

資料室だより

BISI Translation 紹介

— No 17 —

BISI Translation の特長

英國鉄鋼業界、BISRA および英國鉄鋼協会は共同で 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）の主要鉄鋼技術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 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。
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(List Nos. 546~550)

Mineral Sources, Ores, Mining & Treatment

BISI 8772 (F. Cappel and G. von Struve)

Recent progress in the sintering and pelletising of iron ores. [CENIM-Rev. Met., 1970, 6, (3), May-June, 262-273] (F)

BISI 8292 (C. Offroy)

Study of the crushing strength of iron ore pellets after various stages of reduction in a countercurrent gas stream.

[Rev. Met., 1969, 66, July/Aug., 491-518] (F)

BISI 8857 (R. Leveque and R. Imbaud)

Metallurgical study of a die steel containing 3 nickel and 3 molybdenum.

[Rev. Met., 1970, 67, Mar., 195-203] (F)

BISI 8889 (C. Avram et al.)

Research work on the possibility of replacing coke breeze, in sintering processes, by other fuels. [Cerc. Met., 1970, (11), 75-90] (Rum)

BISI 8855 (P. Blazy, et al.)

Dry beneficiation of manganese ore.

[Rev. Ind. Minerale, 1970, 52, Jan., 30-42] (F)

Fuel Preparation, Properties and Use

BISI 8974 (P. Foch and G. Meimarakis)

Possibilities afforded by the use of anti-fissurants in coking coal blends.

[Rev. Gen. Therm. 1964, July 1-26] (F)

BISI 8176 (A. Kozlov, et al.)

The development of an economic-mathematical model of the evolution of the fuel economy of the iron and steel industry.

[Izv. VUZ. Chern. Met., 1968 (11), 177-181] (Russ)

BISI 8125 (E. Canivez)

Automation in coking plants.

[Rev. Ind. Minerale, 1969, 51, 625-640] (F)

Refractory Materials

BISI 7365 (T. Kelen and H. O. Mulfinger)

The mechanism of chemical dissolution of nitrogen in glass melts. Kinetics of the reaction of silicon nitride with oxydic glass melts. [Glastechnische Berichte, 1968, 41, (6), 230-242] (G)

BISI 8131 (H. W. Hennicke and R. Kersting)

High temperature deformation of ceramic materials. III relaxation behaviour of refractory materials. [Deutsch. Ber. Keram. Ges., 1968, (7), 337-340] (G)

BISI 8708 (H. Maas and H. Abratis)

Reduction of fire-clay bricks in Fe-C melts. [Arch. Eisenh., 1970, 41, (5), 483-487] (G)

Blast Furnace Practice & Production of Pig Iron & Ferro Alloy

BISI 8686 (J. Luckers, et al.)

Untitled: deals with control of thermal conditions in blast furnace.

[International Conference on Automation in Iron and Steel Making, 1970, Apr., Intervention Paper B4] (F)

BISI 8702 (E. Daubenfeld, et al.)

Injection of coke oven gas into the blast furnace. [Coke in Iron and Steel Industry; International Conference, 1966, Sept., 438-446] (F)

Production of Steel

BISI 8584 (G. Konig and T. Ernst)

Determination of the composition and origin of oxide inclusions in steel—part II. [Radex Rund., 1970, (2), 67-98] (G)

BISI 8740 (M. G. Frohberg and J. Potschke)

Considerations on the precipitation deoxidation of molten metals.

