

## 資料室だより

## BISI Translation 紹介

— No 46 —

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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 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.

BISI Translations を利用すれば英国米国, 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.

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## BISI Translations List No 698~702

## Management Planning and Control

BISI 12279 (S. V. Bab yan)  
The purification of air from carbon monoxide in foundries.

[Liteinoe Proizvodstvo, 1958, (2), 13-14 (R)]

BISI 7794 (G. Will)

Research carried out by European coal and steel community on the subject of air pollution.

[N. T. Neue Technik, 1967, B6 242-245] (G)

BISI 11695 (Yu. A. Klimov, et al.)

Reduction of noise in the tube-finishing section

[Stal', 1973, (5), 445-447] (R)

BISI 12125 (H. Weinberg)

Planning and arrangement of weighing and data processing installations in rolling mills and tube mills.

[Maschinenmart, 1973, 79, (66), 1444-1447] (G)

BISI 11996 (K. A. Shtets and L. G. Verzhikovskaya)

Methods of determining the optimum operating the operating conditions of the section steel-rolled product.

[Stal', 1973, (8), 763-765] (R)

BISI 12138 (A'A. Posysaev)

Ways of improving the quality of steel products

[Stal', 1973, (11), 1036-1037] (R)

BISI 11745 (H. Th. Brandi)

Considerations regarding the siting of iron and steelworkplants in countries outside Europe.

[Stahl Eisen, 1973, 93, (12), 541-546] (G)

BISI 11580 (H. Kottsieper, et al)

Plant monitoring by the centralised recording and analysis of data and measured values.

[Stahl Eisen, 1972, 92, (11), 25 May, 528-544] (G)

## Physical Structure of Materials and Crystallography

BISI 12042 (R. R. Khadzhiev)

Recovery in iron after deformation by flat shock waves.

[Izv. VUZ. Chern. Met., 1973, (9), 142-145] (R)

BISI 12087 (Yu. A. Alyushin and G. Ya. Rudas)

Kinematically possible rate fields from rigid assemblies for processes of three-dimensional deformation.

[Izv. VUZ. Chern. Met., 1973, (10), 69-72] (R)

BISI 11889 (E. S. Filippov)

Theoretical calculation of hydrogen solubility in liquid and liquid metals.

[Izv. VUZ. Chern. Met., 1973, (7), 122-128] (R)

BISI 12041 (R. L. Fogel'son, et al)

Diffusion of manganese into copper.

[Izv. VUZ. Chern. Met., 1973, (9), 136-137] (R)

BISI 11975 (R. I. Mints, et al)

Deformation structure on a metallic fragment of lunar substance.

[Izv. VUZ. Chern. Met., 1973, (8), 112-114] (R)

BISI 10346 (H. Bester and K. W. Lange)

Estimation of average values for the diffusion of carbon, oxygen, hydrogen, nitrogen and sulphur in solid and liquid iron.

[Arch. Eisenh., 1972, 43, (3), 207-213] (G)

BISI 11311 (F. Bollenrath, et al)

X-ray measurement of stresses and residual stresses in torsion bars of various steels.

[Materialprüfung, 1967, 9, (11), 406-411] (G)

## BISI 10748 (J. Stastný)

The residual stresses and their influence upon the changes of bearing capacity of segments from 13% Cr cast steel welded by austenitic electrodes. [Zvaranie, 1972, 7, 199-204] (C)

## BISI 11363 (A. Gemperle, et al)

Measurement of stacking fault energy of austenitic Cr-Mn-Ni steel by method of extended nodes. [Kovové Mat., 1972, 10, (5), 432-442] (C)

**Physical Metallurgy and Metallography**

## BISI 12243 (Anon)

Microscopic examination of ferrous materials. [Italian Standard, UNI 3245-72, December 1972] (I)

## BISI 11833 (J. Sklenářová and K. Mazanec)

Tempering characteristics of martensite of Fe-Ni-C alloys.

