

資料室だより

BISI Translation 紹介

— No 32 —

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ります。

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。

なお、今回から Group の仕方が少し変わりましたのでご了承下さい。“資料室だより”の別刷ご希望の方は本会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. 626. 628~631

Management Planning and Control

BISI 10415 (Anon)

The mexican steel industry.

[Rev. (ILAFA) Latinoamer Sid., 1971, 12, June, 3437] (Sp)

BISI 10558 (K. Huber and B. von Kortzfleisch)

Detection of weak points and elimination of their causes in the planned maintenance of iron and steelworks.

[Stahl Eisen, 1971, (17), 961-966] (G)

Physical Structure of Materials and Crystallography

BISI 10603 (V. I. Ryabov and L. P. Kopp)

The reasons for the considerable local reduction in plasticity of high-strength patented wire in the low-temperature tempered state.

[Stal', 1972, (5), 466-467] (R)

Physical Metallurgy and Metallography

BISI 9599 (M. Jakob, et al.)

A contribution to the study of micro-plastic deformation of martensite.

[Kovove Mat., 1971, (1), 27-37] (C)

BISI 9676 (J. Kudrman, et al.)

The kinetics of the growth of upper bainite in steel [Kovove Mat., 1971, (4), 273-281] (C)

BISI 9864 (L. Kuchař and M. Balušek)

Preparation of pure iron by arc zone melting.

[Sb. VŠB Ostrava, 1970, (1), 45-60] (C)

BISI 10130 (E. Dorazil)

Distribution and morphology of bainitic ferrite in nodular cast iron.

[Kovove Mat., 1971, (6), 475-484] (C)

BISI 10170 (G. Murry) (from French)

A proposed quantitative method for using the results of work on steel transformation during continuous cooling.

[Rev. Met. Mem. Sci., 1971, 68, (12), 817-26] (F)

BISI 10226 (J. Koritta)

Effect of tensile stresses on the progress of an isothermal austenite transformation.

[Hutn. Listy, 1971, (12), 880-884] (C)

BISI 10451 (C. Giotta.)

Texture determination in electrical sheets by the etch-figure method.

[Metalurgia, 1971, 23, (12), 783-7] (Rom.)

Physical Properties and Chemical Analysis

BISI 10189 (Euronorm)

Steel and wide strip, below 3 mm thick, of mild unalloyed steel for drawing or cold bending. Tolerances in respect of dimensions and shape. [Euronorm 33-70, 1970, Jan.] (G)

BISI 10454 (D. Cosma.)

Some aspects regarding the influence of surface phenomena upon steel quality. With reference to the action of thermoinsulating and exothermic mixtures.

[Metalurgia, 1971, 23, (12), 804-807] (Ru.)

BISI 10691 (S. I. Popel, et al.)

Tension of iron-carbon melts at the interface with silver and the phase adhesion.

[Izv. VUZ Chen. Met., 1972, (6), 13-16] (R)

Mechanical Properties and Material Defects

BISI 9419 (W. Dietl and R. Specht)

Automation of non-destructive test methods. International Conf. on Automation in Iron and Steelmaking, Luxembourg/Dusseldorf. 1970, Apr.] (G)

BISI 9520 (S. Vacu and F. Langu)

Considerations regarding causes of flaws occurring in filled steel ingots.

[Metalurgia, 1970, (12), 780-782] (Rom.)

BISI 9888 (W. Schmia)

Choice of appropriate penetration hardness testing method.

[Bander bleche, 1971, 12, (10), 446-453] (G)

BISI 10188 (S. Bergh and G. Westerberg)

Fine-grained steel—a summary of its mechanisms, properties and fields of application.

[Jernkon. Ann., 1971, 155, 671-692] (S)

BISI 10271 (H. G. Baumann, et al.)

Segregation in continuously cast steel strands.

[Bander Bleche Rohre, 1971, 12, (6), 239-245] (G)

BISI 10300 (S. Forisz et al.)

