

## 資料室だより

## BISI Translation 紹介

— No 41 —

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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 676~680

**Management planning and control**

BISI 11024 (M. D. Glikstein.)

On improving conditions of work in mills for cold-rolling sheet steel.

[Conf. proc. Vop gig prs patol tsvet chern met., 1971, 231-6] (R)

BISI 11052 (E. Tichopadova)

The effect of lead, selenium and tellurium additions on environmental air and human health. [Hutnik, 1972, (8), 287-288] (C)

BISI 11124 (W. Schmidt. and G. Schulz.)

Present situation and future tasks as regards noise abatement in the steel industry.

[Stal Eisen, 1972, 92, (6), Mar., 16, 238-45] (G)

BISI 11241 (H. Wissel, and L. Magyary)

The employment of small computers in the technical sector of an iron and steelworks.

[Stahl Eisen, 1971, 91, (13), 24 June 748-754] (G)

BISI 11242 (V. Dennert)

Reasons for the differences between japan's sources of raw-materials supplies and those of the german federal republic.

[Erzmetall 1972, 6, 306-310] (G)

BISI 11248 (G. Winkler)

Determination of the prices of iron ores.

[Neue Hütte, 1959, Mar. 148-151] (G)

BISI 11801 (A. G. Karpov, et al.)

Planning, calculating and analyzing the cost of steel with a "minsk-22" electronic computer.

[Stal', 1973, (6), 552-555]. (R)

**Physical Structure of Materials and Crystallography**

BISI 11624 (I. V. Gaverilin and G. S. Ershov)

Structural relationships of liquid and solid metals.

[Izv. VUZ' Chern. Met., 1973, (4), 149-152] (R)

BISI 11677 (J. A. Schmitz.)

Contribution to the sensitivity to hot shortness of low alloy steels.

[Arch. Eisenh., 1973, 44, (3), March. 207-210]. (G)

**Physical metallurgy and metallography**

BISI 7555 (Rose, A., H. A. Mathesius, and H. P. Hougardy.)

Measurement of the amounts of carbide and of their size distributions in some tool steels by means of the quantitative television microscope. [ARCH. EISENH. April 1969, 40, (4), 323-331]. (G)

BISI 10436 (J. Kučera, et al.)

Cobalt self-diffusion in the ternary Co-Ni-Fe system.

[Kovové Mat., 1972, (1), 8-19] (C)

BISI 11288 (J. Božanský)

The influence of deformation temperature upon changes in mechanical properties of  $\alpha$ -Fe, or of low-carbon steel.

[Kovové Mat., 1972, 4, 325-336] (C)

**Physical properties and chemical analysis**

BISI 10716 (M. Salcudeanu, and M. Costescu.)

Aspects of the solidification of 17 and 25t. Steel ingots for sheet-metal.

[Metalurgia, 1972, (4)] (Ru)

BISI 11525 (V. Yu. Kaganov, et al.)

Compositions of pulverised metallic samples automatically controlled by the thermal e.m.f. method.

[Izv. VUZ. Chern. Met., 1973, (3), 174-176] (R)

BISI 11411 (E. I. Kazantsev, et al.)

An electronic computer used for calculating heating of metal in continuous furnaces.

[Stal', 1973, (1), 77-9] (R)

BISI 11421 (E. M. Gol'dfarb and V. S. Ibryaev.)

Optimisation of the heating of fine bodies during

heat exchange by radiation.

[Izv. VUZ Chern. Met., 1973, (1), 159-162] (R)

#### Mechanical properties and material defects

BISI 9757 (Wellinger K. and Zanner H.)

Effect of the nominal stress condition on the strength of welded joints under pulsating stresses. [TECHNISCHE MITTEILUNGEN, 1970, 63, No 11, 551-555]. (G)

BISI 10504 (M. Adrian, et al.)

Influence of drawing direction upon the fatigue strength of drawn steel wires.

[Matalugia, 1972, (2), 91-93] (Ru)

BISI 10906 (C. M. Vlad)

Method for determining the anisotropy constants for evaluating the deep drawing behaviour of low-carbon sheet steels.

[Materialprüfung, 1972, 14, (6), 179-82] (G)

BISI 11507 (Möller, P.)

Rational automatic ultrasonic testing of tubes and rounds.

