

## 資料室だより

## BISI Translation 紹介

— No 78 —

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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 Transitions List Nos. 829~830, 834~836

**Management Planning and Control**

BISI 15297 (Yu. D. Molchanov, and L. M. Kogan.)

Cleaning waste water and gas emissions in the iron and steel industry.

[Stal', 1976, (10), 962—963]. (R)

**Physical Structure of Materials and Crystallography**

BISI 14904 (A. P. Kolikov, et al)

Workability of refractory metals in helical rolling in different atmospheres.

[Izu. VUZ Chern. Met., 1976, (7), 80—83]. (R)

BISI 15059 (A. Clement, and Z. Paari).

Critique of the method of measuring uniform expansion.

[Bany. Koh. Lapok (Kohaszat), 1976, 109, (5), 214—216]. (H)

BISI 15064 (J. Toth.)

A mathematical-statistical study of the r and n values of semi-killed deep drawing plates.

[Bany. Koh. Lapok (Kohaszat.) 1976, 109, 328—329]. (H)

BISI 15137 (P. Iancu).

The influence of thermal parameters and plastic deformation on the structure and mechanical properties of bainitic steels.

[Metalurgia, 1975, 27, (6), 307—311]. (Ru)

BISI 15140 (H. Nicula, et al).

Improving the working quality of 65g steel, using heat treatment procedures by drawing.

[Metalurgia, 1975, 27, (7), 353—362]. (Ru)

BISI 15244 (I. Yordanova, and B. Stoikov.)

Investigation of the microtensions in cold rolled low-carbon steel.

[Metalurgia, 1976, (4), 11—14]. (Bu)

BISI 15495 (W. Dahl, and W. Lueg.)

The work-hardening behaviour of circular wire

rods with different methods of deformation.

[Stahl Eisen. 1957, 77, (6), 334—340]. (G)

**Physical Metallurgy and Metallography**

BISI 15166 (M. Lascu—Simon.)

The significance of steel fatigue strength for fracture mechanics.

[Metalurgia, 1976, 28, (2), 83—88]. (Ru)

BISI 15288 (Yu. D. Kon'kov, et al.)

Features of the rupture of bimetals in fracture toughness tests.

[Izu. VUZ. Chern. Met., 1976, (10), 137—140]. (R)

BISI 14940 (C. Brock, et al.)

The production of duplex structures in steels.

[Arch. Eisen. 1976, 47, (8), 513—518]. (G)

BISI 15091 (E. S. Filippov.)

Reason for development of the face-centred cubic/body-centred cubic lattice phase transformation.

[Izu. VUZ Chern. Met., 1976, (9), 125—131]. (R)

BISI 14912 (A. A. Zhukov, and V. I. Ivanov.)

Dendritic heterogeneity in the structure of cast steel after normalizing.

[Izu. VUZ Chern. Met., 1976, (7), 162—166]. (R)

**Physical Properties and Chemical Analysis**

BISI 15117 (J. Pavlossoglou.)

Optimisation model of a two-stage boots/diffusion treatment (two stage gas carburising control).

[Hart.—Tech. Mitt., 1976, 31, (5), 251—256]. (G)

BISI 15290 (A. Sh. Asaturyan, et al.)

Non-isothermal movement of molten metal along open channels.

[Izu. VUZ Chern. Met., 1976, (10), 148—151]. (R)

BISI 15292 (Yu. S. Postol'nik, et al.)

Thermally-stressed state of a plate during con-

vective heating with a non-stationary heat-exchange coefficient.

[Izu. VUZ Chern. Met., 1976, (10), 163—166]. (R)

BISI 15263 (V. V. Druzhinin, et al.)

Interrelationship of magnetic properties and magnetic structure in textured cold rolled steel.

[Stal', 1976, (10), 974—950]. (R)

BISI 14972 (D. Jeulin, and J. Serra.)

To recognise inclusions : charts or texture analyser

[CDS Cir. 1976, (5), 1165—1177]. (F)

### Mechanical Properties and Material Defects

BISI 15070 (P. Koychev, and E. Dankov.)

Regarding the determination of the hardness of autotractor cylinder bushings.

