

## 資料室だより

### BISITS Translation 紹介

— No 7 —

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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。

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(List Nos. 496~500)

#### Mineral Sources, Ores, Mining & Treatment

BISI 6727 (M. Ottow)

Causes of disintegration of hematite pellets of very pure magnetite concentrate during reduction and attempts to improve quality [Diss. approved by Tech. Univ. of Berlin 1966] (G)

BISI 7051 (J. Michal)

Some possibilities for using chromatographic methods in the analysis of mineral raw materials. [Rudy. 1967, 15, (11), 377-384] (R)

BISI 7053 (E. Mazanek and S. Jasienska)

Crushing strength as an indication of the quality of self-fluxing sinter. [Hutnik, 1968, 35, (7-8), 319-322] (P)

BISI 7165 (W. Pietsch)

Pelletizing of iron ore, worldwide. [Aufbereitungs-Tech., 1968, 2, (5), 201-214] (G)

BISI 7304 (J. Guzej)

Maintenance of sinter plant and the life of its basic units. [Sbornik Prednasek Pronesenych na DNT Zavodny Udrzby Zavodu I (Proc. Conf. on New Techniques (Maintenance) Organised by Plant No I of the VZKG Ostravé, 1967, Nov. 15-16] (Cz)

BISI 7342 (I. Verbo)

Production of ferromanganese by a novel technology. [Bany. Koh. Lapok, 1968, 101, Dec., 503-509] (H)

#### Fuel Preparation, Properties and Uses

BISI 6755-IX (M. Ya. German)

Combustion of natural gas in boiler furnaces. [Primenenie prirodnogo gaza v chernoi metallurgii (Using natural gas in ferrous metallurgy), Metallurgiya, Moscow, 1966, 109-120] (R)

BISI 7551 (P. Foch, et al.)

Experimental study on charging of coke ovens with preheated coal. [Rev. Gén. Therm., 1965, 4, June, 655-676] (F)

#### Air Pollution & Smoke

BISI 7086 (Z. Zdeněk)

Cleaning converter combustion products in the “OXYGEN” shop of the kosice steelworks. [Hutnik, 1968, 18, (8), 373-375] (Cz)

BISI 7629 (U. Krause and J. Wasilewska)

Investigations of dust and sulphur dioxide emission into the air from various departments of steelworks. [Hutnik, 1969, 36, (3), 128-132] (P)

#### Refractory Materials

BISI 6918 (Cl. Descamps)

Use of radioisotopes to label refractory materials used in the foundry. [Bull. Soc. Fr. Céram., 1958, Jan-Mar., 61-71] (F)

BISI 7040 (A. Masson)

Contribution to the determination of the dimensions of particles in a ground mixture. [Silicates Industriels, 1968, 33, July-Aug., 317-226] (F)

BISI 7048 (I. Sajo and B. Sipos)

Rapid thermometric analysis of magnesite and dolomite. [Radex Rund., 1968, July, 178-187] (G)

BISI 7050 (H. E. Schwiete and H. Wierich)

Effect of furnace atmosphere on the hot crushing strength of various refractories. [Ber. Dtsch. Keram. Ges., 1968, 45, (9), 483-485] (G)

