



Stainless Steel 304L 316L Slip On Flanges With Cl600lbs 300lbs

Our Product Introduction

Basic Information

- Place of Origin: CHINA
- Brand Name: DEYE
- Certification: ISO9001:2015 PED
- Model Number: ZJD-F-SO02
- 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: 316L slip on flanges, 304L slip on flanges, 300lbs ss slip on flange

for more products please visit us on piping-industry.com

Product Description

Stainless Steel 304L 316L Slip On Flange With CL600lbs 300lbs

ASME/ANSI B16.5 CLASS 300LBS 600LB Slip on Flange

stainless steel/ Carbon Steel pipe flanges are classified as per ASME B16.5 standard. The pressure rating of flange ranges from 150# to 2500#.

The term "lb", "class" and "#" are used interchangeably to designate the pressure rating of the flange. The fact is that 150 lb has no relation to 150 psi and so does the 300 or 600 lb does not correlate to 300 or 600 psi pressure rating. Pressure rating of the flange depends on the material (A105, stainless, nickel alloy etc.), the heat treat condition and pressure "class". Here we will use the term "class" to NOT confuse it with pressure "rating". So what is class 150 flange or ASME B16.5 class 150 flange, as the question raised by many customers.

First lets clarify the pressure rating of Stainless steel / carbon steel pipe flange.

The table below shows the pressure and temperature rating of A105 carbon steel flange for reference

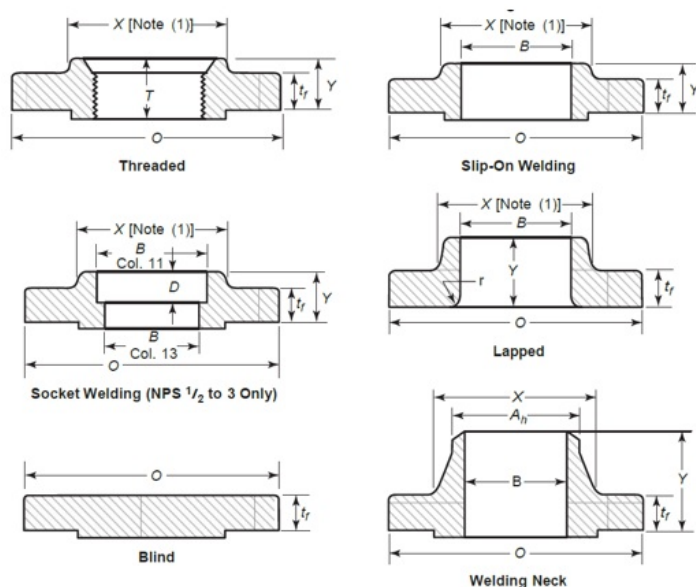
Temperature and Pressure Ratings for ASTM 105 Carbon Steel Flange							
Pressure Class (F)	150	300	400	600	900	1500	2500
PN Number	20	50	68	100	150	250	420
Service Temperature F	Maximum Non Shock Pressure (Psig)						
	285	740	990	1480	2200	3705	6170
200	260	675	900	1350	2025	3375	5625
300	230	655	875	1315	1970	3280	5470
400	200	635	845	1270	1900	3170	5280
500	170	600	800	1200	1795	2995	4990
600	140	550	730	1095	1640	2735	4560
650	125	535	715	1075	1610	2685	4475
700	110	535	710	1065	1600	2665	4440
750	95	505	670	1010	1510	2520	4200
800			NOT RECOMMENDED ABOVE 800				

Product Information/Product Description/Basis Information/Specification

Product Name	STAINLESS STEEL 304L 316L SLIP ON FLANGE WITH CL600LBS 300LBS	
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	
	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),

Material		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
	SABS	304/304L,316/316L CSRST37.2;S235JR;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.

