galvanotech, 1974, 65, (1), 19-27] (G)
- BISI 12863 (M. A. Ghonhiem and K. Lohberg)
SIP and δ IK layers formed during hot dip galvanizing.
[Metall, 1972, 26, (10), 1026-1030] (G)

Rolling

- BISI 11603 (W. H. Hulak)
Pre-stressed rolling stands.
[Bänder Bleche Rohre, 1973, 14, (4), 168-170] (G)
- BISI 12669 (A. A. Pozdeev et al.)
Thermomechanical behaviour during the rolling of ingots on a heavy gauge sheet mill.
[Izv. VUZ Chern. Met., 1974, (6), 104-108] (R)
- BISI 12679 (E. Braun)
Failure of the twin motor armature shaft at a reversing roughing mill and method of calculating the life of drive shafts.
[Stahl u. Eisen, 1973, 93, (24), 1171-1174] (G)
- BISI 12720 (I. S. Trishevskii, et al.)
New technology for the production of curved sections with parts of increased rigidity
[Stal', 1974, (7), 623-626] (R)
- BISI 12741 (K. Kammerhofer)
Mathematical models of cold rolling: Results, conclusions and trends with a view toward process automation.
[BHM, 118., (3) pp 73-80] (G)
- BISI 12749 (H. Borne and P. Borvin)
New equipment at the gueugnon steel-works for cold-rolling stainless steels—sendzimir mill No. 5
[Rev. Met., 1974, (6), 529-533] (F)
- BISI 12822 (H. Neumann and R. Schulze)
Programmed roll pass design for blooming mills.
[Neue Hutte, 1974, 19, (8), 460-471] (G)
- BISI 12910 (H. J. Marczinski)
The actual state of development of up-to-date rolling mills.
[Stahl Eisen., 1974, 94, (24), 1207-1211] (G)
- BISI 12948 (Anon)
Flat products of steel.
[DIN. 59 381, May, 1973.] (G)

Metalworking Excluding Rolling

- BISI 12171 (V. Popescu, et al.)
Influence of forging conditions upon texture of high-speed steel
[Metalurgia, 1973, 25, (10), 617-620] (Ru)
- BISI 12470 (Z. Marciniak and Z. Kopacz.)
Cold formed profiles using hollow face tooling.
[Formage et Traitement des Metaux, 1973 (45), May, 45-49] (F)
- BISI 12608 (DNA)
Structural hollow engineering sections—hot formed, square and rectangular steel tubes
[Ein 59410, 1974, May, pp. 5] (G)
- BISI 12645 (E. Kohlhaus, et al.)
Hot cutting of steels and of a high-temperature nickel alloy

- [Arch Eisen, 1974, (7), 475-481] (G)
- BISI 12762 (U. Schmidt)
Stretch-leveller and finishing line for coils.
[Tech. Mitt. Krupp Werksber., 1974, (2) July, 57-60] (G)
- BISI 12772 (K. Golf)
Automatic forging plant for antifriction bearing races.
[Werkstattstechnik, 1974, (5), 288-291] (G)
- BISI 12786 (V. P. Anisforov, et al.)
Thinning the ends of tubes on the continuous mill
[Stal', 1974, (8), 728-730] (R)
- BISI 12900 (J. Ulbricht)
The volume efficiency factor of hot-formed springs and possible ways of improving it.
[Estel-Ber, 1974, (3), 130-136] (G)
- BISI 12908 (H. Groebler)
The production of metal strip from powder by rolling.
[Blech Rohre Profile, 1973, 20, (8), pp 307-310] (G)
- BISI 12911 (A. Lienhart)
Some effects influencing the amount of the maximum roll forces during cold pilger rolling.
[Arch. Eisen, 1974, 45, (7) 449-455] (G)

Steels and Alloys (Technical Applications and Methods of Production), Cermets

- BISI 11123 (M. Franzmann, et al.)
Manufacture and use of silicon-free cold strip in single-phase induction motors
[Elektrie, 1972, 26, Jan., 23-25] (G)
- BISI 12398 (W. E. Lauprecht et al.)
Thermomechanically treated, high strength weldable structural steels with low carbon bainitic structure.
[Stahl u. Eisen, 1973, 93, (22), 1041-1053] (G)
- BISI 12498 (M. Onderka et al.)
Rolling and heat-treating of transformer steel with sulphidic inhibition phase.
[Hutn. Listy, 1973, (10) 719-727] (C)
- BISI 12502 (E. Janda and A. Rothbauer)
The influence of sheet thickness upon specific losses of orientated transformer steel.
[Hutnicke Listy, 1973, (12), pp. 857-860] (C)
- BISI 12556 (G. Pinard-Legry & G. Plante)
Anodic dissolution of a Stainless steel in sodium chloride solution
[Corrosion Science, 1974, 14, (3) pp. 177-181] (F)
- BISI 12635 (J. Crha et al.)
The complex evaluation of mechanical and metallurgical properties of high-strength structural steels with martensitic structure
[Kovové mat., 1974, (1), 18-46] (C)
- BISI 12647 (Anon)
Medium-grade medium-soft chromium-molybdenum/steels. 12 C.D. 4-12 C.D.
[Renault/Peugeot spec. 1973, September 11-02-201] (F)
- BISI 12649 (Anon)
Half hard special steels with guaranteed harden-

