

資料室だより

BISI Translation 紹介

— No. 80 —

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BISI Translation List Nos. 838, 840~843

Management Planning and Control

BISI 15365 (J. Morlok.)

Reduction of the noise emission from hydraulic pumps and control units.

[Stahl u. Eisen, 1976, 96, (16), 770-774] (G)

BISI 15379 (R. A. Kucherskii, et al.)

Working conditions in the melting of leaded steels and measures for their improvement.

[Gig. Trud. Prof. Zabolev, 1976, (3), 1-4] (R)

BISI 15481 (R. Rozsypal, et al.)

Minsk 32 computer, applied to quality inspection of a control-cooled wire.

[Hutnik (Praque), 1976, 26, (2), (2), 62-65] (C)

Physical Structure of Materials and Crystallography

BISI 15264 (A. I. Dianov, et al.)

Effects of drawing on formation of a granular structure in high-carbon steel during annealing.

[Stal', 1976, (10), 950-951] (R)

BISI 15317 (H. Fritz)

Significance and determination of deformation martensite in austenitic sheet-steel parts.

[Arch. Eisenhüttenwes. 1973, 44, (10), 755-760] (G)

BISI 15388 (L. P. Kostenko, and L. F. Shchugarev)

Changes in the microhardness and reflecting power of chromium spinellide during the reducing heat treatment of pellets.

[Stal', 1976, (11), 1010] (R)

BISI 15415 (A. G. Chernyi.)

Problem of plotting the work-hardening curves of ductile steels during cold deformation.

[Izv. VUZ Chern. Met., 1976, (11), 101-103] (R)

BISI 15464 (A. Masin, and B. Straka)

The common features of the formation of low-

temperature and high-temperature temper brittleness.

[Hutn. listy, 1976, 31, (10), 722-725] (C)

BISI 15474 (A. Masin)

The formation of martensite plays by high-speed deformation; relationship with the plastic deformation of austenite.

[Kovove Mat., 1976, 14, (3), 322-326] (C)

BISI 15496 (S. Schwandt)

A deformation behaviour of plain-carbon and low-alloy steels during bulk deformation.

[Draht-Welt., 1970, 56, (10), 574-581] (G)

Physical Metallurgy and Metallography

BISI 15569 (V. V. Danilin, et al.)

Investigation of the phase composition of titanium-calcium alloys.

[Stal', 1976, (12), 1101-1103] (R)

Physical Properties and Chemical Analysis

BISI 15218 (H. Judat)

Stirring power in the dispersion of gases, a new approximation Ne, (Qg, Fr, Dd) for a disc stirrer with six blades.

[Chem. Ing. Tech. 1976, 48, (10), 865-867] (G)

BISI 15410 (V. I. Akhmatov, et al.)

Stability of high melting oxygen-free compounds in a low-temperature plasma.

[Izv. VUZ Chern. Met., 1976, (11), 56-60] (R)

BISI 15416 (V. A. Dokuchaeva, and A. P. Chernov)

Breakdown of the edges of stamped steel parts and abrasive in ultrasonic hydro-abrasive treatment.

[Izv. VUZ. Chern. Met., 1976, (11), 104-107] (R)

BISI 15417 (V. Ya. Osadchii, and V. A. Gloenkov)

Determination of the force parameters of the drawing process in an ultrasonic field.

[Izv. VUZ Chern. Met., 1976, (11), 108-110] (R)

BISI 15424 (B. I. Medvedev, et al.)
Mass transfer in the chamber of a sectional furnace containing a shielding atmosphere.
[Izv. VUZ Chern. Met., 1976, (11), 171-173] (R)

BISI 15180 (R. Weichert, and K. Schonert)
Temperature at the point of fracture.
[Chemie-Ingenieur-Technik, 1976, 48, (6), 543-544] (G)

BISI 15401 (N. M. Korolev, et al.)
Research into the temperature field when complex section billets are heated.
[Stal, 1976, (11), 1055-1056] (R)

