

Manufacturing Automobile Cylinder Blocks From
Pressure Cast Aluminum Alloy, by T. I. Orlova, 4 pp.

RUSSIAN, per, Lit Proiz, No 6, 1957, pp 7, 8.
9660796

ATIC F-TS-9892

Sci - Engr

May 61

150,199

Surface Alloying of Profiled Castings, by A. M.
Mikhaylov, M. I. Serebryakov, 14 pp.

RUSSIAN, per, Lit Proiz, No 6, 1957, pp 18-22.
9660796

ATIC F-TS-9892

Sci - Engr

May 61

150,198

Verwendung von Zirkonsand im Giessereiwesen, by L. M.
Marienbakh, L. O. Sokolovskiy. (unpubl tr)

RUSSIAN to GERMAN, per, Lit Proiz, No 7, 1957,
pp 28-30.

IDU 694
Institut fuer Dokumentation
Übersetzungsnachweis
Berlin, W.8
Unter den Linden 8

Apr 60

On the Theory and Practice of Centrifugal Casting,
by B. I. Loshkarev.

RUSSIAN to GERMAN, per, Lit Proiz, No 8, 1957,
pp 1-6.

ID-U 710

Institut fuer Dokumentation-
Übersetzungsnachweis
Berlin, W 8
Unter den Linden 8

Dec 59

Automation of Cupola Charging and Stockline Control With the Use of Radiisotopes, by G. K. Mirsalnichenko.

RUSSIAN, per, Lit Prois, No 8, Aug 1957, pp 14, 15.

Henry Brucher 4341.
\$3.75

Sci - Engr
Oct 58

75, 722

Solubility of Magnesium in Cast Iron, by A. F. Landa.

RUSSIAN, per, Litainoe Proizvodstvo, No 8, Aug 1957,
pp 27-29.

Brutcher Tr 4070
\$4.90

Sci - Min/Mat

Apr 58

61,431

Magnesium Treatment of Low-Sulphur Basic-Cupola
Iron, by G. I. Klotkin.

RUSSIAN, par, Lit Proizv, Vol IX, No 9, 1957,
pp 21-26.

Henry Bratcher 4303
\$9.45

Sci - Engr
Oct 58

74, 855

61-18911

Malinochka, Ya. N.
PHASE TRANSFORMATIONS AND INTRACRYSTAL-
LINE LIQUATION IN IRON CARBON SILICON
ALLOYS (Fazovye Sostoyaniya i Vnutrikristallicheeskaya
Likovaniya v Fe - C - Si Splavakh). [1961][13]p.
(foreign text included) 6 refs.
Order from ODS or SIA \$1.60 61-18911

1. Title: Cementite structures
1. Malinochka, Ya. N.

Trans. of Litinoe Proizvodstvo (USSR) 1957, no. 10,
p. 19-22.

DESCRIPTORS: *Iron, *Carbon, *Silicon, *Alloys,
*Phase transitions, Microstructure, Iron castings,
Cast iron, Eutectics, Ferrites, Austenite, Graphite,
Cooling, Pearlite, Crystal structure.

A study of micro and macrostructure of a large number
of iron castings indicated that the distribution of the
ferritic matrix is not uniform in eutectic and hyper-
eutectic grey cast irons. Areas rich in ferrite are dis-
(Metallurgy--Structure), TT, v. 6, no. 10) (over)

Office of Technical Services

Nonmetallic Inclusion in Magnesium-Treated Iron
/for Rolling-Mill Rolls/, by A. E. Krivosheyev,
I. E. Iev.

RUSSIAN, per, Liteinoe Proizvodstvo, No 11, 1957,
pp 18, 19.

Brutcher Tr 4094
\$4.80

Sci - Min/Met, Chem

Jun 58

65,725

Methods of Producing Internal Motion in (Centrifugal)
Castings During Their Solidification, by S. E. Rosenfeld,
et al.

RUSSIAN, DOK, Lit Proiz, No 11, Nov 1957, pp 24-26.

Bratcher Tr 4170
\$5.75

Sci - Physics
Jul 58

66,281

Effets du mouvement de la phase liquide sur la
solidification des pieces moulees, by S. E.
Rosenfeld, S. B. Yudin, M. M. Levin.

RUSSIAN to FRENCH, per, Lit Proiz, Nov 1957, pp 24-26.

CDS I.T.3425

Sci

Nov 61

Continuous Casting, by A. N. Myasodov. UNCL

RUSSIAN, per, Lit Proiz, No 12, 1957, pp 1-4.

Co-op 1st Scheme 553

Sci - Engineering
Mar 59

82,038

On the Diffusion of Mg in Fe, by I. L. Mirkin.
RUSSIAN, per, Litaynaya Proizvodstvo, No 12, 1957,
pp 13-16.
*CFSTI TT 70-59085

Sci- *[Handwritten signature]*
June 70

Influence of Bismuth and Boron on Shortening
of the Annealing Cycle of White Iron, by
I. F. Murtoz, V. A. Zakharov.