[Mashinostroene, 1976, (3), 121—124]. (Bu)

BISI 15170 (R. Neagu, and L. Abraham.)

The torsion test on alsifer refractory products.

[Metalurgia, 1976, 28, (2), 106—112]. (Ru)

BISI 15191 (K. Kotlaba, et al.)

The effect of sampling and sample preparation techniques on the determination of carbon in cast iron.

[Slevarenstvi, 1976, 24, (1), 6—8]. (C)

BISI 14942 (G. Bonini.)

Ultrasonic testing of heterogeneous thick welds.

[Met. Ital. 1975, 76, (9), 497—500]. (I)

BISI 15061 (F. Benkovics.)

Experiments for improving the quality of hot-rolled transformer plates.

[Bany. Koh. Lapok (Kohasz.) 1976, 109, (7—8), 302—304]. (H)

BISI 15120 (S. Suranyi, and J. Kiss.)

Non-destructive testing of casting with ultrasound.

[Bany Koh. Lapok (Ontode), 1976, 27, (7—8), 145—154]. (H)

BISI 15188 (K. Betzold, and R. Becker.)

Numerical and experimental examinations for eddy current testing.

[Materialprufung, 1976, 18, (8), 345—348]. (G)

BISI 15206 (A. Zidek, et al.)

The influence of chemical composition on the properties of OTN sheets.

[Hutnik, (Prague), 1975, (12), 461—463]. (C)

BISI 15216 (F. X. Elfinger, et al.)

A rotating eddy-current proce for the examination of condenser tubes.

[Materialprufung, 1976, 18, (10), 384—386]. (G)

BISI 15343 (A. Szombathelyi.)

The difficulties of delta-ferrite measurement in austenitic steel.

[Bany. Koh. Lapok. (Kohaszat), 1976, 109, (10), 447—451]. (H)

BISI 15045 (J. Koutsky.)

Defects and cracks in alloyed 12% Cr steel.

[Hutnicke Listy, 1976, (6), 415—420]. (C)

BISI 15124 (B. Vero.)

Problems of sulphide inclusion in steels deoxidized by aluminium.

[Bany. Koh. Lapok (Kohaszat) 1976, 109, (7—8).

296—298]. (H)

### Protection of Materials

BISI 15068 (Al. M. Alexandrov, et al)

Influence of the reversible current on the corrosion resistance and mechanical qualities of the galvanic zinc coating obtained from non-toxic electrolytes.

[Khimiya i Industriya, 1976, (3), 124—126]. (B)

BISI 15233 (A. S. Yaroslavtsev, et al.)

The behavior of impurities in the deposition of iron from zinc sulphate solutions.

[Tsvet. Met., 1975, 16, (4), 41—42]. (R)

### Rolling

BISI 14625 (D. Lecommandoux.)

Continuous inspection, finishing and sorting of billets.

[CDS Circ., 1976, (5), 1115—1125]. (F)

BISI 15013 (V. A. Nikolaev.)

Sources of the occurrence of 'ripples' on the work roll surface of a cold rolling mill.

[Izu. VUZ Chern Met., 1976, (8), 80—81]. (R)

BISI 15062 (K. Kaczander.)

Emulsions used in rolling systems.

[Bany. Koh. Lapok (Kohasz.) 1976, 109, (7—8) 305—311]. (H)

BISI 15065 (T. Marton, and P. Tardy.)

The quality of roller bearing steels based on their susceptibility to surface fatigue.

[Bany. Koh. Lapok (Kohasz.) 1976, 109, (7—8), 336—342]. (H)

BISI 15107 (V. I. Safronov.)

Improvement in the design of the screw pairs in the screw-down devices of reversing roughing mills.

[Stal', 1976, (9), 828—830]. (R)

BISI 15146 (L. Stoian.)

The influence of reduction of microhardness and of structural constituents in the adhesion zone of carbon steel and low alloy steel sheets stas 0.9G2 plated by rolling with stainless steel 1Cr-18Ni10Ti.

[Metalurgia, 1975, 27, (10), 491—497]. (Ru)

BISI 15172 (C. Mitroi, et al.)

