

The Metallurgical Problems of Precipitation Steels  
in Tubes and Pipes, by F. Rinaldi, A. Pugno.  
ITALIAN, per, Met Ital, Vol 60, Nov 1968, pp 919-930.  
BISI 7563

Sci-Mat  
May 70

The Influence of Carbon Content in an Iron  
Ore Type-Mix on the Mechanical and Chemical  
Properties of the Sinter Produced, by  
M. Conti,  
ITALIAN, pub. Mat. Ital., Vol 61, No 1,  
1969, pp 3-7.  
BISI 8219

Sci/Mat  
Sep 70

Temper Brittleness in Carbon Steels, by  
W. Nicodemi.  
ITALIAN, per, Met Ital, Vol 61, No 1, 1969,  
pp 8-16.  
BISI 7562

Sci-Mat  
June 70

The Influence of Oxygen on Surface Blistering in  
Mechanically Capped Iridium Steels, by  
P. Fratini, et al.  
IRIDIUM, per, Met. Ital., Vol 61, No 1, 1969,  
pp 17-  
\*HSEI 7651

sci/ materials  
oct 69

Influence of Electro-Slag Resulting of Steel on  
Some Important Properties and the Oxygen Content,  
by P. FAVIZZA, A. BASSI.  
ITALIAN, per, La Metallurgia Italiana, Vol 61,  
No 4, 1969, pp 162-166.  
HB 8107

sci/materials  
feb 70

402,732

Factors Governing the Quality of Austenitic  
Stainless Steel Tubes, by E. Citterio,  
A. Gallenier.

IPALISI, per, La Metallurgia Italiana, Vol 61,  
No 5, 1969, pp 195-200.

IB 7912

sci/ materials  
dec 69

398,628

High-Purity Stainless Steels, by C. Chaudron.  
ITALIAN, per, Mat Ital, No 6, 1969, pp 233-236.  
\*BISI 8597

Sci-Mat  
Sep 70

The Manufacture of Silicon Steel for Electrical  
Sheet in the LD Converter, by J. Oggero, et al.  
ITALIAN, per, Mat Ital, Vol 61, No 6, 1969,  
pp 246-250.  
BISI 7932

Sci-Mat  
June 70



The Formation of Metallic Structures by the Elastic  
Deformation of Powders, by G. Rossi and A. Ferin,  
ITALIAN, per. Met. Ital., Vol 61, June 1969, pp 26--  
pp 260-266.  
BIBI 8375

Sci/Mat

Aug 70

Use of Direct Rolling in Fiber Metallurgy,  
by I. Crivelli Visconti,  
ITALIAN, per. Met. Ital., Vol 61, No 11, 1969,  
pp 550-555.  
HB 8134

Sci/Mat  
May 70

Some Characteristics of the Sound Emission  
During Fatigue Tests with a High-Frequency  
Pulser, by G. Belisario and S. Capuano, *10 pp*  
ITALIAN, per. La Metallurgia Italiana, Vol 62,  
No 1, 1970, pp 11-16.  
HB 8368

*AEC/RFP-TR-127-73*

Jun 71

M. Morando

Hot Rolling Mill For Precision Tubes.  
ITALIAN, per, Metallurgia Italiana, Vol 62,  
1970, pp 207-216  
NTC 72-60350-13H

sept 72

Theory of Stress Corrosion and Hydrogen Embrittlement,  
by G. Bollandi.  
ITALIAN, per, Met Ital, No 6, 1970, pp 218-221.  
BISI 9276

Nov 71

APC (RFP-Trans-100) 3 ATTEMPT TO EXPLAIN THE DIS-  
APPEARANCE OF THE CUBICAL RECRYSTALLIZATION STRUC-  
TURE IN LAMINATED COPPER AFTER SMALL ADDITIONS OF  
EXTRANEIOUS ELEMENTS. 6 van Wely, F. E.; Burgers, W. G.  
10 Translated for Dow Chemical Co., Rooky Flats Div., from Met.  
Ital.; 62: No. 7, 255-60 (1970). 20 14p. 23 (CONF-680995-1). 24 Dep.  
NTIS.