RUSSIAN, par, Lit Proiz, No 12, 1957, pp 20-21.

BCIRA 925

Sci
Jun 63

Mechanization of Production Lines for Shell
Casting, by F. I. Smirnov, M. M. Budylin.

RUSSIAN, per, Lit Proiz, No 1, 1958, pp ~~4~~-7.
3

LSB-104

Sci
Sep 61.

169,358

The Use of Vibration During Solidification for
the Elimination of Hot Shrinkage Cracks,
by I. I. Novikov, G. A. Korol'kov, A. E. Semenov.
UNCL

RUSSIAN, per, Lit Proiz. No 1, 1958, pp 7, 8.

HB 4753

Aluminium Lab, Ltd.

D-TM-233-59

CR/3598

Sci - Min/Mat; Phys
Sep 59

96,780

Casting of Cast Iron Parts Under the Action of
Ultrasonics, by H. P. Nikolaychik, Ye. N.
Nikolaychik.

RUSSIAN, per, Lit Prois, No 2, 1958, p 25.

OTIA Tr 32

HB 5275

Sci - Engr

Sep 59

97,555

Medical Properties of Dio-Processed Graft Membr.
by G. K. Godevanishvili, R. E. Zvanitskaya.

RUSSIAN, per, Lit Proiz, No 3, Mar 1958, pp 10,
11.

Henry Brubaker 4336
\$2.80

Sci - Misc/Med
Oct 58

73, 723

Vaschenko, K. I. and Golovan, N. A.
THE COMPOSITION AND STRUCTURE OF DECAR-
BURISED AND TRANSITION ZONES IN ANNEALED
IRONS. Jan 60.
Order from MT 4 10a MT Trans-30

Trans. of Litelnoe Proizvodstvo (USSR) 1958, no. 3,
p. 16-20.

DESCRIPTORS: Iron, Steel, Microstructure.

BCIRA 923

(Metallurgy--Ferrous Metals, TT, v. 6, no. 6)

61-22783

- I. Vaschenko, K. I.
- II. Golovan, N. A.
- III. MT Trans-30
- IV. Tollemache, M. de O.
(Gt. Brit.)

176641

Office of Technical Services

Some Factors Affecting the Hot Tearing of Steel
Castings. Part II. Absorption of Contraction and
Expansion of Castings by Molding Sand, by A. M.
Lynch, Chou Yao-huo.

U-SIAN, per, Lit Proiz, No 4, 1958, pp 19-23.

HB 4865

cl - Engr

127,038

p. 60

CASTING IRON IN ALUMINUM ALLOY MOLDS CASTING,
by N. B. Pasternak, V. I. Shurupov, N. A.
Kosenko.

RUSSIAN, per, Lit Proiz, No 4, 1958, pp 24-25.

LSB-107

Sci
Sep 61

169,120

RUSSIAN -to FRENCH
OTS TT-62-28240

Modification of Heat-Stable Alloys With an
Al-Si Base, by T. I. Orlova, 11 p.

RUSSIAN, per, Liteynoye Proizvodstvo, 1958, No 4,
pp 31-32.

SLA 62-17623
SLA 59-17623

Sci
Feb 60
Vol 2, No 9

107,089

Influence of Vibrations on Metal Properties,
by V. A. Berkovskiy. U.S.S.R.

RUSSIAN, per, Lit Proiz, No 5, 1956, pp 19-21.

BIBX 1415

(L3 150,00.)

Sci - MIB/MSK

Doc 59

101,457

The Formation of Spheroidal Graphite and
~~xxx~~ Progress in High Tensile Iron Technology,
by E. B. Millman.

RUSSIAN, year, Lit Proizv, No 6, 1957, pp 11-17.

ECIRA 7

Sci
Jun 63

Effect of Steel Composition on Hot Tearing
in Castings, by N. A. Trubitsyn, P. H.
Bidulya. UNCL

RUSSIAN, per, Lit Proiz, No 6, 1958,
pp 22-26.

.. BISI 1538

(L5 15a.01.)

Sci - Min/Met; Engr
Mar 60

109,414

Pressure Die Casting Under Vacuum, by H. L.
Zaslavkiy.

RUSSIAN, par, Int Prois, No 7, 1958, pp 6-8.

EB 461A

LSE-101

Sci - Magr

Feb 60

108,507

Resistance of Cast Steel to Not Tearing and Ways
of Improving It, by N. S. Krenichanovskiy, M. P.
Demina.

RUSSIAN, per, *Litainoe Proizvodstvo*, No 7, 1958,
pp 17-21.

ED 4633

Sci - Min/Mat, Engr

Nov 59

100,353

New Process for Production of Alloys, by G. I. Pogodin-Alekseyev, V. V. Zaboletyev-Zotov.

RUSSIAN, per, Lit Proiz, No 7, 1958, pp 25, 26.