Improvement in the sampling of agglomerates.

[Metalurgia, 1971, (11), 685-88] (Rom.)

BISI 10334 (K. Schwerdtfeger)

Effect of the solidification rate and the sulphur content on the average size of manganese-sulphide inclusions in a steel containing manganese and carbons.

[Arch. Eisenh., 1972, 43, March., 201-205] (G)

BISI 10525 (W. Schmidt and A. von Densteinen)

Contribution on the effect of changes in stress on the creep behaviour of heat resistant steels.

[report DEW Forschungs Institut] (G)

BISI 10584 (Test Specification Sheet)

Ultrasonic testing of high-temperature steel seamless tubes.

[Stahl-Esen Test Specification Sheet 1915-65, 1965, 1st edition] (G)

BISI 10661 (Euronorm)

Hot-rolled non-alloy mild steel

[Euronorm 46-48, 1968, July] (F)

BISI 10686 (M. M. Il'chenko, et al.)

Determination of the mechanical properties of rolled sections without testing specimens.

[Stal', 1972, (6), 526-528] (R)

BISI 10688 (V. A. Urazova, et al.)

Location of non-metallic inclusions in relation to the dendritic structure in steel.

[Stal', 1972, (6), 547-549] (R)

Corrosion and Corrosion Testing

BISI 9607 (L. Cerveny and P. Solarik)

Estimation of climatic conditions in warehouses for the products of the metalworking industry.

[Strojirenstvi, 1971, (4), 241-247] (C)

BISI 10131 (V. Cihal, et al.)

Sulphides as active centres of pitting corrosion in Cr18Ni9Ti steels.

[Kovove Mat., 1971, (6), 485-495] (C)

BISI 10243 (D. Knotkova, et al.)

Atmospheric corrosion of low-alloy steels.

[Koroze a ochrana materialu, 1971, (5), 85-87] (C)

Protection of Materials

BISI 9580 (P. Aubrun)

Recent information on tinplate passivation films.

[Bull. Inacol, 1970, 21, (7), 239-250] (F)

BISI 10140 (J. Teindl, et al.)

Effect of magnesium addition to zinc on the galvanizing of steel sheet.

[Hutn. Listy, 1971, (11), 802-806] (C)

BISI 10227 (J. Petlicka and O. Bodmerova)

Treatment of spent hydrochloric acid pickling liquors.

[Hutn. Listy, 1971, (12), 890-95] (C)

BISI 10274 (German Standard)

Testing of Paints, varnishes and similar coating materials cross-cut test on paints and similar coatings.

[German Standard, DIN 53 151, 1970, Dec.] (G)

BISI 10520 (German Patent)

Process for raising the adhesive strength of plastic.

[German patent 2 020 922, 1972, March 16] (G)

Rolling

BISI 9930 (R. Polansky)

Regulation of tension in continuous rolling.

[Hutn. listy, 1971, (10), 701-707] (C)

BISI 10139 (O. Palzer)

Technological and mechanical factors affecting the accuracy of rolling.

[Hutn. listy, 1971, (11), 787-796] (C)

BISI 10453 (V. Dima and M. Grimberg)

Investigations regarding the application of ergonomics in thin sheet rolling control.

[Metalurgia, 1971, 23, (12), 792-794] (Rom.)

BISI 10461 (D. L. Grinberg et al.)

Elimination of the rupture defect on galvanized strip. [Stal', 1972, (4), 359-60] (R)

BISI 10514 (G. Alich.)

Maintenance and modernisation of the kethin 68" hot strip mill.

[Stahl Eisen, 1972, 92, (10), 456-59] (G)

BISI 10519 (French Standard)

Continuously hot-rolled medium and heavy gauge sheet (sheet and coil), for drawing or cold bending qualities.

[French Standard NF A 36-302, 1968, Aug.] (F)

BISI 10552 (O. Pawelski)

Time behaviour of thermal roll gap variation during cold rolling of strip.

