

## 資料室だより

### BISI Translation 紹介

— No 64 —

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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ります。

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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、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. 776, 778~781

##### **Management Planning and Control**

BISI 13769 (W. Heller, et al.)

The safeguarding of quality in an integrated steelworks.

[Tech. Mitt. Krupp. Werksber., 1975, 33, (2), 89—93] (G)

##### **Physical Structure of Materials and Crystallography**

BISI 13612 (G. Ya. Gun, and V. I. Kostyunin.)

Calculation of stresses in solving two-dimensional problems of plastic flow.

[Izv. VUZ Chern. Met., 1975, (5), 114—117] (R)

BISI 13613 (Ya. M. Okhrimenko, et al.)

A mathematical model of the visco-plastic state of type U8A steel.

[Izvest. VUZ Chernaya Met., 1975, (5), 124—128] (R)

BISI 13696 (I. V. Navrotskii, and I. N. Dryukova.)

Influence of changes in structure with increasing plate thickness on mechanical properties and brittle fracture of steel.

[Stal'. 1975, (6), pp. 548—551] (R)

##### **Physical Metallurgy and Metallography**

BISI 13733 (G. Preis, and G. Lennartz.)

Experiences with the isolation of high-speed tool steel carbides and the separation of MC and M<sub>6</sub>C.

[Arch. Eisenhuttenwes, 1975, 46, (8), 509—514] (G)

BISI 13713 (A. V. Morzhakov, et al.)

Cementite graphitising mechanism in 55S2 silicon steel during cyclic impact loading.

[Izv. VUZ Chern. Met., 1975, (6), 109—113] (R)

BISI 13798 (J. Vrestal, et al.)

Effect of germanium on the thermodynamic activity and distribution of components in the

structure of grey cast iron.

[Kovove materialy, 1975, (3), 315—330] (C)

BISI 13851 (A. N. Kasilov, et al.)

Kinetics of isothermal austenite decomposition in hot worked 70S2ndkm steel.

[Izv. VUZ Chern. Met., 1975, (7), 144—146] (R)

BISI 13688 (B. N. Putimtsev, et al.)

Producing an electrolytic charge iron and its application in the metallurgy of precision alloys.

[Stal'. 1975, (6), 509—511] (R)

##### **Physical Properties and Chemical Analysis**

BISI 13687 (V. T. Sladkoshteev, et al.)

The effect of pressure casting on the solidification and quality of ingots.

[Stal'. 1975, (6), 503—506] (R)

BISI 13705 (V. F. Igushev, et al.)

Research into the enthalpies of molten Fe-Cr-Si alloys.

[Izvest. VUZ Chernaya Met., 1975, (6), 46—50] (R)

BISI 13498 (G. Bianchi, et al.)

Development of mass spectrometry for monitoring and control of gases in the iron and steel industry.

[CDS Circ, 1975, (4), 971—988] (F)

##### **Mechanical Properties and Materials Defects**

BISI 13994 (P. Lukas, and M. Klesnil.)

Criteria for evaluation of the fatigue strength of structural materials.

[Stojirenstvi, 1975, 25, (4), 215—222] (C)

BISI 13199 (A. Fuchs, et al.)

Investigation into the evaluation of the influence of sulphides on the fracture behaviour of structural steel.

[Arch. Eisen., 1975, 46, (2), 127—136] (G)

BISI 13537 (Z. A. Shevchenko, et al.)

The formation of large non-metallic inclusions

- in ShKh 15 ball-bearing steel which has been air melted.  
 [Stal', 1975, (4), 316—322] (R)  
 BISI 13606 (A. A. Ryzhikov, et al.)  
 The formation of off-centre segregational heterogeneity in ingots.  
 [Izvest. VUZ, Chernaya Met., 1975, (5), 58—64] (R)

#### Corrosion and Corrosion Testing

- BISI 13643 (G. Herbsleb, et al.)  
 Corrosion behaviour of alloy steel tubing and tube connexions in warm water distribution systems in houses.  
 [Werkstoffe Korr., 1975, 26, (2), 93—103] (G)  
 BISI 13787 (P. Combrade, et al.)  
 A comparative study of stress corrosion tests for Fe-Cr-Ni and Fe-Cr austenitic, austeno-ferritic, and ferritic alloys in a chlorinated atmosphere.  
 [Rev. Mét., 1974, 71, (12), pp. 807—822] (F)

