

資料室だより

BISI Translation 紹介

— No 53 —

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、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. 723, 726~729

Management planning and control

BISI 12716 (I. V. Babaitsev et al.)

A safety techniques for pouring steel with exothermic mixtures.

[Stal' 1974, (7), 601-602] (R)

BISI 12723 (S. I. Moroz, et al.)

Power and plant investigation of filters containing floating foam polystyrene at the chelyabinsk tube rolling mills.

[Stal', 1974, (7), 666-668] (R)

BISI 12752 (German Patent.)

Process for breaking used cold-rolling emulsions and other oil-in-water emulsion systems containing non-tonic, anion-active emulsifiers.

[German Patent DAS: 2 302 369, 2 May 1974] (G)

BISI 12591 (G. J. Varoufakis)

Examinations carried out on three iron spearheads of the 7th and 6th centuries B. C.

[Arch. Eisenh., 1970, 41, (11), pp. 1023] (G)

Physical structure of Materials and Crystallography

BISI 12574 (V. S. Ivanova et al.)

The ductile fracture features of iron as a function of the deformation conditions.

[Stal', 1974, (5), pp. 454-456] (R)

BISI 12580 (Yu. I. Nyashin, et al.)

Solving the problem of processing metals by pressure through the method of finite elements.

[Izv. VUZ Chern. Met., 1974, (5), 74-78] (R)

BISI 12728 (N. E. Skorokhodov, et al.)

Effect of residual stress distribution on the lack of flatness in sheets.

[Izv. VUZ Chern. Met., 1974, (7), 82-86] (R)

Physical metallurgy and metallography

BISI 12421 (A. F. Polesya and L. S. Slipchenko)

Structure of Ni-Sb alloys quenched from the

molten state.

[Izv. VUZ. Chern. Met., 1974, (3), 149-153] (R)

BISI 12730 (B. S. Bokshtein, et al.)

Investigation of the thermodynamic properties of an alloy of iron with molybdenum.

[Izv. VUZ Chern. Met., 1974, (7), 111-113] (R)

BISI 12526 (B. M. Drapkin et al.)

Investigation of the growth kinetics of graphite inclusions in cast iron.

[Izv. VUZ, Chern. Met., 1974, (4), 133-135] (R)

BISI 12745 (W. Peter and H. Finkler)

Derivation of the pattern of isothermal TTT diagrams from chemical composition.

[Arch. Eisen., 1974, 45, (8), 533-40] (G)

BISI 12746 (I. Titzelkov et al.)

Mathematical description of the TTT diagram for isothermal transformation and continuous cooling

[Arch. Eisen., 1974, 45, (8), 525-32] (G)

Physical properties and chemical analysis

BISI 12380 (B. Weiss)

Ultrasonic transformation part 11-technical significance of ultrasonic transformation.

(Aluminium, 1973, 49 (February), 165-169] (G)

BISI 12581 (Yu. D. Zheleznov et al.)

Transmission function of an object in monitoring the flatness of rolled stock.

[Izv. VUZ. Chern. Met., 1974, (5), 107-110] (R)

BISI 12073 (M. Prihoda and R. Kremer)

On the computation of the temperature field of slabs in push furnaces.

[Sbornik VSB Ostrava, 1972, 18, (2), 147-153] (C)

BISI 12423 (A. G. Sabel'nikov and N. Yu. Taits)

The temperature field and thermoelastic stresses

in a cylinder of unlimited extent containing an internal source of heat (Report 2).

[Izv. VUZ Chern. Met., 1974, (3), 158-161] (R)

BISI 12475 (V. T. Buglaev and M. M. Andraev)
Heat transfer by experiment: heat transfer during transverse flow of condensing steam past a horizontal bundle of tubes.

[Energemasinostroenie, 1973, 556, (1), 36-8] (R)

BISI 12506 (S. Cernoch)

Analytical determination of the main quantities of thick plate heating-up.

[Strojirenstvi, 1973, 23, (12), 729-732] (C)

BISI 12530 (N. Yu. Taits, et al.)

The selection of conditions for heating metal with the minimum consumption of fuel.

[Izv. VUZ Chern. Met. 1974, (4), 164-167] (R)

BISI 12717 (V. L. Shevtsov et al.)

An investigation of the processes of heat transfer in electruslag remelting of rectangular ingots.

[Stal', 1974, (7), 608-610] (R)

BISI 11559 (R. Weber, et al.)

The introduction of emission spectrometers in the iron foundry industry.

