

- CODES:** All connections are manufactured in compliance with ASME Section II, Section VIII, Div. 1, and ASME B16.5. Products may be ordered to special requirements or other standard codes such as ASME Section I, III and Section VIII, Div. 2, ASME B31.1 and B16.47 Series A&B, API and ASTM.
- MATERIALS:** All materials comply with the applicable ASME and ASTM specifications. Full traceability is mandated by our quality system. Standard forged material is carbon steel SA105. Connections can also be furnished in other carbon steels, alloy steels, stainless, high nickel and non-ferrous alloys upon request.
- BORES:** Heavy Barrel "HB" and Intermediate Barrel "I" connections 12" and smaller are provided with standard bores to match Sch. 80 pipe, thus eliminating turbulence and accelerated corrosion resulting from the orifice effect of a sharp constriction common to Long Weld Necks "LWN". In sizes 14" and greater, standard bores are equal to the nominal flange/pipe size. Special bores are available upon request for all products.
- FACING:** Standard facing is raised face to ASME B16.5. The 0.06" raised face is included in thickness "T" and length "L" dimensions for Class 150 and 300 flange connections. The 0.25" raised face is not included in thickness "T" but is included in length "L" dimensions for Class 400, 600, 900, 1500 and class 2500 flange connections. Other standard and special facings are available – see technical section.
- LENGTHS:** Listed lengths are standards used for base weight calculations. Other lengths are available upon request.
- FLANGES:** Flange dimensions and drilling are in accordance with ASME B16.5. Bolt holes will straddle natural centerlines, unless specified otherwise. Studs, bolts, nuts, and gaskets are not furnished, but can be supplied upon request.
- NUT RELIEF:** Standard on Long Weld Neck "LWN" connections only, optional on all other connections.
- NUT STOPS:** Standard on all Heavy Barrel "HB", Intermediate Barrel "I1", "I2", "I3", Equal Barrel "E", and Super Barrel "SB" connections. Not available on Long Weld Neck "LWN" connections. The connection flange hub area outside diameter acts as the nut stop, preventing the nut from turning thereby only requiring one wrench to loosen or tighten the bolting on the mating side. Nut relief can be furnished on special order.
- CONTOURED BOTTOMS:** Connections will be furnished with flat bottoms unless specified otherwise. All connections are available with "contoured" bottoms for installation in shells, heads and cones. In these cases, the centerline length "CL" will be measured on the connection axis from the flange face or butt weld connection end to the bottom contour of the connection.
- INSERT LIPS:** All connections can be ordered with insert lips- "Q" type attachment.
- HEAT TREATMENT:** All standard connections over Class 300 rating are supplied in the normalized condition in accordance with the requirements of ASME Section II. Other heat treatment requirements can be provided upon request.
- TOLERANCE:** Manufacturing tolerances, as a minimum, will meet the requirements of ASME B16.5 where applicable.