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# DEPARTMENT OF COMMERCE BUREAU OF STANDARDS WASHINGTON

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Supplement to Letter Circular 118

(March 27, 1926)

## RECENT METALLURGICAL PUBLICATIONS FROM THE DIVISION OF METALLURGY

April 23, 1924 - March 27, 1926.

	No.	Pub.	<u>Title</u> (1923	Author	Price.
:	*S452	Ģ).	Structure of martensitic carbon steels and changes in microstructur on tempering.	H.S.Fawdon e S.Epstein	15¢ .
	\$463		Preparation and properties of pure iron alloys, II. Magnetic properties of iron alloys	W.L.Cheney	15¢
	S464		Preparation and properties of pure iron alloys, III. Effect of Mn on structure of Fe-C alloys.	H.S.Rewdon F.Sillers, Jr	10¢
			1934		
	S.484		Preparation and properties of pure iron alloys, IV. Critical ranges of Fe-C alloys by the thermoelectric method.	J.F.T.Berline	r 05¢
	S.483		Investigations on Pt metals, IV. Determination of Ir in Pt alloys.	R. Gilchrist	05¢
	S.488		Thermal expansion of molybdenum	P.Hidnert, W.B.Gero	10¢
	<b>T</b> 258		Strength of steel tubing under combined column and transverse loading.	T.W.Greene	15¢
	C101		Physical properties of materials, I. Strengths and related properties of metals and woods.	(2d.ed.,re- vised) S.N.Petrenko	40¢
		+ N7 O + O			ermid water water

#### \*Note:-

C = Circular | constining equal formula:

S = Scientific Paper

T = Technologic Paper

M = Misc. Pub.

Government publications may be obtained at the prices shown, (stamps not accepted) from Superintendent of Documents, Government Printing Office, Washington, D. C.

C297	U. S. Government master specifications for plastic fire-play refractories		05¢
T263	Tangent modulus and strength of steel columns in tests.	O.H.Basquin	20d
Ţ260	Tests of some girder hooks.	H.L.Whittemore A.H.Stang	10¢
<u>0</u> 58	Invar and related nickel steels. (2d	ed.,Rovised) E.G.Groesbeck	10¢
<b>T</b> 2 <b>7</b> 5	Design of specimens for short-time fatigue tests.	L.B. Tuckerman C.S. Aitchison	05¢
м 62	Table of Brinell hardness numbers	S.N.Petrenko	05\$
T252	The nick-bend test for wrought iron	H.S.Rawdon, S. Epstein	10¢
T257	Development of a method for measure- ment of internal stress in brass tubing.	R.J.Anderson, E.G.Fahlman (Work of Bu. Mines)	10¢
C100	Nickel and its alloys. (2d	.ed.,Revised) E.C.Groesbeck	40¢
	1925	,	
T261	Influence of S, O, Cu and Mn on red- shortness of iron.	J.R.Cain Res.Assoc.)	10¢
T267	Effect of hot-rolling conditions on the physical properties of a carbon steel.	J.F. Freeman, Jr, A.T. Oerry.	10¢
S497	Thermal expansion of aluminum and its alloys.	P.Hidnert	15¢
T281	Malleability and metallography of nickel	P.D.Merica, R.G.Waltenberg (Res.Assoc.)	10¢
T285	Release of internal stress in brass tubing.	R.J.Anderson E.G.Fahlman (work of Bu. Mines)	15¢

