Cl150 Cl300 Cl600 ANSI A105 Steel CS Welded Neck Flange

Basic Information

Place of Origin: CHINABrand Name: DEYE

Certification: ISO9001:2015 PED
 Model Number: PF-FL-WN03
 Minimum Order Quantity: 10PCS

Price: USD10-USD100 each pcs
 Packaging Details: Fumigation Ply-wooden cases
 Delivery Time: 30 days for usual order

Payment Terms: T/T, L/C, D/P



Product Specification

• Standard: ASME B16.5, ASME B16.47, API 6A, EN

1092-1, BS 4504, BS 10, DIN, JIS, GOST.

Material: A105, A105N, A350LF2, A182F22, F11, F56,

F60, Stainless Steel

• Size: 1/2"(DN15)-88"(DN2200)

• 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.

• Surface: Black, Golden Yellow, Cold Galvanized, HDG.

Anti-Rust Oil

Highlight: CS Welded Neck Flange,

A105 Welded Neck Flange, Cl150 flange wn

Product Description

ANSI A105 Steel CS Welded Neck Flange With Cl150 Cl300 Cl600

ANSI CS weldd neck Flanges (Raised Face Weld Neck Flange) are one of the most commonly used flanges in the piping industry.

They are easy to recognize with their long tapered hub that is matched to the wall thickness (bore) of the pipe.

It meats standard of ANSI B16.5, It can be designated as class 150, 300, 400, 600, 900, 1500, and 2500, in sizes NPS 1/2 through NPS 24.

The material can be A105, A350LF2, F11, F22, Stainless steel, duplex SS, Alloy Steel according to different working environment.

Product Information/Product Description/Basis Information/Specification

Product In	formation	on/Product Description/Basis Information/Specification								
Product Name	ANSI A105 STEEL CS WELDED NECK FLANGE WITH CL150									
Types	Plate, Welding Neck, Slip on, Blind, Lap joint, Threaded Flange ,socket welding, Long weld neck, Loose Flanges,, Orifice, Blinds, customized,									
Face Finish	RFlat Face (FF), Raised Face (RF), Ring Type Joint (RTJ),									
	ANSI	ANSI B16.5 ASME B16.47 series A/B, API605, AWWAC207								
	DIN	DIN 2631 DIN2632 DIN2543 DIN2502 2573 2527 2565 DIN256 2641,2642,								
	GOST	GOST 12820-80,GOST 12821-80,Gost Blind								
Standard	EN	EN1092-1:2002								
	JIS	JIS B2220-2004, KS D3576, KS B6216,KS B1511-2007,JIS B226 JIS B8210								
	BS	BS4504,BS10 Table D/E								
	UNI	UNI 2253-67,UNI6091-67,UNI2276-67,UNI2280-67,UNI6089-67								
	SABS	SABS 1123								
		CS A105/SA 105N								
		Steels for Low Temperature Service: A 350 Grade LF 1, A350LF2, A350LF4, A350LF6, A350LF8. CL1/CL2, LF3 CL1/CL2,								
	ANSI	Stainless Steel SS 304/304L,316/316L, SS321, SS347H, SS316TI, SS304HM SS316H, 904L, UNS31803, UNS32750, UNS32760								
Material		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),								
a.c.i.a.	DIN	CS RST37.2;S235JR SS 304/304L,316/316L, Stainless steel 1.4301 1.4404, SAF2205, SAF2507,								
	GOST	CS CT20;16MN;SS 304/304L,316/316L								
	EN	CS RST37.2;S235JR;C22.8SS 304/304L,316/316L								
	JIS	CS SS400,SF440,SS 304/304L, 316/316L								
	BS	CSRST37.2;S235JR;C22.8;Q235SS 304/304L,316/316L								
	UNI	CSRST37.2;S235JR;C22.8;Q235SS 304/304L,316/316L								
	SABS	CSRST37.2;S235JR;Q235;SS 304/304L,316/316L								
	ANSI	Class 150, 300, 600, 900, 1500 2500lbs, with welded thickness STD, SCH40, SCH80, SCH160. SCHXXS								
	DIN	PN6,PN10,PN16,PN25,PN40,PN64,PN100								
	GOST	PN6,PN10,PN16,PN25								
Pressure	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								
	ANSI	1/2" – 60"								
	DIN	DN15-DN2000								
	GOST	DN10-DN1600								
	EN	DN15-DN2000								
eio	JIS	15A-1500A								
Size	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.

