

資料室だより

BISITS Translation 紹介

— No 15 —

BISITS Translation の特長

英国鉄鋼業界, BISRA および英国鉄鋼協会は共同で BISITS を運営しています. この BISITS は BISITS Translations を発行しています. BISITS 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 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きます.

BISITS 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.

なお, “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

(List Nos. 536~540)

Mineral Sources, Ores, Mining & Treatment

- BISI 7137 (S. Zielinski and K. Motrykiewicz)
Magnetic properties as a criterion of the mechanical strength of sinter [Hutnik, 1968, 35, (7-8), 311-319] (Po)
- BISI 7943 (E. Mazanek and M. Wyderko)
Addition of oxygen during sinter production. [Stahl Eisen, 1969, 89, Aug. 7, 863-866] (G)
- BISI 8303 (E. Forster et al.)
Softening behaviour of the blast furnace burden. [Stahl Eisen, 1969, 25, Dec, 1473-1480] (G)
- BISI 8478 (W. Koch and K. P. Roeder)
The sampling of bulk materials and its significance for the metallurgical industry. [Thyssenforschung, 1970, 2, (1), 6-11] (G)
- BISI 7719 (J. Hancl)
Some problems relating to ore segregation. [Hutnik, 1969, 19, (6), 201-205] (Czech)
- BISI 8164 (M. Erepelding, et al.)
Moisture control of a sinter mix by a neutron retrodiffusion probe. [C. D. S. Circ., 1969, (7, 8), 1733-1746] (F)
- BISI 8685 (J. Luckers, et al.)
Discussion on report A₃. [International Conference on Automation in Iron and Steel Making, 1970, Apr.] (F)

Fuel Preparation, Properties and Uses

- BISI 8372 (J. Andel)
Impact crushers and the possibility of their utilization in the coal industry. [Tuha Paliva, 1969, 2, (45), 102-106] (Cz)

Refractory Materials.

- BISI 8005 (M. J. Schoendoerffer)
Reactions in refractory linings below the stack of blast furnaces. Comparison with certain

phenomena observed at lining contacts.

[Rev. Met. 1969, 66, Mar., 181-197] (F)

Blast Furnace Practice & Production of Pig Iron & Ferro Alloy

- BISI 7708 (J. Skala)
Problems arising in the study of the chemical kinetics of metallurgical reactions. [Sbornik, V. S. B. Ostrava, 1967, 13, paper 387, 23-36] (Cz)
- BISI 7702 (Z. Punochar)
Construction and cooling of blast furnace hearths. [Hutnik, 1969, 19, (5), 171-174] (Cz)

Production Steel

- BISI 8056 (Z. Motloch)
Deoxidation of steel during vacuum treatment [Sbornik V. S. B. Ostrava, 1968, 14, (3), 131-146] (Cz)
- BISI 8056 (I. Kasik)
Use of new types of slag in the electroslag remelting of steels. [Sbornik V. S. B. Ostrava, 1968, 14, (3), 159-166] (Cz)
- BISI 8712 (Khr. Erinin and N. Malcheva)
Method and apparatus for determining the viscosity of high manganese slags. [Godishnik na Khimiko-tehnologicheskia institut (Sofia), 1964, 11, (4)] (Bulgarian)
- BISI 7703 (J. Becvar)
Was the method of supplying oxygen to steel making plants used in Czechoslovakia correct? [Hutnik, 1969, 19, (5), 175-178] (Cz)
- BISI 8306 (G. Tromel et al.)
The effect of manganese oxide on the equilibria in the system Fe-CaO-FeO-SiO₂ and on sulphur distribution at 1600°C. [Arch Eisen., 1969, 40, Dec. 969-978] (G)
- BISI 8328 (J. Hlineny, et al)

