

## 資料室だより

## BISI Translation 紹介

— No 27 —

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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。

なお、“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. 601-605

**Management Planning and Control**

BISI 9496 (D. Drechsel)

Biological treatment of the waste water of coke-oven plants according to the activated sludge process. [Stahl Eisen, 1971, 91, (9), 509-515] (G)

BISI 9764 (W. Cordes)

Economic situation and development trends in the steel industry. [Stahl Eisen, 1971, 91, (14), 793-801] (G)

**Physical Structure of Materials and Crystallography**

BISI 9768 (A. M. Bigeev, et al.)

On the choice of parameters for corrugation of the surface a steel ingot. [Izv. VUZ. Chern. Met., 1966, (6), 63-66] (R)

BISI 9595 (R. Bartram, et al.)

The influence of a locally variable coefficient of friction on the calculation of the forces in industrial forming processes. [Arch. Eisenh., 1970, 41, (10), 969-973] (G)

**Physical Metallurgy and Metallography**

BISI 9781 (G. Z. Koval'chuk, et al.)

ISI thermal decomposition of austenite in welded billets of grades St. 5 sp and 35 GS steels. [Izv. VUZ. Chern. Met., 1971, (8), 145-9] (R)

**Physical Properties and Chemical Analysis**

BISI 9833 (W. Lipinski and M. Baj)

Rapid methods for determination of carbon in steel. [Hutnik, 1971, 38, (2), 95-100] (Pol.)

BISI 9966 (L. Mazuel and Y. Morillon)

Solidification and reheating of slab ingots. [Rev. Met., 1965, Nov., 1074-1081] (F)

BISI 10025 (F. A. Radin, et al.)

The effect of final rolling temperature and cooling rate on the electromagnetic properties of dynamo steel. [Stal', 1971, (11), 1038] (R)

BISI 9945 (V. Ardeleanu and K. Stricker)

The use of solid electrolyte cells for oxygen activity determination in steels. [Gerc. Met., 1971, (12), 163-167] (Rum)

BISI 9578 (G. Bianchi and G. P. Andreini)

The determination of sulphur using emission spectrometry. [Met. Ital., 1971, 63, (5), 233-238] (I)

BISI 9946 (C. Rizescu)

Comment on the solubility of nitrogen in stainless and heat resisting steels. [Cerc. Met., 1971, (12), 179-183] (Rum)

BISI 9591 (J. Puder)

Investigations into the non-stationary temperature behaviour of length measuring instruments exposed to heat from one side. [Feingerate Technik, 1970, 19, (11), 493-496] (G)

BISI 10020 (V. I. Askol'dov, et al.)

The axial zone in continuously-cast slabs and the resistance of sheet to axial lamination. [Stal', 1971, (11), 996-998] (R)

**Mechanical Properties and Material Defects**

BISI 9725 (W. Gysel, et al.)

Fatigue strength and brittle-fracture behaviour of welded cast 13% chromium steel. [Schweissen Schneiden, 1971, 23, 172-173] (G)

BISI 9953 (J. Hertel)

Significance of the technological torsion test on thin steel wire and effect of its length on the test result. [Thyssenforschung, 1970, 2, (3), 96-104] (G)

BISI 9992 (R. P. Kononov, et al.)

The effect of ingot scum thinning additions on

the contamination of rimming steel by non-metallic inclusions.

[Stal', 1971, (10), 908-909] (R)

BISI 9901 (S. E. Volkov, et al.)

Effect of surface tension on the removal of non-metallic inclusions when treating metal with a slig. [Izv. VUZ. Chern. Met., 1971, (9), 50-53] (R)

#### Corrosion and Corrosion Testing

BISI 9634 (H. Wiegand, et al.)

Contribution on the stress corrosion cracking of austenitic. [Werkstoffe Korr., 1971, 22, (7), 612-623] (G)

BISI 9756 (F. Jargon and G. Schussler)

Technological and corrosion investigation on electrolytic tinplate. [Verpackungs Rund., 1971, (4), 436-446] (G)

BISI 9880 (Anon)

Failure of welded shipbuilding steels.

[Stahl Eisen, 1971, 91, 30 th Sept., 1150] (G)

BISI 9773 (W. Bergemann, et al.)

Prevention of stress corrosion high-alloy chromium-nickel steel by electroless nickel plating. [Technik, 1971, 29, 16-18] (G)

#### Protection of Materials

BISI 9876 (L. Bulczynska and A. Kwiatkowski)

Priming of incompletely derusted surfaces. [Ochra na Przed Korozja, 1971, June 14, 18-21] (Pol.)