[Sbornik Vědeckých prací VŠB Ostrava, 1972, 18, (1), 65-86] (C)

**Physical Properties and Chemical Analysis**

## BISI 12096 (E. M. Gol'farb and V. S. Ibryaev)

Generalizing certain extreme problems in the heating of bodies.

[Izv. VUZ. Chern. Met., 1973, (10), 142-144] (R)

## BISI 12155 (E. S. Filippov, et al)

The effect of successive alternation of structures in pure molten metals.

[Izv. VUZ. Chern. Met., 1973, (11), 141-146] (R)

## BISI 11563 (W. A. Fischer and C. Pieper)

The electrical conductivity and thermoelectric force of pure and calcium oxide-stabilized zirconium oxide at temperatures between 1000 and 1700°C and oxygen partial pressures between 1 and 10<sup>-16</sup> atm.

[Arch. Eisenh., 1973, 44, (4), 251-259] (G)

## BISI 12045 (T. I. Romantseva and I. G. Ivanov)

The extraction-photometric method of determining the tin in ferrous metals.

[Izv. VUZ. Chern. Met., 1973, (9), 179-181] (R)

## BISI 12053 (K. Ohls, et al)

Progress in the emission spectrometry analysis of steel. Part II.

[Z. Anal. Chem., 1970, 250, 369-376] (G)

## BISI 12054 (K. Ohls, et al)

Progress in the emission spectrometry analysis of steel. Part IV.

[Z. Anal. Chem., 1971, 257-264] (G)

## BISI 11663 (H. Triché-A. Saadate-J. Besombes-Vailhé)

Spectrographic study of the emission distribution in a highfrequency plasma torch.

[Methodes Physiques d'analyse (GAMS), 1972, 8, (1), Mar., 26-31] (F)

## BISI 11897 (V. G. Guglya and V. E. Shepelev)

Pyroelectric materials used for analysing small concentrations of carbon monoxide.

[Izv. VUZ. Chern. Met., 1973, (7), 179-181] (R)

**Mechanical Properties and Material Defects**

## BISI 12081 (I. Z. Shatokha, et al)

Investigation of the coke and sinter breakdown process.

[Izv. VUZ. Chern. Met., 1973, (10), 33-35] (R)

## BISI 11772 (Nippon Kokan)

Process for the detection of welds in butt-welded, hot rolled steel strip in a continuous strip rolling line. [German Patent 2 256 505.30 5.73] (G)

## BISI 12032 (I. L. Povkh, et al)

Investigation of the effect of movement on the chemical heterogeneity of an ingot.

[Izv. VUZ. Chern. Met., 1973, (9), 43-45] (R)

**Corrosion and Corrosion Testing**

## BISI 12055 (G. Herbsleb)

The effects of iron and manganese sulphide inclusions on pit nucleation in pitting corrosion of steel.

[Stahl Eisen, 1973, 93, (18), 837-889] (G)

## BISI 9636 (G. Rehm and U. Nürnberger)

On stress corrosion cracking of low-carbon steel bars for reinforcing concrete.

[Stahl Eisen, 1971, 91, (12), 707-717] (G)

**Protection of Materials**

## BISI 11589 (F. Nietzch)

The adhesion of hot dip galvanised coatings. [Bänder Bleche Rohre, 1973, (3), 95-102] (G)

## BISI 11728 (V. I. Malkin, et al)

Raising the resistance to stress corrosion of high-strength carbon steels by means of iron deposit.

[Zashchita Metallurg., 1972, 8, (6), 691-693] (R)

## BISI 11923 (A. Knödler and E. Raub.)

Effects of molecular structure of organic sulphur components on the internal stresses of nickel deposits:

[Metalloberfläche, 1973, 27, 48-59] (G)

## BISI 11579 (S. Schiller, et al)

Device for the protection of coatings produced by vapour deposition.

[German Democratic Republic Office for Inventions and Patents, 93 074] (G)

## BISI 10278 (H. Buckle)

The diffusion behaviour of noble metal claddings.

[Metallforsch., 1946, 1, 47-54] (G)

## BISI 12019 (E. P. Ponomarenko, et al)

Effect of technology on the processes of chromizing and rolling slabs.