[Giesserei, 1970, 17, (57), 526-530] (G)

BISI 12568 (V. Avarin and E. M. Kuznetsov)

Measurement of the oxidation of the steel and control of the steel-smelting processes in high-temperature electrochemical cells.

[Stal', 1974, (5), 404-407] (R)

Mechanical properties and material defects

BISI 9851 (V. Foldyna et al.)

Creep resistance of modified 12 percent chromium steel.

[Hutn. Listy, 1971, (6), 412-424] (C)

BISI 12312 (R. Brueckner and B. Haas.)

The physics of impact test procedure on enalled surfaces (1) method of operation of impact test equipment.

(Mitt. Ver. Deut. Email., 1971, 19, (5), 33-40] (G)

BISI 12456 (DNA)

Hardness testing.

[DIN 50 351, 1973, Jan.] (G)

BISI 12473 (M. Hempel)

Push-pull fatigue strength of unnotched and notched specimens of heat-resistant materials in the temperature range 500-700°C.

[Arch. Eisen, 1972, 43, (6), 479-488] (G)

BISI 12553 (DNA)

Testing of metallic materials-vickers hardness test load 1.96N-49N and 49N-980N.

[DIN 50 133, 1972, Dec., Sheets 1 and 2] (G)

BISI 12457 (DNA)

Non-destructive testing. Reference block 2 and its use for the adjustment and control of ultrasonic pulse echo equipment.

[DIN 54 122, 1973 Mar.] (G)

BISI 12490 (M. Kepka & M. Kostohryz)

The effect of deoxidation with aluminium, SiCa and FeCe on properties of low-alloy,

heat-resistant steels.

[Slevarentsvi, 1973, 21, (11), 459-466] (C)

BISI 12517 (K. F. Starodubov et al.)

Influence of strengthening heat treatment practice on low-temperature strength of rolled rounds and reinforcing sections.

[Stal', 1974, (4), 351-354] (R)

BISI 12657 (V. I. Roitman & R. M. Brusentsova)

Ultrasonic location of defects in small diameter tubes with a diameter/wall thickness ratio below critical.

[Stal', 1974, (6), 551-553] (R)

Corrosion and corrosion testing

BISI 12781 (Anon)

Tensile test on steel sheet and strip with a thickness of 0.5mm inclusive to 3mm exclusive.

[Euronorm, 11-55 October 1955]

BISI 12559 (H. Bohni)

The determination of perforating potentials with special reference to the galvano-kinetic method of measurement.

[Werkstoffe Korr, 1974, 25, (2), 97-104] (G)

Protection of materials

BISI 12372 (M. Winkelmann AG)

Process for the hardening of coatings on wooden materials or other electrically insulating substrates.

[German Patent 192 059 I] (G)

BISI 12617 (M. R. Mechandyev)

Semi technical and plant tests on the degassing of the inter electrode space in zinc electrolysis.

[Neue Hutte, 1973, 18, (6), 353-6] (G)

BISI 11277 (V. Pesat)

Resistance of chromized steels for elevated temperature service.

[Hutn. Listy, 1972, (11), 809-813] (C)

BISI 12583 (G. D. Kuznetsov et al.)

Comparative evaluation of the effectiveness of processes of formation of coatings.

[Izv. VUZ Chern. Met., 1974, (5), 146-149] (R)

BISI 11685 (German Patent)

Plant for treating metal, in particular steel strip moving at high speed in baths, particularly degreasing baths.

[DOLS 2 147 182, 29-3-1973] (G)

Rolling

BISI 11683 (German Patent)

Gulde rolls for equipment for treating fast-moving metal strip.

[DOLS 2 147 181 ; 29.3.1973] (G)

BISI 12257 (V. S. Smirnov, et al.)

Contact stresses during the rolling of textured material.

[Izv VUZ. Churn, Met. 1974, (1), 87-89] (R)

BISI 12404 (N. M. Vorontsov, et al.)

Comparative quality analysis of section mill rolls.

[Stal', 1974, (3), 236-238] (R)

BISI 12415 (I. I. Onishchenko)

Determination of transverse deformation during continuous rolling with tension.

[Izv. VUZ Chern. Met., 1974, (3), 49-52] (R)
BISI 12556 (D. Busse et al.)

