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

This Standard Practice has been substantially revised from the previous 2001 edition. It is suggested that if the user is interested in knowing what changes have been made, that direct page by page comparison should be made of this document and that of the previous edition.

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FOREWORD

This Standard Practice was developed by representatives from pipe hanger manufacturers that are MSS member companies in good standing. It is constructed based on analysis, the current practice at the time, and on the collective feedback and experience of the industry. This Standard Practice is intended for use with non-critical, standard commercial and industrial systems. There is a companion Standard Practice, ANSI/MSS SP-58, which relates to the materials, design, manufacture, selection, application, and installation of pipe hangers and supports.
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SP-9-2013 Spot Facing for Bronze, Iron, and Steel Flanges
SP-25-2013 Standard Marking System for Valves, Fittings, Flanges, and Unions
SP-42-2013 Corrosion-Resistant Gate, Globe, Angle, and Check Valves with Flanged and Butt Weld Ends (Classes 150, 300 & 600)
SP-43-2013 Wrought and Fabricated Butt-Welding Fittings for Low Pressure, Corrosion Resistant Applications
SP-44-2010 Steel Pipeline Flanges (incl. 2011 Errata Sheet)
SP-45-2003 (R 2008) Bypass and Drain Connections
SP-51-2012 Class 150LW Corrosion-Resistant Flanges and Cast Flanged Fittings
SP-53-2012 Quality Standard for Steel Castings and Forgings for Valves, Flanges, Fittings, and Other Piping Components – Magnetic Particle Examination Method
SP-54-2013 Quality Standard for Steel Castings and Forgings for Valves, Flanges, Fittings, and Other Piping Components – Radiographic Examination Method
SP-60-2012 Connecting Flange Joints between Tapping Sleeves and Tapping Valves
SP-61-2013 Pressure Testing of Valves
SP-65-2012 High Pressure Chemical Industry Flanges and Threaded Stubs for Use with Lens Gaskets
SP-67-2011 Butterfly Valves
SP-68-2011 High Pressure Butterfly Valves with Offset Design
SP-69-2003 Pipe Hangers and Supports – Selection and Application (ANSI-approved American National Standard)
SP-70-2011 Gray Iron Gate Valves, Flanged and Threaded Ends
SP-71-2011 Gray Iron Swing Check Valves, Flanged and Threaded Ends (incl. 2013 Errata Sheet)
SP-72-2010a Ball Valves with Flanged or Butt-Welding Ends for General Service
SP-75-2008 Specification for High-Test, Wrought, Butt-Welding Fittings
SP-78-2011 Gray Iron Plug Valves, Flanged and Threaded Ends
SP-79-2011 Socket Welding Reducer Inserts
SP-80-2013 Bronze Gate, Globe, Angle, and Check Valves
SP-81-2013 Stainless Steel or Stainless-Steel-Lined, Bonnetless, Knife Gate Valves with Flanged Ends
SP-83-2006 Class 3000 Steel Pipe Unions Socket Welding and Threaded
SP-85-2011 Gray Iron Globe & Angle Valves, Flanged and Threaded Ends
SP-86-2009 Guidelines for Metric Data in Standards for Valves, Flanges, Fittings, and Actuators (Incl. 2011 Errata Sheet)
SP-88-2010 Diaphragm Valves
SP-91-2009 Guidelines for Manual Operation of Valves
SP-92-2012 MSS Valve User Guide
SP-93-2008 Quality Standard for Steel Castings and Forgings for Valves, Flanges, Fittings, and Other Piping Components – Liquid Penetrate Examination Method
SP-94-2008 Quality Standard for Ferritic and Martensitic Steel Castings for Valves, Flanges, Fittings, and Other Piping Components – Ultrasonic Examination Method
SP-95-2006 Swage(d) Nipples and Ball Plugs
SP-96-2011 Guidelines on Terminology for Valves and Fittings
SP-97-2012 Integrally Reinforced Forged Branch Outlet Fittings – Socket Welding, Threaded, and ButtWelding Ends
SP-98-2010 Protective Coatings for the Interior of Valves, Hydrants, and Fittings
SP-99-2010 Instrument Valves
SP-100-2009 Quality Requirements for Elastomer Diaphragms for Nuclear Service Diaphragm Valves
SP-102-2001 High-Pressure,Part-Turn Valve Actuator Attachment – Flange and Drilling Component Dimensions and Performance Characteristics
SP-103-1991 Multi-Turn Valve Actuator Attachment – Flange and Driving Component Dimensions and Performance Characteristics
SP-104-2012 Wrought Copper Solder-Joint Pressure Fittings
SP-105-2010 Instrument Valves for Code Applications
SP-106-2012 Cast Copper Alloy Flanges and Flanged Fittings: Class 125, 150, and 300
SP-108-2012 Resilient-Seated Cast Iron Eccentric Plug Valves
SP-109-2012 Weld-Fabricated Copper Solder-Joint Pressure Fittings (incl. 2012 Errata Sheet)
SP-110-2010 Ball Valves Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends (incl. 2010 Errata Sheet)
SP-111-2012 Gray Iron and Ductile-Iron Tapping Sleeves
SP-112-2010 Quality Standard for Evaluation of Cast Surface Finishes – Visual and Tactile Methods. This SP must be used with a 10-surface, three dimensional Cast Surface Comparator, which is a necessary part of the standard. Additional Comparators available separately.
SP-113-2012 Connecting Joints between Tapping Machines and Tapping Valves
SP-114-2007 Corrosion Resistant Pipe Fittings Threaded and Socket Welding Class 150 and 1000 (ANSI-approved American National Standard)
SP-115-2010 Excess Flow Valves, 1½ NPS and Smaller, for Fuel Gas Service
SP-116-2011 Service-Line Valves and Fittings for Drinking Water Systems
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SP-127-2014a Bracing for Piping Systems: Seismic-Wind-Dynamic Design, Selection, and Application
SP-128-2012 Ductile Iron Gate Valves
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SP-132-2010 Compression Packing Systems for Instrument Valves
SP-133-2010 Excess Flow Valves for Low Pressure Fuel Gas Appliances
SP-134-2012 Valves for Cryogenic Service, including Requirements for Body/Bonnet Extensions
SP-135-2010 High Pressure Knife Gate Valves
SP-136-2007 Ductile Iron Swing Check Valves
SP-137-2013 Quality Standard for Positive Material Identification of Metal Valves, Flanges, Fittings, and Other Piping Components
SP-138-2009 Quality Standard Practice for Oxygen Cleaning of Valves & Fittings
SP-139-2010 Copper Alloy Gate, Globe, Angle, and Check Valves for Low Pressure/Low Temperature Plumbing Applications
SP-140-2012 Quality Standard Practice for Preparation of Valves and Fittings for Silicone-Free Service
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SP-142-2012 Excess Flow Valves for Fuel Gas Service, NPS ½ through 12
SP-143-2012 Live-Loaded Valve Stem Packing Systems
SP-144-2013 Pressure Seal Bonnet Valves
SP-145-2013 Metal Ball Valves for Low Pressure/Low Temperature Plumbing Applications

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