[Stal', 1973, (9), 818-820] (R)

## BISI 10279 (H. Graff and W. Sprenger)

Synthetic resin varnishes for packaging.

[Reichhold-Albert-Nachrichten, 1971, Sept. 30, 56-61] (G)

**Rolling**

## BISI 10846 (R'Hinkfoth, et al.)

Calculation of roll gap shape by means of strip width in the cold rolling of strip on four high rolling stands.

[Neue Hutte, 1972, 17, (7), 412-416] (G)

- BISI 10370 (H. Reihlen)  
Estimation of the heat balance of a twenty roll cluster mill.  
[Stahl u Eisen, 92, 204-208, 5] (G)
- BISI 11645 (G. Fritsch, et al)  
Automation of hot plate rolling in reversing mills.  
[Rev. Mét., 1973, March, 213-223] (F)
- BISI 12021 (Yu. P. Pakatliv)  
Instrument for measuring the camber in a rolled product.  
[Stal 1973 (9) 825~826] (R)
- BISI 12037 (V. V. Mel'tser, et al)  
Reaction of the outlying portions of a strip to inhomogeneous reduction during light-gauge sheet rolling. Part 2.  
[Izv. VUZ. Chern. Met., 1973, (9), 78-80] (R)
- BISI 11614 (V. F. Libert and D. I. Popov)  
Analysis of major factors governing the productivity of plate mills with the aid of a computer.  
[Stal', 1973, (4), 366-369] (R)
- BISI 12020 (A. P. Klimenko)  
Automatic inspection of the amount of contamination on the surface of a rolled product by the photometric method.  
[Stal. 1973, (9), 821~823] (R)
- BISI 9961 (J. Vojkovsky)  
Roll pass design for rolling UE-beams.  
[Hutnik, 1971, (6), 221-225] (C)
- Metal Working Excluding Rolling**
- BISI 11991 (V. I. Zagorskii, et al)  
Technology of breaking-down high-speed steel.  
[Stal', 1973, (8), 738] (R)
- BISI 12086 (N. A. Chelyshev and Yu. P. Gints)  
Effect of fluctuation in supplementary forces on stresses in a press housing.  
[Izv. VUZ. Chern. Met., 1973, (10), 61-63] (R)
- BISI 12036 (A. P. Chekmarev et al)  
Principles of the deformation of a hollow heated billet by high-pressure hydraulics.  
[Izv. VUZ. Chern. Met., 1973, (9), 73-74] (R)
- BISI 11656 (Anon)  
Cold heading at renault  
[Formage et Traitement des Metaux, 1973, 41, Jan., 27-31] (F)
- BISI 12160 (K. Spies)  
Shape classifications for forgings  
[Werkstattstechnik, 1957, 47, 201-205] (G)
- BISI 10669 (V. I. Biba)  
Plugs for piercing on diagonal rolls mills.  
[Min. Chern. Met. Prokatnoe Proizv., 1967, 28, 213-217] (R)
- BISI 12039 (A. Z. Khuravlev and E. A. Kotelnikov)  
Comparison of the operation of ring and pin load cells in determining the pressures on the walls of a stamp.  
[Izv. VUZ. Chern. Met., 1973, (9), 100-103] (R)
- BISI 11622 (E. V. Slavnov)  
Simulation of the discharge phenomenon in wire drawing.  
[Izv. VUZ. Chern. Met., 1973, (4), 85-88] (R)
- (R)
- BISI 12197 (M. Robelet and G. Odin)  
Comparative study of two rapid machinability tests correlation with the results of long-term tests.  
[Rev. Met., 1973, December, (12), 1021-1032] (F)
- BISI 11980 (V. F. Egrov, et al)  
Averaging the loads on the drives of press shears. Report 1.  
[Izv. VUZ. Chern. Met., 1973, (8), 199-182] (R)
- BISI 11267 (A. Salak and V. Miskovic)  
Influence of scale particle size on the properties of iron sponge powder reduced from it.  
[Pokroky Praškové Met., 1972, (1), 11-18] (C)
- Steel and Alloys Technical (Applications and Methods of Production) Cernets**
- BISI 12024 (E. S. Palatnikova, et al)  
The long time strength of grades 12kh1mf steel boiler tubes.  
[Stal', 1973, (9), 835-836] (R)
- BISI 11250 (S. Wilmes and H. R. Pantke)  
Toughness of tool steels with high chromium content.  
[Das Industrieblatt, 1971, 7, July, 417-422] (G)
- BISI 10135 (K. Matuška)  
The range of stainlessplates and clad sheets manufactured by the vitkovice steel works.  
[Strojirenstvi. 1971, (11), 685-691] (C)
- BISI 11767 (D. Daub and A. Lex)  
Material properties of vacuum decarburized dynamo steels.  
[Hoesch-Berichte, 8, (1973) 5-12, No 1] (G)
- BISI 11852 (V. Dedek)  
Cold formability, and properties of high-carbon steels for strip.  
[Hutn. Listy., 1973, (2), 104-113] (C)
- BISI 11512 (G. Naeser and A. Fiedler)  
Acceleration of the decarburisation and denitriding of dynamo steel strip by the presence of salt films during annealing in a continuous furnace.  
[Arch. Eisen, 1968, 39, (10), 779-781] (G)
- BISI 11977 (Yu. B. Matseev, et al)  
Results of laboratory research into the wear resistance of 110G13L steel alloyed with vanadium, inoculated with titanium and explosion-hardened.  
[Izv. VUZ. Chern. Met., 1973, (8), 129-132] (R)
- BISI 11976 (L. I. Borisov, et al)  
Investigation of the hot-rolled texture of transformer steels.  
[Izv. VUZ. Chern. Met., 1973, (8), 125-128] (R)
- BISI 12097 (A. E. Mager, et al)  
Effects of the teeming rate and the composition of the metals on the quality of steel ingots for deep drawing.  
[Stal', 1973, (10), 888-892] (R)
- BISI 12023 (V. V. Korobeinik, et al)