#### Blast Furnace Practice & Production of Pig Iron & Ferro Alloy

- BISI 6568 (T. Barbieri, et al.)  
Some results of research on automation of the blast furnace at piombino.  
[Met. Ital., 1967, 59, Oct., 861-868] (I)
- BISI 6755-V (Kh. L. Fridman)  
Use of natural gas in direct reduction of iron.  
[Primenenie prirodnogo gaza v chernoii metallurgii (Using natural gas in ferrous metallurgy) Metallurgiya, Moscow, 1966, 65-72] (R)
- BISI 7019 (V. F. Campos, et al.)  
Injection of coal into a blast furnace.  
[Met. ABM. 1964, 20, July, 397-402] (P)
- BISI 7046 (W. Domalski, et al.)  
Desulphurization of pig iron outside the blast furnace. [Stahl Eisen, 1968, 88, Aug. 22, 906-919] (G)
- BISI 7072 (L. Brož)  
Theoretical principles for reducing coke consumption in blast furnace process.  
[Sbornik přednášek z konference o rozvoji hutnictví, Ostrava, 1966, Nov. 22-24, 107-112] (Cz)
- BISI 7610 (W. Engel)  
Operating experience with adjustable throat armour. [Stahl Eisen, 1969, 89, June 12, 679-682] (G)
- BISI 7837 (D. Schulz, et al.)  
Effect of sinter sizing and of sinter and slag basicity on the production of basic pig iron.  
[Stahl Eisen, 1969, 89, Aug. 21, 905-917] (G)
- Production of Steel**
- BISI 6573 (V. Gallois)  
The application of modern weighing techniques in steelworks.  
[C. D. S. Circ. 1967, Dec., 2643-2678] (F)
- BISI 6580 (A. A. Vorob'ev and A. M. Levin)  
On the problem of the formation of complex nuclei of the oxide phase during the deoxidation of iron.  
[Izv. VUZ Chern. Met., 1967, (12), 12-18] (R)
- BISI 6604 (P. Meschi, et al.)  
LD converter production of high carbon steels and their properties.  
[Met. Ital., 1967, 59, Sept., 753-756] (I)
- BISI 7324 (U. Tenhaven)  
Investigation of the diffusion and solubility of hydrogen in killed and rimming mild steel.  
[Moesch Ber., 1967, 2, (2), 68-76] (G)
- BISI 7390 (H. Maas and H. Abratis)  
Reduction of high-alumina refractories in iron-carbon melts.  
[Arch. Eisenh., 1969, 40, Feb., 153-157] (G)
- BISI 7526 (F. C. Roesier)  
On the cavitation phenomena in turbulent mixing zones especially on the boundary of fast liquid jets.  
[Anzeiger Osterreich. Akad. Wissensch. Math. Klasse, 1950, 87, 287-290] (G)
- BISI 7745 (H. Kleeschulte)  
Experiences with the use of a slinger for ladle lining. [Stahl Eisen, 1969, 89, Aug. 7, 859-863] (G)