23 From Symposium on the influence on the properties of metals  
with the addition of elements in limited quantities; Turin, Italy  
(26 Sep 1968).

26 metallurgy; translations 27 11F

28 MN-25 29 P NSA

Increasing Sintering Process Productivity by  
Using Lime in Place of Limestone, by  
M. Carignani,  
ITALIAN, per. Met Ital., Vol 62, No 8, 1970,  
p 307-  
BISI 9506

Jan 72

Corrosion of Refractories Due to an Excess of  
Slag, by G. Aliprandi,  
ITALIAN, per. Met Ital., Vol 62, No 8, 1970,  
pp 317-  
BISI 9507

Nov 71



Continuous Casting of Plate Slabs, by  
G. E. Falck, and D. A. Weber,  
ITALIAN, per. La Metallurgia Italiana, Vol 62,  
No 10, 1970, pp 375-380.  
HB 8405

Sep 71

W. di. Marco

The Effect of %C on the Recrystallization of  
Mild Steel Annealed in a Continuous Furnace.  
ITALIAN, per, Metallurgia Italiana, Vol 62,  
No 10, 1970, pp 401-404  
NTC 72-60328-11F  
BISI 10766

sept 72

N. Guglielmi

Ni-TiO<sub>2</sub> Co-Deposited Coatings.  
ITALIAN, per, Metallurgia Italiana, Vol 62,  
No 11, 1970, pp 420-424  
NTC 72-13206-11F

sept 72

Examination of Some Types of Steel Produced by  
Continuous Casting, by A. Bargone and  
G. Libondi,  
ITALIAN, per. La Metallurgia Italiana,  
Vol 62, No 11, 1970, pp 434-442.  
HB 8406

Sep 70

Experience in Europe on the Automation of  
Hot Reversing Mills, by G. Petrillo,  
ITALIAN, per. Met. Ital., Vol 12, 1970,  
pp 455-460.  
BISI 9630

Mar 72

Wear Resistance of Sulfurized Steel Surfaces,  
by G. Sacchi,  
ITALIAN, per. La Metallurgia Italiana, Vol 63,  
No 1, 1971, pp 37-41.  
HB 8566

Mar 72

A. Antonioli

The Potential Role of Nuclear Energy in the  
Development of Conventional Iron Making.

ITALIAN, per, Metallurgia Italiana, Vol 63,

No 2, 1971, pp 49-60

NYC 72-60332-11F

BISI 9716

sept 72

Joints in the Solid State. Application of Stain-  
less Steel Components, by G. Ceccotti,  
ITALIAN, per. La Metallurgia Italiana, Vol 63,  
No 4, 1971, pp 153-158.  
HB 8708

Mar 72



Effect of Columbium Upon Medium and High Carbon  
Steels, by A. Piaggio,  
ITALIAN, per. La Metallurgia Italiana, Vol 63,  
No 4, 1971, pp 159-165.  
HB 8543

Mar 72

G. Bianchi

G. P. Andreini

The determination of sulphur using emission spectrometry  
ITALIAN, per, Mat. Ital., Vol 63, No 5, 1971, pp 233-238  
BISI 9578

NTC 72-60773-11F

may 72

C. Diccio

Control of Operations in Soaking Pits with Special  
Reference to Time Estimates.  
MET. ITAL, 1971, pp 597-640.  
\*BISI 10934

Feb 73

Suppe, U.

Computer Application in Calculation Concerning  
Roll Passes.