Metal working and heat treatment.

[Stal', 1973, (9), 830-832] (R)

BISI 11998 (J. Barbe)

Continuous casting of steel. Long products. High-output plant.

[C.D.S. Circ., 1972, 29, (4), 1205-1034] (F)

BISI 11467 (V. G. Krechmer, et al)

KhGSTF-type steel.

[Stal', 1973, (2), 163-164] (R)

BISI 12043 (I. B. Kekolo and L. P. Smirnov)

Influence of carbon on the effectiveness of thermomagnetic treatment of single crystals of silicon iron.

[Izv. VUZ. Chern. Met., 1973, (9), 150-154] (R)

### Casting and Cast Metals

BISI 11539 (G. I. Gulyaev, et al)

The use of low-temperature thermomechanical treatment for the production of high-strength tubes.

[Stal', 1973, (3), 260] (R)

BISI 11893 (I. B. Kumanin, et al)

Effects of certain technological factors on the crumbling of moulding sands.

[Iz. VUZ. Chern. Met., 1973, (7), 162-165] (R)

BISI 10970 (K. Röhrig)

The structure and mineral wear resistance of of carbidic cast iron.

[Giesserei, 1971, 58, 697-705] (G)

BISI 10437 (E. Dorazel)

Growth kinetics of bainitic ferrite in nodular cast iron.

[Kovové Mat., 1972, (1), 48-61] (C)

### Heat Treatment

BISI 12137 (T. F. Grushevaya, et al)

Investigation of effect of argon purity on the gas impregnation of heated metal.

[Stal', 1973, (11), 1028-1029] (R)

BISI 11453 (Siemens Ag)

Process and apparatus for the heat treatment of pipes.

[German Patent No 2, 134542] (G)

BISI 11395 (V. Dédék)

Continuous hardening of steel strip.

[Hutn. Listy, 1973, 1, 31-39] (C)

BISI 11876 (A. M. Leshchiner, et al)

The removal of cracks during the production of dispersion hardened alloy wire.