- [Freiberger Forschung., 1969, (B 144), 31-51] (G)
- BISI 8160** (V. A. Romenets, et al.) Research into the effectiveness of steelmaking processes. [Metallugiya, 1967, (44), 306-331] (Russ.)
- BISI 8309** (E. Gori et al.) Equilibria between molten iron and saturated slags of the system CaO-FeO-MnO-SiO₂ at 1600°C taking account of the distribution of sulphur. [Arch. Eisenh., 1969, 40, Dec., 959-967] (G)
- BISI 8342** (J. Plateau) On the limits of the stability of a liquid jet. [Ann. Phys. Chem., Berlin, 1950, 80, 566-569] (G)
- BISI 8584** (G. Konig and T. Ernst) Determination of the composition and origin of oxide inclusions in steel-Part II. [Redex Rund., 1970, (2), 67-98] (G)
- BISI 8740** (M. G. Frohberg and J. Potschke) Considerations on the precipitation deoxidation of molten metals. [Freiberger Forschung., 1969, (B 144), 31-51] (G)
- Foundry Practice**
- BISI 8817** (W. Pohl and H. Sagmeister) Testing of the breakdown properties of core sands. [Giesserei Rund., 1969, Dec., 23-28] (G)
- BISI 8850** (W. Siefer) Considerations on the process of roll casting. [Giesserei, 1967, 54, Oct 26, 588-595] (G)
- BISI 8556** (L. Hallot) Economic advantages in melting malleable iron. [Fundicao, 1968, Oct/Nov., 27-37] (Port)
- BISI 8558** (A. Mocsy) The effect of form rigidity on the contraction of grey cast iron. [A Vasipari Kutato Intezet Ekvonyve, 1967, 3, 346-361] (Hun)
- BISI 8817** (W. Pohl and H. Sagmeister) Testing of the breakdown properties of core sands. [Giesserei Rund., 1969, Dec., 23-28] [G]
- BISI 8850** (W. Siefer) Considerations on the process of roll casting. [Giesserei, 1967, 54, Oct. 26, 588-595] (G)
- Heat-Treatment, Heat-Treatment Furnace, Re-heating Furnace & Soaking Pits**
- BISI 8744** (D. A. Prokoschkin and A. G. Wassiljewa) Recrystallisation and work-hardening of steel during thermomechanical treatment. [Freiberger Forshungsh., 1970, B 153, 49-54] (G)
- BISI 8926** (W. Richter) Internal stresses after a chemical-thermal surface treatment. [Wiss. Z. Techn. Hochsch. Kari-Marx-Stadt, 1969, (1), 1-159] (G)
- BISI 8829** (I. Muth and S. Herfert)
- T-T-T- Diagram for isothermal cooling of steel 66SiMn5. [Neue Hutte, 1968, 13, (3), 183-184] (G)
- BISI** (M. Boutonnat and M. Lebrun) Propagation of electromagnetic waves in underground working areas; measuring methods; tests carried out at the bottom of a mine and the results obtained. [Rev. Ind. Minerale, 1970, 52, 109-126] (F)
- Ronning & Rolling Practices**
- BISI 8773** (F. Cappel and G. von Struve) Comparison of applied angle sizing. [Stahl Eisen, 1970, 90, (15), 796-800] (G)
- BISI 8575** (T. Spittel) Influence of hot rolling and annealing conditions on the cold rolling behaviour of semiferritic and ferritic steels. [Neue Hutte, 1970, 15, Apr., 217-223] (G)
- BISI 8821** (A. E. Zaharov, et al.) Methods of accelerated cooling of hot rolled strip. [Mettallurg., 1970, (9), 30-32] (R)
- BISI 8937** (B. Macor and S. Piccinini) Measurement of residual surface stresses in rolling mill rolls. [Met. Ital., 1969, 61, (4), 141-156] (I)
- BISI 7705** (J. Vojkovsky) Development of roll pass design. [Hutnik, 1969, 19, (5), 187-193] (Cz)
- BISI 8111** (K. Papazyan and A. Dyankov) Research into the relationship between dimensions and weight in rolled steel production. [Godishnik Mashin. Elektrotekhni., 1967, 20, 125-134] (Bulg.)
- BISI 8096** (V. A. Teryaev and Yu. V. Pavlovich) On the contact areas between metal and rolls and forces acting during the rolling of beams in common and universal roll passes. [Trudy Inst. Chern. Met., 1969, 29, 146-154] (R)
- BISI 8723** (P. Zengler) Measurement of the specific normal and tangential forces and rolling forces and torque in hot slabbing. [Neue Hutte, 1970, 15, 274-278] (G)
- BISI 8895** (V. Branisteau, et al.) Studies regarding manufacturing optimization of cold rolled shapes by electric-method. [Metallurgia, 1970, 22, (5), 308-312] (Rum)
- Machinery, Machining Machinability & Services for Iron and Steel Plant**
- BISI 8074** (J. Hrubec) Heat generated by drilling can be utilized for softening hard steel. [Strojirenstvi, 1969, 19, (10), 640-643] (Cz)
- Welding**
- BISI 8084** (J. Prosek) Hot cutting of rust-resisting and heat resisting steels. [Strojirenska Vyroba, 1968, 16, (10), 723-732] (Cz)
- BISI 8456** (V. Pilous) Welding of chromium-nickel austenitic steels with structural low-carbon steels.