#### Protection of Materials

- BISI 13265 (Sumitomo Metal Industries.)  
 Coating of metals with thermoplastics.  
 [German Patent 2 429 198] (G)  
 BISI 13395 (Z. Karaoglanoff.)  
 Oxidation and reduction processes during the electrolysis of iron salt solutions part II-diffusion and convection.  
 [Z. Elektrochem., 1906, (1), 5—16] (G)  
 BISI 13676 (P. Kimmerl, and G. Haschke.)  
 Modern methods of galvanic surface finishing for steel wire.  
 [Neue Hütte, 1975, 20, (5/6), 379—383] (G)

#### Rolling

- BISI 13249 (T. Hartmann, et al.)  
 Reconstruction and modernisation of a hot wide strip mill.  
 [Stahl Eisen. 1974, 94, (13), 589—597] (R)  
 BISI 13596 (M. L. Zaitsev, et al.)  
 Method of cold deformation in the process flow of high-accuracy shaped steel section production.  
 [Stal', 1975, (5), 447—450] (R)  
 BISI 13597 (M. G. Polyakov, et al.)  
 Improvement in the quality of shaped A 12 free-cutting steel rods.  
 [Stal', 1975, (5), 451—452] (R)  
 BISI 13689 (G. N. Anzin, et al.)  
 Production of rolled semiproducts from slabs of type V<sub>2</sub>F tool steel.  
 [Stal', 1975, (6), 522—524] (R)  
 BISI 13707 (V. A. Satskii, et al.)  
 Analysis of the change of shape in a metal during deformation in continuous billet mill passes.  
 [Izv. VUZ, Chern. Met., 1975, (6), 56—61] (R)  
 BISI 13708 (V. S. Gorelik, and V. M. Klimenko.)  
 Interconnection between the strip thickness and width deviations during hot rolling.  
 [Izvest. VUZ. Chernaya met., 1975, (6), 62—66] (R)  
 BISI 13718 (A. N. Moskalev, and A. L. Isupov.)  
 Optimization of the amount of build-up of rolling mill rolls.  
 [Izvest. VUZ Chernaya Met., 1975, (6), 185—

- 187] (R)  
 BISI 13774 (W. Hauck)  
 The influence of the specific coil mass on capital costs, operating costs, and functioning of a cold-rolling mill.  
 [Stahl Eisen, 1974, 94, (24), 1217—1226] (G)  
 BISI 13792 (Yu. S. Chernobrivenko, et al.)  
 Development of a theory for calculating spread in rolling with consideration of tension.  
 [Metallurgiya i Koksokhimiya, 1973, (33), 3—11] (R)  
 BISI 13815 (Z. Zamyslovsky)  
 The nonhomogeneous deformation in rolling flat thick rolled semis.  
 [Sbornik ved, praci VSB Ostrava, 1973, (2), 103—138] (C)  
 BISI 13816 (Z. Zamyslovsky, and C. Milota)  
 Widening in rolling ingots in a blooming mill.  
 [Sbornik véd. práci VŠB, Ostrava, 1973, (2), 139—166] (C)  
 BISI 13832 (P. I. Polukhin, et al.)  
 Spread during the hot rolling of alloy steels.  
 [Stal', 1975, (7), 616—618] (R)  
 BISI 13833 (L. V. Konovalov, and V. S. Gorelik)  
 Assessment of rolling stability from the variations in process parameter conditions.  
 [Stal', 1975, (7), 618—623] (R)  
 BISI 13852 (V. F. Potapkin, et al.)  
 Slip line field during rolling with a continuous speed field.  
 [Izv. VUZ Chern. Met., 1975, (7), 103—106] (R)  

