



Stainless Steel Socket Weld Flange SS304 SS316 SS304L SS316L

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: DEYE
- Certification: ISO9001:2015 PED
- Model Number: ZJD-F-SW18
- Minimum Order Quantity: 10PCS
- Price: USD2-USD100 each
- Packaging Details: Fumigation Ply-wooden cases
- Delivery Time: 25-30 days for order production
- Payment Terms: T/T, L/C, D/P
- Supply Ability: 200ton each month



Product Specification

- Standard: ASME B16.5, ASME B16.47, API 6A, EN 1092-1, BS 4504, BS 10, DIN, JIS, GOST.
- Material: SS316, SS316L, SS304/304L, DUPLEX SS UNS31803, UNS32750, 904L, INCONEL625,
- Size: 1/2" (DN15) ~ 48" (DN1200)
- Types: Weld Neck, Slip On, Blind, Socket Weld, Threaded, Lap Joint, Spectacle, Paddle, Long Weld Neck, Spacer, Orifice, Reduced, Plate
- Pressure Rating: Class 150, 300, 400, 600, 900, 1500, 2500; PN 6, PN 10, PN 16, PN 25, PN 40, PN 63, PN 100, PN 160, PN 250, PN 320, PN 400.
- Highlight: **Socket Weld Flange SS304, Socket Weld Flange SS316, SS316L stainless steel socket weld flange**

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Product Description

Stainless Steel Socket Weld SW Flange With Material SS 304,SS 316,SS304L,SS316L

Socket weld flange designed for higher pressure and small diameters pipeline, it has a shoulder in flange bore for pipe to insert it and do fillet welding. Socket weld flanges are designed for small nominal pipe sizes (≤ 4 inches, ≤ 10 cm) and are common for $\frac{1}{2}$ to 2-inch pipe sizes (1.3 to 5cm pipe sizes). The mechanical strength of a socket weld flange is similar to that of a slip-on flange, but the slip-on flange may use two welds.

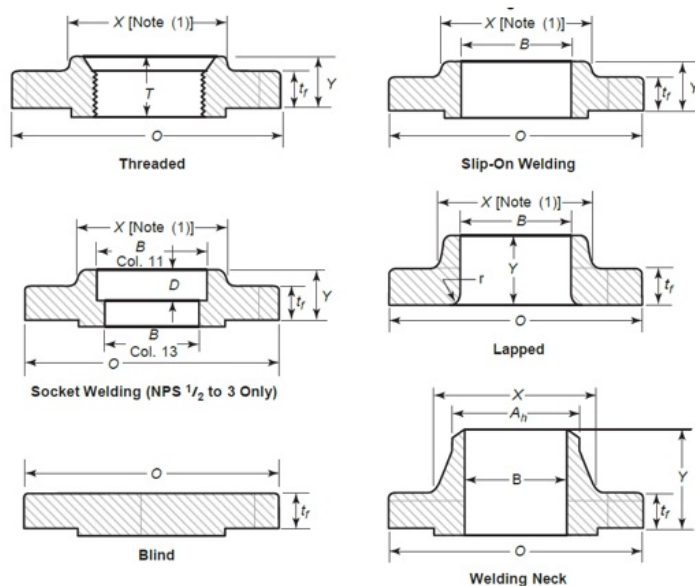
Socket Weld Flanges are available in pressure from 150# and up and pipe schedule 40 to schedule 160. Specifying the pipe schedule ensures that ID of the SW Flange matches the ID of pipe for smooth fluid flow.