- ability $\times c$ 38B- $\times c$ 38BF.
[Renalt/Peugeot Spec. 11-01-012, 12/73] (F)
- BISI 12658 (F. A. Radin et al.)
Reasons for the inconsistent magnetic properties of high-silicon electrical engineering steel
[Stal', 1974, (6), 553-554] (R)
- BISI 12709 (G. Kulesa)
Standard and approved concrete reinforcement steels and reinforcement steel fasteners.
[Din Mitteilungen, 1974, (2), pp. 45-48] (G)
- BISI 12763 (H. Ordenbach)
Strip and plate from stainless and heat resisting steels.
[Tech. Mitt. Krupp Werksber, 1974, (2), July, 93-96] (G)
- BISI 12787 (V. V. Kalmykov, et al.)
Investigation of strength and low temperature brittleness in hardened and tempered reinforcing sections for pre-stressed concrete
[Stal', 1974, (8), pp. 735-737] (R)
- BISI 12790 (N. V. Schegoleva et al.)
Improving the torque figures for springs made of flattened strip produced by cold rolling after initial quenching.
[Stal' 1974, (8), 761-763] (R)
- BISI 12791 (N. R. Frage and Yu. G. Gurevich)
The solubility of nitrogen and titanium in nickel-chromium based alloys.
[Izv. VUZ Chern Met., 1974, (8) 5-8]
- BISI 12807 (VDE) -
Heat resisting cast steel
[Stahl Eisen Werkstoffblatt No. 471-60] (G)
- BISI 12813 (W. E. Ungeich)
Flat products with increased yield point and good deformability.
[Tech. Mitt. Krupp Werksber. 1974, 32, (2) 75-80] (G)
- BISI 12919 (H. de Boer)
Plates with improved properties in thickness direction and their application.
[Thyssen Offshore-Technik, 1974, 10-15] (G)
- BISI 12947 (DNA)
Flat products of steel.
[DIN 59 382, July, 1974.] (G)
- Casting and Cast Metals**
- BISI 12495 (M. Harok and B. Pycha)
A new method of casting composite two-layer ingots or carings
[Hutn. Listy, 1973, (9) 620-626] (C)
- BISI 12497 (E. Bernart)
Oscillating moulds for continuous casting of steel
[Hutnicke listy 1973, (10), 706-710] (C)
- BISI 12513 (A. G. Nepomnaschii, et al.)
The production and use of heavy aluminium-containing pig iron moulds
[Stal', 1974, (4), 312-317] (R)
- BISI 12621 (Z. Rusnak)
Wear resistance of chromium alloyed cast iron.
[Strojirenstvi, 1974, (2), pp. 97-100] (C)
- BISI 12801 (N. I. Taran et al.)
Calculation of gating systems in the top-pouring of large steel castings and forgings ingots. Communications. 2.
[Izv. VUZ Chern Met., 1974, (8), 118-121] (R)
- BISI 12810 (J. Chone and F. Teyssier)
Calculation of ladle heat losses.
[CDS Circ., 1974, (7-8), 1723-1733] (F)
- BISI 12821 (J. Jeitz and G. Blau)
Teeming ladles with double disc valves used in an LD-AC steelmaking plant.
[Stahl u. Eisen, 1974, 94, (23), 1127-1132] (G)
- BISI 12848 (P. Barthelemy et al.)
Development of the centrifugal continuous casting method.
[Rev. Met., 1974, 71, (5), 437-452] (F)
- BISI 12864 (Deutsche Edelstahl GMBH)
Centrifugal casting process.
[German Patent 2 254 705]
- BISI 12912 (German Patent)
Means of lining steelmaking or hot metal ladles.
[DAS, 2, 318, 360] (G)
- Heat Treatment**
- BISI 12048 (S. Kohut and O. Vondrasek)
Continuous entry annealing of austenitic Cr-Ni steel band
[Hutnik, 1973, (5), 182-184] (C)
- BISI 12471 (P. Strigens)
Influence of surface strengthening on steel endurance.
[VDI-Z, 1972, 114, (16), 1193-1199] (G)
- BISI 12624 (A. Puskar)
Surface hardening of steel with ultrasonics and its effect on fatigue limit.
[Strojirenstvi, 1974, (3) pp. 163-167] (C)
- BISI 12788 (Yu. M. Brunzel' et al.)
Techniques and instruments for measuring the carbon potential of controlled atmospheres.
[Stal', 1974, (8), 743-746] (R)
- Heating, Heating Furnaces and Electric Heating**
- BISI 12721 (N. Yu. Taits, et al.)
Heat engineering: research into the heating of slabs in continuous furnaces.
[Stal', 1974, (7), 653-655] (R)
- BISI 12803 (N. Yu. Taits et al.)
The problem of rating the metal oxidation loss in rolling mill furnaces.
[Izv. VUZ Chern Met., 1974, (8) 126-128]
- BISI 12819 (H. D. Pantke and C. Queens)
The processing of sponge iron in the crucible induction furnace
[Stahl u. Eisen, 1974, 94, (23), 1114-1120] (G)
- Fuel, Combustion and Refractories**
- BISI 11224 (C. Weidmuller et al.)
The testing of refractory materials in semi-industrial experimental plants,
[Stahl u. Eisen, 1970, 90, (1), 13-20] (G)
- BISI 12594 (V. Havlik)
New refractory bricks applied at the VSKG
[Hutnik, 1974, 24, (1), pp. 16-18] (C)
- BISI 12769 (C. Brecht)
Natural gas for industry—availability and use.
[Gaswarne Intl., 1974, 23, (5/6) May/June, 159-164] (G)
- BISI 12789 (B. P. Teben'kov et al.)