#### Metalworking, Excluding Rolling

BISI 13709 (I. A. Dobychin, and B. M. Gotlib)  
 Statistical variation principles of the processing of metals by pressure. communication 1.  
 [Izvest. VUZ Chernaya Met., 1975, (6), 67—70] (R)  
 BISI 13869 (H. M. Sauerbrey)  
 High-speed hydraulic presses for cold and hot forging.  
 [International Cold forging Congress, Brighton, October 1—3, 1975, 508—522] (G)  
 BISI 13872 (M. Burgdorf)  
 Cold forging of gear-shaped components.  
 [International Cold Forging Congress, Brighton, October 1—3, 1975, 275—289] (G)  
 BISI 13805 (M. Snasel)  
 Effect of the mannesmann tube piercing process on the biting conditions in a piercing mill.  
 [Hutn. Listy, 1975, (5), 357—360] (C)  
 BISI 13541 (Yu. V. Zil'berg, et al.)  
 Improvement in the outside surface quality of shells during rolling on a continuous mill.  
 [Stal', 1975, (4), 347—349] (R)  
 BISI 13853 (A. K. Grigorev, et al.)  
 Effect of mandrel pass design on the speed and power-force parameters of the the piercing process.  
 [Izv. VUZ Chern. Met., (7), 107—110] (R)  
 BISI 13997 (J. Jenik, and F. Mildorf)  
 The effect of additional elements on the form-

- ability of CSN 13 030 steel during the manufacture of large/diameter pipes.  
[Hutnik 1975, (3), 99—101] (C)
- BISI 13870** (D. Schmoekel)  
The manufacture of cold extrusion dies by hot working.  
[International Cold Forging Congress, Brighton, October 1—3, 1975, 173—189] (G)
- BISI 13873** (G. Brix)  
Development of a cold extrusion component from design to production.  
[International Cold Forging Congress, Brighton, October 1—3, 1975, 363—379] (G)
- BISI 13675** (J. Wolf)  
Present state and development trends in drawing machines for producing.  
[Neue Hütte, 1975, 20, (5/6), 354—360] (G)
- BISI 13694** (V. V. Parusov, et al.)  
Research into mild steel wire rod after its accelerated cooling and during drawing.  
[Stal', 1975, (6), 540—542] (R)
- BISI 13925** (I. N. Nedovizii, et al.)  
Experience of the industrial mastery of the combined annealing-draw process.  
[Stal' 1975, (8), 726—728] (R)
- BISI 13399** (A. Kirste)  
Porous sintered metals.  
[VDI-Z., 1974, 116, (15), 1272—1274] (G)
- BISI 13648** (V. D. Lunev, et al.)  
Determination of the specific surface of metal and carbide powders.  
[Poroshkovaya Metall., 1975, (1), 1—6] (R)
- BISI 13874** (H. Honess, et al.)  
Behaviour and properties of sintered preforms during and after cold forging.  
[International Cold Forging Congress, Brighton, October 1—3, 1975, 64—91] (G)
- Steels and Alloys (Technical Applications and Methods of Production), Cermets**
- BISI 13803** (J. Skala)  
Preliminary melting of pre-alloys in an electric arc furnace for high-grade steel production.  
[Hutn. Listy, 1975, (5), 338—341] (C)
- BISI 13822** (B. Million, et al.)  
Diffusion of Cr, Mn, Ni and W in CSN 17455 steel alloyed with tungsten.  
[Kovové Materiály, 1975, (1), 3—15] (C)
- BISI 13836** (A. M. Adaskin, et al.)  
Causes of property instability in R6M5 steel.  
[Stal', 1975, (7), 649—651] (R)
- Casting and Cast Metals**
- BISI 13286** (Z. Zdenek, et al.)  
Industrial experience with rammed-lining ladles.  
[Hutnik, 1974, (11), 410—412] (C)
- BISI 13409** (H. G. Levelink, et al.)  
Control of sand quality with modern moulding equipment.  
[Giesserei, 1975, 62, (5), 93—99] (G)
- BISI 13535** (V. G. Osipov, et al.)  
Continuous casting practice for the production of O9G2 steel.  
[Stal', 1975, (4), 310—313] (R)
- BISI 13761** (A. Wiesner, et al.)  
Availability and maintenance of continuous slab casting plants.  
[Stahl Eisen, 1975, 95, (8), 342—347] (G)
- BISI 13806** (J. Pribyl)  
Possibilities of metal saving when casting.  
[Slevarenství, 1975, (3—4), 141—144] (C)
- BISI 13821** (A. Vetiska, and M. Horacek)  
Effect of the flow-through property on the course of solidification and surface quality of grey cast-iron casting.  
[Slevarenství, 1975, (5), 176—179] (C)
- BISI 13847** (A. P. Ogurtsov, et al.)  
Determination of the time taken to melt slag-forming mixtures in ingot mounds.  
[Izvest. VUZ. Chern. Met., 1975, (7), 53—55] (R)
- Heat Treatment**
- BISI 13752** (H.-U. Weigel, and H. Knoche)  
The rapid annealing of cold-rolled, low carbon steel strip.  
[Stahl Eisen, 1975, 95, (12), 544—550] (G)
- BISI 13998** (G. Beckmann)  
Investigations into the thermal elimination of residual stresses, in particular in rotating forgings (part 2).  
[Neue Hütte, 1974, 19, (11), 681—685] (G)
- BISI 13999** (G. Beckmann)  
Investigations into the thermal elimination of residual stresses, in particular in rotating forgings (part 3).  
[Neue Hütte, 1974, 19, (12), 745—747] (G)
- Heating, Heating Furnaces and Electric Heating**
- BISI 13797** (J. Senberger, and V. Kafka)  
Technical and economic questions of steelmaking in the electric arc furnace and in medium-frequency induction furnaces.  
[Slévarenství, 1975, (3—4), 97—100] (C)
- BISI 13354** (V. I. Tkach, et al.)  
Research into the non-oxidizing heat treatment of tubes in a roller-hearth furnace. Report 1.  
[Izvest. VUZ. Chernaya Met., 1975, (2), 129—132] (R)
- BISI 13714** (V. I. Tkach, et al.)  
Investigation of the non-oxidizing heat treatment of tubes in a roller hearth furnace. Communication 2.  
[Izvest. VUZ. Chernaya Met., 1975, (6), 131—134] (R)
- Fuel, Combustion and Refractories**
- BISI 13811** (M. F. Kessler)  
Problems on control of production and prediction of the quality of blast-furnace coke.  
[Hutn. listy, 1975, (4), 236—240] (C)
- Welding and Joining**
- BISI 13680** (P. G. Bastien, and Ph. Maynier)  
Contribution to the forecast of structure and mechanical properties of the 'Heat Affected Zone' of high strength weldable steels.  
[International Institute of Welding, Annual Assembly, Kyoto, 1969] (F)
- Ores and Minerals Handling and Beneficiation**
- BISI 13503** (R. Jon, and Y. Roux)