18
RB 4779

possibly FATIC MEL-244/III

Sci - Min/Mat

Apr 60

114 273
AEC NP-D-529

Substitutes for Ethyl Silicate, by A. A.
Kotovshnikov. UNCL

RUSSIAN, per, Lit Prois, No 9, 1958, p 32.

SLA 60-19884
DSIR LIJ ERS 1472

(2s. 60.)

Sci - Chem

Apr 60

113,013

Graphite Casting Molds, by M. N. Sosnenko, 4 pp.

RUSSIAN, per, Lit Proiz, No 10, 1958, pp 6, 7.

(VEIA Tr 34

Sci - Engineering
Jan 60

105,917

PS: CR-2694

(2087-N)

Certain problems on the Theory of Alloying Special
Cast High-Alloys, by Yu. A. Nekhendzi, 16 pp.

RUSSIAN, per, Liteynoye Proizvodstvo, No 10, Moscow,
№ 1958, pp 23-28.

OTS 59-13411
US JPRS L-635-N

USSR
Econ
Feb 59

in the...
7...
81,565

Landa, I.
SUSTITUCION PARCIAL DEL COKE POR LIGNITO
EN LA HORNADA DE UN CUBILOTE DE SOPLADO
CALIENTE (Chastichaya Zamena Koksá Burym Uglem v
Shikhze Vagranki s Podogrevom Dut'ya) (Partial Substi-
tution of Lignite for Coke in the Furnace Charge of Hot
Blown Smelter). Sp. CID: 62-268.
Order from OTS, ETC or CID \$0.80 62-29268

Trans. in Spanish of Litelnoe Proizvodstvo (USSR) 1958,
no. 10, p. 31.

DESCRIPTORS: Fuels, Coke, *Lignite.

(Metallurgy, TT, v. 10, no. 8)

62-29268

- I. Landa, I.
- II. CID-62-268
- III. Centro de Información
y Documentación,
Madrid (Spain)

Office of Technical Services

DC-2452

The Comparative Economics of Smelting Open-Hearth
and Electric-Furnace Steel in Foundry Production, by
H. S. Sachko, 9 pp.

RUSSIAN, par, ^YLitaknoye Proizvodstvo, No 11,
Moscow, Nov 1958, pp 4-6.

US JPRS/DC-L-1333

USSR
Econ
Jan 59

78,775

60-18349

Nozkov, B. A., Rozenberg [Yu]. G. and others.
COKE-GAS CUPOLA FURNACE [Koksogazovaya
Vagranka]. [1960] [12]p. (foreign text included).
Order from LC or SLA ml\$2.40, ph\$3.30 60-18349

- I. Cupola furnaces--Design
- I. Nozkov, B. A.
- II. Rozenberg, Yu. G.

143,047

Trans. of Liteynoye Proizvodstvo (USSR) 1958, no. 11,
p. 14-15.

A cupola is described in which normal conditions for
gas burning and reduced coke expenses were obtained
by reducing the number of tuyeres from 6 to 4.

Office of Technical Services

(Metallurgy--Ferrous Metals, TT, v. 5, no. 3)

Desulfurization of Liquid Cupola Iron by
Magnesium, by B. S. Milman, et al.

RUSSIAN, per, Lit Proiz, Vol IX, No 11, 1958,
pp 15-17.

Brutcher 4518

Sci - Min/Met

Jun 59

90,033

On the Desulfurization of Liquid Iron With
Magnesium, by V. I. Lakomskiy.

RUSSIAN, per, Lit Proiz, Vol X, No 11, 1958,
pp 18.

Henry Bratcher 4519
\$2.50

Sci - Chem

May 59

86,595

Furnace [Specifically, Deoxidizing] Practice for
Steel Casting, by H. N. Dobrokhotov.

RUSSIAN, per, Lit Proiz, Vol IX, No 12, 1958,
p 8.

HB 4945

Sci - Chem - Deoxidizing

Mar 61.

145,053

Shrinkage Phenomena in Continuous-Cast Steel, by
V. G. Bortov, V. A. Leites.

RUSSIAN, per, Lit Proiz, Vol IX, No 12, 1958,
pp 10-12.

Henry Bratcher 4554
\$8.60

Sci - Engr

May 59

86,598

A. For a Doctor Organization in Scientific
Research and Structural Design Work, 4 pp. 10/1/54

RUSSIAN, per, Lit Prois, Jan 1959, p 1.

ACSI, E-6054

Sci - Misc

Jan 60

106,184

B. Factors Determining the Amount of Mould
Taper on Patterns; C. New Technological
Methods in Studying the Fluidity of Metals and
Formation of Shrinkage Cavities; E. F. Cryolite,
An Effective Flux in Brass Smelting, 28 pp.

19

RUSSIAN, paper, Lit Prois, Jan 59, pp 27, 48.