MET. ITAL., Vol. 27, No. 2, 1972, pp 41-50.  
*FEB*

#BISI 10855

Feb 73

Portuguese

Metal Portuguese

Development of the Microstructure of Nickel 200  
During Hot Plastic Deformation, by R. E. Reed-Hill,  
C. R. Smeal, 19 pp.  
PORTUGUESE, per, Metalurgia, Vol 23, 1967,  
pp 419-427.  
AEC/ORNL/Tr-2011-68

Sci/Materials  
Feb 69

374,245

Electrical and Metallurgical Reasons for Some  
Charges Employed in Electrical Reduction Furnaces  
Producing Ferro-Alloys, by R. Correa de Silveira,  
PORTUGUESE, per. Metalurgia, Vol 25, No 3, 1969,  
pp 167-179.  
BISI 8045

Sci/Mat  
May 70

<sup>4</sup>(ORNL-tr-2456) <sup>5</sup>STUDY OF THE REACTIVITY OF  
 $U_3O_8$ -Al DISPERSIONS. <sup>4</sup>Gentile, Eberto Francisco; Cintra,  
Sebastiao Hermans Leite; Tracancella, Roberto Barata. <sup>10</sup>Trans-  
lated by R. Gregg Mansfield (Oak Ridge National Lab., Tenn.),  
from <sup>15</sup>Metalurgia (Sao Paulo); 26: No. 149, 305-9(1970). <sup>20</sup>10p.  
<sup>23</sup>(CONF-690733-1). <sup>24</sup>Dep. NTIS.  
<sup>25</sup>From 24. annual congress of ABM, Sao Paulo, Brazil (Jul 1969).

<sup>26</sup>meetings; metallurgy <sup>27</sup>11F

<sup>28</sup>MN-25 <sup>29</sup>P NSA

REVISED CARD



*Metal Romania*

Improvements in the Manufacturing Technology of  
Ingot Moulds, by F. Schonberger & M. Marghescu.  
RUMANIAN, per, Met. (Bucharest), Vol 17, No 4,  
1965, pp 184-188.  
BISI 5868

Sci/Nat  
June 68

358,481

On the Specific Consumption of Aluminum for the  
Deoxidation of Steels Intended for Castings, by  
L. Apa.  
ROMANIAN, per, Metalurgia, Vol 17, No 3, 1965,  
pp 406-410.  
HB 6737

Sci/Materials  
Jan 67

317,944

The Efficiency of Self-Carburizing of  
Natural Gas Flames in Open-Hearth  
Furnaces, by D. Greco, I. Iordache.  
ROMANIAN, per, Met. (Bucharest), Vol 17,  
No 8, 1965, pp 410-414.  
BISI 6434

Sci-Mat  
May 69

380,386

Composition of Wide Strip Rolling Mills of  
Large Output, by A. Lederer.  
RUMANIAN, per, Metallurgia, Vol 17, No 9,  
1965, pp 403-491.  
\*BISI 5189

Sci - Mechanical, Industrial,  
Civil, and Marine Engineering  
Dec 66

Influence of the Degree of Unit Deformation on  
the Inhomogeneity of Elastic Deformation During  
Upsetting in Forging, by V. Popescu, 6 pp.  
ROMANIAN, per. Metallurgia, No 9, 1965, pp 471-  
474.  
AIR/FTD/HR-23-621-67

Sci-Phys  
Nov 68

368,152

The Composition of High Output Wide Sheet  
Rolling Mills, by A. Lederer.  
RUMANIAN, per, Metallurgia, Vol 17, Sep 1965,  
pp 483-491.  
BISI 5189

319,893

Sci - Mechanical, Industrial  
Civil, and Marine Engineering  
Mar 67

Growth of Labor Productivity in the Ferrous  
Metallurgy Industry, by D. Rebusapca, R.  
Soare and I. Nitu, 10 pp.  
RUMANIAN, per, Metalurgia, No 3, Mar 1966,  
pp. 164-168.  
JPRS 35824

EE-Romania  
Soc  
Jun 66

302,961



New Salt Baths for Low-Temperature Thermo-  
chemical Treatment, by Gh. Sucevanti.  
RUMANIAN, per, Metalurgia, Vol 17, June  
1966, pp 325-329.  
\*IB 6944

Sci-Materials  
Oct 66

Considerations Concerning the Hot Deformability  
of Stainless Steels, by I. Dragan.  
RUMANIAN, per, Metalurgia, Vol 18, No 1, 1966,  
pp 5-8.  
BISI 6628