BISI 9877 (E. Blachowicz, et al.)

Study on the influence of the method of preparation of steel surfaces on the durability of priming coats. [Ochra na Przed Korozja, 1971, Apr., 4, 97-99] (Cz)

BISI 9911 (H. Wurtinger)

Shear tests on tube specimens of glass fibre-reinforced plastics. [Materialprufung, 1971, (10), 345-347] (G)

BISI 9968 (E. Fondolf and H. Wehr)

Types and properties of coatings for protection against high temperature corrosion with special reference to gas turbine manufacture.

[Stahl Eisen, 1971, 91, (15), 885-887] (G)

#### Rolling

BISI 9994 (D. I. Starchenko, et al.)

Investigation of the cold sheet rolling process with preliminary oiling of the semirrolled product.

[Stal', 1971, (10), 927-928] (R)

BISI 9995 (A. P. Shapovalov, et al.)

Investigation of the service life of cold rolling rolls made of electroslag remelted metal.

[Stal', 1971, (10), 929] (R)

BISI 9996 (Yu. V. Konovalov, et al.)

A Statistical model of the hot rolling conditions on wide strip mills.

[Izv. VUZ. Chern. Met., 1971, (10), 78-82] (R)

BISI 9987 (V. K. Smirnov, et al.)

Deformation and power parameters in rolling oval stock in oval passes-II.

[Izv. VUZ. Chern. Mat., 1971, (10), 83-86]

(R)

BISI 9993 (M. L. Zaitsev and G. V. Anufriev)

Determination of the power and force parameters during rolling in passes.

[Stal', 1971, (10), 922-925] (R)

BISI 9965 (German Standard)

Hot rolled steel buld flats: dimensions, weights, permitted variations, static values.

[German Draft Standard DIN 1019, 1971, Nov.] (G)

BISI 10023 (Ya. S. Shvartsbart)

Calculation of the yield stress, allowing for the law of development of deformation with time in hot-rolling. [Stal', 1971, (11), 1020-1023] (R)

BISI 9924 (H. Muller)

The beam mill stands of arbed-differdange and the rapid roll change system.

[CDS Circ., 1970, (7/8), 1785-1812] (F)

BISI 10030 (N. P. Gromov and A. N. Khvalov)

The amounts of deviation in torque and forward flow on the neutral stand.

[Izv. VUZ. Chern. Met., 1971, (11), 88-90] (R)

BISI 10031 (I. I. Onishchenko)

Forward slip during rolling with tension and spread. [Izv. VUZ. Chern. Met., 1971, (11), 95-97] (R)

BISI 9702 (E. Cerveny)

Trains for hot rolling of alloy steel strip.

[Hutnik, 1971, (5), 188-192] (Cz)

BISI 9986 (G. Ya. Gun and P. I. Polukhin)

Method of conformal representations in three-dimensional problems of rolling and drawing theory-I. [Izv. Vuz. Chern. Met., 1971, (10), 63-66] (R)

BISI 10153 (S. V. Zemskii, et al.)

Diffusional redistribution of carbon in clad metals with an interlayer. [Izv. VUZ. Chern. Met., 1971, (12), 105-8] (R)

#### Metalworking, Excluding Rolling

BISI 10022 (V. A. Nikovaev et al.)

Investigation of the contact stresses during the passage of the weld joint through the deformation zone by the optical polarised light method.

[Stal', 1971, (11), 1012-17] (R)

BISI 9680 (M. Cuma)

On new trends in drop forging.

[Strojirenska vyroba, 1971, (4), 231-240] (Cz)

BISI 9696 (V. Vagoun and J. Zlamal)

Outuputs of tube rolling trains from the viewpoint of correlation analysis.

[Hutnik, 1971, (4), 134-137] (Cz)

BISI 9752 (VDE)

The effect of continuous stretcher-and-roller levelling on strip properties. [Stahl Eisen, 1971, (16), Aug. 5. 916-24] (G)

#### Steel and Alloys (Technical Applications and Methods of production), Cermets

BISI 9750 (W. Holzgruber et al.)

The results of resarch and development relating to the melting of alloy steels.