Product Information/Product Description/Basis Information/Specification

Product Name	STAINLESS STEEL SOCKET WELD FLANGE WITH MATERIAL SS304,SS316,SS304L,SS316L	
Types	● Stainless steel Blind Flanges ● Stainless steel Spectacle Blinds ● Stainless steel High Hub Blinds ● Stainless steel Orifice Flanges ● Stainless steel Slip-on Flanges ● Stainless steel Socket Weld Flanges ● Stainless steel Weld Neck Flanges ● Stainless steel Flat Flanges ● Stainless steel Loose Flanges ● Stainless steel Threaded Flanges ● Stainless steel Lap Joint Flanges ● Stainless steel Reducing Threaded ● Stainless steel Weld Neck Flanges Series A or B ● Stainless steel Square Flanges ● Stainless steel Groove & Tongue Flanges ● Stainless steel Spade Flanges ● Stainless steel Forged flanges ● Stainless steel Raised Face Flanges ● Stainless steel RTJ Flanges ● Stainless steel Pipe Flange Spacer Ring	
Face Finish	Flat Face (FF), Raised Face (RF), Ring Type Joint (RTJ), LM, TF,GF	
Material	ANSI	Stainless Steel SS 304/304L,316/316L, SS321, SS347H, SS316TI, SS304HM SS316H, 904L, UNS31803, UNS32750, UNS32760
		Alloy Steel: WHPY45/52/65/80/A 182 Grade F 5, A 182 Grade F 9, A 182 Grade F 11, F 12, F22, F91, A694 F42, F46, F48, F50, F52, F56, F60, F65, F70, A516.60, 65, 70 (Spectacle Blind Flange, Spacer Ring/Spade Flange),
		Steels for Low Temperature Service: A 350 Grade LF 1, A350LF2, A350LF4, A350LF6, A350LF8. CL1/CL2, LF3 CL1/CL2,
		Normally use: CS A105/SA 105N
	DIN	SS 304/304L,316/316L, Stainless steel1.4301, 1.4404, SAF2205, SAF2507,CS RST37.2;S235JR
	GOST	SS 304/304L,316/316L CS CT20;16MN;
	EN	SS 304/304L,316/316L CS RST37.2;S235JR;C22.8
	JIS	SS 304/304L, 316/316L CS SS400,SF440,
	BS	SS 304/304L,316/316L CSRST37.2;S235JR;C22.8;Q235
	UNI	C SS 304/304L,316/316L SRST37.2;S235JR;C22.8;Q235
Pressure	ANSI	Class 150, 300, 600, 900, 1500 2500lbs, with welded thickness of Sch10s, SCH40s, SCH80s, SCH160s. SCHXXS
	DIN	PN6,PN10,PN16,PN25,PN40,PN64,PN100
	GOST	PN6,PN10,PN16,PN25
	EN	PN6,PN10,PN16,PN25,PN40,PN64,PN100
	JIS	1K,2K,5K,10K,16K,20K,30K,40K
	BS	PN6,PN10,PN16,PN25,PN40,PN64,PN100
	UNI	PN6,PN10,PN16,PN25,PN40
	SABS	600KPA,1000,1600,2500,4000
Size	ANSI	1/2" – 60"
	DIN	DN15-DN2000
	GOST	DN10-DN1600
	EN	DN15-DN2000
	JIS	15A-1500A
	BS	DN15-DN2000
	UNI	DN10-DN2000
	SABS	DN10-DN600

Surface	Oil Black Paint, varnish, Golden yellow paint, anti-rust oil, galvanizing, Cold and Hot Dip Galvanized etc, Zinc plating. chrome plating. Black treatment, anodize, powder coating. punishment, brass plating. etc.
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Flanges Specification and different types



ASME/ANSI B16. 5:

WELDING NECK FL ANGE, SLIPON FL ANGE. BLIND FLANGE. HIGH HUB BLIND FLANGE. SOCKET WELD FL ANGE. LAPJOINT FLANGE, THREADED FL ANGE. RING TYPE JOINT FLANGE. Pressure Class: 1 50.300,400. 600.900,1500,2500

ASME/ANSI B16.47 :

WELDING NECK FLANGE, BLIND FLANGE. Pressure Class: 75,150. 300, 400.600,900

ASME/ANSI B16.36:

ORIFICE FLANGE WELDING NECK FL ANGE, SLIPON FLANGE, THREADED FLANGE. Pressure Cass: 300, 400,600,900, 1500,2500

AWWAC207

AWWA standard steel-ring flanges, Class B* (86 psi)
AWWA standard steel-ring flanges, Class D* (175-150psi)
AWWA standard steel-hub flanges, Class D* (175-150 psi)
AWWA standard steel-hub flanges, Class E* (275psi)
AWWA standard steel-ring flanges, Class E* (275psi), Blind flanges 275PSI
AWWA standard steel-ring flanges, Class F* (300psi), Blind flanges 300PSI

MSS-SP-44

WELDING NECK FLANGE, BLIND FLANGE TO ANSI B16.47 SERIES A
Pressure Class: 75,150. 300, 400.600,900

JIS B2220/B2291 :

WELDING NECK FLANGE, SLIPON HUB FLANGE SLIPON PLATE FLANGE, SHUT OFF FLANGE, SQUARE FLANGE.
Pressure Class: 5K.10K 16K 20K 30K

BS4504SEC3.1

WELDING NECK FLANGE (111/134). HUBBED SLIPON FLANGE (112), HUBBED THREADED FLANGE (113). LAPPED PIPE END FLANGE (133) PLATE FLANGE (101). LOOSE PLATE FLANGE (102) LOOSE PLATE WITH WELD-NECK FLANGE (104). BLANK FLANGE (105).
Pressure Class: PN2.5 TO PN 40

BS1560:

WELDING NECK FLANGE. SOCKET WELDING FLANGE SLIP-ON BOSS FLANGE BLIND FL ANGE, SCREWED BOSS FLANGE, LAPPED FLANGE.
Pressure Class: 150,300,400,600,900, 1500,2500

BS 10:

WELDING NECK FL ANGE. PL ATE SLIP-ON FLANGE. SCREWED, BOSS FLANGE, SLIPON BOSS FLANGE, BLIND FLANGE.
Table: D,E,F,H

DIN FLANGE:

DIN2573.DIN2576.DIN2641891 DIN2642. DIN2655. DIN2656, DIN2632 DIN263.DIN2634.