BISI 15423 (F. D. Obolentsev, et al.)
The problem of speed of action as applied to the thermophysical processes in metallic foundry moulds.
[Izv. VUZ Chern. Met., 1976, (11), 161-165] (R)

BISI 15425 (M. K. Bezrodnyl, et al.)
Effects of the angle of inclination of an enclosed two-phase thermosphon maximum heat transmitting power.
[Izv. VUZ Chern. Met., 1976, (11), 174-177] (R)

BISI 15491 (A. Zidek, et al.)
The influence of carbon content upon final magnetic properties of transformer steel strips.
[Hutnik (Prague), 1976, 26, (7), 261-264] (C)

BISI 15322 (W. Pluschkell)
Application of oxygen concentration cell to steelmaking process.
[Stahl Eisen, 1976, 96, (14), 657-662] (G)

Mechanical Properties and Material Defects

BISI 15398 (Yu. S. Tomenko, et al.)
Mechanical properties and cold-resistance of large H-beams.
[Stal', 1976, (11), 1041-1042] (R)

BISI 14964 (German Standard)
Non-destructive testing; magnetizing equipment for magnetic particle inspection-stationary and transportable equipment apart from a transportable magnetic yoke.
[DIN 54, 131, July 1975 Part 1] (G)

BISI 15196 (B. Kopec)
Ultrasonic wall thickness gauging of grey iron castings.
[Slevarenstvi, 1976, 24, (7), 275-276] (C)

BISI 15399 (A. M. Neleshkov, and V. M. Krasnopol'skii)
Revelation of defects in inspection of the macrostructure of thick plate metal.
[Stal', 1976, (11), 1043-1045] (R)

Protection of Materials

BISI 15518 (S. Steinhäuser)
The effect of the material structure on the wear behaviour of electrolytically deposited dispersion coatings.
[Neue Hütte, 1976, 21, (11), 671-676] (G)

BISI 15029 (G. Krawitz)
Electrochemical honing-fundamental principles and accumulated experience.

[Werkstattstechnik, 1976, 66, (5), 265-270] (G)

BISI 15229 (N. I. Galat, and F. I. Kukoz)
The effect of the initial raw material and the production method of the negative electrode masses of an iron-nickel accumulator on their magnetic properties.

[Tr. Novacherk. Politekh. Inst., 1974, (287), 85-88] (R)

BISI 15262 (L. N. Tatarnikova, et al.)
Phosphating the surface of metal for producing securing components by the dual reduction method.
[Stal', 1976, (10), 937-938] (R)

Rolling

BISI 14928 (L. Hütter)
What quality grade of materials for the rolls in rod mills.
[Draht-Welt, 1975, 61, (2), 55-57] (G)

BISI 15280 (Yu. P. Pokatilov, et al.)
Control of undulating surfaces in rails during rolling.
[Izv. VUZ Chern. Met., 1976, (10), 87-91] (R)

BISI 15313 (M. Redr, et al.)
Mathematical model of change of temperature field of rolling stock during rolling in smooth rolls.
[Hut. Listy, 1976, 31, (11), 795-802] (C)

BISI 15389 (T. A. Koinov)
Rational schemes of hot-rolling on wide-strip mills.
[Stal', 1976, (11), 1011-1016] (R)

BISI 15390 (A. G. Lutsenko, and B. A. Sutyagin)
The continuous medium-section 450 mill of zapadno-sibirsk works.
[Stal', 1976, (11), 1016-1019] (R)

BISI 15391 (V. A. Tyagunov., et al.)
Optimizing the main drive operating conditions on a blooming mill using variable acceleration.
[Stal', 1976, (11), 1019-1020] (R)

BISI 15411 (Yu. I. Sinel'nikov)
Referring the curvilinear shape of a groove to rectangular stock by the method of equivalent deformations.
[Izv. VUZ Chern. Met., 1976, (11), 65-67] (R)

BISI 15413 (M. Ya. Brovman, et al.)
Power parameters when rolling with different peripheral roll speeds.
[Izv. VUZ Chern. Met., 1976, (11), 76-80] (R)

