



Quality Standard for Steel Castings for Valves, Flanges, Fittings, and Other Piping Components

Visual Method for Evaluation of Surface Irregularities

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: info@mss-hq.org



www.mss-hq.org



Quality Standard for Steel Castings for Valves, Flanges, Fittings, and Other Piping Components

Visual Method for Evaluation of Surface Irregularities

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: info@mss-hq.org



www.mss-hq.org

This MSS Standard Practice was developed under the consensus of the MSS Technical Committee 304 and the MSS Coordinating Committee. In addition, this Standard Practice was approved by an ANSI/MSS Consensus Committee and by ANSI as an American National Standard. 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 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 A). 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.

In this Standard Practice, all text, notes, annexes, tables, figures, and references are construed to be essential to the understanding of the message of the standard, and are considered normative unless indicated as “supplemental”. All appendices, if included, that appear in this document are construed as “supplemental”. Note that supplemental information does not include mandatory requirements.

Substantive changes in this 2011 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 edition.

U.S. customary units in this Standard Practice are the standard; (SI) metric units are for reference only.

Non-toleranced dimensions in this Standard Practice are nominal, and, unless otherwise specified, shall be considered “for reference only”.

Excerpts of this Standard Practice may be quoted. Credit lines should read ‘Extracted from ANSI/MSS SP-55-2011 with permission of the publisher, Manufacturers Standardization Society of the Valve and Fittings Industry, Inc.’. 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: April 1961

Current Edition Approved by MSS: September 2010

Current Edition Approved by ANSI/MSS Consensus Committee: August 2011

Current ANSI/MSS Edition Published: October 2011

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

Copyright ©, 2011 by
Manufacturers Standardization Society
of the
Valve and Fittings Industry, Inc.

Printed in U.S.A.

FOREWORD

The MSS SP-55, Quality Standard for Steel Castings for Valves, Flanges, Fittings, and Other Piping Components – Visual Method for Evaluation of Surface Irregularities, was originally adopted in 1961. It was developed for the purpose of providing the industry with a uniform means for identifying various types of casting surface irregularities.

A set of 60 reference photographs illustrating these casting surface irregularities is included in this Standard Practice to permit a visual comparison of an actual casting surface with the reference photographs for the purpose of the establishing acceptable/unacceptable casting surface irregularities.

The format of this Standard Practice was revised in 1996 to be consistent with other MSS Standard Practices.

The 2006 revised edition included updates in the referenced standards, Annex A, to reflect current applicable dates and the updated addresses of the referenced publications organizations.

This 2011 revised American National Standard edition includes updates to the applicable organizations and referenced standards, indicating current dates, names, and addresses of the referenced publications or organizations within this Standard Practice. In addition, an Annex B has been introduced that contains the pre-existing set of 60 reference photographs, along with various editorial corrections that include Section 5.

IMPORTANT NOTICE:

Due to variations in viewing environments, the printed version published by MSS shall be the “official” rendering of this Standard Practice for inspection, code, or any other purpose.