[Arch. Eisenh., 1972, May, (5), 405-411] (G)

BISI 10610 (E. A. Garber et al.)

Developing a mathematical model of the thermal profile of the rolls of a temper-rolling mill.

[Izv. VUZ. Chern. Met., 1972, (5), 51-55] (R)

BISI 10611 (V. P. Korzh et al.)

Some features of the formulation of a rolling algorithm for a slabbing mill.

[Izv. VUZ. Chern. Met., 1972, (5), 56-61] (R)

BISI 10685 (L. V. Andreyuk, et al.)

Analytical dependence of the resistance to deformation of steel and (other) alloys on their chemical composition.

[Stal', 1972, (6), 522-523] (R)

BISI 10696 (N. A. Cheylshev, et al.)

Effect of the character of growth of static loads when gripping metal by the rolls on the dynamics of operation of the main mill drive-1.

[Izv. VUZ. Chern. Met., 1972, (6), 86-90] (R)

Metalworking, Excluding Rolling

- BISI 10637 (Yu. F. Shevakin, et al.)
Forces on the contact surface in the cross-rolling of tubes.
[Izv. VUZ Chern. Met., 1972, (7), 849] (R)
- BISI 10687 (E. M. Khalamez, et al.)
Forming thin-walled tubes on a 73-219 mill.
[Stal', 1972, (6), 541-542] (R)
- BISI 10698 (V. Yu. Proskurin and V. S. Korshov)
Acoustic emission in the stretching of type IKh18N9T steel.
[Izvest. VUZ. Chern. Met., 1972, (6), 108-9] (R)
- Steel and Alloys (Technical Applications and Methods of production), Cermets**
- BISI 9176 (G. di Caprio and B. Roncaglioli.)
Hygienic aspects and potential of stainless steels for abattoir equipment. [Paper to Symp.; "Abattoirs in Italy-Technical and Organisational Aspects", Verona, Oct. 9, 1970] (I)
- BISI 9320 (P. Foret.)
Use of stainless steel for the reduction in weight of suburban rolling stock. [Paper to Meeting of the Society of French Civil Engineers, Paris, 1969, Dec. 11, 17] (F)
- BISI 10134 (M. Šicha)
Properties of heat-treated, weldable structural steels with high yield point at temperature up to 450°C. [Strojírenství, 1971, (11), 669-671] (C)
- BISI 10355 (Belgian Standard NBN 179-01 1968)
Steels for reinforced concrete. general information and common requirements. [Institut Belge de Normalisation, Av. de la Brabançonne, 29-1040, Brussels] (B)
- BISI 10492 (A. Kohler)
Hollow sections for steel constructions.
[Bander Bleche Rohre, 1971, 12, (11), 490-2] (G)
- BISI 10524 (H. Bohn & M. Schirra)
Influence of the thermo-mechanical treatment on the creep-rupture behaviour of high-temperature austenitic steels.
[Report DEW Forschungs Institut] (G)
- BISI 10575 (P. Schwaab & H. Weber)
Effect of the heat treatment upon the precipitation and creep behaviour of the creep-resistant, ferritic 13 Cr Mo 44 and 10 Cr Mo 9 10 steels.
[VDE Creep conference, Dusseldorf, 1972, 3-5 th May, 11, paper 6.2] (G)
- BISI 10683 (A. A. Kugushin, et al.)
Study of the surface quality of blooms of converter steel.
[Stal', 1972, (6), 512-513] (R)

Casting and Cast Metals

- BISI 9481 (J. Oger)
The regeneration of foundry sands.
[Hommes et Fonderie, 1970, (7), 23-29] (F)
- BISI 9632 (P. Dauxois)
Recovery of foundry sands
[Metall., 1965, 97, (2-5)] (F)
- BISI 10359 (K. Menge)

Measurement of surface temperatures in continuous casting.