Residual stress distributions in cold-rolled low-carbon band steels for drawing.
[Bander Bleche Rohre, 1974, 15, (2), 73-75] (G)

BISI 12655 (A. B. Chelyustkin, et al.)
Simulation of the dynamics of the self-agligning properties of the tension of rolled strip.
[Stal', 1974, (6), 527-530] (R)

BISI 12666 (V. K. Smirnov & V. I. Nikitin)
Deformation and power parameters when rolling square stock in an hexagonal pass.
[Izv. VUZ Chern. Met., 1974, (6), 72-76] (R)

BISI 12670 (B. E. Khaikin, et al.)
Formation of optimum passes on a mill with a wide range of rolled products.
[Izv. VUZ Chern. Met., 1974, (6), 114-115] (R)

BISI 12719 (V. I. Mal'tsev et al.)
Metal saving reserves in the rolling of shaped sections.
[Stal', 1974, (7), 621-623] (R)

BISI 12726 (A. I. Sanzharevskii & N. I. Kapitanov)
Stress state of the sleeves of mill rolls.
[Izv. VUZ Chern. Met., 1974, (7), 68-73] (R)

BISI 12797 (B. Kh. Rimen et al.)
Engineering method of calculating the rolling temperature behaviour on billet mills.
[Izv. VUZ Chern. Met. 1975, (8), 66-69] (R)

Metal working excluding rolling

BISI 12516 (M. E. Protskii and V. G. Kuznetseva)
Improvement in the service life of mandrels used for extruding tubes.
[Stal', 1974, (4), 345-346] (R)

BISI 12771 (Anon)
Modern tube production.
[Fordern und Heben, 1973, 23, (5), 265-6] (G)

BISI 12480 (A. Randak and H. Voge)
Investigations into the influence of the sulphur content of heat treated steels on their workability with high-speed steel and on different steel properties.
[Zwf. 1972, 67, (12), 653-656] (G)

BISI 12515 (A. F. Smolyaninov et al.)
The rolling of high-accuracy periodic roll-forged sections.
[Stal', 1974, (4), 337-340] (R)

BISI 12593 (R. Prummer and E. Wolff)
Some Applications of electro-hydraulic forming.
[Bander Bleche Rohre, 1974, 15, (1), 19-23] (G)

Steel and alloys (technical applications and methods of production) cermets

BISI 12512 (B. V. Kharchenko et al.)
Melting chain steel on 130t basic oxygen furnaces and the quality of the chains.
[Stal', 1974, (4), 305-307] (R)

BISI 12525 (A. V. Morzhakov et al.)
Selection of the optimum version of heat treatment for hard-alloy drill bits.
[Izv. VUZ. Chern. Met. 1974, (4), 129-132] (R)

Casting and cast metals

BISI 11075 (S. Simonik)
The Application of a standardization technique to the risering of representative casting groups.
[Slevarenstvi, 1972, (5/6), 215-216] (C)

BISI 11129 (F. Neumann)
Technological and metallurgical comparison of melting of cast iron in cupola and coreless induction furnaces.
[Elektrowarme International, 1971, 29, (10), 552-564] (G)

BISI 11309 (C. Picariello, et al.)
Start-up of continuous casting plant at Italsider, Taranto.
[Boll. Tec. Finsider, 1972, (310), Dec. 777-782] (I)

BISI 11831 (J. Vrana)
Metallurgical development—an integral part of a modern foundry.
[Slevarenstvi, 1973, (2), 44-47] (G)

Heat treatment

BISI 12585 (I. N. Giniyatullin et al.)
Study of the thermoelectromotive force of surface layers of decarbonized wire rod.
[Izv. VUZ Chern. Met. 1974, (5), 157-159] (R)

Heating, heating furnaces and electric heating

BISI 12072 (L. Tomis & B. Striz)
Heat control of cold metal changes in soaking furnaces by means of a computer.
[Sbornik VSB Ostrava, 1972, (2), 105-117] (C)

BISI 12529 (E. M. Goldfarb and E. A. Roslik)
Optimum fuel consumption-based control of metal heating for variable billet travel speed in the continuous furnace of a rolling mill.
[Izv. VUZ. Chern. Met. 1974, (4), 159-163] (R)

BISI 12575 (V. N. Apterman and G. A. Gel'man)
Automatic control of the thermal conditions in drawing furnaces.
[Stal', 1974, (5), 469-474] (R)

BISI 12636 (H. Klammer)
Experience with a 210-tonne/h top-and bottom fired walking-beam furnace equipped with radiation recuperations.
[Stahl Eisen, 1974, (14), July, 631-640] (G)

BISI 12734 (Yu. N. Ivanov & M. D. Klimovitskii)
Sub-optimal control of the heating of metals. Report 2.
[Izv. VUZ Chern. Met., 1974, (7), 158-163] (R)