Experience of investigating and using radiation Recuperators.

[Stal', 1974, (8), 755-759] (R)

Welding and Joining

BISI 12188 (G. Seidel and H. Hess)

Investigation of electrosag weld cladding with strip electrodes.

[Schweissen U. Schneiden, 1971, (10), 410-411] (G)

BISI 12458 (DNA)

Welding of pressure vessels-welder approval test-approval for high quality welds.

[AD Merkblatt H2, 1952, Dec.] (G)

BISI 12504 (M. Holy)

Present state of knowledge of the crackability of low alloy steel welded joints during annealing.

[Zvaranie, 1973, 22, (11), pp. 328-333]. (C)

BISI 12918 (S. Dittrich)

Filler als for offshore technology.

[Thyssen, Offshore-Technik, Technische, Information, pp. 27-31] (G)

Ores and Minerals Handling and Beneficiation

BISI 12605 (G. Mitter.)

Method of ore evaluation practised by voest.

[BHM, 1973, 118, April, 109-111] (G)

BISI 12623 (I. Florek)

The rationalization of the ore-dressing process by means of the simplification of its operations.

[Rudy, 1974, (3), pp. 72-76] (C)

BISI 12639 (E. Teichert and V. N. Gupta)

Change in the operating characteristics of a blast furnace due to charging with the sinter burden.

[Stahl Eisen, 1974, 94, (4), 133-6] (G)

BISI 12662 (B. Sh. Statnikov, et. al.)

Method of calculating strengthening and determination of constants in equations of the sintering of iron ore pellets during their heat treatment (R)

BISI 12754 (H. Wunsch)

Sinter plant instrumentation and automation.

[Siemens-Z., 1973, 47, (3), 141-144] (G)

Ironmaking and Ferro-Alloys

BISI 12509 (J. Vincent)

Report on blast furnace tops

[La Metallurgie, 1972, July/August, 104, (7/8), 281-294] (F)

BISI 12174 (M. Declerc)

Ores—Optical preparation and use of ores and fluxes in sintering and in blast furnace

[Bull. Tech. USINOR, 1973, (3), 47-55]

BISI 12540 (K. H. Koch, et al.)

Development and use of quick-setting taphole and runner mixtures

[Stahl u. Eisen, 1974, 94, (1), 22-24]

BISI 12753 (S. Durell)

Blast furnaces: Will the race to giant size come to an end?

[Usine Nouv. 1972, (Dec) pp. 154-156] (F)

Steel making

BISI 12652 (A. N. Popov et al.)

Possible developments and basic problems in

building high capacity ultra high power arc furnaces.

[Stal', 1974, (6), 506-508] (R)

BISI 12664 (E. F. Gabrilin and B. L. Markov)

Determination of the position of oxygen roof lances in the open hearth furnace by electrical methods.