- Grangesberg pellets: manufacturing process and metallurgical properties.  
[C. D. S. Circ. Inf. Tech., 1974, (10), 2185—2205] (F)
- BISI 13685 (Yu. S. Yusfin, et al.)  
Investigation of the strengthening and metallurgical properties of pellets made from Lebedi concentrate.  
[Stal', 1975, (6), 485—490] (R)
- Ironmaking and Ferro-Alloys**
- BISI 13402 (H. Ohba, et al.)  
Development of refractories for high temperature hot stove.  
[Ber. Deutsch Keram. Ges., 1972, 49, (7), 225—226] (G)
- BISI 13425 (V. K. Kornev, et al.)  
Investigation of blast-furnace process stability with recirculation of top gas.  
[Stal', 1975, (3), 199—205] (R)
- BISI 13589 (N. N. Babarykin)  
Indirect reduction and carbon consumption in blast-furnace operation.  
[Stal', 1975, (5), 395—401] (R)
- BISI 13679 (S. Imer)  
Development of some formulae for the convective transfer of heat under blast-furnace stove conditions.  
[Stahl Eisen, 1975, 95, (7), 308—310] (G)
- BISI 13683 (T. Kootz, et al.)  
Silicon reduction in the blast furnace melting zone and the hearth.  
[Thyssenforschung, 1973, 5, (1), 17—27] (G)
- BISI 13802 (H. Beer)  
Analysing system of the NHKG blast furnace plant for applying computing technique.  
[Hutn. listy, 1975, 30, (5), 328—333] (C)
- BISI 13538 (Kh. N. Kadarmetov)  
Formation of high-carbon ferro-chrome in the reduction of lump chrome ores.  
[Stal', 1975, (4), 325—329] (R)
- BISI 13635 (D. Papamantellos, et al.)  
The importance of low arsenic content in ferro-nickel for future nickel supply to the steel industry.  
[Arch. Eisenhuttenwes., 1974, 45, (6), 373—380] (G)
- BISI 13699 (N. V. Parkacheva, et al.)  
Effect of slag temperature and composition on its rate of spread over ferrosilicon.  
[Izvest. VUZ. Chernaya Met., 1975, (6), 5—7] (R)
- BISI 13703 (Kh. N. Kadarmetov)  
Slag formation during the reduction of lump chromium ores.  
[Izv. VUZ Chern. Met., 1975, (6), 32—36] (R)
- Steelmaking**
- BISI 12750 (W. Wenzel, et al.)  
The behaviour of the burden materials in a revolving tubular kiln in the production of sponge iron.  
[Aufbereitungstechnik, 1974, (3), 141—145] (G)