- BISI 7746 (G. Bauer, et al.)  
Operating experience in the production of low-carbon steels for flat products in the oxygen converter.  
[Stahl Eisen, 1969, 89, Aug. 7, 853-859] (G)
- Foundry Practice**
- BISI 7064 (F. Knaff, et al.)  
Management of ingot mould stock by 'mechanography'. (with disc.)  
[C. D. S. Circ., 1968, Sept., 1941-1953] (F)
- BISI 7262 (A. Hrbek and J. Svoboda)  
Prehardened mixtures.  
[Technicke Zpravy, 1963, 4, (9), 113-116] (Cz)
- BISI 7356 (Dr. Esterer)  
Die castings of brass fittings with shell cores.  
[Giesserei-Praxis, 1964, (23), 458-460] (G)
- BISI 7389 (E. Theis and G. Gawlas)  
Welding of austenitic cast iron with spheroidal graphite. [Giesserei, 1969, 56, Mar. 13, 140-146] (G)
- BISI 7446 (H. Coriou, et al.)  
Influence of nickel, silicon and molybdenum on the corrosion of austenitic "iron-chromium-nickel" in superheated steam.  
[Rev. Mét. Mém. Sci., 1968, 65, Sept., 643-650] (F)
- BISI 7696 (M. Lüling and W. Gysel)  
Steel castings for nuclear power plant.  
[Giesserei, 1968, 55, June 6, 331-345] (G)
- Vacuum Metallurgy**
- BISI 7628 (J. Calvo Gomex)  
Studies on the kinetics of the vacuum degassing of molten iron and steel.  
[Rev. Met. CENIM, 1969, 5, June, 276-289] (S)
- Heat-Treatment, Heat-Treatment Furnace, Reheating Furnace & Soaking Pits**
- BISI 6605 (K. L. Maurer and F. Jeglitsch)  
Optical and electron microscopic comparison of structures produced by quenching and tempering. [Radex Rund., 1967, (3/4), 539-546] (G)
- BISI 7514 (D. I. Tarasko, et al.)  
The influence of plastic deformation of steel in the austenitic state on the impact resistance at sub-zero temperatures.  
[Izv. VUZ Chern. Met., 1968, (12), 140] (R)
- BISI 7595 (F. Hengerer, et al.)  
Calculation of the cooling curves obtained in oil- and air-quenching of cylindrical and flat work-pieces of alloyed heat-treatable steel by means of an electronic computer.  
[Stahl Eisen, 1969, 89, June 12, 641-654] (G)
- Forging, Pressing, Drawing, Extrusion, Swaging & Stamping**
- BISI 7283 (G. Naeser and O. Wessel)  
Fabrication of bars and tubes from metal powders by the extrusion process.  
[Arch. Eisenh., 1969, 40, (3), 257-262] (G)
- BISI 7286 (N. Hansen and H. Treis)  
Metal forming with applied variation-extract.  
[Bänder Bleche, 1968, 2. Oct., 573-576] (G)

