# **Specifications**

# ANSI (American National Standards Institute)

## B 16.3

This specification covers dimensions, ratings, testing, tolerances, markings and minimum material requirements for malleable-iron threaded fittings 150 lb and 300 lb. Used for dimensions and tolerances of threaded fittings from <sup>1</sup>/<sub>8</sub>" to 6" nominal pipe size.

#### **B** 16.5

This specification covers pipe flanges and flanged fittings, including ratings for 150, 300, 400, 600, 900, 1500 and 2500 lb. Used for dimensions and tolerances of threaded, slip-on, socket-welding, weld neck, lap-joint and blind flanges for the above ratings and/or to denote commercial drilling. Sizes covered are from 1/2" through 24" nominal pipe size.

#### **B** 16.9

This specification covers butt- weld fittings. Used for dimensions and tolerances, ratings, testing and marking of buttweld fittings from ½" through 48" nominal pipe size. For specifications covering low pressure corrosion resistant buttwelding fittings, see MSS SP-43.

#### B 16.11

This specification covers dimensions, finish, tolerances, testing, marking, material and minimum performance requirements for forged carbon and alloy steel fittings both socket-welding and threaded. Dimensional standards are commonly used for other alloys such as copper-nickel.

#### B 16.15

This specification covers 125 and 250 lb cast bronze threaded fittings. Used for dimensions and tolerances of cast, forged or machined threaded fittings from 1/8" through 4" nominal pipe size with 125 or 250 lb rating. Certain requirements also pertain to wrought or cast plugs, bushings, couplings and caps.

## **B** 16.28

This specification covers butt-weld short radius elbows and returns. Used for dimensions, tolerances, testing and marking from 1/2" through 24" nominal pipe size.

## MSS Standard Practices

## **SP-51**

This specification covers 150 lb corrosion resistant cast flanges and flanged fittings.

## **SP-79**

This specification covers dimensions, finish, tolerances and marking for socketwelding reducing inserts for use with B 16.11. Reducing inserts may be made to special dimensions other than those covered by this standard by agreement between manufacturer and the purchaser. This standard is used for dimensions and tolerances for 3000 lb and 6000 lb socketweld reducing inserts.

## **SP-83**

This specification covers envelope and other dimensions, finish, tolerances, testing, marking and minimum performance requirements for forged carbon steel pipe unions. Unions designated as 3000 lb socketwelding or threaded.

## **SP-97**

This specification covers the dimensions, finish, tolerances, testing, marking, material and minimum strength requirements for 90 degree carbon steel forged branch outlet fittings of buttwelding, socketwelding and threaded types. Threaded and socket-welding outlets shall be designated as class 3000 lb and 6000lb. Fittings may be made to special dimensions, size shape, tolerances or of other wrought materials.