BISI 15414 (V. N. Klimenko, et al.)
Pressure and spread during rolling in wedge-shaped passes.
[Izv. VUZ Chern. Met., 1976, (11), 81-86] (R)

BISI 15418 (V. Ya. Ostrenko, et al.)
Investigation of the end wall thickness variation of hollows.
[Izv. VUZ. Chern. Met., 1976, (11), 111-114] (R)

BISI 15463 (L. Wolf.)
Plate rolling mill 'Quarto 3600' azovstal.
[Hutnicke listy, 1976, 31, (9), 657-663] (C)

BISI 15364A (H. Kuntze, and W. Bielfeld)
Present state of tinplate inspection.

- [Stahl Eisen, 1976, 96, (19), 910-915] (G)
 BISI 15393 (S. M. Vladimirov, et al.)
 Improvement in the surface quality of hot-rolled chrome-nickel steel strip.
 [Stal, 1976, (11), 1023] (R)
- BISI 15486 (R. Polansky)
 Grooving relations when rolling flanged beams on heavy-duty rolling trains.
 [Hutník (Prague), 1976, 26, (5), 174-181] (C)
- BISI 15555 (J. Bouzek)
 Precise calculation of cooling time of a product on cooling beds of section rolling mills.
 [Hutník (Prague), 1976, 26, (8), 305-309] (C)
- BISI 15573 (V. G. Ryabov)
 Calculation of the width of semi-production for profiling.
 [Stal', 1976, (12), 1113-1115] (R)
- BISI 15593 (V. K. Smirnov)
 Contact area during rolling in simple-shape passes.
 [Izv VUZ Chern. Met., 1976, (12), 85-87] (R)
- Metalworking, Excluding Rolling**
- BISI 15487 (R. Barteczek)
 Present developments in the field of heavy hammer forging.
 [Hutník, (Prague), 1976, 26, (5), 185-189] (C)
- BISI 15395 (V. V. Shveikin, et al.)
 Decreasing the curvature of tubes in drawing.
 [Stal', 1976, (11), 1029-1030] (R)
- BISI 15559 (J. Gocal)
 Optimizing of pipe production in the ingot/pipe cycle under production in the CSSR
 [Hutník (Prague), 1976, 26, (10), 375-380] (C)
- BISI 15478 (J. Dostal)
 Contribution of the new wire-rolling train at TZ VRSR to improve wire quality in the wire-drawing mill.
 [Hutník (Prague), 1976, 26, (1), 23-28] (C)
- BISI 15492 (E. Bruzda)
 Sintered carbides for cold forming.
 [Hutník (Prague), 1976, 26, (7), 265-269] (C)
- BISI 15479 (M. Brat)
 Shears for shearing rolled sections.
 [Hutník (Prague), 1976, 26, (1), 28-32] (C)
- Steels and Alloys (Technical Application and Methods of Production), Cermets**
- BISI 15312 (B. S. Krishnamachar)
 Steel for reinforced concrete; the present state of technology.
 [Rev. Latinoamer. Sid., Oct. 1974, (174) 96-103] (Sp)
- BISI 15372 (T. Dimov, and T. Rashev)
 Technological possibilities for casting nitrogen stainless steels without nickel by the gas counter-pressure method.
 [Metalurgiya, 1976, (10), 7-9] (Bu)
- BISI 15376 (H. Gerlach, and D. Schulten)
 Greep behaviour of weld metal of high temperature ferritic and austenitic steels.
 [Schweissen u. Schneiden, 1973, 25, (6), 205-209] (G)
- BISI 15482 (J. Single)
 Manufacture of tongue and crossing rails.
 [Hutník (Prague), 1976, 26, (3), 93-95] (C)
- BISI 15497 (S. Genov)
 Experimental study of electrical insulating qualities of the surface layer of cold rolled electro-technical steel.
 [Tekhnicheska Mis'l 1976, (4), 27-33] (Bu)
- BISI 15513 (P. Romvari, et al.)
 Metallographical aspects of material selection for rail steels.
 [Bany Koh. Lapok. 1976, (Kohasz), 109, (11), 477-481] (H)
- BISI 15557 (V. Brázdil, and J. Lichý)
 Hot formability of a 12% Cr+steel.
 [Hutník (Prague), 1976, 26, (9), 348-352] (C)
- Casting and Cast Metals**
- BISI 15193 (J. Zemanek, and S. Retek)
 Development of nodular iron casting for pielstick engines.
 [Slevarenstvi, 1976, 24, (4), 134-136] (C)
- BISI 15238 (G. Bocher, and W. Resch)
 Continuous casting of aluminium-killed deep-drawing steels.
 [Stahl Eisen, 1976, 96, (21), 998-1003] (G)
- BISI 15386 (A. K. Makarenko, et al.)
 Use, calculation and analysis of the lift of ingot moulds.
 [Stal', 1976, (11), 998-1000] (R)
- BISI 15452 (M. Onillon, et al.)
 Forecast of the risk of physical metal penetration in the cast iron foundry.
 [Fonderie, 1976, (362) 339-411] (F)
- BISI 15462 (L. Smrha, and J. Sustek.)
 Note on computing the temperature field of a continuously-cast casting.
 [Hutn. Listy, 1976, 31, (9), 632-636] (C)
- BISI 15494 (F. Bonnier)
 Use of the interstop type slide gate nozzle at the solmer steelworks.
 [CDS C. I. T., 1977, (1), 67-77] (F)
- BISI 15540 (F. Kavicka, et al.)
 Thermal resistance of the mould-*ingot* interface and its effect on the solidification process.
 [Slevarenstvi, 1976, 24, (11), 448-452] (C)
- BISI 15550 (B. Pycha)
 Some research data on the solidification of an 8-ton ingot.
 [Hutnicke Listy, 1976, 31, (8), 561-568] (C)
- BISI 15512 (F. Macher)
 Experience with the thermoelectric determination of Si-content in raw malleable cast iron.
 [Bany Koh Lapok (Ontode), 1976, 27, (9) 186-190] (H)
- BISI 15192 (S. Pilarik, et al.)
 Hypoeutectic grey cast iron grades alloyed with small additions of germanium and their application in manufacture of some special castings.
 [Slevarenstvi, 1976, 24, (2/3), 111-114] (C)
- BISI 15467 (J. Čech, et al.)
 Application of low-alloy cast iron for optimum mechanical and thermal properties in cast cylinder
 [Slevarenstvi, 1975, 24, (2/3), 56-60] (C)