Sci-Materials  
Apr 69

377,-780  
377,780

Automation and Intensification of Technological  
Processes the Main Factor in the Rise in Labor  
Productivity in the Iron and Steel Industry  
1959-1964, by D. Rebusapca and M. Vasilache, 6 pp.  
RUMANIAN, per, Metalurgia, Vol 18, No 4, Apr  
1966, pp. 224-226.  
JPRS 37610

EE-Romania  
Econ  
Oct 66

311,193

Researches Concerning the Use of Iron Sponge for  
Steelmaking in Electric-Arc Furnace, by O. Hatarasou.  
RUMANIAN, por, Mat. (Bucharest), Vol 18, No 5,  
1966, pp 253-257.  
BISI 5871

Sci/Mat  
June 68

358,482

New Salt Baths for Low-temperature Heat Treatment [of Steel], by Gh. Sucoveanu, A.N. Minkevich.  
RUMANIAN, per, Metalurgia, Vol 18, No 6, 1966,  
pp 325-329.  
HB 6944

Sci/Materials  
Mar 67

318,626

Macroetching of Steel With Acid Mixtures, by  
L. Birescu, et al.  
RUMANIAN, per, Metallurgia, Vol 18, No 11, 1966,  
pp 634-636.  
NS 7112

Sci/Materials  
Apr 67

522,501

Spectrographic Determination of Aluminium in  
Plain Carbon Steels, by V. Raszillier,  
RUMANIAN, per, Metallurgia, Vol 18, No 11, 1966,  
pp 637.  
DB 7113

Sci/Materials  
Apr 67

322,502

Radiometric Device for Determination of the  
Stockline in the Cupola, by Th. Dumitrescu, et al.  
ROMANIAN, per, Metallurgia, Vol 18, No 12,  
1966, pp 682-684.  
HB 7111

Sci/Materials  
Apr 67

322,500



Energy Theory of Internal Corrosion,  
by D. Moraru.  
HUMANIAN, por, Met. (Bucharost), Vol 7,  
No 2, 1967, pp 47-51.  
BISI 6093

Sci/Materials  
Jan 69

353,176

Investigations Concerning the Physico-Chemical  
Properties of Metallurgical Cokes, by S. Forizs.  
RUMANIAN, per, Metalurgia, Vol 19, No 3,  
1967, pp 125-129.  
RISI 6489

Sci/Mat  
Nov 68

370,111

Reduction of Iron Ores in a Shaft Furnace by  
Means of Recycled and Regenerated Gases, by I.  
Tripsa and O. Hatarascu.  
RUMANIAN, per. Metalurgia, Vol 19, No 3, 1967,  
pp 130-134.  
HB 7353

Sci-Mat  
Apr 68

352,200

Review of Developed and Undeveloped Iron Ore  
Deposits, by N. Zavoianu, 9 pp.  
RUMANIAN, per, Metalurgia, Vol 19, No 8, Aug  
1967, pp ~~444-448~~.  
JPRS 43300

EE-Rumania  
Econ  
Dec 67

346,684

Inoculation of Cast Irons with Liquid Steel,  
by J. Jaklovszky.  
RUMANIAN, per. Metalurgia, Vol 19, No 9, 1967,  
pp 509-512.  
HB 7394

Sci-Mat  
Apr 68

352,192

The Use of Mathematical Statistics for Complex Analysis of Some Factors Affecting the Coke Rate in Blast Furnace, by V. David, S. Popa.  
RUMANIAN, per, Metalurgia, Vol 19, No 12, 1967, pp 670-676.  
BISI 6468

Sci-Mat  
Jan 69

370,767

Observations on the Use of Petroleum  
Coke in Coking Loads, by S. Forizs.  
ROMANIAN, per, Metalurgia. Bucuresti,  
Vol 19, No 12, 1967, pp 677-679.  
NTC 72-10577-21D

Apr 72

Control of Nitriding and Sulfurizing Processes  
in Fused Salt Baths, by Gh. Suceveanu.  
ROMANIAN, per, Metalurgia, Vol 20, No 5, 1968,  
pp 268-272.  
HB 7714

Sci/Mat  
Nov 70



Studies of the Production of Pre-Reduced Pellets,  
by O. Hatarascu and Gh. Atanasiu.  
ROMANIAN, per, Metalurgia, Vol 20, No 8, 1968,  
pp 454-457.  
HB 7621