Fuel combustion and refractories

BISI 12698 (J. Talaber)
Long-time studies with high-alumina cements.
[Epitoanyag, 1967, 19, (1), 1-8] (H)

BISI 12722 (S. E. Bark, et al.)
Development and experience of the industrial use of blind-ended radiant tubes.
[Stal', 1974, (7), 656-658] (R)

Welding and joining

BISI 11821 (F. J. Ganowski & O. Gengenbach)
Standard spot technique in resistance welding.
[Reprint of paper for Schweissen und Schnei-

den Exhibition, Essen, 19.9.73-27.9.73] (G)

BISI 12459 (DNA)

Welding-definition-classification of welding process

[DIN 910, Sheet 1, Draft 1972 Dec.,] (G)

BISI 12551 (Anon)

Procedure for welding or hard-facing under an electrically conductive slag.

[French Patent, 2, 194-524]

BISI 12682 (V. A. Deev)

Multi-Electrode hard facing of steel cylinders.

[Avtomaticheskaya Svarka, 1974, (3), 56-9] (R)

Ores and minerals handling and beneficiations

BISI 12538 (F. Hermann)

Situation and trends in the world supply of iron ores.

[Berg. Hutten Monatsch., 1973, 118, April, 97-98] (G)

BISI 12539 (O. Burghardt)

Quality characteristics of iron ores: possibilities of evaluation and control.

[BHM., 1973, 118, (4), 112-120] (G)

BISI 12485 (J. Vesely et al.)

Production of high basicity sinter.

[Hutnik, 1973, 23, (12), 443-449] (C)

BISI 12663 (I. A. Kopyrin & I. F. Graur)

Special Features of ssgok pellets fluxed with dolomite.

[Izv. VUZ Chern. Met., 1974, (6), 41-45] (R)

BISI 12715 (N. V. Fedorenko et al.)

Sintering a mixture of Mikhailovka and Sokolovka sintering ores with combined heating of the mix.

[Stal', 1974, (7), 589-591] (R)

Ironmaking and ferro-alloys

BISI 12049 (I. Janousek)

The monitoring of blast furnace cooling elements.

[Hutn. Listy, 1973, (5), 305-310] (C)

BISI 12714 (S. T. Pliskanovskii et al.)

Planning the optimum blast-furnace burden with the use of linear-programming methods.

[Stal', 1974, (7), 585-587] (R)

BISI 12514 (V. Ya Maier et al.)

Effect of ULC on the electrical parameters and economic indices of the operation of ore-thermal

electric furnaces.

[Stal', 1974, (4), 323-326] (R)

BISI 12653 (N. V. Tostoguzov)

The sintering and preheating of a charge for the melting of ferromanganese from oxide and carbonate ores.

[Stal', 1974, (6), 511-514] (R)

BISI 12718 (S. A. Livshita)

Technical and economical assessment of the converter and electrothermic methods of medium carbon ferrochromium production.

[Stal', 1974, (7), 612-613] (R)

Steelmaking

BISI 12615 (W. Dorr, et al.)

Possibility of obtaining information from the waste gas measured at the LD converter for the control and conduct of the process.

[Stahl Eisen, 1974, 94, (9), 381-386] (G)

BISI 12674 (V. I. Grankovskii, et al.)

Some mechanisms of the refining period in an open hearth heat.

[Izv. VUZ Chern. Met., 1974, (6), 178-180] (R)

BISI 12712 (H. Gauter)

Model study on the pulsations of gas in the waste heat boiler of an oxygen converter.

[Stahl Eisen, 1971, 91, (5), 261-7] (G)

BISI 12735 (Koa Van Shong & G. I. Demin)

Effects of the angle of inclination of the nozzles in furnace roof oxygen lances on erosion of the roof and the rate of spatter.

[Izv. VUZ Chern. Met., (7), 173-175] (R)

BISI 12844 (Moscow Steels and Alloys Institute)

An arrangement for the control of the carbon content in an oxygen converter.

[Russian Patent 403.739; 26.5.73] (R)

Engineering

BISI 12474 (W. Schwermann and W. Oswald)

Precision magnetic apparatus for the numerical detection of magnetic characteristics.

[Reinstahl-Technik, 1972, 10, 128-132] (G)

BISI 12554 (DNA)

Pipe fittings and screw plugs: summary of types for shipbuilding.

[DIN 86 100, 1967 April] (G)