The casting properties of adamant type hypereutectoid steel rolles.

[Metalurgia, 1976, 28, (3), 141—144]. (Ru)

BISI 15187 (K. H. Mommertz.)

Developments in rolling mill technology.

[Stahl Eisen, 1976, 96, (18), 859—864]. (G)

BISI 15203 (K. Stýblo.)

Effect of torsional vibrations of blooming mill driving gear on biting conditions.

[Hutnicke listy, 1976, 31, (7), 475—482]. (C)

BISI 15291 (Yu. V. Denisov, and M. L. Komissarova.)

Temperature stress in mill rolls.

[Izv. VUZ Chern. Met., 1976, (10), 156—159]. (R)

BISI 15295 (M. I. Federov, and L. P. Vakulina.)

Elastic-plastic bending of H-beams during straightening on roller straightening.

[Izu. VUZ. Chern. Met., 1976, (10), 179—181]. (R)

**Metalworking, Excluding Rolling**

- BISI 15118 (R. Fangmeier.)  
Straightening machines in pipe finishing lines, part 2.  
[Bänder-Bleche-Rohre, 1976, 17, (9), 366—372]. (G)
- BISI 14286 (Urals Scientific Metalworking Institute, (chiyabinsk, USSR.)  
Applying a polymer coating to metal pipes by maintaining heated polymer-coated pipe in heated thermally insulated space.  
[German Patent, 2425 851]. (G)
- BISI 14507 (P. H. Huppertz, and P. Ziener.)  
Investigation on thin-walled plastic-clad 'poly-stal' pipes.  
[ESTEL Ber., 1976, 11, (1), 17—25]. (G)
- BISI 15171 (T. David, et al.)  
Developing production of Cr25Ni20 stainless steel wires for welding electrodes and refractory nets.  
[Metalurgia, 1976, 28, (3), 128—133]. (Ru)
- BISI 14854 (H. Hojas.)  
Forming of continuously cast billets in a continuous forging machine.  
['Neue' Fachberichte, Sept, 1976, 762—764]. (G)
- BISI 15316 (P. Funke, et al.)  
A new method for cold forming of ribbed wire for reinforcement fabric.  
[Stahl Eisen, 1976, 96, (21), 1015—1020]. (G)

**Steels and Alloys (Technical Application and Methods of Production), Cermets**

- BISI 14907 (V. V. Seleznev, et al.)  
Force conditions during the hot rolling of stainless steel ingots produced by various methods of melting.  
[Izv. VUZ Chern. Met., 1976, (7), 101—106]. (R)
- BISI 14941 (G. Herbsleb, and K. J. Westerfeld.)  
Influence of nitrogen on the corrosion properties of solution-treated and annealed austenitic 18/10 CrNi and 18/12 CrNiMo steels. III. pitting and stress corrosion cracking in aqueous solutions of NaCl and MgCl<sub>2</sub>.  
[Werkstoffe Korrosion, 1976, 27, (7), 479—486]. (G)
- BISI 14943 (J. Basillis, et al.)  
The production of stainless steels in the clu converter.  
[Rev. Met., 1976, 73, (5), 441—446]. (F)
- BISI 15057 (W. Heller, and R. Schweitzer.)  
Influence of the chemical composition on the mechanical properties of rail steel.  
[Stahl Eisen, 1975, 95, (22), 1057—1061]. (G)
- BISI 15144 (C. Catrinou.)  
Present possibilities of obtaining steels for reinforced concrete of PC 52 periodic type 16 mm on a continuous mill.  
[Metalurgia, 1975, 27, (8—9) 406—410]. (Ru)
- BISI 15158 (E. Chelmu, et al.)  
The effect of cobalt alloying on the structural transformation and tempering stability of steels.  
[Metalurgia, 1976, 28, (1), 25—30]. (Ru)