[BÄNDER BLECHE ROHRE, 1973, 14, No 1, pp 16-20] (G)

BISI 11509 (H. de Leiris)

Lamellar tearing and testing of plates in the thickness direction.

[Paper, 1971 Session Maritime and Aeronautic Association, Paris, 16pp] (F)

BISI 11353 (J. Brunet, et al.)

Influence of elements of the sulphur family on some mechanical properties of construction steels. [Rev. Mét. Mém. Sci., 1972, 69, (11), 785-795] (F)

BISI 11648 (V. Bina et al.)

A probability interpretation of creep in heat-resistant low-alloyed CrMoV steel.

[Kovové materiály, 1973, 1, 51-62] (C)

BISI 11732 (Wellinger, K., and P. Gimmel.)

Bursting pressure of pipes containing notch-type defects.

[MITTEILUNGEN der VGB 1954 31 309-316] (G)

#### Corrosion and corrosion testing

BISI 11064 (J. Kocich.)

Diagrams of corrosion mechanical properties of steels in active state of corrosion.

[Strojrenství, 1972, (10), 596-599]. (C)

BISI 10240 (T. Teindl)

Effect of stress on the corrosion cracking of low-alloyed martensitic steel

[Strojrenstivi, 1972, (1), 43-46] (C)

BISI 10753 (V. Karel and P. Pahuta.)

Contribution to the investigation of fracture mechanism in the martensitic structure.

[Kovove Mat. 1972 (3) 295-302] (C)

#### Protection of materials

BISI 8724 (M. Wrzecian)

Metal coatings on aluminium and its alloys. [Galvano, 1969, 38 (386), 185-188] (F)

BISI 9593 (Borgolle Th.)

The cold HCl-process for the continuous removal of iron and the regeneration of hydro-

chloric pickling baths.

[BLECH, 1967 No. 2pp 64-66] (G)

BISI 10660 (U. Weigel and C. Schneider Andernach)

The testing of very fine sheet and tinplate

[Stahl Eisen, 1970, 90, (11), 579-586] (G)

BISI 10725 (H. Wabunek, et al.)

Procedures and practices for the consignment and storage of hot-rolled products demonstrated using the example of merchant bar, plate and wire-rod.

[Stahl Eisen, 1972, June, 620-628] (G)

BISI 11063 (A. Šalák)

Reduction iron oxide obtained through complete Regeneration of spent sulphuric and hydrochloric acids pickling liquors.

[Hutn. Listy, 1972, (10), 730-736] (C)

BISI 11080 (German Patent)

Chemical plating bath for the treatment of mild steel.

[German Patent Specification 2,001, 750]

BISI 11752 (Hintermann, H. E. and H. Gass)

Chemical deposits in the gaseous phase-CVD process and applications.

[OBERFLÄCHE-SURFACE Nov. 1971 12 (11) 189-192] (G)

#### Rolling

BISI 10543 (M. Hajduk)

How the unsuitable choice of the vertical and horizontal drive revolutions affects the force loading of universal rolling mill stands.

[Hutn. Listy, 1972, (4), 259-264] (C)

BISI 11008 (I. Gostian.)

Rolling of steel section on micro-mills.

[Metalurgia, 1972, 24, (8), 553-557]. (Ru)

BISI 11037 (M. Vrzal)

Measurements performed on a 300 light-section rolling mill train in the trinec iron and steel works.

[Strojrenství, 1972, (11), 675-685] (C)

BISI 11060 (Š. Uličný)

The effect of the degree and speed of deformation on mechanical properties of micro-alloyed low-carbon steels with niobium addition.

[Hutn. Listy, 1972, (10), 710-716] (C)

BISI 11061 (S. Bernat.)

Computer calculations of the material deformation resistance when rolling heavy plates.

[Hutn. Listy, 1972, 10, 717-721] (C)

BISI 11236 (A. Dumitrescu)

Contributions regarding the requirements in the mill-rolls.

[Metalurgia, 1972, (11), 763-765] (Ru)

BISI 11423 (Yu. V. Kalashnikov et al)

Investigation of the Round-square system metal rolling process in 4-high Passes

[Izv. VUZ chern. Met., 1973, (1), 116-118] (R)

BISI 11522 (V. T. Zhadan et al.)