- [BHM, 1971, 116, 70-77] (G)
- BISI 9948 (A. Constantinescu and B. Rotenstein)  
A new steel for superheater tubes.  
[Cerc. Met., 1971, (12), 309-316] (Rum)
- BISI 9949 (P. Herscovici, et al.)  
Contribution to the improvement of the manufacturing technology of hard tungsten carbide base alloys for drawing dies used in the iron and steel industry. Cerc. Met., 1971, (12), 345-362] (Rum)
- BISI 9758 (VDE)  
Weather-resisting structural steels directives for delivery, processing and application.  
[Stahl-Eisen Material Data Sheet, Wo 87-70, 1st Edition Feb. 1970] (G)
- Casting and Cast Metals**
- BISI 9735 (K. H. Caspers and J. Demharter)  
The use of a glucose binder in the hot-box process. [Giesserei, 1963, 50, May 16, 304-310] (G)
- BISI 9761 (J. Eisen et al.)  
Further technical developments in continuous slab casting plants. [Bander Bleche, 1971, 12, (8), 349-352] (G)
- BISI 9543 (A. Troost, et al.)  
Conditions for transfer of data on non-stationary temperature fields, without restriction as to geometrical similarity, and application to the continuous casting process.  
[Arch. Eisenh., 1971, 42, Feb. 143-145] (G)
- BISI 9658 (Anon)  
Continuous casting of steel.  
Actualites Industrielles Lorraines, 47-53, part of article starting 38, describes plant at Dillingen] (F)
- BISI 9769 (E. Stagno and M. R. Pinasco)  
Metallographic structure of Ni-resist lamellar graphite and Ni-resist S. G. cast iron.  
[Boll. Techn. Finsider, 1971, Mar., 177-197] (I)
- BISI 9076 (H. Berndt)  
Optimum adjustment of moulding sands for high pressure squeeze moulding, I-Testing methods, interactions of the influences and optimum adjustment of sand quality.  
[Giesserei, 1968, 55, Sept. 26, 605-613] (G)
- Heat Treatment**
- BISI 9661 (A. P. Chekmarev, et al.)  
The part played by surface roughness in the prevention of welding during annealing and soiling of cold-rolled strip.  
[Stal', 1971, (6), 532-533] (R)
- BISI 10026 (R. B. Gutnov, et al.)  
Sources of decarburisation during the restoration case hardening of steel in bell furnaces.  
[Stal', 1971, (11), 1039-1040] (R)
- Heating, Heating Furnaces and Electric Heating**
- BISI 9624 (R. Kremer and K. Obroucka)  
New metallic recuperator for soaking pit.  
[Hutnik, 1963, 13, (3), 124-127] (Cz)
- BISI 9698 (Z. Benes)  
Various kinds of fuels for forging furnaces.  
Their economy and efficiency. [Hutnik, 1971, (3), 111-115] (Cz)
- Fuel, Combustion and Refractories**
- BISI 9693 (Z. Benes)  
Various types of energy for firing forging furnaces. Their economical aptitude and power profitability. [Hutnik, 1971, (4), 146-150] (Cz)
- BISI 9728 (S. Grossmann & S. Hylak)  
Economic aspects of dry quenching of coke in a new coking plant. [Koks Smola Gaz., 1970, Mar., 79-82] (R)
- Ores and Minerals Handling and Beneficiation**
- BISI 9701 (B. Ruzicka)  
Testing methods and physical properties of lime for oxygen steelmaking processes.  
[Hutnik, 1971, (5), 184-187] (Cz)
- BISI 9984 (V. G. Pyzhov and M. S. Bykov)  
Influence of quantity of air and the mix basicity at different levels in the bed on desulphurization during sintering. [Izv. VUZ. Chern. Met., 1971, (10), 33-35] (R)
- BISI 9990 (A. I. Ivanov, et al.)  
Optimum moisture content of a sintering mixture. [Stal', 1971, (10), 879-881] (R)
- BISI 9616 (M. Guran et al.)  
Research concerning the behaviour of finely intergrown iron ores in flotation.  
[Cerc. Min., 1969, 12, 197-206] (Rum)
- BISI 9637 (J. Astier)  
The possibilities open to iron ore producers to meet customers' requirements.  
[Rev. Met., 1971, 68, (5), 329-330] (F)
- BISI 9514 (E. Mazanek and M. Wyderko)  
Magnetite in iron ore sinters. [Arch. Eisenh., 1970, 41, (11), 1017-1022] (G)
- BISI 9694 (J. Ponevac)  
Effect of sinter-mix grain size on the sintering process and on the mechanical properties of sinter. [Hutnik, 1971, (4), 121-124] (Cz)
- Ironmaking and Ferro-Alloys**
- BISI 8636 (N. Jusseau et al.)  
Automatic control of blast furnace No. 5 at Rombas (Wendel-Sidelor) [Int. Conf. Uato. in Iron and Steel Making, 1970, Apr. B3. Rombas. Wendel-Sidelor] (F)
- BISI 10149 (Yu. G. Yaroshenko, et al.)  
Influence of furnace size and method of introducing the blast on gas distribution in shaft furnaces. [Izv. VUZ Chern. Met., 1971, (12), 22-26] (R)
- BISI 9699 (H. Schmidt)  
Coke rate during blowing-in of a blast furnace. [Hutnik, 1971, (5), 172-176] (Cz)
- BISI 9940 (F. Falk, et al.)  
Structural change of the factors influencing the process in blast furnaces. [Cerc. Met., 1971, (12), 21-34] (Rum)
- BISI 9924 (G. Atanasiu and I. Tripsa)  
The L. W. S. Process.  
[Rev. Met., 1970, 67, Mar., 181-193] (F)
- BISI 9333 (O. Benda)  
Heat stresses in the walls of metallic recuperators.