- BISI 15159 (V. Fiterau.)  
Heat treatment of bearing steels.  
[Metalurgia, 1976, 28, (1), 31—35]. (Ru)
- BISI 15175 (M. Climescu, and C. Giotta.)  
Determining the alpha-ferritic content in austenitic stainless steel billets for rolling  
[Metalurgia, 1976, 28, (3), 162—171]. (Ru)
- BISI 15177 (R. Cretu, et al.)  
Investigations into the behavior of CIH-COR patinable steel wires and bars when manufacturing screws by cold forming.  
[Metalurgia, 1976, 28, (4), 185—189]. (Ru)
- BISI 15178 (V. Safta, et al.)  
Dynamic toughness characteristics of low alloy steels for pressure tanks at low temperatures.  
[Metalurgia, 1976, 28, (4), 203—208]. (Ru)
- BISI 15210 (J. Purmensky, and J. Sobotka.)  
The effect of trace elements on the properties of heat-resistant steels.  
[Hutnik (Prague), 1976, (3), 66—72]. (C)
- BISI 15167 (I. Mitelea, and M. Trusculescu.)  
Influence of thermomechanical treatment on dislocation density in Ni and Ni-Co cryogenic alloy steels.  
[Metalurgia, 1976, 28, (2), 88—92]. (Ru)

**Casting and Cast Metals**

- BISI 15116 (J. F. Mignot.)  
Nozzle blockage by aluminium in continuous casting of steel.  
[CDS Circ., 1976, (7—8) 1645—1653]. (F)
- BISI 15121 (Gy. Korponay, and K. Csach)  
The production of thick plates resistant to embrittlement and aging from cast slabs.  
[Bany Koh. Lapok (Kohaszat), 1976, 109, (7—8), 329—335]. (H)
- BISI 15156 (L. Sofroni, et al.)  
Improving the casting technology of semi-hard rolls.  
[Metalurgia, 1976, 28, (1), 8—13]. (Ru)
- BISI 15173 (I. Ciobanu, and V. Vulcu.)  
The nature of molten metal flowing through distributing channel of the pouring gates.  
[Metalurgia, 1976, 28, (3), 145—150]. (Ru)
- BISI 15190 (M. Reznicek.)  
The significance of the casting modulus for grey iron crystallization.  
[Slevarenstvi, 1976, 24, (2/3), 107—110]. (C)
- BISI 15255 (V. B. Shashkov, et al.)  
Mechanical properties of iron and ingot mould life.  
[Stal', 1976, (10), 904—907]. (R)
- BISI 15153 (D. M. Stefanescu, et al.)  
The structure and properties of irons resistant to abrasive wear alloyed with Cr, V and Mn.  
[Metalurgia, 1975, 27, (12), 619—627]. (Ru)
- BISI 15048 (P. Jelinek.)  
Improving the surface quality of grey iron castings. [Sbornik VSB Ostrava, 1975, (2), 149—182]. (C)
- BISI 15133 (L. Sofroni, et al.)  
The properties of grey iron with a high carbon saturation improvement.

