Weld-Fabricated, Copper Solder-Joint Pressure Fittings
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 competent and experienced 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 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 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 referred 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 C). 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, footnotes, or other information denoted as “supplemental”, that may be included within this Standard Practice, DO NOT include 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 2012 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-109-2018 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: September 1991
Current Edition Approved: April 2018
Current Edition Published: October 2018

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

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

Printed in U.S.A.
FOREWORD

ASME B16.22 is the American National Standard for seamless Wrought Copper and Copper Alloy Solder-Joint Pressure Fittings. It does not include requirements for weld-fabricated fittings.

The purpose of this Standard Practice is to provide industry with a standard for factory-made, weld-fabricated, copper pressure fittings in nominal sizes 1/4 through 12. This Standard Practice follows ASME B16.22, modified as required.

Dimensions within this Standard Practice utilize U.S. Customary units. Guidelines for SI (metric) data conversion may be found in MSS SP-86.
TABLE OF CONTENTS

SECTION
1  SCOPE ............................................................................................................................................. 1
2  PRESSURE-TEMPERATURE RATINGS ......................................................................................... 1
3  FITTING-END DESIGNATIONS ....................................................................................................... 1
4  SIZE ................................................................................................................................................ 1
5  MARKING ....................................................................................................................................... 2
6  MATERIAL ...................................................................................................................................... 2
7  LAYING LENGTHS ......................................................................................................................... 2
8  INSPECTION TOLERANCE ............................................................................................................. 3
9  ALIGNMENT ................................................................................................................................. 3
10 TESTING ....................................................................................................................................... 3
11 GAUGING .................................................................................................................................... 3

TABLE
| 1  Rated Internal Working Pressure for Copper Fittings (psi) .............................................................. 2 |
| 2  Inspection Tolerances .................................................................................................................. 3 |
| 3  Dimensions of Solder-Joint Ends ................................................................................................ 5 |
| A1 Pressure-Temperature Ratings of Solder Joints ......................................................................... 6 |

FIGURE
1  Method of Designating Laying Lengths of Fittings and Openings of Reducing Fittings .............. 4

ANNEX
| A  Strength of Solder Joints ............................................................................................................ 6 |
| B  Fitting Rating ............................................................................................................................ 7 |
| C  Referenced Standards and Applicable Dates ............................................................................ 8 |