Sci/Mat  
Nov 70

On the Manufacture of Steelplant Ingot  
Molds of Spherical Graphite Cast Iron,  
by C. Cosmeanu.  
RUMANIAN, per, Metallurgia, Vol 20, No 9,  
1968, pp 527-532.  
HB 7691

Sci-Mat  
June 69

383,282

Development of Iron, Steel Industry Discussed,  
5 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 363-365.  
JPRS 49401

Sci-Mech, Ind, Civ & Mar Engr  
Dec 69

396,644

Achievements, Prospects of Metallurgical  
Research Given, by I. Dragan, 7 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 366-369.  
JPRS 49401

Sci-Mat  
Dec 69

396,645

Development of Iron, Steel Industry Studied,  
by I. Prisecaru, 6 pp.  
ROMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 370-374.  
JPRS 49401

EE-Romania

Econ

Dec 69

396,646

Results, Prospects of Rolling Mill Planning  
Given, by P. Wechsler, 16 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 375-386.  
JFRS 494Q1

Sci-Mat  
Dec 69

399,147

Results, Prospects of Coke Production Studied,  
by I. Stofanescu, I. Barbu, 5 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 387-390.  
JPRS 49401

Sci-Mat  
Dec 69

399,149

Progress in Field of Cast Iron Production  
Described, by C. Avram, D. Dobrovici, 8 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 391-394.  
JFRS 49401

Sci-Mat  
Dec 69

399,148



Development of Steel Production Discussed,  
by G. Ilin, 6 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 395-397.  
JPRS 49401

Sci-Mat  
Dec 69

399,150

1944-1969 Production of Rolled Steel Given,  
by I. G. Popa, 8 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 398-401.  
JFRS 49401

Sci-Mat  
Dec 69

399,151

1950-1969 Production of Steel Pipe Described,  
by I. Moldovan, A. Caciua, 6 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 402-405.  
JPRS 49401

Sci-Mat  
Dec 69

399,152

Development of Metal Casting Traced, by  
Cl. Stefanescu, 8 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 406-410.  
JPRS 49401

Sci-Mat  
Dec 69

399,153

Achievements, Prospects in Area of Refractory  
Materials Given, by G. Gheorghiu,  
L. Sarocopud, 6 pp.  
RUMANIAN, per, Metalurgia, Bucharest, Vol 21,  
No 8, Aug 1969, pp 417-420.  
JPRS 49401

Sci-Mat  
Dec 69

300 454

Equipment for Fluid Moulding Mixture Preparation and its Utilization in Ingot Mould Manufacturing, by C. Cosneanu, ROMANIAN, per. Metalurgia, Vol 21, No 9, 1969, pp 447-450.  
BISI 9269

Nov 71

Present Day Processes for Manufacturing Iron  
Powder by the Direct Reduction Method, by  
O. Hatarascu and E. Stoicovici,  
ROMANIAN, per. Metalurgia, Vol 21, Oct., 1969,  
pp 530-534.  
BISI 8971

Jun 71

Heat Treatment of High Strength, Weldable, Heavy  
Steel Plates (1), by A. Lederer,  
ROMANIAN, per. Metalurgia, Dec., 1969, pp636-643.  
BISI 9084

June 71



Etching Method for Austenitic Grains (Outlining  
Method), by B. RUSU,  
ROMANIAN, per. Metalurgia, No 1, Vol 22, 1970,  
pp 11-13.  
ISI 8886

Jun 71

Radiometric Method Forstudies Regarding  
Origin and Distribution of Non-Metallic  
Inclusions in Ingot Moulds, by  
T. Dumitrescu,  
ROMANIAN, per. Metalurgia, Vol 22, No 1,  
1970, pp 14-17.  
BISI 8883

Sci/Mat  
Feb 71

Considerations Regarding Manufacturing Utility  
of Nodular Cast-Iron Ingot Moulds, by  
C. Cosneanu,  
ROMANIAN, per. Metalurgia, Vol 22, No 2, 1970,  
pp 85-90.  
BISI 8894

