

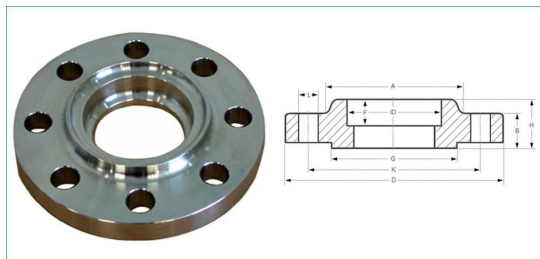
Socket Weld Flange

What Are Socket Weld Flanges?

Socket Weld Flange is a flange for small diameter high pressure piping systems, which is welded by inserting the pipe into the flange socket and is suitable for scenarios that require a high degree of leak tightness.

Socket Weld flanges balance strength with ease of installation through socket welding, making them ideal for small-diameter, high-pressure systems.

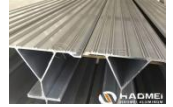
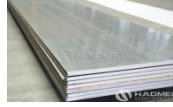
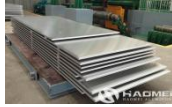
Socket Weld Flange Structural Features:



- Socket design: The flange bore has a groove (socket), which is welded after the pipe end is inserted to form a firm connection.
- Single-side welding: After the pipe is inserted, fillet welding is performed on the outside of the contact surface between the flange and the pipe, no beveling is required.
- Sealing surface type: common convex surface (RF) or ring joint surface (RTJ), suitable for high pressure sealing.
- Gap reservation: After the pipe is inserted, a gap of about 1.6mm needs to be reserved with the bottom of the socket to compensate for the stress caused by thermal expansion.

Socket Weld Flanges Product Specification:

Dimensions	ANSI B16.5, ANSI B16.47 Series A & B, MSS SP44, ASA, API-605, AWWA, Custom Drawings
Size	1/2" (15 NB) to 48" (1200NB)
Class	150 LBS, 300 LBS, 600 LBS, 900 LBS, 1500 LBS, 2500 LBS, DIN Standard



	ND-6,10, 16, 25, 40 Etc.
DIN	DIN2527, DIN2566, DIN2573, DIN2576, DIN2641, DIN2642, DIN2655, DIN2656, DIN2627, DIN2628, DIN2629, DIN 2631, DIN2632, DIN2633, DIN2634, DIN2635, DIN2636, DIN2637, DIN2638, DIN2673
BS	BS : BS4504 , BS4504, BS1560, BS10
Flange Face Type	Flate Face (FF), Raised Face (RF), Ring Type Joint (RTJ)

Types of Aluminum Socket Weld Flanges:

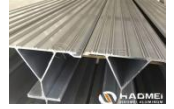
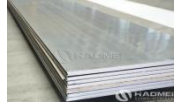
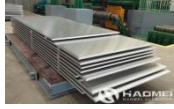
Socket Weld Raised Face Flange	Raised Faced Socket Weld Flanges
ANSI B16.5 Socket Weld Flanges	Socket Weld Flange Dimensions
ASME B16.5 SWRF Flanges	ANSI B16.5 Class 150 Socket Weld Flanges
High Quality SWRF Flanges Manufacturer	Flat Faced Socket Weld Flanges
ANSI 150 Socket Weld Flange	SWRF Flange

Socket Weld Flanges Core Advantages:

- High-strength sealing: welding combined with socket structure, sealing is better than threaded connection, suitable for small diameter and high pressure system.
- Convenient installation: no need for complex bevel processing, welding operation is simple, suitable for space-constrained compact environment.
- Anti-vibration performance: high strength of weld seam, resistant to mechanical vibration and shock load.
- Economy: Compared with butt-welding flanges (Weld Neck), less material is used, suitable for small pipe diameter scenarios.

Applications of Aluminum Socket Weld Flanges:

- High-pressure fluid system: steam, gas, hydraulic oil and other high-pressure small-diameter pipeline (such as instrumentation lines, sampling lines).
- Chemical and petrochemical industry: corrosive media small diameter connection (need to match the corrosion-resistant materials such as stainless steel).
- Power industry: boiler water piping, high pressure steam instrumentation lines.



- Valve and pump connection: need frequent maintenance or compact installation of the interface position.