T288	Comparative cold-rolling tests of open-hearth steel strip (deep drawing stock) and electrolytic iron strip.	J.R.Freeman, Jr R.D.France	. 10¢
T289	Impact and slow bending notched bar tests.	S.N.Petrenko	20¢
T295	Initial temperature and mass effects in quenching.	H.J.French, O.Z.Klopsch.	10¢
C214	Mcdium and light rust preventive compounds.		05¢
T296	Flow in a low-carbon steel at various temperatures.	H. J.French, W.A.Tucker.	10¢
	National Directory of Commodity Specifications (27,000 specifica- tions listed)		\$1.25
	1926		
S510	Effect of wear on the magnetic properties and tensile strength of steel wire.	R.L.Sanford, W.L.Cheney	<b>0</b> 5¢
S513	Origin of Quenching Cracks.	H.Scott	20¢
S514	Gases in Metals, II. The determina- tion of oxygen and hydrogen in metals by fusion in vacuum.	L.Jordan, J.R.Eckman.	10¢
<b>S</b> 515	Thermal expansion of tungsten	P.Hidnert, W.T.Sweeney	05¢
S517	A special camera for photograph- ing cylindrical surfaces.	R.Davis	10¢
S518	Metallographic etching reagents.	E.C.Groesbeck	25¢
ВН8	Recommended building code requirements for unit working stresses in building materials.	J.M.Gries	10¢

## Publications of a General Nature.

Ç 1	National Bureau of Standards, Its Functions and Activities. (Revised)	50¢
g296	Research Associates at the Bureau of Standards	10¢
M 46	War Work of the Bureau of Standards	70¢
м 63	Report of Board Visitors to Bureau of Standards of the Department of Commerce for the Secretary of Commerce.	05¢
M 60	Annual Report of the Director of the Bureau of Standards to the Secretary of Commerce for the Fiscal Year Ended June 30,1924	10¢
м 69	Annual Report of the Director of the Burcau of Standards for the Fiscal Year Ended June 30,1925.	05¢

## Government Publications in Press.

	,Pure zinc at normal and elevated temperatures.	J.R.Freeman, Jr., F.Sillers, Jr., P.F.Brandt.
Mis.Pub.	Hartman Luder lines	
Tech. Paper	Compressive tests of structural members of the Delaware river bridge.	R.S. Johnston
Tech. Paper	Some Characteristics of Quenching Curves.	H.J.French, O.Z.Klopsch.
Sci. Paper	Melting Point of Palladium 1553°	C.O.Fairchild
Sci. Paper	Non-destructive testing of wire rope.	R.L.Sanford

#### Simplified Practice Recommendations (Department of Commerce)

Metal lath	R 3	05¢
Forged tools	R 17	11
Steel barrels and drums	R 20	11
Brass lavatory and sink traps	R 21	11
Plow bolts	R 23	11
Steel lockers	R 35	11
Steel reenforcing bars	R 23	11
Sheet steel	R 28	11
Terneplate	R 30	11

## Mimeographed Reports

Reports to the gage steel committee, 1924-5.	H. Scott Nos.15,16 17,18,19.
Initial Corrosion losses of specimens buried in soil.	K.H.Logan Feb. 1925.
lst progress report on abnormal steel.	H.S.Rawdon, S.Epstein May,1924.
2nd progress report on abnor- mal steel.	H.S.Rawdon S.Epstein July, 1925.

Iron and Steel Scrap Specifications, Metal Utilization Committee, Division of Simplified Practice, Department of Commerce.

## Specifications Promulgated by the Federal Specifications Board.

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## Letter Circulars - (obtainable only through this Bureau)

33	·	Structure and properties of alternately deposited
54 61 .83 115 121		metals Protection of track scale parts from corrosion Hardened copper (revised) Purity of nickel salts Behavior of nickel anodes Publications on electrodeposition from the Bureau of Standards:
125		Throwing power in copper and nickel deposition
126		Brinell hardness numbers
163		Nickel plating of zinc and zinc base die castings
164		Sources of information and data on the properties of metals and alloys
166		Publications of engineering mechanics section
172		Protective value of nickel plating
177		The application of chromium plating to printing plates
191		Testing laboratories equipped for mechanical tests of metals and other engineering materials
192		Corrosion resistance of iron and steel
195		Testing laboratories equipped for metallurgical tests

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<sup>\*</sup> Copies of outside publications are not obtainable from the Superintendent of Documents, and Reprints are seldom available from the Bureau. The journals may be consulted at most technical libraries.

Sager, T.P.	Report on corrosion tests of iron and steel submerged in running water at the Bureau of Standards and at Annapolis, Md.	Proc.Am.Soc. Test.Matl. 24, (1) p.228.
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Standards)		
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