[Siemens-Z., 1971, 45, (10), 640-642] (G)

BISI 10362 (J. Penning, et al.)

New cast maraging steels containing copper.

[Fonderia Ital., 1970, (7), 223-233] (I)

BISI 10416 (H. G. Baumann, et al.)

Radio transmission of continuously measured temperatures in continuous casting with in-line strand reduction.

[Draht-Welt, 1971, (7), 331-336] (G)

BISI 10619 (A. A. Timofeev, and I. D. Shumov)
Effects of the initial casting stresses on the mechanical properties of steel.

[Izv. VUZ. Chern. Met., 1972, (5), 159] (R)

BISI 10658 (G. Ulmer and J. Leveque.)

The use of gas for melting iron in the cupola.
[Assoc. Techn. L'Industrie du Gaz France Meeting 1972, 1-14] (F)

Heat Treatment

BISI 9707 (M. Daguer)

Improvements in the annealing of metals in coils-1.

[Fils, Tubes, Bandes, Profiles, 1969, 3, (12), 9-13] (F)

BISI 10136 (J. Smetana and J. Lang)

Vacuum treatment of rail sheet in iron and steelworks of trinec.

[Hutn. Listy, 1971, (11), 769-774] (C)

Heating, Heating Furnaces and Electric Heating

BISI 9796 (K. O. Borchers)

The development of the walking beam furnace
[Kleipzig Fachber, 1971, 79, (1), Eh5, 5-9]
(G)

BISI 9931 (S. Černoch, and J. Kral)

Ingots with liquid core raise output of soaking pits.
[Hutn. Listy, 1971, (10), 714-715] (C)

Fuel, Combustion and Refractories

BISI 9962 (M. Redr, et al.)

Heat losses in the lining of industrial furnaces
[Hutnik, 1971, (6), 226-231] (C)

BISI 10357 (Yu. Ya. Filonenko)

Determination of the internal specific surface area of coke from microscopic analysis data.
[Khim. Tverd. Topliva, 1972, (1), 136-8] (R)

BISI 10633 (T. Miyagawa, et al.)

A study of the coking property of asphalts and pitches 11—study of the plasticity of coals mixed with asphalts and pitches.
[Nenryo Kyokai-shi, 1972, 51, (539), 172-179] (J)

BISI 10678 (K. D. Gundermann, et al.)

Organic sulphur bonding in (hard) coal.

[Erdöl Kohle Erdgas Petrochemie verein Brennstoff-chemie, 1972, 25, (2), 58-61] (G)

Welding and Joining

BISI 9151 (F. J. Ganowski)

The spot welding and strip welding of continuous-strip galvanized steel sheets.

[Reprint : Test Book Series, "Welding technology", 58 "Resistance Welding and Micro-Structure Processes" 1-28] (G)

Ores and Minerals Handling and Beneficiation

- BISI 8725 (O. Burghardt and H. Kortmann)
Investigation of the properties of sinter dependent on the grain size of a magnetite and a hematite iron ore.
[Stahl Eisen., 1970, 90, July 23, 805-811] (G)
- BISI 9703 (J. Luckers, et al.)
Continuous automatic control of sinter quality in a dl-sintering plant.
[International Conference on Iron and Steel : Automation in Iron and Steelmaking. Luxembourg, 13-15 April ; Dusseldorf, 16-18 April, 1970, pp. 53-62 and Intervention, p. 73] (F)
- BISI 10302 (A. Voicu, et al.)
Rotary tipplers for use in iron-making plants.
[Metalurgia, 1971, (11), 718-720] (Rom.)
- BISI 10414 (E. di Poggio, et al.)
Trials leading to increased productivity at a sinter plant by modifying the charge mix.
[Boll. Tech. FINSIDER, 1971, Aug. Sep., 549-552] (I)