- Importance of electrical equipment for operation of steelmaking arc furnaces. [Hutnik, 1968, 19, (11), 426-429] (Cz)
- BISI 7699 (J. Jirsa)
Some remarks on the use of vacuum in the production of Cr/Ni stainless steels for castings. [Slevarenstvi, 1969, 17, (6), 233-236] (Cz)
- BISI 7824 (J. Becvar)
Problems with the introduction of the production of free-cutting steels in large open-hearth plants in Czechoslovakia. [Hutnik, 1969, 19, 251-255] (Cz)
- BISI 7832 (K. Obroucka)
A Contribution to the problem of measurement of the rate of flow. [Sbornik V. S. B. Ostrave, 1968, 14, (2), 99-108] (Cz)
- BISI 7918 (F. Benes)
The role of rare-earth elements in carbon spring steel production. [Hutn. Listy, 1969, 24, (376) 561-570] (Cz)
- BISI 7991 (L. Repiska)
Investigating the possibilities of applying mendelev's peridic low to equilibrium diagrams of iron alloys. [Sbornik V. S. B. Ostrave. Rada Hutnicka, 1967, 13 special no., 25-35] (Cz)
- BISI 8065 (Z. Buzek, et al)
The intensified and economization of electric steelmaking by means of auxiliary burners. [Sbornik V. S. B. Ostrave, 1968, 14 (3), 217-223] (Cz)
- BISI 8066 (Z. Buzek, et al)
The extraction and depth deoxidation of electric furnace steels. [Sbornik V. S. B. Ostrava, 1968, 14, 225-234] (Cz)
- BISI 8072 (F. Sroka and L. Krol)
Methods of improving gall-bearing steel. [Sbornik V. S. B. Ostrava, 1968, 14, 285-290] (Cz)
- BISI 8284 (J. Arnoult, et al)
Study of the solidification of continuously-cast ingots. [Rev. Met. 1969, 66, (9), 585-594] (F)
- BISI 8425 (J. Burton)
Measuring the temperature of liquid steel using the thermocouples with interchangeable tips. [C. D. S. Circ., 1969, (11), 2493-2518] (F)
- BISI 8615 (K. M. Shakyrov et al.)
Interaction rates of oxygen with iron-carbon melts. [Izv. VUZ. Chern. Met., 1969, (12), 9-15] (R)
- BISI 8070 (Z. Buzek, et al.)
The possibilities of using argon and argon-oxygen mixtures during production of stainless steels. [Sbornik V. S. B. Ostrave, 1968, (3), 269-273] (Cz)
- BISI 8077 (V. Maroszczyk and K. Polach)
Experimental teeming of electric steel through cross-shaped nozzles. [Hutn. Listy, 24, (9), 632-634] (Cz)
- BISI 8542 (J. Gibon)
Automation of LD-kaldo operation at Cookerill Ougree-providence. [International Conference on Automation in Iron and Steelmaking, Intervention C-105, Luxemburg/Dusseldorf, 1970, Apr.] (F)
- BISI 7842 (G. Bozza and B. Costa)
General layout of the control system for the LD process. [Met. Ital., 1969, Mar., 97-97-110] (I)
- Foundry Practice**
- BISI 8380 (E. K. Modl)
Review of methods used for the production of the production of spheroidal graphite cast iron. [Giesserei, 1969, 56, July 3 416-421] (G)
- BISI 7700 (J. Becvar)
Researchs on new types of inoculants. [Slevarenstvi, 1969, 17, (6), 253-255] (Cz)
- Vacuum Metallurge**
- BISI 7829 (J Edelmann and V. Mikule)
A contribution to the method of evaluating corrosion measurements [Plyn, 1969, 49, (8), 233-236] (Cz)
- BISI 7901 (V. Kochnov)
Gas generation during vacuum heating of silicon steel. [Elektrotermiya Nauchn.-Tekhn. SB, 1965, (45), 49-50] (R)
- BISI 8057 (M. Kopca and B. Hruda)
Vacum treatment of liquid refined ferrochromium. [Sbornik V. S. B. Ostrava, 1968, 14, (3), 147-151] (Cz)
- BISI 8573 (R. Thueme and K. Werner)
Vacuum treatment plant for liquid steel in East German steelworks. [Neue Hutte, 1970, 15, Mar., 140-147] (G)
- Heat-Treatment, Heat-Treatment Furnace, Reheating Furnace & Soaking Pits**
- BISI 7725 (B. Glatz)
Heat-treatment facilities for thick plates. [Hutn. Listy, 1969, 24, (6), 413-420] (Cz)
- BISI 8204 (E. Hanke and H. J. Laudenberg)
Strength investigations in the static bend test on hardened case-hardening steel 18 NiCrMo 14 after carburizing and carbonitriding in a gas atmosphere. [Harterei-Techn. Mitt., 1969, 24, 81-91; 171-179] (G)
- BISI 8287 (G. Beck)
Application of the concept of wall temperature to the quenching of steel parts upon sudden contact between the test specimen and the quenching liquid. [Rev. Met. Mem. Sci., 1969, 66, (7-8), 581-589] (F)
- BISI 8089 (I. Pisch)
Heat treatment of sinter steels. [Strojirenska vyroba, 1969, 17, (7), 484-488] (Cz)
- BISI 8336 (M. Sicha, et al.)
Heat-treated plates of weldable steels. [Strojirenstve, 1970, 20, (3), 155-164] (Cz)
- BISI 8503 (V. Cihal and J. Kubelka)
Stabilization of austenitic chromium-nickel stainless steels. [Strojirenstvi, 1970, 20, (2), 91-99] (Cz)
- Forging, Pressing, Drawing, Extrusion, Swaging & Stamping**
- BISI 8089 (I. Piasch)