Heat Treatment

- BISI 15363 (G. Pont, et al.)
Application of a time/temperature equivalence to the study of steel tempering.
[Rev. Metall., 1976, (12), 1115-1125] (F)
- BISI 15535 (J. Kolbel)
The nitride layer formation in glow discharge nitriding.
[Forschungsber. des Landes Nordrhein-Westfalen, No. 1555, 1965] (G)

Heating, Heating Furnaces and Electric Heating

- BISI 15387 (F. V. Ivanov-Filippov, et al.)
Melting iron-nickel and iron-nickel-cobalt alloys in large-tonnage induction furnaces.
[Stal, 1976, (11), 1004-1007] (R)
- BISI 15450 (H. Konig, and G. Rath)
Possibility of steelmaking with a high sponge iron charge in the electroslag resistance furnace.
[Stahl Eisen, 1977, 97, (1), 12-17] (G)
- BISI 15534 (E. Matula, and L. Tomezyk)
Influence of the harmonic content in the current and voltage diagram on phase powers and their unbalance, electric losses and the mean phase power factor in electric steel-making furnaces.
[UIE 7th Congress for Electroheat, Warsaw, 18-22 Sept. 1972, paper No 709] (Po)
- BISI 15554 (I. Petrman)
Electroslag casting of metals.
[Hutnik (Prague), 1976, 26, (8), 295-301] (C)
- BISI 15455 (K. Von Germersheim, et al.)
Heat-engineering aspects of the design and operation of high-capacity slab pusher furnaces with overhead firing.
[Stahl Eisen, 1976, 96, (5), 191-198] (G)