Ironmaking and Ferro-Alloys

- BISI 9991 (N. A. Voronova, et al.)
Raising the quality of foundry pig iron.
[Stal', 1971, (10), 885-887] (R)
- BISI 10231 (M. Prouza)
The effect of coke reactivity on its consumption in blast furnace operation.
[Hutn. Listy, 1972, (1), 5-10] (C)
- BISI 10285 (J. van Laar)
Historical review of the development and design of high-temperature hot blast stoves with combustion chamber inside the stove.
[Stahl Eisen., 1972, 92, (4), 154-157] (G)
- BISI 10681 (M. L. Zyskind)
Calculating the degree of direct reduction of iron. [Stal', 1972, (6), 488-490] (R)
- BISI 10703 (B. N. Zhrebin)
Influence of graphite content on physical properties of magnesia-alumina blast-furnace slags.
[Izv. VUZ Chern. Met., 1972, (6), 22-25] (R)

Steelmaking

- BISI 9824 (Z. Jasinsky, et al.)
Roof jets employed for blowing powdered substances into the bath of steelmaking furnaces.
[Hutn. Listy, 1971, (7), 473-481] (C)
- BISI 10339 (N. A. Kislova & V. A. Boyarshinov)
The production costs of metal obtained in electroslag and vacuum arc furnaces.
[Sb. Tr. Tsentr Nauch.-issled. Inst. Chern. Met.,

- 1970, (75), 189-193] (R)
- BISI 10662 (Anon)
The problem of hoods.
[CDS Cire., 1971, 28, (10), 2233-2234] (F)
- BISI 10663 (French Patent)
Improvements to metallurgical processes in which oxygen is injected to the bath.
[French Patent 24.353/1450718, 1966, July] (F)
- BISI 10682 (K. K. Zhdanovich, et al.)
Improving the quality of open hearth ShKh 15 ball bearing steel.
[Stal', 1972, (6), 505-508] (R)
- BISI 10684 (V. N. Binevskii, et al.)
Introduction of argon into the zone formed by the electric arcs of a 5 ton electric furnace.
[Stal', 1972, (6), 515-516] (R)
- BISI 10689 (V. O. Kulikov, et al.)
Heating 900 t open-hearth furnaces by natural gas with self-carburation in the spray-cone.
[Stal', 1972, (6), 557-559] (R)

Extraction and Refining

- BISI 9492 (F. Sperner)
Vacuum-melting of iron-, nickel-, and cobalt-base alloy. [Nickel Symp. Gesellschaft Deutscher Metallhutten-und Bergleute eV, 1970, Sept. 24-25, 191-200] (G)
- BISI 10694 (M. Ya. Medzhibozhskii)
An analysis of the kinetics of carbon oxidation in metal shot and an estimate of the dwell time of the shot in the slag.
[Izv. VUZ Chern. Met., 1972, (6), 51-56] (R)

Engineering

- BISI 9952 (R. Geiger)
Investigation of lubricants for the hot forming of steel. [Industrie-Anziger, 1970, 93, (30), 623-29] (G)
- BISI 10165 (R. Kracke & W. Becker)
The coupled-motion weighing of railway wagons
[Stahl Eisen., 1971, 91, (23), 1323-27] (G)
- BISI 10369 (German Patent)
Process for cleaning coke gases for the formation of a carbon monoxide and hydrogen enriched fuel Gas. [German Patent 1,186,974, 1965, 11th Feb.] (G)
- BISI 10690 (B'Z. Teverovskii, et al.)
Trial cloth filter for cleaning open-hearth gases before the waste heat boiler.
[Stal', 1972, (6), 566-568] (R)

[抄録 538 ページよりつづく]

なり、双晶亜結晶は減少する)。の2段階に分けられる。時効後に焼き入れた場合は時効しない場合より硬度が高い理由はマルテンサイト変態量の相違によるものであ

り、λの増大とともに硬度が減少するのは粒子間隔の増大とマルテンサイト間の界面の拡散と関係をもち内部双晶の減少と関係があると考えられる。(盛山博一)