Jun 71

Manganese Behaviour During Vacuum Arcsmelting of  
Steel, by L. Apa.  
RUMANIAN, per, Metalurgia, Vol 22, No 4, 1970,  
pp 209-213,  
\*RISI 8896

sci/mat  
Jan 71

Studies Regarding Crust Formation in the Blast Furnaces of Steel Plant-Resista, by A. Dijmarescu, ROMANIAN, per. Metalurgia, Vol 22, No 5, 1970, pp 273-281.  
BISI 8907

June 71

Studies Regarding Manufacturing Optimization of  
Cold Rolled Shapes by Electro-Method, by  
V. Branișteanu, et al.  
ROMANIA, per, Metalurgia, Vol 22, No 5, 1970,  
pp 308-312.  
WISI 8895

sci/mat  
Jan 71

Reduction of Iron Sulphide with Methane,  
by M. Ienciu,  
ROMANIAN, per. Metalurgia, No 6, 1970, pp 354-  
359.

BISI 8843

June 71

Wire Mill No. 3 in Industria Sirmei Plant -  
Cimpia Turzii, by E. Nita.  
ROMANIAN, per. Metalurgia, No 6, 1970,  
pp 360-364.  
BISI 8844

Mar 72



Synthesis of Investigations Regarding Replacement of Metallurgical Coke by Other Fuels in Ore Agglomeration', by A. Useanu, ROMANIAN, per. Metalurgia, Vol 22, No 8, 1970, pp 476-479.  
BISI 9024

June 71

Contributions to the Optimum Conditions for  
Achieving Reduction of Metal Losses in L.D.  
Converters, by C. Tarpan,  
ROMANIAN, per. Metalurgia, No 8, 1970,  
pp 480-483.  
BISI 9025

Aug 71

Considerations Regarding the Characteristics  
of Seamless Steel Pipes for the Petroleum  
Industry, by H. Voinescu,  
ROMANIAN, per. Metallurgia, No 8, 1970,  
pp 496-500.  
BISI 9026

Aug 71

Researches Concerning the Possibilities of Reducing  
Specific Coke Consumption in Blast Furnaces by  
Injecting Auxiliary Fuels, by G. Avram.  
RUMANIAN, per, Metallurgia, Vol 22, No 9, 1970, pp  
546-550.  
BISI 9209

Nov 71

Researches Concerning the Inoculation of Grey Cast  
Iron With Complex Inoculants Containing Barium,  
by D. M. Stefanescu.  
RUMANIAN, per, Metalurgia, No 9, 1970, pp 560-563.  
BISI 9210

Nov 71

The Influence of Final Rolling Temperature on  
the Mechanical Properties of Plate, Controlled  
Temperature Rolling, by I. Calutoiu.  
ROMANIAN, per, Metalurgia, 1970, pp 564-5.  
BISI 9845

Oct 72

Researches on the Agglomeration of Concentrates  
Resulting from the Flotation of Siderites, by  
C. Avram, et al.  
RUMANIAN, per, Metalurgia, Vol 22, No 10, pp 611-617.  
BISI 9207

Nov 71

The Possibilities of Reducing Coko Consumption in  
Blast Furnaces, by D. Dobrovici.  
RUMANIAN, per, Metalurgia, No 10, 1970, pp 643-647.  
BISI 9208

Nov 71



Remelting of Manganese Steel in a Consumable Furnaces  
Under an Argon Atmosphere, by L. Apa.  
RUMANIAN, per, Metalurgia, No 11, 1970, pp 687-689.  
BISI 9252

Nov 71

Carbon Influence Upon Sulphur Determination in Steel  
by Vacuum Spectrometry, by M. Benta.  
RUMANIAN, per, Metalurgia, No 11, 1970, pp 690-694.  
BISI 9253

Nov 71

Considerations Regarding the Working Intensity of  
Blast Furnaces (1), by D. Dobrovici, et al.  
RUMANIAN, per, Metalurgia, No 11, 1970, pp 713-716.  
BISI 9255

Nov 71