

1964 BOOK OF ASTM STANDARDS

With Related Material

(Issued Annually)



Reg. U.S. Pat. Off.

PART 3

Steel Sheet, Strip, Bar, Rod, Wire,
Chain, and Spring; Wrought Iron Bar
and Sheet; Metallic Coated Products

As of September, 1963

Price ~~to non-members~~ \$8.40

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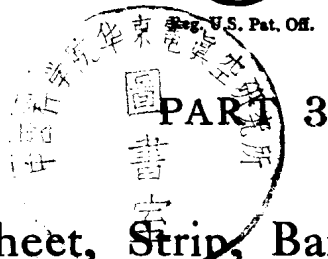
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THE American Society for Testing and Materials is an international nonprofit, technical, scientific, and educational society devoted to "... the promotion of knowledge of the materials of engineering, and the standardization of specifications and methods of testing."

Since 1898, the Society, mainly through the activities of technical committees, has conducted vast numbers of investigations and researches leading to a better knowledge of the properties of materials and the development of more than 3200 widely used standards for materials. These are used throughout the world by industry, government, architects, and engineers in specifying and evaluating materials of all kinds. They are applied in design, manufacturing, construction, and maintenance.

More than 90 main technical committees (some 2500 committees including all subcommittees and sections) function in prescribed fields and under regulations that ensure a balanced representation of producers, consumers, and general interest groups. Current committee activities cover materials in the fields of aerospace, atomic energy, surgical implants, housing and construction, highways, heavy industry, and durable consumer goods.

The standards developed by the committees and the hundreds of technical papers and reports presented at Society meetings are published and widely distributed.

The world-wide membership is drawn from a broad spectrum of individuals, agencies, and industries concerned with materials. More than 11,500 members include 8000 individual engineers, scientists, researchers, educators, and testing experts; 1000 governmental agencies and departments (federal, state, and municipal), educational institutions, and libraries; and 2500 companies, associations, and research institutes. There are more than 2000 engineering and science student members. In addition, about 7000 other individuals, though not personally members of the Society, serve as technical experts representing industrial members on committees.

A cordial invitation to apply for membership in the Society is extended to individuals and organizations who are concerned with the fields of work in which ASTM is active. Some information on membership is given on the membership application form bound in the back of this book. For further information, contact ASTM Headquarters, 1916 Race St., Philadelphia, Pa. 19103.

The appearance of this Book is a tribute to the sincere efforts of the technical committees responsible for the development and review of the standards, and of the many individuals serving on the committees. The Society's time-tested standardization procedure provides opportunity during the period of promulgation for full consideration by all interested parties. As developments and advances take place, requirements are suitably revised.

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FOREWORD

THE 1964 Book of ASTM Standards comprises 32 parts, of which this volume is one. It contains all current formally approved ASTM Standard and Tentative Specifications, Methods of Tests, Recommended Practices, and Definitions, as well as certain other related materials, such as proposed methods. New editions of the Book of Standards will be issued annually.

The 1964 edition of the Book of Standards comprises over 21,600 pages and includes the 3200 ASTM Standards and Tentatives in effect at the time of publication. To make this amount of material available in books of convenient size and not too bulky and heavy for binding, the standards are issued in 32 parts, as listed on p. v. Publication dates of the various parts are spread throughout the entire year beginning in January, and each part will appear in the same month each year. An additional list by materials is also given to enable the user to locate the part in which each type of material is included.

The combined Index to ASTM Standards, issued annually, will be helpful in locating any desired standard. All current standards and tentatives as well as new and revised items accepted by the Society between the appearance of any given part are made available as separate reprints.

Standards comprise those specifications, methods of test, and definitions that have been formally adopted by the Society, requiring a letter ballot approval by the entire membership.

Tentatives have been approved by the sponsoring committee as representing the latest thoughts and practices and have been accepted by the Society in accordance with established procedures for use pending adoption as standard.

In accordance with Society regulations, standards that have been published for a period of six years or more without revision have been reviewed (in the odd-numbered years) by the responsible technical committees prior to the appearance of the Book and have been reapproved in their present form.

Tentative Revisions appear at the end of the standards to which they apply. A list of the tentative revisions that apply to the standards in this part appears at the end of the Table of Contents.

An ASTM standard represents a common viewpoint of those parties concerned with its provisions, namely, producers, consumers, and general interest groups. It is intended to aid industry and the general public. The use of an ASTM standard is purely voluntary. The existence of an ASTM standard does not preclude anyone from manufacturing, marketing, or purchasing products, or using products, processes, or procedures not conforming to the standard. ASTM standards are subject to periodic review and revision, and those who use them are cautioned to obtain the latest revisions.

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- Part 1*—Steel Piping Materials
- Part 2*—Ferrous Castings
- Part 3*—Steel Sheet, Strip, Bar, Rod, Wire, Chain, and Spring; Wrought Iron Bar and Sheet; Metallic Coated Products
- Part 4*—Structural Steel; Boiler and Pressure Vessel Plate; Steel Rails, Wheels, and Tires; Bearing Steel; Steel Forgings; Ferro-Alloys; Filler Metal
- Part 5*—Copper and Copper Alloys (Including Electrical Conductors)
- Part 6*—Light Metals and Alloys (Including Electrical Conductors)
- Part 7*—Nonferrous Metals and Alloys (Including Corrosion Tests); Die-Cast Metals; Electrodeposited Metallic Coatings; Metal Powders
- Part 8*—Magnetic Properties; Metallic Materials for Thermostats and for Electrical Resistance, Heating, and Contacts; Materials for Electron Tubes and Semiconductor Devices
- Part 9*—Cement; Lime; Gypsum
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- Part 13*—Refractories; Glass; Ceramic Materials
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- Part 23*—Industrial Water; Atmospheric Analysis
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- Part 25*—Textile Materials—Fibers and Products; Leather
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GUIDE TO THE USE OF THE BOOK OF STANDARDS

THE standards in this Book are assembled in numeric sequence of designation numbers. The Table of Contents in each part is presented in duplicate—one a list of the standards classified according to the materials covered, the other, a list of the standards in numeric sequence of their ASTM Designations.

A subject index of the standards and tentatives in this part appears at the back of this volume. This index should be the most convenient means of locating any standard appearing in the volume if only the general subject matter covered is known.

A separate combined Index, covering all standards and tentatives in the 32 parts of the Book of ASTM Standards, is issued annually; this should be of convenience to all users of the Book of Standards.

A numeric list with complete titles of the current standards and tentatives also appears in the combined Index.

Comments or suggestions intended to improve the utility of the Book of Standards will be welcome.

Nothing contained in any publication of the American Society for Testing and Materials is to be construed as granting any right, by implication or otherwise, for manufacture, sale, or use in connection with any method, apparatus, or product covered by Letters Patent, nor as insuring anyone against liability for infringement of Letters Patent.

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1964 BOOK OF ASTM STANDARDS, PART 3

STEEL SHEET, STRIP, BAR, ROD, WIRE, CHAIN, SPRING; WROUGHT IRON; METALLIC COATED PRODUCTS

As of September, 1963

In the serial designations prefixed to the following titles, the initial letter, indicative of the general classification, and the first number are permanent. The number following the dash indicates the year of original issue as tentative or of adoption as standard or, in the case of revision, the year of last revision. Thus, standards adopted or revised during the year 1964 have as their final number, 64. Tentatives are identified by the letter T.

In the following listing, the standards and tentatives are grouped according to materials to which they apply.

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