Features /Characteristics

- •Carbon steel flanges shall not be used in services above 425 °C
- •High-temperature service: Standard carbon steel material shall be ASTM A 105, a material that can be safely used for temperatures between minus 29 °C and 425 °C.
- •Low-temperature Service: Carbon steel flanges used for services below minus 29 °C, shall conform to the impact-testing requirements of ASME B 31.3.
- •ASTM A 350-LF2 shall be the standard material for low temperature applications
- •High-Yield Service: High strength carbon steel flanges ASTM A694 should fit API Std. 5L pipe Grade X42 to X65.
- •Material for low-alloy steel flanges (11/4 Cr-1/2 Mo) shall be ASTM A 182-F11. Material for intermediate alloy steel flanges (11/2 Cr-5 Mo) shall be ASTM A 182-F5.

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



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ASTM Designatioin		Tensile strength			Fluency limit Elongation in 50			Stress	brinell	Faces	Charpy - V	
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	F5	70	485	40		7	20	35	143 - 217			
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						2				1		
	F11 Cl. 1	60	415	30		- 1	20	45	121 - 174			
						5						
						2						
	F11 Cl. 2	70	485	40		- 1	20	30	143 - 207			
						5						
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	F11 Cl. 3	75	515	45		- 1	20	30	156 - 207			
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	F52	66	455	52	3 6 0	20					
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ad es	F60	75	515	60	4 1 5	20					
	F65	77	530	65	4 5 0	20					
	F70	82	565	70	4 8 5	18					

Production Process



Flanged Standard

ASME B16.5

This is the most used flange standard worldwide. The standard includes forged, cast and laminated flanges. It covers service, materials, dimensions, tolerances, marking and testing for flanges. It also describes all flange types for size 1/2"to 24"Class 150#, 300#, 400#, 600#, 900# & 1500#, and 1/2"to 12"Class 2500#.

ASME B16.36

This standard is applicable to flanges for flow measurement with orifice plate.
ASME B16.36 flanges have the same dimensions as B16.5 flanges except for the minimum thickness that is increased to allow measurement orifices.

Moreover, two slots and bolts allow flange separation and the replacement of the measurement plate. It covers sizes from 1"to 24"Class 300# to 1500#, and sizes 1"to 12"Class 2500#.

MSS SP-44

An standardization used for thin thicknesses and high strength. It covers ranges from 12"to 60"Class 150# to 600# and up to 48"Class 900# only for blind and welding neck flanges. Outside diameter and drilling template matches with ASME up to 36. Therefore, they can be used with valves and pumps according to ASME.

ASME B16.47

This standard covers the previous one complementing it with materials, pressure ratings and temperatures from ASME B16.5. A type class is similar to MSS-SP44. B type is the same as API 605.

ASME B16.20

It includes materials, dimensions and marking of rings for steel flanges 1/2 to 24"Class 150# to 1500#, and 36"Class 900#.

API 6 A

API 6 A specification has been created for wellheads and Christmas trees. It includes the standardization of lap joint flanges, which are dimensionally replaceable with ASME B16.5 ones but adding some tolerances with all sizes. However, as API materials are more resistant, the maximum service pressure of API/ASME union is limited to that of lower performance flange.

EN1092-1

This European Standard for a single series of flanges specifies requirements for circular steel

flanges in PN designations PN 2,5 to PN 400 and nominal sizes from DN 10 to DN 4000.

This European Standard specifies the flange types and their facings, dimensions, tolerances, threading, bolt sizes, flange jointing face surface finish, marking, materials, pressure/temperature ratings and approximate flange masses.

For the purpose of this European Standard, "flanges" include also lapped ends and collars. This European Standard applies to flanges manufactured in accordance with the methods described in Table 1. Non-gasketed pipe joints are outside the scope of this European Standard.

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.

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