Fuel, Combustion and Refractories

- BISI 15182 (M. Weltner)
Derivatographic investigation of the combustion process of coals
[Acta Chim. Hung. 1965, 43, 89-98] (G)
- BISI 15458 (T. Ikio, et al.)
Coke oven door.
[German Patent 25 48 923] (J)
- BISI 15461 (B. Splichal)
Determination of the optimum ash content in blast furnace coke under present conditions.
[Hutnické Listy, 1976, 31, (9), 612-622] (C)
- BISI 15473 (S. Cernoch)
Thermotechnical results of heat recovery from industrial furnaces.
[Plyn 1975, 55, (3), 77-82] (C)
- BISI 14850 (W. Wenzel, et al.)
Polyhedral coke in connection with unconventional coke production.
[Aufbereitungs-Technik, 1976, (5), 232-236] (G)
- BISI 15488 (O. Janak)
'Kalinit UO 14' guniting mass for lining metallurgical ladles.
[Hutnik (Prague) 1976, 26, (6), 214-218] (C)

Welding and Joining

- BISI 15384 (A. V. Leites)
Production of consumable electrodes from billets

cast on multi-strand vertical continuous casting machines.

[Stal', 1976, (11), 993-996] (R)

Ores and Minerals Handling and Beneficiation

- BISI 15198 (P. Vejnar)
Kinetics of air-oxidation of magnetite pellets.
[Rudy, 1975, (12), 377-382] (C)
- BISI 15209 (D. Trojka, and I. Janik)
Model of programmed homogenization of Burden.
[Hutnik (Prague), 1976, (2), 48-53] (C)
- BISI 15245 (A. Maslanka, and A. Crusczyńska-Jacyna)
Properties of sinters of increased and high basicity.
[Prace Inst. Hutn. 1970, 22, (5), 243-253] (Po)
- BISI 15564 (M. N. Shatalov)
Influence of magnesium-containing compounds on pellets strength.
[Stal', 1976, (12), 1070-1072] (R)
- BISI 15585 (G. V. Korshikov)
Kinetics and mechanism of mix-stream moistening in a 3.2 x 12.5 m revolving drum.
[Izv. VUZ Chern. Met., 1976, (12), 26-30] (R)

Ironmaking and Ferro-Alloys

- BISI 15314 (L. Krol, et al.)
Testing the suitability of charge materials for the blast furnace process.
[Hutnik (Katowice), 1976, 43, (11), 473-476] (Po)
- BISI 15381 (S. L. Solomentsev, and V. D. Korshikov)
Non-uniformity in distribution of blast and combustion products over the cross-section of the checkerwork of blast-furnace hot-blast stoves.
[Stal', 1976, (11), 982-984] (R)
- BISI 15382 (V. M. Antonov, et al.)
Thermal stresses in blast-furnace tuyeres.
[Stal', 1976, (11), 985-986] (R)
- BISI 15460 (J. Vrtek)
The effect of oxygen intensification in the blast furnace process on the conditions for energy economy.
[Hutn. Listy, 1976, 31, (8), 548-553] (C)
- BISI 15489 (L. Tejzr)
Changes in the composition of steel-making pig iron in the course of tapping.
[Hutnik (Prague), 1976, 26, (7), 234-245] (C)

Steelmaking

- BISI 15240 (M. A. Molina)
Venezuelan experience in the construction and commissioning of direct reduction plant.
[ILAFSA, 17th Steelmaking Congress, Caracas, Oct. 1976, K1-K10] (Sp)
- BISI 15239 (W. Domrose, et al.)
Metallurgy and process technology of continuous steelmaking.
[Stal, Eisen, 1976, 96, (21), 993-997] (G)
- BISI 15383 (M. Kepka)
A comparison of the contamination of carbon steel melted in acid and basic furnaces.
[Stal', 1976, (11), 988-990] (R)
- BISI 15477 (B. Borsky, and J. Petros)
Conditions governing the making of medium-carbon killed steel in tandem furnaces.