Investigation of the deformation heat in 50 KhGA steel

[Izv. VUZ Chern. Met., 1973, (3), 65-59] (R)

- BISI 11523 (V. S. Gorelik)  
Investigation of the accuracy of tempac-steel-tempac bimetallic strip rolling.  
[Izv VUZ Chern. Met., 1973, (3), 97-101]
- BISI 11529 (B. P. Zuev, et al.)  
Optimization of the strip rolling schedule on a 1700 continuous mill.  
[Stal', 1973, (3), 253-254]. (R)
- BISI 11797 (I. S. Trishevskii and M. E. Doktorov.)  
New methods of forming curved rolled sections.  
[Stal, 1973, (6), 527-530]. (R)
- Metal working excluding rolling**
- BISI 11762 (H. W. Grunkemeir)  
Machining of extrusions.  
[Werkstattstechnik, Z, ind. Fertig 1973, 63, (3), 153-56] (G)
- BISI 11620 (A. G. Chernenko et al.)  
Lateral boundaries of the instantaneous deformation zone when cold-rolling tubes  
[Izv. VUZ Chern. Met., 1973, (4), 89-91] (R)
- BISI 11141 (R. Clausen)  
Investigations on tool life in hot turning.  
[Z. Für Wirt. Fertigung, 1970, 65, (2), 55-9] (G)
- BISI 11135 (L. Eberlein and W. Fietz.)  
Investigations into the flow of materials during drop forging  
[Neue Hütte, 1970 15, Nov. 687-691] (G)
- BISI 11134 (M. R. Eck)  
Mechanical properties of sintered Tzm molybdenum alloy.  
[Metall. Tech, 1970, July 743-747] (G)
- Steel alloys (technical applications and methods of production) and cermets**
- BISI 6234 (H. Loscher, et al.)  
Production and Properties of St 45/60  
[Neue Hütte, August, 1967, 12, (8), 475-481]. (G)
- BISI 9834 (L. Paganini and V. Bulkchen)  
Electron microscope study of leaded steel.  
[La Metallurgia Italiana 1970 (1) 1-10] (I)
- BISI 10239 (M. Vyklický and M. Mericka)  
Oxidation resistance of Cr20 Ni38 Type  
[Strojirenstvi, 1972, (1), 30-34] (C)
- BISI 10767 (W. Heller)  
Manufacture, Properties and Track Behaviour of self-Hardening chromium-manganese steel rails with a minimum strength of 110 kp/mm<sup>2</sup>  
[Eisenbahntechnische Rund., 1972, May, 176-183] (G)
- BISI 11248 (ANON.)  
Concrete reinforcement steel bars: sizes.  
[German Standard DIN 488 Blatt 2, 1972, April.] (G)
- BISI 11258 (M. Fondevirole, et al.)  
Statistical study of some properties of hot working Turbine rotor forgings.  
[A communication to the Arbeitsgemeinschaft für warmfeste Stähle, Verein Deutscher Eisenhüttenleute, Conf. Düsseldorf, 3/5 May 1972 on Properties of creep-resistant steels Rep. 1]
- BISI 11289 (P. Veles, et al.)  
Effect of carbon steel structures on the mechanical properties at dynamic loading  
[Kovové Mat., 1972, (4), 343-351] (C)
- BISI 11293 (J. Micha et al.)  
Notch toughness values of low-alloyed manganese steel CSN 42 2710 used for steel casting.  
[Slévárenstvi 1972, 9, 379-381] (C)
- BISI 11611 (M. M. Kudryavtsev, et al.)  
Quality of structural steel produced by various melting practices and examined in the form of billets for section rolling and after electroslag melting.  
[Stal', 1973, (4), 322-325] (R)
- BISI 11748 (AUBRUN, Ph., and ROCQUET, P.)  
Metallurgical mechanisms in the production of deep-drawing sheet made from aluminium-killed extra-mild steel.  
[Rev. Mét. Mém. Sci 1973 April, pp 261-9.] (F)
- Casting and cast metals**
- BISI 9650 (D. M. Stefanescu, and G. Bolintineanu.)  
Investigations regarding case-iron inoculation: complex barium-carbon inoculants.  
[Matalurgia, 1971, 23, (4), 229-223]. (R)
- BISI 10361 (A. Igualador)  
Cold box moulding with organic agglomerants-I  
Cold set moulding with organic corebinders-II  
[Fundicion, 1971, (138), 31-34]  
[IBID 1971, (140), 23-37] (Sp)
- BISI 10829 (K. Doring.)  
Thermo-physical parameters of ironworks' materials and their influence upon the crystallization process.  
[Neue Hütte, 1971, Feb., 99-102]. (G)
- BISI 11126 (G. W. Seulen and H. G. Matthes)  
Inverted-fed induction melting furnaces for rationalising melting of steel for castings.  
[Giesserei, 1972, 59, (11), 365-69] (G)
- BISI 11153 (H. Kowalke)  
Effects of the element bismuth, aluminium, boron and chromium in the Production of black malleable cast iron.  
[Giesserei, 1972, 59, (16) Aug. 10. 498-506] (G)
- BISI 11280 (V. Parma and B. Pýcha)  
The effect of teeming rate of the structure of rolled products manufactured from rimming steel  
[Hutn. Listy, 1972, 8, 557-561] (C)
- BISI 11479 (B. A. Fel'damn, et al.)  
Mechanism of the formation of thermal cracks in high chromium iron.  
[Izv. VUZ. Chern. Met., 1973 (2), 134-138] (R)
- BISI 11508 (Z. Ambroz and Kohl)  
Production experiences gained in utilization of dry reclaiming and in utilization of reclaimed Sand.  
[Slévárenstvi, 1973, 21, (2), 59-61]. (C)
- BISI 11672 (S. Mayer.)  
Production of pig-iron and Blast furnace/foundry duplexing in the rheinstahl schalka verein gmbh.  
[Rheinstahl Technik 1972, 10, (2), 75-77]. (G)