IV 2140241

ACSI, II-6054

Sci - Min/Int

6. DSA 264 RTS 1511

Jan 60

106,177

62-29267

- I. Gorahkov, A. A.
- II. Markhasev, B. I.
- III. CID-62-267
- IV. Centro de Información y Documentación, Madrid (Spain)

Office of Technical Services

Gorahkov, A. A., Markhasev, B. I. and others.
MEJORA DE LA CALIDAD DE ARENAS DE MOLDEO
POR ADICION DE PEQUEÑAS CANTIDADES DE SALES
(Uluchshenie Kachestva Formovochaykh Smesel Putem
Vvedeniya Mal'yx Dobavkov Soli) (Improvement in
Molding Sands Characteristics Through the Addition of
Small Amounts of Salts). 7p. 6 refs. CID:62-267.
Order from OTS, ETC or CID \$1.01 62-29267

Trans. in Spanish of Liternoye Proizvodstvo (USSR)
1959, no. 2, p. 34-38.

DESCRIPTORS: Effectiveness, *Molding materials,
Additives, Salts, *Sand.

(Metallurgy, TT, v. 10, no. 8)

Grain of Solidifying Metal Refined by Vibration,
by I. I. Novikov.

RUSSIAN, per, Lit Proiz, No 2, 1959, p 42.

Brutcher 4563

Sci - Min/Met

Jun 59

90,043

Manufacture of Castings, 8 pp. UNCL

RUSSIAN, per, Lit Proiz Vedstvo, No 3, 1959.

ACSI E-4974
ID 2161944

USSR
Econ
Mar 61.

143,818

Turbovskii, M. M.
MODIFICATION OF CAST IRON BY ADDITIONS OF
MOLTEN STEEL. [1961] 6p.
Order from ATS \$8.40 ATS-07N56R

Trans. of Litainoe Proizvodstvo (USSR) 1959, no. 3,
p. 4-7.

DESCRIPTORS: *Cast Iron, Processing. *Steel, Melt-
ing, Additives.

RT-3345

(Metallurgy--Ferrous Metals, TT, v. 7, no. 4)

62-12149

- I. Turbovskii, M. M.
- II. ATS-07N56R
- III. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

The Optimum Composition of Alloy Al for Casting
Pistons, by D. P. Lovtsov, 11 pp.

RUSSIAN, Proc, Lit Prois, No 3, 1959, pp 12-14.

ATTC MCL-27/III

(SIR 44 117 100)

Sci - Min/Mat

Dec 60

134,625

105 9127

Use of Steel Molds (in Conjunction With Sand
Cores) for Large Steel Castings, by S. I.
Smolenskiy, N. N. Guglin, G. F. Zasetkiy.

RUSSIAN, per, Lit Proiz, No 3, 1959, pp 23-26.

HB 4849

Sci - Min/Mat

145, 048

Feb 61

CAUSES OF SATURATION OF METAL-MOLD SURFACES WITH
SULFUR, BY YU. L. LITVAKOVSKAYA, YU. P.
BARDACHEV,

RUSSIAN, PRE , LIT PROIZ, NO 3, 1959,
PP 29, 30.

HB 5680

SCI - MIN/MET
OCT 62

212,099

Heat Resistant Enamel Coating Stable to the
Action of Molten Aluminium, by G. V. Kukolev,
V. N. Tarasenko.

RUSSIAN, per, Lit Proiz, No 3, 1959, pp 45, 46.

DSIR LLJ M.1049
(loan)

DSIR LLJ M. 1049 (M)

SLA 60-13758

128,744

Sci - Chem

Oct 60

61-25594

Morozov, V. N. and Yaropolov, I. N.
CUPOLA FOREHEARTH HEATED BY GASES DI-
VERTED FROM TUYERE ZONE. Sep 61.
Order from HB \$2.25 HB-4624

I. Morozov, V. N.
II. Yaropolov, I. N.
III. HB-4624
IV. Brutcher, Henry, Altadena,
Calif.

Trans. of Liteinoe Proizvodstvo (USSR) 1959, no. 3,
p. 46.

DESCRIPTORS: USSR, *Cupola furnaces, Design,
Coke, Heat production, Coal gas.

SECRET

(Metallurgy, TT, v. 6, no. 11)

Office of Technical Services

Cupola Forehearth Heated by Gases Diverted
From Tuyere Zone, by V. N. Morozov,
I. M. Yaropolov.

RUSSIAN, per, Lit Proiz, 1959, No 3, p 46.

HB 4624

Sci -Engr
Oct 61.

Ways of Reducing Labour Consumption in the
Foundry Trade.

RUSSIAN, per, Lit Proiz, May 1959, p 1.

BISI 1986

USSR

Econ

136,588

Inclusions (Black Spots) in Magnesium-Treated
Cast Iron in a Phosphoric-Chromic Acid Electrolyte,
by L. P. Zaitseva.

RUSSIAN, par, Lit Prois, No 5, 1959, pp 17,-18.