- [Hutnik (Prague), 1976, 26, (11), 13-18] (C)
 BISI 15483 (B. Borsky, and J. Petros)
 State of the art of, and outlook for, manufacturing high-quality steels in tandem furnaces.
 [Hutnik (Prague), 1976, 26, (4), 130-135] (C)
 BISI 15221 (B. Korusic, and V. Ostere)
 Technological characteristics of ESR slags. part 1.
 [Radex Rundschau, 1976, (3), 764-769] (G)
- Extraction and Refining**
- BISI 15409 (B. P. Chumakov, et al.)
 Experimental static characteristics of an installation for the circulation degassing of steel.
 [Izv. VUZ. Chern. Met., 1976, (11), 40-42] (R)
 BISI 15256 (Yu. V. Gerasimov, et al.)
 Improvement in high-alloy steel melting techniques.
 [Stal', 1976, (10), 909-911] (R)
 BISI 15302 (H. Sperl, et al.)
 Practical results from gas purging of steel in casting ladles.
 [Stal Eisen, 1976, 96, (21), 1056-1060] (G)
 BISI 15402 (M. P. Revun, et al.)
 Investigation of metal oxidation.
 [Stal', 1976, (11), 1057-1058] (R)
 BISI 15435 (D. Janke, and W. A. Fischer)
 Survey of literature on the equilibria of important deoxidation elements with oxygen in iron melts.
 [Stal Eisen, 1976, 96, (8), 398-401] (G)
 BISI 15484 (K. Gottfried)
 Crude argon used as a steel refining element.
 [Hutnik (Prague), 1976, 26, (4), 135-138] (C)
 BISI 15490 (M. Kepka, and M. Kostohryz.)
 The effect of deoxidation with SiCa on the properties of low-alloyed heat-resistant cast steel CSN 42 2740.
 [Hutnik (Prague), 1976, 26, (7), 252-255] (C)
 BISI 15476 (J. Petros, et al.)
 The quality of steel scrap; its effect on steelmaking indices.
 (Hutnik (Prague) 1975, 25, (12), 449-455)
 BISI 15480 (V. Bohm, and K. Pollach.)
 The contribution of remelting unusable high-alloy scrap in open-hearth furnaces in trinec iron and steel works.
 (Hutnik (Prague), 1976, 26, (2), 54-55)
 BISI 15552 (J. Petros, et al.)
 Effect of steel-scrap quality on the quantity and composition of tandem-furnaces dust.
 (Hutnik (Prague), 1976, 26, (7), 246-252)
- Engineering**
- BISI 15403 (A. N. Popov, et al.)
 Control of the main electrical drives of a continuous cold-rolling mill with a black system of power supply to the motors.
 [Stal', 1976, (11), 1058-1060] (R)
 BISI 15400 (D. V. Lebedev.)
 The Soviet-American symposium "Metal for gas and oil pipe lines".
 [Stal', 1976, (11), 1045-1047] (R)
 BISI 15134 (V. Fireteanu, and D. Stanciu)
 Electromagnetic pumping of metals in the liquid state.
 [Metalurgia, 1975, 27, (5), 253-258] (Ru)
 BISI 15252 (V. I. Lyulenkov, et al.)
 Assessing the serviceability of a Si-29-11 skip hoist with an increase in skip capacity to 20 m³.
 [Stal', 1976, (10), 888-889] (R)
 BISI 15431 (H. Rodermund)
 Criteria for the testing and selection of sprayable adherent lubricants for large open gears.
 [Zement-Kalk-Gips, 1976, (4)] (G)
 BISI 15644 (J. G. C. Boudewijn, and S. W. Vogt.)
 Development of the continuously variable transmission for the volvo 343.
 [Automobiltech. Z. 1977, 97, (3), 81-88] (G)