- BISI 11740 (ANON)  
Method and mould for casting steel ingots.  
[GERMAN SPEC. DT 2035251] (G)
- Heat treatment**
- BISI 10431 (V. Zábavnik)  
Some new information on the nitriding of steel in gases.  
[Zb. VST Košice, 1970, (1), 103-116] (C)
- BISI 10503 (N. Popescu, and C. Dumitrescu.)  
Investigations regarding heat treatments for improving workability after carbarizing of a high nickel content steel.  
[Metalurgia, 1972, (2), 86-90] (R)
- BISI 10651 (J. Michel)  
The dynamic strength properties of the deformation hardening of CSN 12 013 steels.  
[Sbornik VST Košice, 1970, 2, 181-190] (C)
- BISI 11146 (G. Gottschlich)  
Progress achieved in the field of heat treatment and surface treatment of wire.  
[Draht-Welt, 1971, 57, (11), 559-567] (G)
- BISI 11492 (A. Randak and K. Vetter)  
Testing the hardenability of low hardness penetration steels by means of modified end quench test bars.  
[Arch. Eisenh., 1972, Oct., 43, (10), 763-768] (G)
- BISI 11517 (W. Lotter, et al.)  
Influence on the work hardening exponent (n-Value) of deep draw hardening  
[7th Congress EED Res. G. P. Amsterdam, 1972, Oct.,] (G)
- Heating, heating furnaces and electric heating**
- BISI 11532 (B. L. Gilerson, et al.)  
Heat engineering  
Improving the design of a furnace with a walking hearth.  
[Stal', 1973, (3), 276-278]. (R)
- BISI 11652 (J. Klimek, et al.)  
An index for furnace comparisons.  
[Hutnik, 37 (9) 1970, 438-444] (P.)
- Fuel combustion and refractories**
- BISI 10671 (E. Gugel, et al.)  
Investigations of the scorification of silicon-carbide materials in the blast furnace.  
[Stahl Eisen, 1972, 92, (4), 144-149] (G)
- Welding and joining**
- BISI 11147 (G. Spur and R. Clausen.)  
The results of tests on hot-machining and plasma-machining.  
[Werkstattstechnik, 1969, 59, (2), 56-61] (G)
- Ores and minerals handling and beneficiations**
- BISI 10727 (A. Maslanka and E. Gutowska)  
The importance of coarse-grained components of a sinter mixture as pellet nuclei at the initial pelletizing.  
[Hutnik, 1969, 36, (2), 57-62] (Po)
- BISI 10728 (I. Vilchev and T. Dyakov)  
Investigation of strength properties of manganese concentrate pellets.  
[Godishnik Khim. Tekhol. Inst., 1963, 10, (2) 1-15] (Bu)
- BISI 11243 (P. M. Sandgren.)  
Study of spiral concentration.  
[Jernkont, Ann., 1965, 149, 12]. (Sw)
- BISI 11612 (M. P. Avdonina, et al.)  
Investigation of mineral-formation during oxidizing firing of SSGOK pellets.  
[Stal, 1973, (4), 298-303] (R)
- BISI 11655 (M. Weber)  
Hydraulic transport of ore from north sea ports to the ruhr district.  
[Stahl Eisen, 1973, 93, (9), 396-400] (G)
- Ironmaking and ferro-alloys**
- BISI 10545 (J. Drabina.)  
Twenty-three years of operation of blast furnaces using rammed carbon lined hearths.  
[Hutn, Listy, 1972, (4), 239-244]. (C)
- BISI 10859 (K. H. Caspers.)  
The use of silicon carbide in the mains frequency induction crucible furnace.  
[Giesserei, 1972, 59, (18), Sept., 7, 556-559]. (G)
- BISI 11347 (GERMAN STANDARD.)  
Blast furnace and metallurgical slag for road-building; technical conditions of supply.  
[German Standard DIN 4301, March 1962]. (G)
- BISI 11408 (Anon)  
Largest blast furnace in the western world is blown-in  
[Stahl Eisen 1973, 93, (7) 29th March]
- BISI 11533 (Z. I. Bulatov et al.)  
Integrated processing and utilization of slags at the chelyabinsk steelworks.  
[Stal', 1973, (3), 282-284]. (R)
- Stelmaking**
- BISI 7971 (H. Zeder, S. Bergh. and N. Stahl.)  
Wear measurement of the refractory lining in the kaldo furnace.  
[12th International refractory colloquium Aachen, 23-24th October, 1969-299-322] £6 (G)
- BISI 10118 (G. Zoglmeier)  
Research on the simulation of hot modelling in the LD process  
[Radex Runds., 1971, (5), 614-632] (G)
- BISI 10443 (L. Kodrle and J. Pětroš)  
Metallurgy of the tandem furnace steelmaking Process  
[Hutn. Listy, 1972, (2), 100-110] (C)
- BISI 10640 (O. Rubisch and H. Ernst)  
Burn-off protection of graphite electrodes.  
[Stahl Eisen, 1972, 92, (14), 689-89] (G)
- BISI 11623 (S. A. Dubrovskii, et al.)  
The interconnection between the ore and quiescent boil periods investigated by component and factor analyses  
[Izv. VUZ Chern. Met., 1973, (4), 51-56] (R)
- Extraction and refining**
- BISI 11445 (H. Degenkolb)  
Modular system for one-storied buildings by light metal and mixed type constructions.  
[Intern. Assoc. for Bridge and Struct. Engrg. Symp., Prague, 1971, 153-168] (G)