HD 4651

Sci - Min/Mat

Nov 59

101,236

Hydrodynamic State of Metal and Its Effect on the
Macrostructure of Centrifugal Castings, by N. N.
Reutov.

RUSSIAN, per, Lit Proiz, Jun 1959, pp 22-27.

*HB 4771

Sci - Min/Met
Jan 60

On the Mechanism of Modifying Some Aluminum Alloys, by L. Kubichek, M. B. Mal'tsev, 9 pp.

RUSSIAN, per, Lit Print, No 5, 1959, pp 28-30.

ATTC MX-246/III

Sci - Min/Met

Dec 60

Sci - 16982

134,616

pp 28-31 — REC NP-1-535

Metallothermal Method in Producing Zirconium Master
Alloy, by A. I. Layner, M. A. Kolenkova,
Ye. K. Barent, 12 pp.

RUSSIAN, per, Lit Prois, No 5, 1959, pp 30-32.

ATTC NCL-246/III

Sci - Min/Net

Dec 60

134,617

The Use of Borine Chloride in Casting Magnesium Alloys,
by D. A. Kusnetsov, A. I. Malakhov, 5 pp.

RUSSIAN, per, Lit Froiz, No 5, 1959, pp 32.

ATIC MCL-246/III

Sci - Chem

Dec 60

965-9128
134,621

Refining the Structure and Eliminating Cracks
in the Magnesium Alloy, by V. S. Astaulov,
A. D. Klinov, A. S. Astaulova, 7 pp. Castings

RUSSIAN, par, Lit Proiz, No 5, 1959, pp 33-34.

ATIC MCL-246/III

Sci - Min/Met

Dec 60

134, 624

Transformation of Graphite Inclusions in Cast
Iron Saturated [in Solid State] With Magnesium,
by F. N. Tavdize, M. A. Essen.

RUSSIAN, per, Lit Proiz, Vol X, 1959, No 6,
pp 15-18.

HB 4713

Sci - Min/Met

114,267

Apr 60

Press Forming of [Liquid] Steel, by
N. N. Rubtsov, et al.

RUSSIAN, per, Liteinoe Proiz, No 7, 1959,
pp 17-18.

IIB 5363

Sci-Min/Met
Jan 63

226,618

<p>Fomichev, A. V. STAMPING OF LIQUID METAL IN A ONE-PIECE DIE. [1961] 7p. (5 figs. omitted) 3 refs. Order from OTS or SLA \$1. 10 61-14975</p>	<p>61-14975 1. Title: Stamping 2. Title: One-piece die 3. Fomichev, A. V.</p>
<p>Trans. of Liteynoye Proizvo'dstvo (USSR) 1959, no. 8, p. 13-14. Another translation is available from LC or SLA mi\$1. 80, ph\$1. 80 as 61-10212 [1960] [6]p.</p>	
<p>DESCRIPTORS: *Liquid metals, Casting, *Dies, *Metal forming presses, Aluminum alloys.</p>	
<p>(Machinery--Manufacturing, TT, v. 6, no. 2)</p>	<p>10971. Office of Technical Services</p>

61-22784

Tatanov, D. P. and Kuranova, N. V.
THE PRODUCTION OF COMPLICATED ALUMINUM
ALLOY CASTINGS BY PRESSURE DIE CASTING

Jan 60.
Order from MT 4 1 10a

MT Trans-99

Trans. of Litface Proizvodstvo (USSR) 1959, no. 8,
p. 23.

DESCRIPTORS: *Transmissions, Vehicles, *Aluminum
alloys, *Aluminum castings, Dies, Metal forming
presses

I. Tatanov, D. P.
II. Kuranova, N. V.
III. MT Trans-99
IV. Tollemache, M. de O.
(Gt. Brit.)

180549

Office of Technical Services

(Machinery--Manufacturing, TT. v. 6, no. 5)

11 221

GE-1

KURTOV I. F.

Production of mild steel with additions of bismuth and boron
Die Herstellung von mit Wismut und Bor modifiziertem
Temperguss

Liteinoe Proizvodstvo, No. 8, 31-34 (1959)
Giesserei-Technik, 6, No. 5, 153-154 (1960)

German

E u r a t o m

Double-Layer Shell Moulding for Iron Castings, by
A. A. Smirnov, I. V. Bobysheva. UNCL

RUSSIAN, per, Lit Proiz, No 9, 1959, pp 14, 15.

*HB 4815

Sci - Engr
May 60

Effect of Lithium on Form of Graphite in Cast Iron,
Tavadze, D. D. Ebanoidze, UNCL

RUSSIAN, per, Lit Proiz, Sep 1959, p 38.

HB 4762

Sci - Min/Met
Jan 60

104,557

Pressure Die Casting of Steel, by V. M. Belov,
S. A. Kazennov.

RUSSIAN, per, Lit Proiz, No 10, 1959, pp 12-17.

