



DIN11850			3A			SMS/DS		
Size	D×t	D×t	Size	D	t	Size	D	t
DN10	12×1.5	13×1.5	1/2"	12.7	1.65	19	19.1	1.25/1.5
DN15	18×1.5	19×1.5	3/4"	19.05	1.65	25	25.4	1.25/1.5
DN20	22×1.5	23×1.5	1"	25.4	1.65	32	31.8	1.25/1.5
DN25	28×1.5	29×1.5	1 1/2"	38.1	1.65	38	38.1	1.25/1.5
DN32	34×1.5	35×1.5	2"	50.8	1.65	51	50.8	1.25/1.5
DN40	40×1.5	41×1.5	2 1/2"	63.5	1.65	63	63.5	1.6/2.0
DN50	52×1.5	53×1.5	3"	76.2	1.65	76	76.2	1.6/2.0
DN65	70×2.0	70×2.0	4"	101.6	2.1	89	88.9	2.0
DN80	85×2.0	85×2.0	6"	152.4	2.8	102	101.6	2.0
DN100	104×2.0	104×2.0	8"	203.2	2.8			
DN125	129×2.0	129×2.0						
DN150	154×2.0	154×2.0						
DN200	204×2.0	204×2.0						
	Series 0	Series 2						

Size	ISO/IDF		ISO 2037		ISO 1127		BS 4825	
	D	t	D	t	D	t	D	t
12.7	12.7	1.5	12.7	1.2	13.5	1.6	12.7	1.6
19	19.1	1.5	17.2	1.2	17.2	1.6	15.88	1.6
25	25.4	1.5	21.3	1.2	21.3	1.6	19.05	1.6
32	31.8	1.5	25.0	1.2	26.9	1.6	25.4	1.6
38	38.1	1.5	33.7	1.2	33.7	2.0	38.1	1.6
45	45.0	2.0	38.0	1.2	42.4	2.0	50.8	1.6
48	48.0	1.5	40.0	1.2	48.3	2.0	63.5	1.6
51	50.8	1.5	51.0	1.2	60.3	2.0	76.2	1.6
57	57.0	2.0	63.5	1.6	76.1	2.0	101.6	2.0
63	63.5	2.0	70.0	1.6	88.9	2.3	114.3	2.0
76	76.2	2.0	76.1	1.6	114.3	2.3	139.7	2.0
89	89.0	2.0	88.9	2.0	139.7	2.3	168.3	2.5
102	101.6	2.0	101.6	2.0	168.3	2.3	219.1	2.5
108	108.0	2.0	108.0	2.0	219.1	2.3		
114	114.3	2.0	114.3	2.0				
133	133.0	2.5	139.7	2.0				
159	159.0	2.5	168.3	2.6				
204	204.0	2.5	219.1	2.6				

## Stainless Steel Standards of Different Countries

GB (China)	EN (Europa)	AISI (U.S.A)	ASTM (U.S.A)	BSI (U.K)	DIN (Germany)	JIS (Japan)
0Cr18Ni9	X5CrNi18-10	304	TP304	304 S 15 304 S 16	1.4301	SUS304
00Cr19Ni10	X2 CrNi19-11	304L	TP304L	304 S 11	1.4306	SUS304L
0Cr17Ni12M02	X5CrNiMo17-2-2	316	TP316	316 S 31	1.4401	SUS316
00Cr17Ni14M02	X2CrNiMo17-2-2	316L	TP316L	316 S 11	1.4404	SUS316L

## Chemical Composition and Mechanics Property

(GB)	TYPE	≤	≤	≤	≤	≤				Mechanical Properties			
		C	Si	Mn	P	S	Cr	Mo	Ni	$\sigma_2$ (Mpa)≥	$\sigma_b$ (Mpa)≥	$\delta_5$ %	Hb≤
		304	0.07	1.0	2.0	0.035	0.030	18.0-20.0	/	8.0-11	205	520	40
304L	0.03	1.0	2.0	0.035	0.030	18.0-20.0	/	8.0-12	177	480	40	187	
316	0.08	1.0	2.0	0.035	0.030	16.0-18.5	2.0-3.0	10-14	205	520	40	187	
316L	0.03	1.0	2.0	0.035	0.030	16.0-18.0	2.0-3.0	12-15	177	480	40	187	

  

(ASTM)	TYPE	≤	≤	≤	≤	≤				Mechanical Properties			
		C	Si	Mn	P	S	Cr	Mo	Ni	$\sigma_2$ (Mpa)≥	$\sigma_b$ (Mpa)≥	$\delta_5$ %	Hb≤
		TP304	0.08	0.75	2.0	0.040	0.030	18.0-20.0	/	8.0-11	205	515	35
TP304L	0.035	0.75	2.0	0.040	0.030	18.0-20.0	/	8.0-13	170	485	35	187	
TP316	0.08	0.75	2.0	0.040	0.030	16.0-18.0	2.0-2.5	10-14	205	515	35	187	
TP316L	0.035	0.75	2.0	0.040	0.030	16.0-18.0	2.0-2.5	12-15	170	485	35	187	

  

(JIS)	TYPE	≤	≤	≤	≤	≤				Mechanical Properties			
		C	Si	Mn	P	S	Cr	Mo	Ni	$\sigma_2$ (Mpa)≥	$\sigma_b$ (Mpa)≥	$\delta_5$ %	Hb≤
		304	0.08	1.0	2.0	0.040	0.030	18.0-20.0	/	8.0-11	206	520	35
304L	0.03	1.0	2.0	0.040	0.030	18.0-20.0	/	9.0-13	177	481	35	187	
316	0.08	1.0	2.0	0.040	0.030	16.0-18.0	2.0-3.0	10-14	206	520	35	187	
316L	0.03	1.0	2.0	0.040	0.030	16.0-18.0	2.0-3.0	12-16	177	481	35	187	

  

(AISI)	TYPE	≤	≤	≤	≤	≤				Mechanical Properties			
		C	Si	Mn	P	S	Cr	Mo	Ni	$\sigma_2$ (Mpa)≥	$\sigma_b$ (Mpa)≥	$\delta_5$ %	HB≤
		(BSI) 304	0.07	1.0	2.0	0.045	0.015	17.0-18.0	/	8.0-10	205	520	40
(DIN) 304L	0.03	1.0	2.0	0.045	0.015	17.0-18.0	/	8.0-10	180	480	40	187	
(EN) 316	0.08	1.0	2.0	0.045	0.015	16.5-18.0	2.0-2.5	10-13	205	520	40	187	
(EN) 316L	0.03	1.0	2.0	0.045	0.015	16.5-18.0	2.0-2.5	10-13	180	480	40	187	