[Stal', 1973, (7), 652-654] (R)

BISI 11995 (V. M. Doronin, et al)

Research into the decarburization of high-speed steel when it is heated in a continuous furnace.

[Stal', 1973, (8), 758-759] (R)

BISI 11784 (Yu. M. Lozinskii and I. T. Tikhonov)

The use of an exponential relationship for the selection and control of tempering procedures and the assessment of the heat resistance of steels.

[Izv. VUZ Chern. Met., 1973, (6), 84-88] (R)

### Heatings, Heating Furnaces and Electric Heating

BISI 12085 (V. G. Legaev, et al)

Research into the cooling of the hearths of

furnaces used for melting standard electrocorundum.

[Izv. VUZ. Chern. Met., 1973, (10), 54-56] (R)

BISI 11985 (V. E. Pirozhnikov, et al)

System of automatic control of heat in electroslag remelting installations.

[Stal', 1973, (8), 711-713] (R)

BISI 11576 (M. Wahlster and E. Zimmermann)

Economics of manufacturing forgings by the conventional casting of ingots and the ESR method.

[Radex Rundschau, 1973, (1), March, 379-394] (G)

BISI 12285 (Z. Hradilek)

Higher harmonics and resonance in networks feeding compensated electric arc furnaces.

[Elektrotechnický Obzor, 1973, 62, (4), 210-214] (C)

BISI 11142 (W. Ullrich)

Fuel or electric heating in rolling mills and forges a cost comparison.

[BBC-Nachrichten, 1970, 52, May/June, 171-173] (G)

BISI 12009 (F. Rub)

Advances in batch furnace design.

[Kleipzig Fachber., 1972, 80, (7), 350-352] (G)

### Fuel Combustion and Refractories

BISI 11880 (V. I. Kostikov and Yu. I. Kosholov)

The strength of pyrographite in contact with molten alkali metals.

[Izv. VUZ. Chern. Met., 1973, (7), 18-20] (R)

### Welding and Joining

BISI 11832 (F. Čipera and A. Kapuszta)

Removal of sizeable risers from high-alloy steel castings, using oxygen powder cutting.

[Slévárenství, 1973, (3), 156-160] (C)

BISI 12123 (V. Murer and R. Pogoda)

Twin screw cylinders with a long service life.

[Plastverarbeiter, 1973, 10, (24), 633-634] (G)

### Ores and Minerals Handling and Beneficiations

BISI 10345 (R. Herment and Y. Lafage)

The recovery of fines by bitumen agglomeraton.

[Ind. Minerale, 1971, 1-8] (F)

BISI 10265 (J. M. Lucia and C. Losada)

Chemical dephosphorization of iron ore

[Rev. Met. CENIM, 1966, 2, (1), 42-55] (Sp)

BISI 10791 (R. Dumon and M. Tamalet)

A new particles circulating furnace for the treatment of ore.

[Chimie et Industrie, 1971, 104, 2167-2170] (F)

BISI 9334 (D. Trojka)

Stabilizing the chemical analysis of sinter.

Results achieved at vžkg and other sintering plants.

[Hutník, 1971, 21, (2), 41-48] (C)

### Ironmaking and Ferro-Alloys

BISI 11461 (V. N. Kitaev, et al)

Investigation of operational reliability of equipment on blast furnaces of large volume.

[Stal', 1973, (2), 109-111] (R)

BISI 11406 (A. Decker and A. Poos)

Injection of reformed gases into the blast furnace

stack as a means of reducing coke consumption.  
[Stahl Eisen, 1972, 92, Oct., 1077-1084] (G)

BISI 11972 (M. I. Gasik, et al)

The microstructure of commercial silicomanganese.

[Izv. VUZ. Chern. Met., 1973, (8), 63-66] (R)

### Steelmaking

BISI 12016 (L. M. Demidenko)

Gas-flame guniting of 130t oxygen converter linings.