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, SLIP ON HUB FLANGE SLIP ON PLATE FLANGE, SHUT OFF FLANGE, SQUARE FLANGE.
Pressure Class: 5K, 10K, 16K, 20K, 30K

BS4504 SEC3.1

WELDING NECK FLANGE (111/134), HUBBED SLIP ON 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 FLANGE, SCREWED BOSS FLANGE, LAPPED FLANGE.
Pressure Class: 150, 300, 400, 600, 900, 1500, 2500

BS 10:

WELDING NECK FLANGE, PLATE SLIP-ON FLANGE, SCREWED, BOSS FLANGE, SLIP ON 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 is maximum. Its long tapered neck optimizes the stress distribution



SLIP-ON FLANGES

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



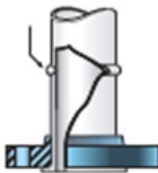
THREADED FLANGES

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 50 mm.			Stress	Brinell Hardness (HB)	Charpy - V		
	Ksi min.	MPa	Ksi min.	MPa	% min.			Energy J Min. 1 Test tube	Average 3 Test tubes	Testing Temp. °C
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 $\Rightarrow$	/
Impact Value KV(J)	Room Temp.	Lateral	/
Brinell hardness	Room Temp.	$\leq$	290
Rockwell hardness	Room Temp.	$\geq$	/

SAF2507(UNS32750)

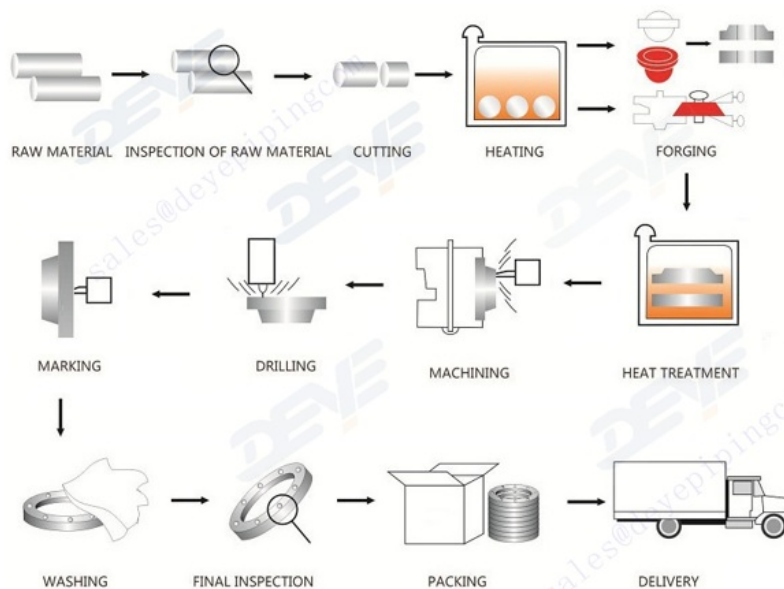
Chemical Composition%

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	Ø≤55 Rm≥	550 Mpa
			Ø >55 Rm≥	515 Mpa
		Tensile Strength	Ø≤55 R0.002 ≥	800 Mpa
			Ø >55 R0.002≥	760 Mpa
		Elongation A% (4D) >	Ø≤55 ≥	15
			Ø >55 ≥	15
Brinell hardness HB	Room Temp.	Ø≤5 ≤		310
		Ø >55 ≤		310

Flange Production Process/ Manufacture Procdedure

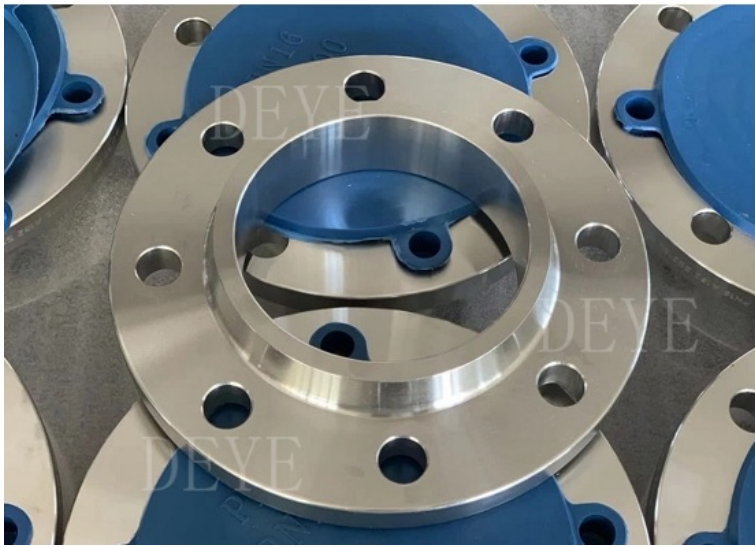


Application/Usage

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.





 **SHIJIAZHUANG DEYE PIPING INDUSTRY CO., LTD Pipefittings Department)**



+8613292824811



sales@deyepiping.com



piping-industry.com

No. 368 Youyi St. Shijiazhuang, Hebei, China