

## 資料室だより

### BISI Translation 紹介

— No 70 —

#### BISI Translation の特長

英國鉄鋼業界、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き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ります。

BISI Translations を利用すれば英國米国、以外の主要製鉄国的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、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. 793, 795, 799, 800

#### Management Planning and Control

BISI 12942 (P. Ravizza)

Lectures delivered at Milan, 1972. I. The induction furnace II. The degassing of steel III. Vacuum metallurgy.

[Met. Ital., 1973, 28, (7/8), 459—475] (I)

BISI 14097 (N. F. Sklokin, and P. A. Shiryaev)  
The effectiveness of the main lines for improving the quality of ferrous metals.

[Stal', 1975, (10), 941—944] (R)

#### Physical Structure of Materials and Crystallography

BISI 13784 (K. Fini, et al.)

The question of cobalt content in structural steels for reactors.

[Nukleonik, 1961, 3, (1), 41—49] (G)

BISI 14015 (M. Ya. Dzugutov, et al.)

Reliability of methods for determining high-temperature ductility of steels and alloys.

[Stal', (9), 846—851] (R)

BISI 14151 (B. V. Kucheryaev, et al.)

Calculation of the kinematic parameters of two-layer flow process.

[Izv. VUZ Chern. Met., 1975, (11), 93—96] (R)

BISI 14198 (G. Constanin and D. Aiteanu)

Influence of chromizing working conditions on the size of the chromized layer and on the dimensional variation of OLC 15 test specimens.  
[Metalurgia, 1973, (3), 130—132] (Ru)

#### Physical Metallurgy and Metallography

BISI 14284 (B. Fay)

Determination of the grain size of steel using the ultrasonic backscatter method.

[Arch. Eisen., 1976, 47, (2), 119—126] (G)

BISI 14143 (A. A. Zharov, and S. I. Filippov)

Absorption of oxygen by iron melts in impurity-oxidation processes.

[Izv. VUZ Chern. Met., 1975, (11), 8—14] (R)

#### Physical Properties and Chemical Analysis

BISI 14233 (E. Enard)

The testing of thin spring plates.

[Metall., 1975, 29, (8), 767—770] (G)

BISI 14100 (P. V. Kocherov, et al.)

Calculating the heats of mixing of molten alloys of transitional metals with silicon and aluminum.

[Izv. VUZ Chern. Met., 1975, (10), 9—12] (R)

BISI 13738 (E. Ametrano, and S. Lione)

Sampling system for molten steel and analysis by means of vacuum spectrometers.

[Fonderia Ital., 1968, 17, (12), 531—537] (I)

BISI 14347 (H. Keller)

Determination of iron and manganese sulphide in carbon steels.

[Arch. Eisen., 1975, 46, (5), 331—334] (G)

#### Mechanical Properties and Material Defects

BISI 1454 (M. I. Sinel'nikov, et al.)

The method of testing the technological plasticity of steel.

[Izv. VUZ Chern. Met., 1975, (11), 109—112] (R)

BISI 14252 (P. Gernhardt)

Heat-resisting centrifugally cast tubes and other spun castings for the construction of furnaces for use in the chemical industry.

[DEW Techn. Ber., 1972, 12, (4), 247—254] (G)

BISI 14346 (A. Krisch)

On the transient creep of creep resistant ferritic steels in long-time creep tests.

[Arch. Eisen., 1976, 47, (3), 177—180] (G)

**Corrosion and Corrosion Testing**

BISI 13941 (G. Mix and P. R. Sahm.)

Corrosion of directionally solidified eutectic Co-Cr-C base superalloys by molten salts at high temperatures.

[Werkstoffe u. Korrosion 1974, 25, (11), 827—835] (G)

**Protection of Materials**

BISI 14194 (L. Stoian)

Factors influencing the adherence of plated material.

[Metalurgia, 1975, (2), 92—95] (Ru)

**Rolling**

BISI 13462 (A. Lederer)

The effectiveness of plate finishing equipment. Part I.

[Bänder Bleche Rohre, 1975, (2), 61—67] (G)

BISI 13463 (A. Lederer)

The effectiveness of plate finishing equipment. Part II.

[Bänder, Bleche, Rohre, 1975, (3) 110—116] (G)

BISI 13627 (A. Lossent, and M. Lamouille)

New double universal for the beam and rail section rolling mill at sacilor hayange.

[CDS Circ, 1975, (2), 305—348] (F)

BISI 13906 (N. A. Chelyshev, et al.)

Use of a silicate melt for fine-gauge sheet rolling.

[Izv. VUZ Chern. Met. 1975, (8), 108—110] (R)

BISI 14014 (N. G. Bochkov, et al.)

Effects of some of the skin passing process conditions on the physical and mechanical properties of car steel.

[Stal', 1975, (9), 825—827] (R)

BISI 14024 (B. V. Kucheryaev, et al.)

