

Non-Ferrous
Threaded and Solder-Joint Unions
for Use with
Copper Water Tube

Standard Practice
Developed and Approved by the
Manufacturers Standardization Society of the
Valve and Fittings Industry, Inc.
127 Park Street, NE
Vienna, Virginia 22180-4602
Phone: (703) 281-6613
Fax: (703) 281-6671
E-mail: standards@msshq.org



www.msshq.org

This MSS Standard Practice was developed under the consensus of the MSS Technical Committee 201, *Non-Ferrous Fittings and Flanges*, and the MSS Coordinating Committee. The content of this Standard Practice is the resulting efforts of knowledgeable and experienced industry volunteers to provide an effective, clear, and non-exclusive standard that will benefit the industry as a whole. This MSS Standard Practice describes minimal requirements and is intended as a basis for common practice by the manufacturer, the user, and the industry at large. It is the responsibility of the user of this Standard Practice to establish appropriate safety and health practices and determine the applicability of regulatory requirements prior to use. 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 to this Standard Practice is established only by reference in other documents such as a code, specification, sales contract, or public law, as applicable. MSS has no power, nor does it undertake, to enforce or certify compliance with this document. Any certification or other statement of compliance with the requirements of this Standard Practice shall not be attributable to MSS and is solely the responsibility of the certifier or maker of the statement.

“Unless indicated otherwise within this MSS Standard Practice, other standards documents referenced to herein are identified by the date of issue that was applicable to this Standard Practice at the date of approval of this MSS Standard Practice (see Annex B). This Standard Practice shall remain silent on the validity of those other standards of prior or subsequent dates of issue even though applicable provisions may not have changed.”

By publication of this Standard Practice, no position is taken with respect to the validity of any potential claim(s) or of any patent rights in connection therewith. MSS shall not be held responsible for identifying any patent rights. Users are expressly advised that determination of patent rights and the risk of infringement of such rights are entirely their responsibility.

For all MSS Standard Practices, the term “shall” means “must” and “shall not” means “must not”.

In this Standard Practice, all text, notes, annexes, tables, figures, and references are construed to be “normative” and essential to understand the standard’s message. All appendices and footnotes, or any other information denoted as “supplemental”, that may be included within this Standard Practice, DO NOT involve mandatory or normative requirements.

Substantive changes in this 2018 edition are “flagged” by parallel bars as shown on the margins of this paragraph. The specific detail of the change may be determined by comparing the material flagged with that in the previous 2013 edition.

Non-toleranced dimensions in this Standard Practice are nominal unless otherwise specified.

Excerpts of this Standard Practice may be quoted with permission. Credit lines should read ‘Extracted from MSS SP-123-2018 with permission of the publisher, Manufacturers Standardization Society of the Valve and Fittings Industry’. Reproduction and/or electronic transmission or dissemination is prohibited under copyright convention unless written permission is granted by the Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. All rights reserved.

Originally Published: August 1998

Current Edition Approved: August 2018 (November 2018)

Current Edition Published: December 2018

MSS is a registered trademark of Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.

Copyright ©, 2018
by the
Manufacturers Standardization Society of the
Valve and Fittings Industry, Inc.

Printed in U.S.A.

TABLE OF CONTENTS

SECTION

1	SCOPE	1
2	PRESSURE-TEMPERATURE RATINGS	1
3	ABBREVIATIONS	1
4	DESCRIPTION	1
5	MATERIALS	2
6	SIZE	2
7	DESIGN	2
8	LAYING LENGTHS	3
9	ASSEMBLY TORQUE	3
10	TESTING	4
11	MARKING	4

TABLE

1	Terminology of Parts	2
2	Pressure-Temperature Ratings and Tensile Testing	4
3	Dimensions of Wrought Solder-Joint Fittings	5
4	Dimensions of Cast Solder-Joint Fittings	6
A1	Pressure-Temperature Ratings of Solder and Brazeed Joints	8

FIGURE

1	Union Designs and Drawings	7
---	----------------------------------	---

ANNEX

A	Strength of Solder and Brazeed Joints	8
B	Referenced Standards and Applicable Dates	9