- BISI 7289 (A. P. Kachailov)  
Resistance to deformation of alloy steels during hot working.  
[Inst. Chern. Met. Nauchnye trudi, 1967, 28 193-196] (R)
- BISI 7742 (K. D. Lietzmann and J. Eittersmann)  
Contribution to hydrodynamic lubrication during wire drawing.  
[Neue Mütte, 1969, 14, Jan., 32-37] (G)
- Rolling & Rolling Practices**
- BISI 7070 (P. Časlavský)  
Production scheduling, static model.  
[Hutn. Listy, 1963, 23, (5), 333-338] (Cz)
- BISI 7089 (J. Jech)  
The effect of macrostructure of roller bearing balls on ball life.  
[Mutnik, 1968, 18, (8), 393-396] (Cz)
- BISI 7138 (T. Solkowski and A. Vilain)  
Researches on the possibilities of improvement of conditions of engagement during rolling.  
[ATB Met., 1968, 8, (2), 87-96] (F)
- BISI 7225 (P. Bolek, et al.)  
The occurrence of amorphous carbon on cold rolled sheet intended for preserve cans.  
[Hutnik, 1968, 18, (9), 436-438] (Cz)
- BISI 7333 (F. G. Patrunov)  
An investigation of the mathematical model of rolling ingots on a blooming mill.  
[Izv. VUZ Chern. Met., 1968, (3), 89-91] (R)
- BISI 7334 (N. I. Baimov)  
Selecting the optimum pauses for rolling in reversing mills.  
[Izv. VUZ Chern. Met., 1965, (4), 128-134] (R)
- BISI 7335 (N. I. Baimov)  
On the efficient use of the long pauses during rolling in reversing mills.  
[Izv. VUZ Chern. Met., 1964, (2), 108-111] (R)
- BISI 7337 (N. I. Baimov)  
On the rational distribution of draughts among the passes during rolling on reversing mills.  
[Izv. VUZ Chern. Met., 1963, (4), 76-82] (R)
- BISI 7401 (G. Fries)  
New plate finishing equipment for Sweden.  
[Blech, 1969, 16, Apr., 217-221] (Cz)
- BISI 7438 (O. Palzer)  
Modern rolling mills for steel production.  
[Hutnik, 1968, 18, (12), 549-550] (Cz)
- BISI 7440 (J. Jedlička)  
Evaluating roll pressures and torsion moments in hot rolling with grooved rolls of simple shapes.  
[Hutnik, 1969, 19, (1), 17-20] (Cz)
- BISI 7627 (D. Ströle)  
Practical synthesis of multivariable control systems illustrated by the example of a reversing mill.  
[Preprint IFAG Symposium Düsseldorf 1968] (G)
- BISI 7679 (R. Helmes and A. Riegel)  
Electrical equipment of the hunedoara blooming mill train.  
[Klepzig Fachber., 1969, June, 390-398] (G)
- BISI 7880 (V. Dedek, et al.)  
Operation test of new type oil emulsions for cold strip rolling.  
[Hutn. Listy, 1964, 19, (2), 102-108] (Cz)
- Welding**
- BISI 7091 (M. Holý and J. Červenka)  
Hanoers of superheater coils fabricated by welding chromium steel parts to low alloy steel parts.  
[Strojirenstvi, 1968, 18, (8), 600-604] (Cz)
- BISI 7278 (G. Pütz)  
Heat-affected area in spot welding of plastic-coated sheet.  
[Schweisstechnik, 1967, 17, (9), 415-418] (G)
- BISI 7437 (V. Pokorný)  
High-frequency induction welding of tubes.  
[Hutnik, 1968, 18, (12), 545-548] (Cz)
- BISI 7808 (J. Krahe and F. Müller)  
Recarburization of plain carbon steel during stoxy-acetylene cutting.  
[Arch. Eisenh. 1968, 39, May, 347-351] (G)
- Plating, Protective Coatings, Cleaning Pickling**
- BISI 7218 (W. F. Kohl)  
Special characteristics of hot-dip galvanised steel sheet.  
[Metall, 1968, 22, Aug., 805-808] (G)
- Properties and Tests**
- BISI 6577 (P. Brozzo)  
Fracture toughness of mild steels as a function of their tensile strength and microstructure.  
[Met. Ital., 1967, 51, Oct., 789-800] (I)
- BISI 6665 (U. Issarescu)  
The true breaking toughness in the impact test—a new notched bar specimen.  
[Schweiz. Arch., 1968, 34, Feb., 40-49] (G)
- BISI 6775 (H. Koppen)  
Wear-resistant rail steels—then and now.  
[Der Eisenbahn Ingenieur, 1968, 19, Sept., 256-258] (G)
- BISI 6989 (R. Baus and A. Brenneisen)  
Resistance to fatigue in pre-stressed reinforcement.  
[Symposium on pre-stressed steels, International Federation Madrid, 1968] (F)
- BISI 7079 (Z. Radominski)  
Effect of various coke grain size on blast furnace operation.  
[Sbornik prednásek z konference o pozvoji hutnictvi, 1966, Nov. 22-24, 89-97] (Cz)
- BISI 7142 (A. Cheviet and M. Prudhomme)  
Brittleness tests. II—Tests of brittle fracture on large specimens: Robertson, Pellini, Battelle C.D.S. Circ., 1968, (9), 2013-2027] (F)
- BISI 7145 (P. Benda and V. Paur)  
Effect of some elements and operational conditions on the hot formability of carbon steels.  
[Hutn. Listy, 1968, 23, (7), 473-478] (Cz)
- BISI 7208 (K. Bungardt, et al.)  
High-strength maraging nickel steels.  
[Arch. Eisenh., 1968, 39, Oct., 719-731] (G)
- BISI 7214 (M. Kersten)  
On the theory of coercive force.  
[Z. Physik, 1948, 124, Sept., 714-741] (G)