Problems arising in the production of drop and die forgings. [Strojirenska Vyroba, 1969, 17, (6), 430] (Cz)

Rolling & Rolling Practices

BISI 8029 (G. Gedda)

On the camber of cylindrical rolls: Experience with the rolling of thin sheet and strip. [Jernkon. Ann., 1969, 153, (5), 201-217] (Sw)

BISI 8253 (E. Gorissen)

Rationalisation of the tube manufacturing process by means of optimising the cutting process with the aid of computer-controlled billet dividing shears.

[Bander Bleche, 1970, 11, (1), 35-43] (G)

BISI 7717 (J. Boruta and M. Endrle)

Variation of some properties of heavy plates around shear edge. [Hutn. Listy, 1969, 24, (5), 338-345] (Cz)

BISI 8488 (K. Kaup et al)

Production of high-tensile structural steels on the hot wide strip mill and its use in the manufacture of welded large tubes.

[Bander Bleche, 1970, 11, (3), 154-161] (G)

BISI 8606 (R. V. Lambah et al.)

The automation of a hot strip mill.

[International Conferences on Automation in Iron and Steelmaking, (Luxembourg/Dusseldorf) April 1970] (F)

BISI 8466 (H. Weinberg)

The use of weighing devices, data comprehension and data processing plant in automated hot strip and cold rolling mills. (W)

[Bander Bleche, 1970, 11, (4), 245-253] (G)

BISI 7989 (M. Endrie)

Effects of non-uniform deformation of rolled plates on their final shape and cross section.

[Sbornik V. S. B. Ostrava, 1968, 14, (4), 87-100] (Cz)

BISI 8416 (H. Weinberg)

The use of weighing devices, data processing plant in automated hot strip and cold rolling mills-III. [Bander Bleche Roher, 1970, 11, (3), 178-183] (G)

BISI 8611 (O. Pawelski and G. Kading)

On the causes of the deformation of the edges of cold-rolled thin strip.

[Arch. Eisenh., 1970, 41, 249-254] (G)

BISI 8621 (G. Fries)

Modern combined shear units for heavy plate mills. [Klepzing Fachber., 1969, Oct. 623-629, Nov. 707-711] (G)

Machinery, Machining, Machinability & Services for Iron and Steel Plant

BISI 7811 (V. Sklenicka and J. Cadek)

Network planning in the maintenance department of an iron and steel works.

