

Titanium Socket Weld Flange

Size Range: NPS 1/2" ~ NPS 3" (DN15 ~ DN80)
Pressure Rating: Class 150 – 2500 (PN20 – PN420)
Facing Types: Raised Face (RF), Male-Female Face (MFM), Tongue & Groove (TG), Ring Joint (RJ)
Connection Type: Flange nuts and bolts
Standards: ANSI/ASME B16.5, B16.47, ASTM B381

Product Features

Reinforced Socket Step – The pipe is inserted into the socket and welded externally, providing higher strength and excellent sealing performance.
Smooth Inner Bore Design – Ensures streamlined flow, reducing resistance and energy loss.
Wide Applications – Used in boilers, pressure vessels, petrochemical, shipbuilding, pharmaceutical, and metallurgical machinery industries.
Customization Available – Titanium socket weld flanges can be made from Grade 2, Grade 5 (Ti-6Al-4V), or Grade 7, with various surface treatments.

Key Advantages

Advantage	Description
Suitable for High Pressure	Designed for small-diameter pipelines under high pressure
Superior Sealing Performance	Socket weld design prevents leakage and ensures safe operation
Better than Threaded Flange	Safer and more reliable with reduced leakage risk
External Welding Design	Smooth bore, reduced fluid resistance, easy welding process

Technical Specifications

Parameter	Specification
Pipe Size	NPS 1/2" – 3" (DN15 – DN80)
Pressure Rating	Class 150 – 2500 (PN20 – PN420)
Facing Types	RF, MFM, TG, RJ
Material	Titanium Grade 2, Grade 5, Grade 7
Welding Type	External fillet weld
Surface Treatment	Machined, polished, or customized
Max Temperature	≤ 400°C (depending on grade)
Standards	ANSI/ASME B16.5, B16.47, ASTM B381
Customization	Available upon request
Manufacturing	CNC precision machining, TIG welding

Contact Us

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