[Izv. VUZ Chern Met., 1974, (6) 53-58] (R)

BISI 12811 (H. Ottmar et al.)

Selected test results on sponge-iron charges in a high-performance electric-arc furnace.

[Elektrowarme Int., 1974, B3, June, B127-B137] (G)

BISI 12820 (E. Kalla and R. Steffen)

Present status and development trends of direct reduction processes.

[Stahl u. Eisen, 1974, 94, (23), 7 Nov., 1109-1114] (G)

BISI 11869 (A. Salak and A. Solom)

Low temperature reduction of wustite in sponge iron powder by hydrogen and dissociated ammonia.

[Zbornik VST Kosice, 1972, 95-105] (C)

Extraction and Refining

BISI 12486 (M. Kepka)

Making of steel CSN 12 040 for crankshafts in a 25 t arc furnace

[Hutnik, 1973, (12), 450-455] (C)

BISI 12665 (D. Ya. Povolotskii et al.)

Elimination of non-metallic inclusions during the drop remelting of metal in the slag.

[Izv. VUZ. Chern. Met., 1974, (6), 68-71] (R)

BISI 12707 (W. Janke and H. Serbent)

The processing of ion-bearing metallurgical dusts by the sl/rn process

[Int. Iron & Steel Congress, Dusseldorf, 1974, 1, Paper 2.2.2.4]

BISI 12724 (G. N. Elanskii et al.)

The content of combined oxygen in the metal during the boil of an open hearth bath.

[Izv. VUZ Chern Met., 1974, (7), 37-40] (R)

BISI 12725 (A. M. Yakushev et al.)

Deoxidation of 5 KhNM open hearth steel with MnAl alloy.

[Izv. VUZ Chern Met., 1974, (7) 41-43] (R)

BISI 12768 (F. Oeters and R. Scheel)

Studies of the dissolution of lime in CaO-FeO-SiO₂ slags.

[Arch. Eisen, 1974, 45, (9) 575-580] (G)

BISI 12782 (C. M. Muller & W. Fix)

Determination of free lime in steel-slugs-selection of a solvent

[Arch. Eisenh, 1974, 45, (10), 685-691] (G)

BISI 12817 (A. Eggenhofer et al.)

Operating experience with the vacuum heating plant for 50-tonne heats.

[BHM, 1974, (9), 338-343] (G)

Engineering

BISI 12240 (C. H. Rademacher)

The bridge across the river in line with the Mannheim—Ludwigshafen (Kurtzschumacher bridge) Part II: workshop completion and

mounting
 BISI 12303 (E. Neumann and E. Varnos)
 Inspection of the stability of coolant lubricant
 emulsions by classical research methods
 [Schmierungstechnik, 1971, 2, (11), 332-340]
 BISI 12541 (E. Gulker and P. Hainke)
 Tribiological measures to reduce maintenance

costs of rail and road vehicles
 [Stahl Eisen, 1973, 93, (9), 400-404]
 BISI 12701 (West German Patent)
 Continuous procedure for preparing aluminum
 oxide
 [West German Patent 2 302 724] (G)

“鉄と鋼” 掲載論文の索引カード頒布について

日本鉄鋼協会資料委員会

当委員会は、情報量の増大する折から、情報管理の為、“鉄と鋼”掲載の論文を組織的に検索する手段として、数年前より索引カードを作成して参りました。毎年カードを改良して参りましたが、昭和 46 年度の論文より抄録を掲載し、順調に蓄積して参りました。

これら索引カードは日本鉄鋼協会の利用に留めるだけでなく、会員の皆様方にも御利用頂ければ得るところ大であると思ひ、頒布致すことになりました。

広く御利用頂けますようお願い申し上げます。

- (1) カード様式 (3 インチ×5 インチのカード、普通の図書カードサイズ、UDC 分類標数付き)
- (2) 頒布の論文範囲 昭和 49, 50 年に“鉄と鋼”に発表された全論文。(講演概要集も含む)
- (3) 頒布価格 カード 1 枚につき 21 円 (抄録が表だけ) 又は 32 円 (抄録がカード裏表にわたる場合)
- (4) 頒布方法 1 論文についてカード 1 枚を全論文揃えたものを 1 セットとし、このセットが頒布単位としますのでセット数でお申し込み下さい。
 [1 セット約 52,000 円になる予定です。]
- (5) 申込先 日本鉄鋼協会 技術部 調査課資料係
 〒100 東京都千代田区大手町 1-9-4 経団連会館 3 階 TEL (03) 279-6021
- (6) 申込期限 印刷は注文数により決めますので、6 月 20 日 (金) までにお申し込み下さい。
 それ以降のお申込みは受けつけかねます。