Investigation of the plastic flow of a material in the deformation zone during rolling.

[Izv. VUZ Chern. Met., 1975, (9), 70—73] (R)

BISI 14025 (P. I. Polukhin, et al.)

Formation of defects on the axis of symmetry of rolled product and optimum deformation in rolling.

[Izv. VUZ Chern. Met., 1975, (9), 74—78] (R)

BISI 14028 (V. P. Polukhin, et al.)

Strip temperature formation in hot wide-strip rolling mills.

[Izv. VUZ Chernaya Met., 1975, (9), 97—101] (R)

BISI 14123 (G. Hartmann.)

Experience with the use of hard metal as roll material in small section and rod mills.

[Stahl Eisen, 1975, 95, (24), 1161—1166] (G)

BISI 14127 (A. Lederer)

The stage of development of hot wide strip mill trains (1)

[Bänder Bleche Rohre, 1975, (6), 248—253] (G)

BISI 14134 (M. M. Ilchenko, et al.)

Experience in despatching curved sections to

theoretical weight.

[Stal', 1975, (11), 1011—1013] (R)

BISI 14149 (V. K. Vorontsov, et al.)

Investigation into three-dimensional metal flow over the width of the stock during rolling.

[Izv. VUZ Chern. Met., 1975, (11), 84—88] (R)

BISI 14162 (M. Espenhahn, and A. Hunting)

Problems of the transfer of roll roughness to controlled sheet.

[Stahl. Eisen, 1975, 95, (24), 1166—1171] (G)

BISI 14357 (V. P. Polukhin)

Cold rolling and the properties of thin strip.

[Neue Hutte, 1975, 20, (10), 582—588] (G)

BISI 14388 (H. Rothe)

A new rod mill for special steel.

[Stahl u. Eisen, 1975, 95, (19), p. 869—875] (G)

**Metalworking, Excluding Rolling**

BISI 13492 (J. Starek)

Raising the drawing speed of precision tubes by applying a floating mandrel economic aspects.

[Hut. Listy, 1975, (1) 44—46] (C)

BISI 14029 (V. M. Grebenik, et al.)

Analytical investigation of impact loading on the centring device of cross-helical rolling mills.

[Izv. VUZ Chernaya Met., 1975, (9), 106—108] (R)

BISI 14031 (I. N. Potapov, et al.)

Interaction of metal and driven discs in reeling mills.

[Izv. VUZ Chernaya Met., 1975, (9), 118—122] (R)

BISI 14138 (I. A. Sokolov, et al.)

Residual stresses in tubes after drawing with the use of ultrasonics.

[Stal', 1975, (11), 1025—1027] (R)

BISI 14139 (N. I. Zavalishchin, et al.)

Analysis of wastage and losses of wire rod reprocessed in the production of small metal products, and methods of reducing this.

[Stal', 1975, (11), 1028—1031] (R)

BISI 14153 (V. I. Zalesskii, et al.)

Manufacture of tubes from cast hollow semi-products by drawing.

[Izvest VUZ Chern. Met., 1975, (11), 106—108] (R)

BISI 14156 (I. N. Potapov, et al.)

Some special features of a helical rolling mill with one driven disk.

[Izv. VUZ Chern. Met., 1975, (11), 122—126] (R)

BISI 13817 (F. Blascik, et al.)

Research into the geometry of tools for forward extrusion.

[Zbornik ved. prace VST. Kosice, 1973, 123—134] (C)

BISI 14181 (J. Wepner, and G. Mielke)

Precision shearing of steel bar.

[Materiaux et Tech. 1975, 63, (10), 391—394]

(F)

BISI 14043 (J. Loose, et al.)  
Tempering effect and physical structural conditions of deep-drawn strip.

[Neue Hütte, 1975, 20, (1), p. 30—35] (G)

BISI 14401 (J. Buza, and P. Bartl.)  
Possibilities in controlling the manufacturing process of deep-drawing sheets by computer control.

[Hutnicke Listy, 1975, (12), 873—875] (C)

BISI 14249 (J. Schlegel, et al.)  
Method for testing the flowability of metal powders at elevated temperatures.

[Neue Hütte, 1975, 20, (1), 35—38] (G)

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

BISI 13955 (D. Hirschfeld)  
Some experience with stainless steel water heaters.

[J. Mater. Tech., 1975, 6, (2), 45—52] (G)

BISI 14141 (A. K. Petrov, et al.)  
Improving structure homogeneity on bearing steel.

[Stal', 1975, (11), 1034—1036] (R)

BISI 14189 (L. Baraf.)  
Influence of electropneumatic dressing on the intercrystalline corrosion resistance of austenitic stainless steels.

[Metalurgia, 1975, (1), 35—36] (Ru)

BISI 14246 (J. Carlen, and B. Kvarnbeck)  
Experience in the chemical industry of the use of two high-alloy, highly corrosion-resistant steels.