DIN2635.DIN2636. DIN2637.DIN2638.DIN2673
Pressure from PN 6 TO PN320

AFNOR NFE 29-203:

PLATE FLANGE (01), LOOSE PLATE FLANGE (02,03,04) BLIND FLANGE (05)
WELDING NECK FLANGE (111), HUBBED SLIP ON FLANGE (12) SCREWED FLANGE (13).
HUBBED SOCKET WELDING FLANGE(14),LOOSE HUBBED FLANGE(15),
INTEGRAL FLANGE (211)
Pressure Class: ISO- PN 2.5 TO PN420

EN 092-1.

PLATE FLANGE SO (Type 01) LOOSE Plate flanges (Type 02, 04) Blind flange (Type 05),
Welding Neck flange (Type 11), Hubbed Slip on Flange (Type 12), Screw Flange (Type 13),
Integral Flange (Type 21)
Pressure Class: PN2.5 to PN100

ASME/ANSI B16.9/MSS SP-43: STUB END. Type: A,B,C

UNI2253-67,UNI6091-67,UNI2276-67,UNI2280-67,UNI6089-67 PN6,PN10,PN16,PN25,PN40

GOST 12820-80,GOST 12821-80,Gost Blind
PN6,PN10,PN16,PN25, PN40, PN63, PN100, PN150,PN250

SABS1123

Technology/ How to use and install the different flange types

WELDING NECK FLANGES

They are connected to the pipe by means of a Butt weld connection. They are used when X-ray testing is required or if the torque over unions are maximum. Its long tapered neck optimizes the stress distribution



SLIP-ON FLANGES

This kind of flanges are installed with two weld bead, sliding the pipe inside. Thus installation costs are lower, so less accuracy is required for pipe cutting.



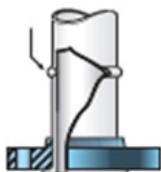
THREADED FLANGES

They are usually installed with the pipe previously threaded, in places where welding cannot be done. We do not recommend to install if there are high pressure variations in the system



LAP JOINT FLANGES

They slide on an overlapped gasket. They are commonly used where it is necessary to dismantle in order to be cleaned or repaired. Dismantling cost decreases due to the ease of flange turning and drilling alignment.



SOCKET WELD FLANGES

This kind of flange is especially designed for lower small diameters and high pressures. The pipe is inserted into the flange up to the seat and then is fillet welded against the cube.



BLIND FLANGES

Blind flanges are utilized for pipe ends, and they bolted to any of the above flange types.



The stainless steel material that normally used

Material Grades: Chemical Composition

ASTM Design	Analysis in % max.							
	C	Mn	Si	P	S	Cr	Ni	Mo
F304 L	0.030	2.00	1.00	0.045	0.030	18.00 - 20.00	8.00 - 13.00	2.00 -
F316	0.08	2.00	1.00	0.045	0.030	16.00 - 18.00	10.00 - 14.00	3.00
F316L	0.030	2.00	1.00	0.045	0.030	16.00 - 18.00	10.00 - 15.00	2.00 -
F321	0.08	2.00	1.00	0.045	0.030	17.00 - 19.00	9.00 - 12.00	3.00

physical properties

ASTM Design	Tensile strength		Fluency limit		Elongation in		Stress	Brinell	Charpy - V		
	Ksi min.	MPa	Ksi min.	MPa	% min.	% min.			Energy J	Min. 1 Test tube	Average 3 Test tubes
A182 - 07											
F304	751	5151	30	205	30	50	156 - 207				
F304L	702	4852	25	170	30	50					
F316	751	5151	30	205	30	50					
F316L	702	4852	25	170	30	50					
F321	751	5151	30	205	30	50					

SAF2205 (UNS31803)

Chemical Composition%

C≤	Si≤	Mn≤	P≤	S≤	Cr	Ni	Mo	Cu	N
0.03	1.0	2.0	0.03	0.02	22-23	4.5-6.5	3.0-3.50	/	0.14-0.2

physical Performance

Test Items	Test Temp.	Performance	Standard Data
Tensile Strength	Room Temp.	Yield Strength $s \geq$	450 Mpa
		Tensile Strength $h \geq$	620 Mpa
		Elongation % $>$	25
		Reduction of Area $=>$	/
Impact Value KV(J)	Room Temp.	Lateral	/
Brinell hardness	Room Temp.	$\leq$	290
Rockwell hardness	Room Temp.	$\geq$	/