[Stahl Eisen, 1969, 89, (7), 872-877] (G)

BISI 8623 (G. Murry)

Some aspects of the study of the machinability of steels. [C. D. S. Circ. Inf. Techn. 1970, (4), 1071-1078] (F)

Welding

BISI 7697 (V. Pilous)

Welding of corrosion-resisting low-carbon steels 13% Cr with 4% in the AS-cast condition [Zvaranie, 1969, 18, (6), 169-173] (Cz)

BISI 7698 (I. Hrubusek)

Contribution on the operative weldability of very thick 13% Cr steels.

[Zvaranie, 1969, 18, (6), 187-190] (Cz)

BISI 8779 (A. Ya. Brodskii, et al)

The weldability of 10 GT reinforcing steel

[Avtom. Svarka, 1970, 22, (3), 58-59] (Russ)

Plating, Protective Coatings, Cleaning Pickling

BISI 8087 (P. Kersch)

Flame-aluminizing sheet. [Strojirenska Vyroba, 1969, 17, (6), 420-425] (Cz)

BISI 8178 (L. Leontaritis and E. Buchel)

Hydrogen permeability as a criterion of the tendency to fish scale formation of enamelled thin steel sheet. [Thyssenforschung 1969, 1, (2), 65-69] (G)

BISI 8629 (A. F. Bogenschutz, et al.)

Electrodeposition of invar-alloys (35-65 Ni Fe) from sulphamate solutions.

[Oberflache, 1969, Nov., 396-402] (G)

BISI 8647 (J. Glayman)

The anodic oxidation of zinc.

[Galvano, 1970, 397, February, 147-149] (F)

Properties and Tests

BISI 7972 (F. Benes and P. Skvor)

The effect of deoxidation on the fatigue limit of martensitic steel wires.

[Hutn. Listy, 1969, 24, (9), 640-649] (Cz)

BISI 8063 (Z. Kletecka et al.)

The effect of vacuum arc and electroslog remelting on the properties of alloy steels.

[Sbornik, V. S. B. Ostrava, 1968, 14, (3), 195-209] (Cz)

BISI 8222 (J. Nemeč)

Propagation of fatigue cracks from superficial defects in metal parts.

[Strojirenstvi, 1969, 19, (11), 691-694] (Cz)

BISI 7497 (P. Bastien)

The engineer looks at the problem of delayed fracture in steels in the presence of hydrogen.

[R. U. M. 1968, III, (10), 277-290] (F)

BISI 8536 (H. J. Puhl, et al.)

Research on the relations between the causes and the appearance of defects in unkilld free-cutting steel.

[Arch. Eisenh., 1970, 41, Apr., 349-359] (G)

BISI 8736 (R. Bouliss et al)

study of slight deformations by creep in tests of short duration. Influence of yield point at ambient temperature.

[Rev. Met., 1969, 66, May, 375-388] (F)

BISI 7953 (F. Cechura)

New reinforcing bar steel grade 10607.

[Hutnik, 1969, 19, (8), 312-315] (Cz)

BISI 8150 (A. Rancak and R. Eberbach)

Influence of austenite grain size on the properties of the 16 MnCr 5 steel.

[Harterei-Techn. Mitt., 1969, 24, 201-209] (G)

BISI 8320 (W. Schmidt)
The effect of cold working on creep in austenitic steel X 5 Cr Ni 18 9 [Bander Bleche, 1970, 11, (11), (1), 26-34] (G)

BISI 8568 (P. Opel, et al)
Promising nickel-chromium-molybdenum steels for turbine and generator shafts. [Stahl Eisen, 1970, 90, Apr. 30, 465-475] (G)

BISI 7728 (P. Gerlich)
Practical experience with tools made of new high-speed cobalt steels. [Strojirenstvi, 1969, 19, June, 389-392] (Cz)

BISI 8086 (L. Zeleznik and V. Rocek)
New high speed steels for cutting tools. [Strojirenska vyroqa, 1969, 17, (5), 344-346] (Cz)