HB 4847

Sci - Engr

Oct 60

129,116

^{RE}
THERMAL TREATMENT OF MOLTEN METALS AND ITS
EFFECT ON MECHANICAL PROPERTIES OF CASTING,
BY A. G. SPASSKI, B. A. FOMIN,
S. I. OLEYNIKOV.

RUSSIAN, PER, LIT PROIZ, NO 10, 1959,
PP 105-108.

ALUMINIUM LAB

SCI - ENGR

173,190

NOV 6L

INTERNATIONAL FOUNDRY CONGRESS (NO 26)
[1961] Sp. [DSIR LLU] M. 2340
Order from LC or SLA m\$1.80, ph\$1.80 CI-15476

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 1-2.

Topics are noted of papers presented at the Congress
held in 1958 at Madrid, Spain.

CI-15476

1. Iron castings
2. Conferences
3. Title: Foundry congress
1. DSIR LLU M 2340

15476

Office of Technical Services

(Machinery--Manufacturing, TT, v. 5, no. 12)

Kolchinskly, V. M.
CASTING IN CERAMIC MOULDS. [1961] [5]p. [DSIR
LLU] M. 2341.
Order from LC or SLA mi\$1.80, ph\$1.80 61-15477

Trans. of Liteynoye Proizvodatvo (USSR) 1959, no. 12,
p. 2-3.

Instructions.

(Machinery--Manufacturing, TT, v. 5, no. 12)

61-15477

- I. Iron castings--Production
- I. Kolchinakly, V. M.
- II. DSIR LLU M. 2341

106629

Office of Technical Services

Kurochkin, P. D.
CASTING BLAST FURNACE IRON. [1961] [4]p. [DSIR
L.L.U] M. 2342.
Order from L.C or S.L.A mi\$1. 80, ph\$1. 80 61-15478

Trans. of Liteynoye Proizvodatvo (USSR) 1959, no. 12,
p. 3-4.

In spite of appreciable differences in silicon content and of a high proportion of phosphorus, the mechanical properties of the iron of blast furnace melts treated with magnesium exceed by a factor of 3 or 4 the mechanical properties of the original iron, also the properties of sulphur and inoculated cupola cast irons (GOST 1412-54) and in many cases approach the mechanical properties of magnesium cupola cast iron (GOST 7293-54). Industrial experience has demonstrated the advantages of magnesium-treated iron from the blast furnace melt for casting machine components.

(Machinery--Manufacturing, TT, v. 5, no. 12)

61-15478

- I. Iron castings--Production
- I. Kurochkin, P. D.
- II. DSIR L.L.U M. 2342

10002.

Office of Technical Services

61-15480

Shestopal, V. M.
IN THE FOUNDRIES OF CZECHO-SLOVAKIA. [1961]
[9]p. 1 ref. [DSIR LLU] M. 2344.
Order from LC or SLA mi\$1.80, ph\$1.80 61-15480

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 5-7.

Processes and special machines introduced in Czecho-
slovakia are reviewed.

1. Iron industry--
Czechoslovakia
 2. Iron castings--Production
- I. Shestopal, V. M.
 - II. DSIR LLU M. 2344

106132

Office of Technical Services

(Machinery--Manufacturing, TT, v. 5, no. 12)

Casting Intricate Iron Components in Multi-
Sectional Chill Moulds, by G. I. Gordon.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 7, 8.

DSIR LIB M.2345
(loan)

Sci - Min/Met

156,889

Jun 61

SLA-61-154, 1

New Method of Trimming and Fetting Castings,
by M. S. Kashanskiy, et al.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 8, 9.

DSIR LLU M.2346
(lean)

Sci - Engr

Jun 61

156,890

SKA - 41 - 15 1/2

61-15483

Frolov, N. P.
SB BINDER USED FOR LARGE IRON CASTINGS.
[1961] [5]p. [DSIR LLU] M.2347.
Order from LC or SLA ml\$1.80, ph\$1.80 61-15483

I. Iron castings--Binders
I. Frolov, N. P.
II. DSIR LLU M.2347

Trans. of Liteynoye Proizvodstvo (USSR) 1959, v. 12,
no. 9-10.

The experiences of the heavy casting shop of the
Kolonna Heavy Machine Construction Works are re-
viewed concerning the use of the quick-hardening
SB binder. This binder is an emulsion of sulfited
distillation residues with additions of
GTF (GOST 5339-50) flaky generator tar as emulsi-
fier. Advantages and shortcomings of the binder are
noted.

100621

Office of Technical Services

(Machinery--Manufacturing, TT, v. 5, no. 12)

61-15484

Belov, V. M.
THE OPERATION OF DIE-CASTING MACHINES WITH
HORIZONTAL PRESSURE CHAMBERS. [1961] [5]p.
[DSIR LLU] M2348.
Order from LC or SLA ml\$1.80, ph\$1.80 61-15484

1. Dies--Casting
 2. Steel--Casting
 3. Machines--Operation
- I. Belov, V. M.
 - II. DSIR LLU M. 2348

Trans. of *Liteynoye Proizvodstvo* (USSR) 1959, no. 12,
p. 11-12.
Another translation is available from HB \$2.90 as
HB-4879, Sep 60, 1000 words.