- BISI 13686 (K. A. Blinov, and V. A. Ostrinskii)  
Sonic oscillations used for accelerating mass transfer in boiling converter baths.  
[Stal', 1975, (6), 497—499] (R)
- BISI 13702 (V. B. Okhotskii)  
Model of interaction of oxygen jet with metal.  
[Izv. VUZ Chern. Met., 1975, (6), 28—31] (R)
- BISI 13799 (B. Czövek)  
The control of steelmaking by means of the Siemens 305 computer.  
[Hutnik, 1975, (4), 133—137] (C)
- BISI 13804 (J. Petros and K. Kalvoda)  
Field checking of an on-line model for computing the tandem furnace charge.  
[Hutn. listy, 1975, 30, (5), 342—350] (C)
- Extraction and Refining**
- BISI 13602 (S. I. Filippov, and Yu. V. Levin)  
Experimental investigation of the influence of the anionic composition of ternary oxide system melts in ferrous-oxide activity.  
[Izv. VUZ Chern. Met., 1975, (5), 10—19] (R)
- BISI 13604 (V. I. Yavoiskii, et al.)  
An investigation of the oxidising process in metal droplets using the method of microprobe analysis part 1.  
[Izvest. VUZ Chernaya Met., 1975, (5), 39—49] (R)
- BISI 13810 (I. Chmelar)  
Reduction in As, Sb, Sn and Pb contents by electroslag remelting.  
[Zvaranie, 1975, (4), 118—120] (C)
- BISI 13842 (Yu. B. Lyovin, and S. I. Filippov)  
Effect of basicity on the iron oxide activities in complex oxide systems.  
[Izv. VUZ Chern. Met., (7), 5—11] (R)
- BISI 13205 (H. Werzner)  
Low-temperature scrap shredding.  
[Metall, 1975, 29, (2), 183—185] (G)
- BISI 13588 (M. Chalanccon, et al.)  
The slag slab foundations at Usinor, Dunkirk.  
[Rev. Met., Nov. 1973, 70, (11), 745—756] (F)
- Engineering**
- BISI 13579 (L. Simon)  
Nuclear methods in ore mining for application today.  
[Rudy, 1975, (2), 42—46] (C)
- BISI 13809 (V. Mraz, and J. Simek)  
A series of direct-current rolling mill motors.  
[Technicke zpravy CKD, 1974, (4), 36—47] (C)
- BISI 13877 (P. Vicens)  
The main characteristics of rail steel production to meet railway requirements.  
[Rev. Met., 1975, 72, (5), 387—402] (F)
- BISI 13840 (E. M. Kunina, et al.)  
Possibility of reducing power consumption on the wet purification of open-hearth furnace gases.  
[Stal', 1975, (7), 662—663] (R)
- BISI 13841 (Sh. L. Gol'din, et al.)  
Calculation of rectangular adjustable venturi tube.  
[Stal', 1975, (7), 664—666] (R)