BISI 8351 (A. Kirsch et al.)
Creep rupture tests on chromium-molybdenum steel 10 CrMo 9 10 and changes observed in the structure. [Arch. Eisenh., 1970, 41, Jan., 43-53] (G)

BISI 8368 (E. Hanke and D. Endemann)
Use of the bauschinger effect to study the strength of a quenched chromium-molybdenum tool steel. [Rev. Met., 1969, 66, July/Aug., 527-550] (F)

BISI 8710 (G. Barrez and C. Leymonie)
Study of the influence of coatings on the fatigue life under pulsating tensile stress of test-pieces with transverse fillet welds. [Rev. Met., 1970, March, 253-261] (F)

BISI 8721 (Ph. Maynier, et al.)
Influence of alloying elements on the hardenability of low-alloy steels. [Rev. Met., 1970, April, 343-351] (F)

Corrosion

BISI 8078 (M. Zedulova and J. Petrmanva)
Corrosion-resistant austenitic Cr-Ni steels with a very low carbon content. [Hutn. Listy, 1969, 24, (9), 635-640] (Cz)

BISI 8387 (J. Kocich)
Corrosion fatigue of Mn-Si steel in a NaCl medium. [Strojirenstvi, 1970, 3, 169-171] (Cz)

BISI 8408 (K. Lobl and M. Zedulova)
Using nitrogen as alloying addition in corrosion-resisting austenitic steels. [Hutn. Listy, 1969, 24, (10), 699-706] (Cz)

BISI 8463 (H. Kawshch)
Fundamentals of metallic corrosion. [Z. Metallk., 1970, 61, 94-101] (G)

BISI 8502 (F. Umland and H. P. Voigt)
The role of alkali sulphates in high temperature corrosion. [Werkstoffe Korros., 1970, 21, (4), 254-263] (G)

Metallography

BISI 8235 (F. Jandos, et al.)
Morphology of aluminium nitride in structural Cr-Ni-Mo steels. [Kovove Mat., 1969, 7, (6), 480-496] (Cz)

BISI 7990 (R. Kamensky)
New information on the eutectic crystallization of Fe-C alloys [Sbornik V. S. B. Ostrava Rada Hutnicka, 1967, 13, special on. 55-63] (Cz)

BISI 8041 (W. Laux and G. Wahn)
Hardenability and thermo-electric measurements for the determination of residual austenite in steel. [Neue Hutte, 1969, 14, June, 351-355] (G)

BISI 7833 (V. Sklenicka and J. Cadek)
Grain boundary serration in creep of An Fe-3 Si alloy. [Sbornik V. S. B. Ostrave, 1968, 14, (2), 109-117] (Cz)

BISI 8453 (J. Dubsky, et al.)
Contribution to the study on changes in austenite during the bainitic transformation. [Kovove Mat., 1970, 8, (1), 65-72] (Cz)

BISI 8698 (H. Kreye, et al)
Recrystallisation and precipitation in iron-copper alloys. [Arch. Eisenh., 1970, 41, May, 439-443] (G)

Economics and Statistics

BISI 8216 (H. Bub)
The development of building supervisions relative to constructional fire protection. [Vortage und Aufsätze aus dem Stahlbau Deutsche Stahlbau Verband, Köln, 1969] (G)

Miscellaneous

BISI 7653 (H. J. Schrader)
Is aluminium a material of the future? [Techn. Mitt. Krupp Werksber., 1968, 26, (3/4), 171-177] (G)

BISI 8310 (H. Hoppe and G. Oetzmann)
Computerized plotting of the contour lines of surfaces defined by points. [Techn. Mitt. Krupp Forsch. Ber., 1969, 27, (2), 37-40] (G)

BISI 7727 (P. Duzi and L. Kucher)
Distribution of iron and aluminium during zone refining of uranium. [Hutn. Listy, 1969, 24, (6), 437-447] (Cz)