[Zvaranie, 1970, 19, (3), 86-90] (Cz)

BISI 8468 (J. Vrbensky)

Weldability aspects of rolled plates when stressed in the thickness direction.

[Zvaranie, 1970, 19, (4), 98-103] (Cz)

BISI 8500 (W. Welz)

Submerged arc welding of S. G. iron using filler strip electrodes.

[Schweissen Schneiden, 1969, 21, 162-167] (G)

Plating, Protective Coatings, Cleaning Pickling

BISI 8815 (C. G. Enke)

Whirl sintering, varnishing or powder coating?

[Bender Bleche, 1970, 11, (6), 321-323] (G)

BISI 8443 (A. Vojtiskova and F. Wiesner)

Production of chromium-plated sheet by diffusion treatment.

[Hutnik, 1970, 20, (2), 60-63] (Cz)

BISI 8579 (A. Hake)

Pickling of steel with hydrochloric acid and the closed acid and rines-water circuits by total regeneration.

[Neue Hutte, 1969, 14, Dec., 750-755] (G)

BISI 8770 (M. Grandou and M. Icre)

Drying of painte and lacquers by electronic irradiation. [Peintures-Pigments-Vernis, 1969, 45, (1), 3-15] (F)

Properties and Tests

BISI 8229 (A. Salak)

Influence of small cold deformations and aging on mechanical properties of low-carbon steels. [Strojirenstvi, 1969, 19, (12), 763-767] (Cz)

BISI 8454 (A. Polokovic)

Measurement of metal-hardening curves at high deformation rates.

[Kovove Mat., 1970, 8, (1), 73-81] (Cz)

BISI 8597 (G. Chaudron)

High-purity stainless steels.

[Met. Ital., 1969, (6), 233-236] (I)

BISI 8788 (K. Fink)

Physical properties of steels, in particular high temerature steels.

[Thyssenforschung, 1970, (2), 65-80] (G)

BISI 7616 (V. Vaclavik)

Calculating time-limited fatigue strength through the safety factor.

[Strojirenstvi, 1969, 19, (1), 3-10] (Cz)

BISI 8667 (E. Beyer and H. J. Ernst)

Fatigue tests on an orthotropic plate with welded on zig-zag flat steel-bars for the "Düsseldorf planking" on steel bridges.

[Der Stahlbau, 1965, (4), 110-115] (G)

BISI 8501 (F. Pawlek and K. Pawlek)

Contribution to problem of replacing silicon in transformer sheets by aluminium, titanium, vanadium and tin.

[Arch. Eisenh., 1970, 41, (4), 1-6] (G)

BISI 8849 (K. Fink, et al.)

Non-destructing testing on the large diameter longitudinally welded pipe production line for long-distance pipelines.

[Schweissen Schneiden, 1970, 22, Mar. 119-23]

(G)

BISI 8901 (M. M. Pentrat)

The use of the ralus test at french rail-manufacturing works.

[Journees Francaises du Rail, 1970, Sept.] (F)

BISI 8904 (K. Kussmaul and D. Blind)

Material flaws and deffects in heavy plates.

[Bander Blech, 1969, 10, (12), 728-736] (G)

BISI 8939 (G. Beckman)

Thermoelastic investigations on the acoustic detection behaviour of non-metallic substances in steel-I. [Neue Hutte, 1970, July, 430-432] (G)

BISI 8942 (A. Bassetti, et al.)