- [Metalurgia, 1975, 27, (5), 230—234]. (Ru)  
 BISI 15135 (I. Mitrofan, and M. Marghescu.)  
 Iron brake of a nodular graphite iron with ferritic structure.  
 [Metalurgia, 1976, (5), 263—266]. (Ru)  
 BISI 15194 (L. Jablonsky, et al.)  
 Cast iron used as a construction material for the cast bodies of burners operating in industrial furnace.  
 [Slevarestvi, 1976, 24, (4), 140—145]. (C)  
 BISI 15347 (G. Nandori, and J. Dul.)  
 Texture and strength properties of cast irons treated with rare earth metals.  
 [Bany. Koh. Lapok (Ontode), 1976, 27, (9), 181—186]. (H)  
 BISI 15141 (C. Bratu, and C. Cernat.)  
 Using the aluminothermic method for the production of cast steel.  
 [Metalurgia, 1975, 27, (7), 382—385]. (Ru)  
 BISI 15016 (I. N. Balan, et al.)  
 Phase and microchemical compositions of yttrium-inoculated cast irons.  
 [Izu. VUZ Chern. Met., 1976, (8), 116—119]. (R)  
 BISI 15344 (G. Buza.)  
 The effect of alloying with rare earth metals on hypoeutectic cast iron.  
 [Bany. Koh. Lapok (Ontode), 1976, 27, (10), 214—217]. (H)
- Heat Treatment**  
 BISI 14597 (M. Catheu.)  
 On nitriding.  
 [Tecnica Metalurgica, 1972, 27, (193), 17—20]. (Sp)  
 BISI 15129 (N. Popescu, et al.)  
 Equal hardness annealing regimes to improve a wide range of steels.  
 [Metalurgia, 1975, 27, (4), 181—185]. (Ru)  
 BISI 15345 (L. Pocsaji.)  
 An analysis of the relationship between the tempering parameters and the strength properties of steel by mathematical-statistical methods.  
 [Bany. Koh. Lapok (Kohaszat), 1976, 109, (9), 386—389]. (H)
- Heating, Heating Furnaces and Electric Heating**  
 BISI 15201 (V. Dembovsky.)  
 The processes in hearth type plasma furnaces.  
 [Hutnicke Listy, 1976, 31 (7), 464—469]. (C)  
 BISI 15208 (M. Kepka.)  
 Electroslag remelting in the production of large forging ingots.  
 [Hutnik (Prague), 1976, (1), 18—22]. (C)  
 BISI 15284 (A. V. Byakova, et al.)  
 The possibility of depositing molybdenum carbides by resistance heating on the surface of iron and steel.  
 [Izu. VUZ Chern. Met., 1976, (10), 115—118]. (R)  
 BISI 14640 (B. F. Zobnin, et al.)  
 Research into the running of the continuous furnaces of a 650 mill after reconstruction.  
 [Stal', 1976, (5), 469—472]. (R)
- BISI 14891 (E. M. Kotlyarevskii, et al.)  
 Development experimental verification and practical application of a mathematical model of ingot heating in soaking pits.  
 [Stal', 1976, (7), 655—668]. (R)
- Fuel, Combustion and Refractories**  
 BISI 15195 (J. Šenberger, et al.)  
 The making of rammed lining in medium-frequency furnaces, using dry ramming material and removable form.  
 [Slévarenství, 1976, 24, (7), 269—272]. (C)
- Welding and Joining**  
 BISI 15223 (V. G. Shiyan, and V. V. Getmanetz.)  
 'Hardfacing rolls with a new type of wire'.  
 [Metallurg, 1976, July, 38—39]. (R)
- Ores and Minerals Handling and Beneficiation**  
 BISI 14843 (H. Hille, et al.)  
 Study on the dependence of the dust content in the sintering waste gas and the physical properties of the dust on the charging and operating conditions of a sintering plant.  
 [Stahl Eisen, 1976, 96, (16), 759—764]. (G)  
 BISI 14849 (U. Breuer.)  
 Fundamentals for a simulation model of iron ore dressing.  
 [Aufbereitungstechnik, 1976, (6), 271—281]. (G)  
 BISI 15060 (M. Matula, et al.)  
 Designing red mud sedimentators, a method of measurement and mathematical model.  
 [Bany. Koh. Lapok (Kohasz), 1976, 109, (5), 228—234]. (H)  
 BISI 15145 (A. Urseanu, and I. Kanton.)  
 Controlling ore sintering by magnetic induction.  
 [Metalurgia, 1975, 27, (10), 483—486]. (Ru)  
 BISI 15176 (M. Vladescu, et al.)  
 The possibility of replacing limestone with dolomite when sintering iron ore.  
 [Metalurgia, 1976, 28, (4), 177—180]. (Ru)  
 BISI 15199 (P. Vejnar.)  
 The effect of oxidation value on pellet strength.  
 [Rudy, 1976, (6), 172—174]. (C)  
 BISI 15257 (G. V. Serov, et al.)  
 Pelletized materials used for melting 75% ferrosilicon.  
 [Stal', 1976, (10), 913—916]. (R)
- Ironmaking and Ferro-Alloys**  
 BISI 15099 (V. I. Loginov, et al.)  
 Optimum lines of a blast furnace.  
 [Stal', 1976, (9), 780—784]. (R)  
 BISI 15130 (N. Pilly.)  
 The thermo-energetic balance of a blast furnace calculated from technological balance data.  
 [Metalurgia, 1975, 27, (4), 186—190]. (Ru)  
 BISI 15132 (E. Lingner.)  
 The influence of variable factors on heat consumption in blast furnaces.  
 [Metalurgia, 1975, 27, (5), 255—229]. (Ru)  
 BISI 15211 (H. Beer.)  
 Intensification of pig-iron production by oxygen-enriched blast air.  
 [Hutnik, 1976, (4), 127—129]. (C)  
 BISI 15293 (L. I. Krivolapova, et al.)