160955

Office of Technical Services

(Metallurgy, TT, v. 3, no. 11)

Suction Casting, by A. A. Ridzayy,

RUSSIAN, per, Lit. Proiz, No 12, 1959. pp 12, 13

DSIR LHM M.2349
(loan)

Sci - Engr

Jun 61

150,882

<p>Chaykovskiy, K. A. AN INERTIAL SHAKING-OUT FRAME. [1961] [2]p. [DSIR L.L.U] M. 2350. Order from LC or SLA m\$1.80, ph\$1.80 61-15485</p> <p>Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12, p. 13-14.</p> <p>A 10-ton inertial shaking-out frame is described that was designed and constructed at the Sibyazhmash Works.</p> <p>(Machinery--Machine Parts, TT, v. 5, no. 12)</p>	<p>61-15485</p> <p>I. Inertia devices--Design 1. Chaykovskiy, K. A. II. DSIR L.L.U M. 2350</p> <p><i>1006,07</i></p> <p>Office of Technical Services</p>
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<p>Kushch, K. M. APPARATUS WITH ONE ELECTRONIC VALVE CARRYING OUT THE FUNCTIONS OF MANY TIME AND FEED-BACK RELAYS. [1961] [6]p. 3 refs. [DSIR LLU] M. 2351. Order from LC or SLA mi\$1.80, ph\$1.80 61-15486</p> <p>Trans. of <u>Liteynoye Proizvodstvo</u> (USSR) 1959, no. 12 p. 14-15.</p> <p>An electronic mechanism for time control is described which replaces any number of successively arranged time relays with adjustable or independent timing.</p> <p>(Machinery--Manufacturing. TT, v. 5, no. 12)</p>	<p>61-15486</p> <ol style="list-style-type: none">1. Control systems--Design2. Foundries--Operation3. Industrial production-- Control systems <ol style="list-style-type: none">I. Kushch, K. M.II. DSIR LLU M. 2351 <p>100531</p> <p>Office of Technical Services</p>
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<p>Zorin, A. L. MECHANIZATION OF SINGLE AND SMALL SCALE PRODUCTION OF CORES. [1961] [5]p. [DSIR LLU] M. 2352. Order from LC or SLA m\$1. 80, ph\$1. 80 61-15487</p> <p>Trans. of <u>Liteynoye Proizvodstvo</u> (USSR) 1959, no. 12, p. 15-16.</p> <p>A machine for densifying by vibration is described.</p> <p>(Machinery--Manufacturing, TT, v. 5, no. 12)</p>	<p>61-15487</p> <p>I. Castings--Production 2. Castings--Machining I. Zorin, A. L. II. DSIR LLU M. 2352.</p> <p>100632</p> <p>Office of Technical Services</p>
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The Mechanism of ~~the~~ Graphite Formation in
Magnesium Iron, by R. P. Rusev.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 17-19.

NLL M. 2353

Sci - Min/Metals

174, 991

Dec 61

Effect of Inoculation Agents on the Shrinkage of
High Alloy Chromium and Chromium-Nickel Steels,
by N. S. Kreshchanovskiy, M. P. Demin.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 19-21.

NLL M. 2354

Sci - Min/Metals

174.990

Dec 61

Hot Shortness of Aluminium Alloys Due to
Overheating the Melt, by I. I. Novikov, G. A.
Korolkov.

RUSSIAN, per, Lit. Proiz, No 12, 1959, pp 21-22.

NLL M. 2355

Sci - Meta/Minerals

173, 975

Nov 61

The Overheating of Iron in the Cupola, by A. V.
Kaibichev, V. P. Chernobtovkin.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 22-24.

DSIR M.2356

Sci - Chem

Sep 61

168,604
SLA-61-15428

Levi, L. I. and Zhukov, A. A.
NITROGEN IN HIGH MANGANESE STEELS. [1961]
[12]p. 23 refs. DSIR [LLU] M. 2357.
Order from LC or SLA int \$2.40, ph \$3.30 61-15489

Trans. of Litovnoye Proizvodstvo (USSR) 1959, no. 12,
p. 24-27.