- BISI 7430 (V. Heinrich and O. Pejčoch)  
Theoretical question concerning the piercing property of steels.  
[Sbornik Symp. "Stiefel VZKG" Paper E] (Cz)
- BISI 7507 (A. Kochendörfer, et al.)  
Evaluation of bend tests for the determination of the tensile flow curve from the bending flow curve. [Arch. Eisenh., 1969, 40, Feb., 163-172] (G)
- BISI 7508 (A. Kochendörfer, et al.)  
Deformation and stress state in smooth and notched bending test pieces with regard to testing the brittle fracture tendency of steels.  
[Arch. Eisenh., 1968, 39, Oct. 769-777] (G)
- BISI 7753 (V. G. Vyakhorev, et al.)  
Some possibilities offered by the eddy-current method for multiparameter testing of structural components. [Proc. Series: Non-destructive testing in Nuclear Technology. I.A.E.A., Vienna] (R)
- BISI 7802 (C. Crussard)  
A phenomenological study of creep.  
[Rev. Mét. Mém Sci., 1969, 66, May, 333-346] (F)
- Clad Steel, Powder Metallurgy & Hardfacing**
- BISI 6988 (G. Jangg, et al.)  
Comparative experiments on pressing and sintering techniques on a new type of electrolytic iron powder.  
[Planseeber, 1967, 15, Aug., 103-115] (G)
- Corrosion**
- BISI 6304 (A. Rahmel and J. Tobolski)  
Influence of steam and carbon dioxide on the oxidation of iron silicon alloys in oxygen between 750 and 1050°C.  
[Werks. Korros., 1965, 16, Aug., 662-676] (G)
- BISI (V. Krivan)  
Investigation of corrosion damage by means of beta radiation scattering.  
[Werks. Korros., 1968, 19, Dec., 1021-1025] (G)
- BISI 7311 (G. Burgmann and W. Schwenk)  
Comparative tests on the corrosion resistance of galvanized and aluminized sheet steel.  
[Arch. Eisenh., 1968, 39, Aug., 623-628] (G)
- Metallography**
- BISI 7448 (G. Becker, et al.)  
The mechanism of rust formation on weather-resistant steel.  
[Arch. Eisenh., 1969, 40, Apr., 341-349] (G)
- BISI 6569 (K. L. Maurer)  
Some examples of electron microscopy in metallography. [Radex Rund., 1967, (3/4), 733-741] (G)
- BISI 6571 (F. Jeglitsch)  
Direct determination of grain size with the high-temperature microscope.  
[Disc. on the study of A. Kulmburg, Radex Rund., 1967, (3/4), 691-694] (G)
- BISI 6575 (R. Mitsche, et al.)  
High-speed cinematography of the martensite transformation.  
[Radex Rund., 1967, (3/4), 705-710] (G)
- BISI 6578 (H. Sauer and M. Enockl)  
Brom-methylacetate as an etchant for special steels. [Radex Rund., 1967, (3/4), 641-645] (G)
- BISI 7042 (A. Masi and P. Ravizza)  
Observations on the influence of the main alloying elements on the transformation points of steels. [Met. Ital., 1968, 60, Jan., 32-36] (I)
- BISI 7302 (R. Kamensky and K. Kurzova)  
Determination of the phosphorus content of carbides. [Sbornik VSB Ostravě 1968, 14, (1), 67-73] (Cz)
- BISI 7350 (E. Neuenschwander)  
Manufacture and characterisation of ultrafine carbides, nitrides and metals.  
[J. Less-Common Met., 1966, 11, Nov., 365-375] (G)
- BISI 7447 (G. Grützner and H. J. Schüller)  
Investigations into the electrolytic potentiostatic etching of stainless steels in 10 N NaOH, using a coulometer.  
[Werks. Korros., 1969, 20, Mar., 183-194] (G)
- BISI 7686 (J. Pluhar, et al.)  
Recrystallization of austenite after high speed deformation.  
[Rev. Met. Mem. Sci., 1969, 66, Feb., 117-123] (F)
- Analysis**
- BISI 6608 (J. Kestowicz)  
Possibility of spectrographic determination of niobium in steel with the aid of the spectrograph of mean dispersion.  
[Hutnik, 1968, 25, (1), 25-28] (P)
- BISI 6670 (W. Koch et al.)  
Dependence of spectrometric sulphur determination on the anisotropy of deformed sulphides in steels. [Z. analyt. Chem., 1967, 225, (2), 196-203] (G)
- BISI 7039 (K. Doerffel and G. Allam)  
Determination of cobalt in steel by atomic absorption. [Neue Hütte, 1968, 13, 378-379] (G)
- BISI 7502 (M. Lacomble, et al.)  
Determination of the oxygen content in liquid steel by neutron activation in an oxygen steel plant. [Arch. Eisenh., 1969, 40, May, 451-454] (G)
- BISI 7600 (B. Haase and H. Koch)  
Investigations on the adiabatic absorption of hydrogen chloride.  
[Chemische Technik, 1968, 20, Dec., 738-742] (G)
- BISI 7605 (E. Förster and H. Richter)  
Range of application of stabilized zirconium dioxide as a solid electrolyte in the electrochemical determination of oxygen in liquid steel. [Arch. Eisenh., 1969, 40, June, 475-478] (G)
- Miscellaneous**
- BISI 6318 (A. Policard, et al.)  
The role of quartz in the development of pne-

umoconiosis in coal miners. [Rev. Ind. Minérale, 1967, 49, Sept., 641-648] (F)  
BISI 7466 (J. Petermann)  
Static and dynamic investigations on follow-up systems with parameter controls.  
[Wissensch. Z. T. H. Karl-Marx-Stadt, 1966,

8] (G)  
BISI 7815 (H. Suter)  
Continuous manufacture of phthalates from phthalic anhydride and high boiling alcohols.  
[Chemie Ingenieur Technik, 1968, Sept., 971-974] (G)