[Stal', 1973, (9), 807] (R)

BISI 12062 (K. W. Lange and H. Rees)

Determination of the top-blowing rates causing the overflow of bop converters and of the size of fluid particles in gas flows.

[Arch. Eisen., 1973, 44, (11), 813-820] (G)

BISI 12025 (E. A. Kapustin, et al)

Heat engineering.

[Stal', 1973, (9), 843-849] (R)

BISI 11954 (K. Scheidig)

Development of the QEK process for the refining of pig-iron in the bottom blown oxygen converter in the veb maxhutte unterwellenborn.

[Neue Hütte, 1973, May, 18, (5), 277-281] (G)

BISI 12031 (V. B. Okhotskii, et al)

Acoustic characteristics of the reaction zone in the oxygen converter process.

[Izv. VUZ. Chern. Met., 1973, (9), 26-30] (R)

BISI 12018 (A. L. Kornevich, et al)

The temperature field in a RP3-48 furnace bath.

[Stal', 1973, (9), 811-812] (R)

### Extraction and Refining

BISI 11292 (J. Krušina)

Effect of manganese monoxide on surface tension in CaO-SiO<sub>2</sub>-AlO<sub>2</sub> system.

[Hutn Listy, 1972, 27, (9), 622-625] (C)

BISI 10422 (S. V. Shavrin and I. N. Zacharov)

Reduction of iron oxides from molten slags.

[Fiz. Khim. Rasplav Shlakov, 1970, 55-61] (R)

BISI 12241 (F. R. Block and A. Theissen)

Electromagnetic suspension-melting-a contribution to the technique of floating melting.

[Elektrowärme, 1971, 29, (6), June, 349-354] (G)

BISI 12029 (A. H. Makhmud and S. I. Filippov)

Kinetic process behaviour sequence in the decarburization of a metallic melt.

[Izv. VUZ. Chern. Met., 1973, (9), 8-12] (R)

BISI 11987 (L. P. Tager, et al)

The use of metal abrasive waste containing

silicon carbide fro slag oxidation and metal alloying.

[Stal', 1973, (8), 720-722] (R)

### Engineering

BISI 12027 (D. E. Krasnozhen and E. V. Baskinskii)

The use of trilon for keeping inner surface of boiler unit tubes clean.

[Stal', 1973, (9), 862-864] (R)

BISI 10734 (German Standard)

Blank flanges nominal pressure 6 to 100

[DIN 2527, 1972, Apr.] (G)

BISI 11175 (German Standard)

Seamless steel tubes made of steel ST35, selection for ships' pipelines.

[German Standard, Draft June, 1972, DIN 86 008] (G)

BISI 12115 (DNA)

Bottom hook blocks, hook nuts for cranes.

[DIN 15 413, 1970, September] (G)

BISI 12111 (DNA)

Lifting hooks.

[DIN 15401, 1970, July, Sheets 1 and 2] (G)

BISI 12116 (DNA)

Bottom hook Blocks, nut locking devices for cranes.

[DIN 15 414, 1970 September] (G)

BISI 12026 (A. I. Semenov and V. A. Maksimovskii)

Strength properties of stabilized reinforcement cables and relaxation of the stresses in them.

[Stal', 1973, (9), 856-859] (R)

BISI 11671 (G. Riedel)

Reconditions and reasons for the use of cast iron tunnel-segments in the construction of the Elbe tunnel in Hamburg.

(Rheinstahl Technik, 1972, 10, (2), 55-62] (G)

BISI 12177 (H. Lutz)

Determination of the load concentration over buried pipes.

[Rohre Rohrleit. Rohrleit Transport 1973, 12, (5/6) Oct. 254-258] (G)

BISI 12201 (Anon)

Regulation for approval of high strength steel reinforcement for pre-stressed concrete structures with pre- or post-tension.

[Laboratoir Central des Ponts et Chaussés] (F)

BISI 12028 (V. I. Kostikov and Yu. I. Koshelev)

The strength of pyrographite in binary metallic alloys.

[Izv. VUZ. Chern. Met., 1973, (9), 5-7] (R)