[Werkstoffe u. Korrosion, 1974, 25, (9), 653—658] (G)

### **Casting and Cast Metals**

BISI 14077 (E. Wamich, and D. Röben)  
Synthetic material as lustrous carbon former:  
Experiences with polystyrene in clay-bonded moulding sands.

[Giesserei, 1975, 62, (21), 542—546] (G)

BISI 14088 (I. Bindernagel)  
Annual survey of moulding materials (12th series) (part 1).

[Giesserei, 1975, 62, (12), 554—559] (G)

BISI 14089 (U. Kleinheyer)  
Annual review of moulding materials (12th series) Part 2.

[Giesserei, 1975, 62, (21), 560—564] (G)

BISI 14256 (U. Feldmann)  
Continuous casting of steel.

[Stahlbau, 1975, (10), 300—305] (G)

### **Heat Treatment**

BISI 13617 (S. Gunnarson)  
Structural anomalies in the surface of gas carburised ACSE hardening steels.

[Härt. Techn. Mitt., 1963, 18, (1), 1—11] (G)

BISI 14102 (O. V. Devechkin, et al.)  
Effect of preliminary oxidation on the process of casehardening steel.

[Izv. VUZ. Chern. Met., 1975, (10), 18—20] (R)

BISI 14356 (H. Klunker, et al.)

Determining and influencing the work hardening exponent of steel strip.

[Neue Hütte, 1975, 20, (10), 589—592] (G)

### **Heating, Heating Furnaces and Electric Heating**

BISI 14165 (F. Hackl, and M. Ussar)

An industrial method to calculate steady-state thermal processes in heat-treatment furnaces.

[Stahl Eisen, 1975, 95, (24), 1177—1183] (G)

### **Ores and Minerals Handling and Beneficiation**

BISI 14004 (P. Cousein)

Sintering with on-strand cooling.

[Journées Internationales de Siderurgie, Paris, 2—3 Oct. 1975] (F)

BISI 14237 (H. Fahnenbrach)

Magnetic filtration of very fine, weakly magnetic particles, and its importance in purification of waste water.

[Metall, 1975, 29, (6), 594—595] (G)

### **Ironmaking and Ferro-Alloys**

BISI 13504 (T. Kootz)

Contributions to the control of the silicon content in pig iron.

[Stahl Eisen, 1975, 95, (9), 403—408] (G)

BISI 13971 (Z. Radominski)

Progress achieved in the blast-furnace process.

[Prace Inst. Hunt., 1973, 25, (1—3), 25—32] (Po)

BISI 14009 (G. A. Volovik)

Combating sulphur in pig iron with modernblast-furnace operating technology.

[Stal', 1975, (9), 791—794] (R)

BISI 14078 (K. Pierchala)

Protection from formation of an explosive mix of gases in the space between the throat bells of a blast furnace.

[Hutník, 1975, (6), 205—207] (C)

BISI 14103 (N. A. Spirin, et al.)

Assessing the non-stationary nature of temperature fields in the blast-furnace stack.

[Izv. VUZ Chern. Met., 1975, (10), 30—33] (R)

### **Steelmaking**

BISI 13727 (J. Astier)

The scientific aspects of direct reduction.

[Revista Latinoamer. Sid., 1974, 14, (166), 22—36] (Sp)

BISI 13793 (K. Scheidig, and E. Richter)

On the metallurgy of a bottom-blown oxygen converter.

[Neue Hütte, 1973, 18, (7), 385—388] (G)

BISI 14010 (L. D. Yupko, et al.)

Melting practice for the production of steel in the tandem furnace at the zaporozhstal' works.

[Stal', 1975, (9), 798—800] (R)

### **Extraction and Refining**

BISI 14145 (G. N. Elanskii, et al.)

Effect of the oxide inclusions present in a boiling open-hearth furnace bath on the quality of the metal.

[Izvest. VUZ Chern. Met., (11), 49—53] (R)

BISI 14240 (P. Leroy, et al.)

- The CLU process for refining stainless steels.  
[Rev. Mét., 1975, 72, (6), 499—505] (F)  
**BISI 14348** (G. Schmolke)  
The isolation of sulphides from unalloyed steels.  
[Arch. Eisen, 1975, 46, (4), 261—264] (G)  
**BISI 14426** (D. Hausler)  
Scrap processing plant—new technology.  
[Metall., 1976, 30, (2), 115—117] (G)  
**BISI 14018** (Yu. A. Pavlov, et al.)

Effect of radiation treatment of the  $\text{Fe}_2\text{O}_3$  reduction process with solid carbon.  
[Izv. VUZ Chern. Met., 1975, (9), 9—12] (R)

- Engineering**  
**BISI 14017** (A. E. Murikov, and V. M. Rozhkov)  
Some of the service requirements made of modern automatic electric drives.  
[Stal', 1975, (9), 866—868] (R)