- rators. [Hutnik, 1971, (1), 18-21](Cz)
- BISI 9641 (P. Tocu et al.)  
Statistical mathematical analysis regarding optimal grading of the blast-furnace charge. [Metalurgia, 1971, 23, (3), 137-141](Rum)
- BISI 10028 (V. P. Segeda and V. A. Sorokin)  
Combined parameters of the thermal state of the blast-furnace process. [Izv. VUZ. Chern. Met., 1971, (11), 26-29](R)
- BISI 9689 (Z. Puncochar)  
Modern blast furnace technology in Soviet plants. [Hutnik, 1971, (3), 90-92](Cz)
- Steelmaking**
- BISI 9941 (Ov. Hatarascu and I. Tripsa)  
Contribution to sponge iron production using converted methane gas [Cerc. Met., 1971, (12), 61-68](Rum)
- BISI 9700 (J. Jirsa, et al.)  
Reasons causing failure of stopper assemblies in steel teeming. [Hutnik, 1971, (5), 177-183](Cz)
- BISI 9836 (O. V. Hatarascu)  
The production of sponge iron by means of converted methane. [Metalurgia, 1971, 23, (7), 431-435](Rum)
- BISI 9923 (P. Leroy)  
The L.W.S. Process. [Rev. Met. 1970, 67, Mar., 181-193](F)
- BISI 9699 (H. Schmidt)  
Coke rate during blowing-in of a blast furnace. [Hutnik, 1971, (5), 172-176](Cz)
- BISI 9940 (F. Falk, et al.)  
Structural change of the factors influencing the process in blast furnaces. [Cerc. Met., 1971, (12), 21-34](Rum)
- BISI 9683 (Z. Sivala)  
Controlling thermal variations in the 230t maerz boelens furnace melting process. [Hutnik, 1970, (11), 406-412](Cz)

**Extraction and Refining**

- BISI 9652 (A. Bender)  
Investigations regarding manganese burning during deoxidation of open-hearth killed steel. [Metalurgia, 1971, 23(2), 81-83](Rum)
- BISI 9943 (M. Costescu and D. Petreasa)  
Predeoxidation of steel in the converter. [Cerc. Met., 1971, (12), 141-146](Rum)
- BISI 10027 (S. N. Paderin and S. I. Filippov)  
The effect of blocking the reaction surface on the intensity of decarbonisation of a metal melt. [Izv. VUZ. Chern. Met., 1971, (11), 12-17](R)
- BISI 9944 (V. Ursu et al.)  
Steel predeoxidation possibilities by using coal-containing powders. [Cerc. Met., 1971, (12), 149-160](Rum)
- BISI 10019 (L. L. Levin and V. G. Manchinskii)  
Viscosity and desulphurizing capacity of high-alumina magnesia-bearing blast-furnace slags. [Stal', 1971, (11), 977-984](R)
- BISI 10021 (K. S. Prosvirin, et al.)  
The use of molten silico-manganese to deoxidize rail steel. [Stal', 1971, (11), 999-1000](R)
- BISI 9922 (J. E. Astier)  
Effect of surface tension on the removal of non-metallic inclusions when treating metal with a slag. [Izv. VUZ. Chern. Met., 1971, (9), 50-53](R)
- BISI 9982 (A. N. Korneeva and E. S. Vorontsov)  
Thermodynamics and mechanism of the direct reduction of coloured oxide films on iron. [Izv. VUZ. Chern. Met., 1971, (10), 18-21](R)
- BISI 9989 (P. M. Maslovskii, et al.)  
Sample actions in systems for regulating metallurgical equipment. [Izv. VUZ. Chern. Met., 1971, (10), 152-155](R)