**Engineering**

- BISI 10481 (J. Holéczy et al.)  
Surface tension of the Fe-O-SiO<sub>2</sub> slag system.  
[Hutn. Listy, 1972, (3), 201-206] (C)
- BISI 11427 (V. I. Baptizmanskii, et al.)  
The absorption of hydrogen by the oh bath  
[Izv. VUZ Chern. Met., 1973, (1), 45-48] (Ru)
- BISI 11429 (G. D. Surguchev, et al.)  
Quantitative identification and investigation of  
the dynamics of decarburization by means of a  
digital computer.  
[Izv. VUZ Chern. Met., 1973, (1), 24-27] (Ru)
- BISI 11519 (E. B. Teplititskii and L. P. Vladimirov)  
Thermodynamics of deoxidizing steel with zir-  
conium  
[Izv. VUZ Chern. Met., 1973, (3), 5-7] (Ru)
- BISI 11527 (F. I. Bashlii, et al.)  
The nature of bubbling of steelmaking baths.  
[Stal', 1973, (3), 220-222] (R)
- BISI 11528 (K. K. Zhdanovich, et al.)  
The melting of high Grade steel using molten  
alloy for deoxidizing and alloying in the ladle.  
[Stal', 1973, (3), 222-225] (R)
- BISI 11621 (S. F. Sviridnko)  
The kinetics of the oxidation of phosphorus in  
a molten steel bath during reaction with the slag  
[Izv. VUZ Chern. Met., 1973, (4), 62-64] (R)
- BISI 11646 (J. Rusnar, and D. Debnar.)  
A contribution to the metallurgy of LD process  
in vsz steel plant.  
[Hutnik, 1972, 7, 256-258]. (C)