Metallurgical quality of rails and methods of testing to determine their behaviour on the track. [Journees Francaises du Rail, 1970, Sept.] (F)

BISI 9004 (J. Monet and M. Lluansi)

A glance at bearing steels.

[Aciers Speciaux, 1970, (13), 26-30] (F)

BISI 8130 (D. Raeubig)

Ways to decrease wear on 350 t/h steam generators. [Energietechnik, 1968, 18, Aug. 353-356] (G)

BISI 8827 (E. Ermini)

Challenge for steel and the specialists in the application of special steels and special steel uses. [Boll. Tecn. Finsider, 1969, Nov., 1-13] (I)

BISI 8523 (D. Arnaud)

Study of a high resistance brass.

[Fonderie, 1970, (286), Jan., 1-8] (F)

BISI 8734 (O. Bohusova)

Properties of low-alloy structural weldable with strength exceeding 60 kp/sq. mm.

[Hutnik, 1969, 19, (12), 472-476] (Cz)

BISI 8818 (Anon)

Magnetic coating thickness meter "ISOTRON AL" [Die Technik, 1969, 24, (12), 813-816] (G)

Corrosion

BISI 8680 (J. Glatz)

Equipment for corrosion prevention of heavy plate. [Hutnik, 1969, 19, (12), 466-471] (Cz)

BISI 8477 (W. Schwenk and H. E. Buhler)

Observations on the corrosion of active stainless chromium and chromium-nickel steels in sulphuric acid.

[Corros. Sci., 1963, 3, 261-272] (G)

BISI 8745 (A. P. Bond and E. A. Lizlovs)

Recent findinge in ferritic stainless steel technology. [Werkstoffe Korros., 1970, 21, 336-342] (G)

BISI 8828 (H. Forestier and M. Daire)

Anomalies of chemical reactivity at the points of magnetic transformation of solid bodies ABH. Math-Naturwiss. Kless. Akad. Wiss. Lit. (Mainz), 1966, 7, 705-716] (F)

Metallography

BISI 8830 (J. P. Piton and M. F. Fay)

On the phase changes in alloys with compo-

- sitions in the FeSi₂ region.
[Comptes Rend., 1968, 266, Feb., Series C,
514-516](F)
- BISI 8236 (J. Kucera, et al.)
Contribution to the study on the origin of
micro-fissures in martensite.
[Kovove Mat., 1969, 7, (6), 497-509] (Cz)
- BISI 8430 (J. Jirsa, et al.)
Practical applications of micro-fractography.
[Rev. Met., 1969, Dec., 841-859] (F)
- BISI 8709 (G. Henry and J. Philibert)
Mechanism of the action of boron in austenitic
stainless steels.
[Rev. Met. Mem. Sci., 1970, (4), 233-251]
(F)
- BISI 8938 (K. Schwerdtfeger)
Effect of solidification rate on microsegregation
and interdendritic precipitation of manganese
sulphide inclusions in a steel containing manganese
and carbon.
[Arch. Eisenh., 1970, (9), 923-937] (G)

Analysis

- BISI 8311 (W. A. Fischer and D. Janke)
Aluminium oxide and mullite as solid electrolytes
in oxygen measuring cells.
[Arch. Eisenh., 1969, 40, (9), 707-716] (G)
- BISI 8766 (M. Grandon and M. Icre)
High-frequency melting of chips to obtain solid
samples for spectrometer and X-ray fluorescence
analysis. [Arch. Eisenh., 1970, 41, May, 433-
437] (G)

Miscellaneous

- BISI 8877 (A. Schomer)
Reduction of industrial noise by structural
damping. [Arbeit und Leistung, 1969, 23,
(2), 19-25] (G)
- BISI 8313 (Sh. M. Sabirov)
Method of calculating an adsorption isotherm.
[Izv. Akad Nauk Uzbek. SSR. Ser. Tekh. nauk.
1968, 42, (3), 73-75] (R)