Standard Marking System for Valves, Fittings, Flanges and Unions

Standard Practice
Developed and Approved by the
Manufacturers Standardization Society of the
Valve and Fittings Industry, Inc.
127 Park Street, NE
Vienna, Virginia 22180
(703) 281-6613

MSS

An MSS Standard Practice is intended as a basis for common practice by the manufacturer, the user, and the general public. The existence of an MSS Standard Practice does not in itself preclude the manufacture, sale, or use of products not conforming to the Standard Practice. Mandatory conformance is established only by reference in a code, specification, sales contract, or public law, as applicable.

Unless otherwise specifically noted in this MSS SP, any standard referred to herein is identified by the date of issue that was applicable to the referenced standard(s) at the date of issue of this MSS SP. See Annex A.

U.S. customary units in this SP are the standard; the metric units are for reference only.

Substantive changes in this 1998 edition are "flagged" by parallel bars as shown on the margins of this paragraph. The specific details of the changes may be determined by comparing the material flagged with that in the previous edition.

Originally approved July, 1934

FOREWORD

The initial issue of the Standard Marking System was made by the Manufacturer's Standardization Society in 1934. It stated the basic rules but was considered to need more details for general use. A second edition was therefore prepared with additional details and examples and was published in 1936.

The third edition, in 1954, recognized the use of new materials, increased operating temperatures and pressures and added more examples of markings for regular products. In 1958, the fourth edition incorporated relatively minor changes and updates and included some additional examples.

The format was revised for the fifth edition in 1960. It permitted the use of nameplates on valve bodies, and added requirements for making ductile iron products. The 1964 edition broadened the scope of the Marking Standard Practice and revised the examples and sections of the text to reflect changes in piping requirements.

The seventh edition in 1978 was completely revised and rewritten to simplify its cross references and to improve its readability. It also incorporated the marking features of pressure-temperature marking designations contained in American National Standards on products and materials. It was rearranged so that the General Rules were stated in Sections 1 to 11. These were amplified in Sections 12 to 18 which gave specific rules and examples of marking requirements for various products and materials.

In 1993, the eighth edition incorporated relatively minor changes and updates. This 1998 ninth edition includes minor revisions required per current MSS practices.

TABLE OF CONTENTS

STANDARD MARKING SYSTEM FOR VALVES, FITTINGS, FLANGES AND UNIONS

1. SCOPE

1.1 This marking system applies to valves, fittings, flanges, and unions used in piping connections which include (but are not limited to) flanged, soldered, brazed, threaded, or welded joints.

1.2 These specified markings serve to identify the manufacturer, the rating designation, materials of construction and special service limitations imposed by the manufacturer. They are used for product identification and to assist in proper application.

2. GENERAL MARKING REQUIREMENTS

2.1 Each product of a size and shape permitting legible marking shall be marked in accordance with the provisions of this Standard Practice.

2.2 Markings shall be applied to the body of valves, fittings and the nut of onions or on an identification plate. For quarter turn valves, markings shall be applied to the body, identification plate, or handle. Markings on covered quarter turn valve handles do not need to be integral with the base handle material.

The markings shall consist of numerals, letters, or symbols cast, forged, stamped, or otherwise made integral with the product; or markings on an identification plate attached to the product; or both. Where stamping is used on pressure-containing walls, low stress stamps which produce a round bottom impression shall be used; such low stress stamps are not required on flanged edges or on raised pads provided for marking purposes.

Markings obliterated during manufacturing of steel products may be replaced by weld deposition or welded plates when permitted, or stamping, at the option of the manufacturer.

2.3 Markings indicating conformance with recognized documents such as ASME Boiler Pressure Vessel Codes, API, Factory Mutual, and Underwriter's Laboratories may be applied only by authorized, licensed, or approved manufacturers. Such markings shall be applied only to products fully conforming to the code qualification requirements, and may be shown on the body or an attached plate, at the option of the manufacturer.

2.4 Manufacturers may apply markings indicating conformance with codes and standards such as ANSI, ASME, MSS, AWWA, for example, on products which fully conform, to the standards. Such markings may be shown on the body or on an attached plate.

2.5 Nothing in this Standard Practice shall be construed as prohibiting the use of additional markings such as "Made in U.S.A.", catalog reference numbers, pattern numbers, patent numbers, dates, customer specification numbers, etc. Product markings indicating special designs, particular requirements, or specific limitations, should also carry additional special marking to distinguish them from regularly available standard products. All additional markings shall be applied in such a manner as to avoid confusion with standard markings.

2.6 Flow direction indication shall be marked on unidirectional valves. Commonly used markings include arrows, or the words "inlet" or "outlet" or high pressure side marked at an appropriate end.

3. MANUFACTURER'S NAME OR TRADEMARK

All products within the scope of this Standard shall be marked with the Manufacturer's name, trademark, or symbol, unless size or shape do not permit.