SAF2507(UNS32750)

Chemical Composition%

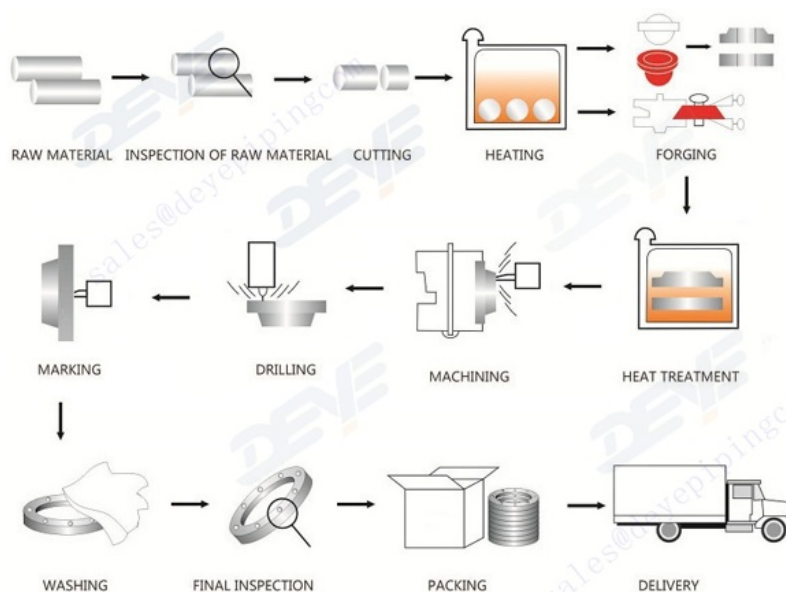
c ≤	Si≤	Mn≤	P≤	S≤	Cr	Ni	Mo	Cu≤	N
0.03	0.8	1.2	0.03	0.015	24-26	6.0-8.0	3.0-5.0	0.5	0.24-0.32

physical Performance

Test Items	Test Temp.	Performance	Standard Data
Tensile	Room Temp.	Yield Strength	$\varnothing \leq 55 \text{ Rm} \geq$ 550 Mpa
			$\varnothing > 55 \text{ Rm} \geq$ 515 Mpa
		Tensile Strength	$\varnothing \leq 55 \text{ R0.002} \geq$ 800 Mpa
			$\varnothing > 55 \text{ R0.002} \geq$ 760 Mpa
		Elongation A% (4D) $>$	$\varnothing \leq 55 \geq$ 15
			$\varnothing > 55 \geq$ 15

Brinell hardness HB	Room Temp.	$\varnothing \leq 5 \leq$	310
		$\varnothing > 55 \leq$	310

Flange Production Process/ Manufacture Prodcedure

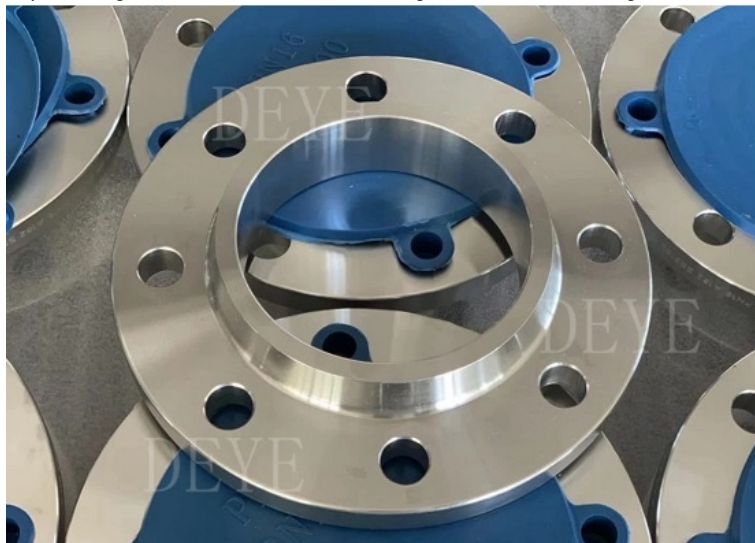


Application/Usage

A flange is a method of connecting pipes, valves, pumps, and other equipment to form a piping system to convey the water, steam, air, gas and oil. It also provides easy access for cleaning, inspection, or modification.

Flange Photos for shipment

Slip on flanges, CL150LBS, threaded Flanges, 1500LBS RJ flanges, CL2500LBS Weld Neck flange, etc.







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