Valve Industry Standards

The design and production of forged steel valves, fittings, and unions is governed by codes and standards that cover material, design, product dimension, inspection, examination, testing, pressure/temperature ratings, procedure, and safety.

Safety guidelines and procedural standards are issued by ANSI, MSS and the American Society of Mechanical Engineers (ASME)

Listed below is a partial list of codes and standards that directly affect the design and production of forged steel valves, fittings, and unions:

ASME Boiler & Vessel Code

Section I – Power Boilers
Section II – Material Specifications
Section III – Nuclear Power Plant Components
Section V – Nondestructive Examination
Section VIII – Pressure Vessels
Section IX – Welding and Brazing Qualifications

Valve Standards

ASME/ANSI B16.34 – Valves – Flanged, Threaded and Welding Ends
API-600 – Steel Gate Valves, Flanged, and Buttwelding Ends
API – 602 – Compact Steel Gate Valv es
API – 606 - Compact Steel Gate Valves (Extended Body)
MSS –SP-84 – Steel Valves – Socket Welding and Threaded Ends
MSS – SP-99 – Instrument Valves

Flanges, Fittings and Unions

ASME/ANSI B16.5 – Pipe Flanges and Flanged Fittings
ANSI B16.11 – Forged Steel Fittings, Socket Weld and Threaded
MSS – SP- 83 – Steel Pipe Unions, Socket Welding and Threaded Ends
MSS-SP-79 – Socket Welding Reducer Inserts

Valve, Fi tting, Flange and Union Details

ANSI/ASME B1.20.1 – Pipe Threads, General Purpose
ANSI/ASME B16.10 – Face-to-Face and End to End Dimensions of Ferrous Valves
ANSI/A SME B16.20 – Ring Joint Gaskets and Grooves for Steel Pipe Flanges
ANSI/ASME B16.20 – Ring Joint Gaskets and Grooves for Steel Pipe Flanges
ANSI/ASME B16.25 – Buttwelding Ends