61-15489

1. Steel castings--
Microstructure
2. Nitrogen--Metallurgical
effects

- I. Levi, L. I.
- II. Zhukov, A. A.
- III. DSIR LLU M. 2357

160956

Office of Technical Services

(Metallurgy--Ferrous Metals, TT, v. 5, no. 11)

<p>Popov, A. D. CRYSTALLIZATION OF IRON IN CONTINUOUS CASTING. [1961] [4]p. [DSIR LLU] M. 2358. Order from OTS of SLA \$1. 10 61-15490</p> <p>Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12, p. 27-28.</p> <p>DESCRIPTORS: *Cast Iron, *Crystallization, *Pipes, Casting, Iron.</p> <p>The principal factors in determining efficient techno- logical parameters for the continuous casting of iron tubes and other components are (1) the crystallization constants in continuous casting of iron (2) the thick- ness of the solidifying shell in the mould, and (3) the depth of the liquid phase.</p> <p>(Metallurgy, TT, v. 6, no. 1)</p>	<p>61-15490</p> <p>I. Popov, A. D. II. DSIR LLU M. 2358</p> <p>161789</p> <p>Office of Technical Services</p>
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61-15491

Gol'dsheyn, Ya. Ye. and Pyatakova, L. L.
**THE EFFECT OF TITANIUM ON THE PROPERTIES
OF BORON-CONTAINING STEELS. [1961] [10]p.**
1 ref. [DSIR LLU] M. 2359.
Order from OTS or SLA \$1.10 61-15491

- I. Gol'dsheyn, Ya. Ye.
- II. Pyatakova, L. L.
- III. DSIR LLU M. 2359

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 28-31.

DESCRIPTORS: Casting, *Steel, *Titanium, *Boron steel

L36R, 45R, and 20 KhGNR boron steels were examined. It was concluded that titanium added to boron containing steel exerts a strong inhibiting action on grain growth. A combined decarburization of boron steel with silico-calcium (0.2-0.3%) and small additions of aluminium (0.03%) is very effective. The advisability of titanium additions depends upon the intended use of the steel and upon the conditions of its subsequent hot mechanical and thermal treatments. The addition of titanium is undesirable for casting-type steels. (Metallurgy, TT, v. 6, no. 1)

161730

Office of Technical Services

The Effect of Densification of the Strength of the
Moulding Mixture With S.B. Binder, by N. D.
Egorkina.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 31-32.

DSIR N.2360

Sci - Engr

Sep 61

168,600

SLA-61-15-11-12

61-15493

Valisovskiy, I. V.
WETTING OF MOULDING MATERIALS BY THE
MOLTEN ALLOY. [1961] [12] p. 12 refs. [DSIR
LLU] M. 2361.
Order from OTS or SLA \$1.60 61-15493

I. Valisovskiy, I. V.
II. DSIR LLU M. 2361

Trans. of Liteynoye Proizvodstvo (USSR) 1959, no. 12,
p. 32-35.

DESCRIPTORS: *Casting, *Flotation, Wetting agents,
*Molding materials, Liquid metals, *Alloys.

A comparison of the wetting of moulding materials by
different alloys showed that in an oxidizing gaseous
medium the wetting by Armco iron and by 30L carbon
steel is practically the same. In a neutral gas atmos-
phere the acid moulding materials (mixtures on a
quartz base and chromium iron ores) are wetted better
by 30L steel and worse by chromium nickel steel.
Armco iron occupies an intermediate position. The
basic moulding materials (magnesite and chrome-
(Metallurgy, TT, v. 6, no. 1) (over)

161791

Office of Technical Services

Effect of Small Additions of Zirconium, Titanium
and Boron on the Structure and Properties of Silicon
Iron, by V. M. Chursin, A. Ya. Zavgorcđni.

RUSSIAN, per, Lit Proiz, No 12, 1959, pp 35-37.

DSIR LLU M.2362
(loan)

Sci - Min/Met

Jun 61

56, P 87
CLA-6-12-194

Automatic Discard Control of the Spent Mixture From
the Shaking Out Frames on to a Belt Conveyor, by
P. D. Adayev, et al.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 17.

DSIR N.2363

Sci - Engr

168,588

Sep 61

Production of Iron Castings of High Quality, by
I. P. Khedosek.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 38.

DSIR M.2363

Sci - Engr

Sep 61

168,606

Shell Cores With Water-Glass Mixtures, by V. S.
Burov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 38.

NLL M. 2363

Sci - Chem

Jan 62

180,050

Coating Cast Iron Crucibles for Melting
Aluminum Alloys, by M. P. Kuptsov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 39.

NLJ. M. 2363

Sci - Engr

174.984

Dec 61.

Experience With a Moulding Compound on a Lignite Base,
by O. P. Pavlov, et al.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 39.

DSIR M.2363

Sci

Sep 61

A Sectional Casting Box, by B. V. Rabinovich.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 39.

DSIR M.2363

Sci

Sep 61

Melting Magnesium Alloy in Basic Crucibles, by
A. P. Perov, I. S. Pryanishnikov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 40.

DSIR M.2363

Sci

Sep 61

Experience With Induction Furnaces, by V. V. Panin.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 40.

DSIR M.2363

Sci

Sep 61

One Piece Coreboxes for Making Tall Cylindrical
Cores, by P. K. Khamidov.

RUSSIAN, per, Lit Proiz, No 12, 1959, p 41.

NLL M. 2363

Sci - Engr

Dec 61

174.982