Relationships between state indices and outputs of the blast-furnace process.

[Izv. VUZ Chern. Met., 1976, (10), 171—175]. (R)

BISI 15299 (N. Sh Grinshtein, et al.)

Monitoring changes in the course of reduction and heat exchanges processes in the blast furnace. [Izv. VUZ Chern. Met., 1976, (6), 161—163]. (R)

### Steelmaking

BISI 14920 (P. Costa, et al.)

The kinetics of oxygen absorption in the metal bath during LD converter refining.

[Met. Ital., 1975, 67, (7/8), 393—404, 412]. (I)

BISI 14970 (T. Kootz, and K. Behrens.)

Influence of mechanical processes in oxygen converters.

[Neue Hutte, 1966, 11, (4), 207—214]. (G)

BISI 15081 (S. V. Kominov, et al.)

Effectiveness of increasing the blowing rate in the oxygen-converters process.

[Izv. VUZ Chern. Met., 1976, (9), 46—50]. (R)

BISI 15207 (B. Czoyek.)

Effect of pig iron quality on the economics of LD converter steelmaking.

[Hutnik, 1975, (12), 455—457]. (C)

BISI 15243 (I. Vladimirov, and K. Erinin.)

Investigating the quality of lime used in oxygen converters.

[Metalurgia, 1976, (4), 5—8]. (Bu)

BISI 15342 (J. Szegedi.)

A study of oxygen transfer under conditions prevailing in oxygen converters.

[Bany. Koh. Lapok (Kohaszat), 1976, 109, (10), 442—446]. (H)

BISI 15346 (I. Lantos, and F. Nagy.)

The development of steel production technologies with special regard to the production of electric steel.

[Bany. Koh. Lapok (Kohaszat), 1976, 109, (9), 400—410]. (H)

### Extraction and Refining

BISI 14612 (H. Fiedler.)

The state of plasma melting technology in the GDR.

[Neue Hutte, 1976, 21, (2), 69—72]. (G)

BISI 15104 (M. I. Loganov, et al.)

The effect of adding deoxidants on the content and properties of non-metallic inclusions in carbon steel.

[Stal', 1976, (9), 810—813]. (R)

BISI 15200 (S. Majercak, et al.)

The refining of steel with solid chlorides.

[Hutnicke listy, 1976, 31, (6), 407—410]. (C)

BISI 15254 (A. G. Gabisiani, et al.)

Variation in the oxygen content and in the nature of the non-metallic inclusions when steel is de-oxidized with a silicon-calcium-aluminium alloy.

[Stal', 1976, (10), 897—899]. (R)

### Engineering

BISI 14949 (R. Brunner.)

Chemical operating experience in the nuclear powder station at stade during the first three operating cycles.

[VGB Kraftwerkstechnik, 1976, 56, (2) 90—100]. (G)

BISI 14926 (J. Lhermitte, and D. Douay.)

The heat pump: its industrial applications.

[EDF: Journees d'Informations Electro- Industrielles, Paris. Nov. 1974, p. 15.]. (F)

BISI 15502 (H. Pfestorf.)

Functionally and technologically satisfactory design of rolled sleeves for friction bearings.

[Schmiertechnik u Tribologie, 1976, 23, (2), 33—35]. (G)

BISI 14761 (E. O. Schneidersmann, et al.)

Investigation on the service life of crane track wheels.

[Stahl Eisen, 1976, 96, (12), 584—585]. (G)

BISI 14846 (W. Heller.)

Investigations into the behaviour of rails under service conditions.

[Stahl Eisen, 1974, 94, (3), 149—151]. (G)