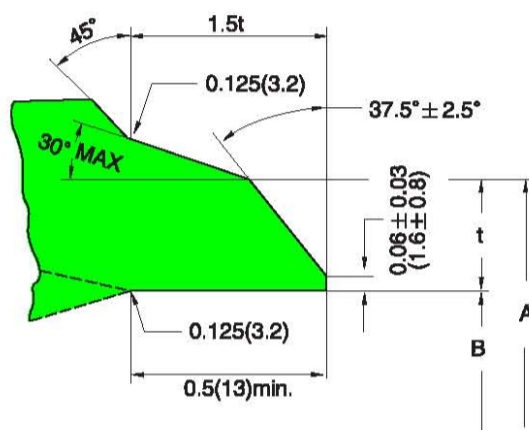


## BUTT WELDING ENDS

ANSI/ASME B16.25 is the standard covers the preparation of butt welding ends of piping components to be joined into a piping system by welding. The standard includes the butt welding ends information of General scope, Welding Bevel designs, Preparation of inside diameter of welding ends and the tolerances involved.

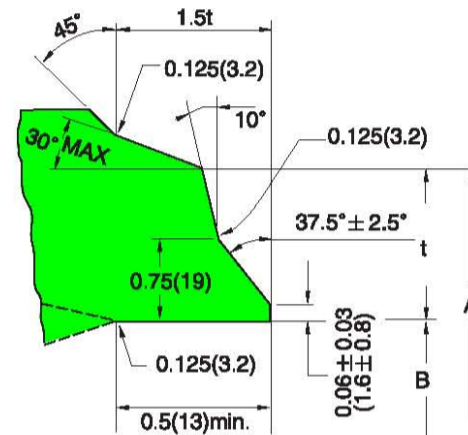
Following are the dimensions of the butt welding pipe ends according to ANSI B16.25.

TYPE\_A



For Wall Thickness(t) 0.188(4.8) to 0.875(22.2) Inclusive

TYPE\_B



For Wall Thickness(t) More Than 0.875(22.2)

Nominal Pipe Size		Schedule Number or wall	A				B		C (3)		t	
			Pipe Outside Diameter (1)		Valve Outside Diameter(2)		Nominal Inside Diameter		Machined Inside		Nominal Wall Thickness	
In	mm		In	mm	In	mm	In	mm	In	mm	In	mm
2 1/2	65	40	2.88	43	2.96	75	2.469	62.7	2.479	62.95	0.203	5.15
		80					2.323	59	2.351	59.7	0.276	7
		160					2.125	54	2.178	55.3	0.375	9.55
		XXS					1.771	45	1.868	47.45	0.552	14
3	80	40	3.5	88.9	3.59	91	3.068	78	3.081	78.25	0.216	5.5
		80					2.9	74	2.934	74.5	0.3	7.6
		160					2.624	67	2.629	68.4	0.438	11.15
		XXS					2.3	58	2.409	61.2	0.6	15.25
4	100	40					4.026	102	4.044	102.7	0.237	6
		80					3.826	97	3.869	98.25	0.337	8.55
		120	4.5	114.3	4.62	117	3.624	92	3.692	93.8	0.438	11.15
		160					3.438	87	3.53	89.65	0.531	13.5
		XXS					3.152	80	3.279	83.3	0.674	17.1
5	125	40					5.047	128	5.07	128.8	0.258	6.55
		80					4.813	122	4.866	123.6	0.375	9.55
		120	5.56	141.3	5.69	144	4.563	116	4.647	118.05	0.5	12.7
		160					4.313	110	4.428	112.45	0.625	15.9
		XXS					4.063	103	4.209	106.9	0.75	19.05

Nominal Pipe Size		Schedule Number or wall	A				B		C (3)		t	
			Pipe Outside Diameter (1)		Valve Outside Diameter(2)		Nominal Inside Diameter		Machined Inside		Nominal Wall Thickness	
In	mm		In	mm	In	mm	In	mm	In	mm	In	mm
6	150	40					6.065	154	6.094	154.8	0.28	7.1
		80					5.761	146	5.828	148.05	0.432	10.95
		120	6.62	168.3	6.78	172	5.501	140	5.6	142.25	0.562	14.25
		160					5.187	132	5.326	135.3	0.719	18.25
		XXS					4.897	124	5.072	128.85	0.864	21.95
8	200	40					7.981	203	8.02	203.7	0.322	8.2
		60					7.813	198	7.873	199.95	0.406	10.3
		80					7.625	194	7.709	195.8	0.5	12.7
		100	8.62	219.1	8.78	223	7.437	189	7.544	191.6	0.594	15.1
		120					7.187	183	7.326	186.1	0.719	18.25
		140					7.001	178	7.163	181.95	0.812	20.6
		XXS					6.875	175	7.063	179.15	0.875	22.25
		160					6.813	173	6.998	177.75	0.906	23
10	250	40					10.02	255	10.07	255.8	0.365	9.25
		60					9.75	248	9.834	249.8	0.5	12.7
		80					9.562	243	9.67	245.6	0.594	15.1
		100	10.75	273	10.94	278	9.312	237	9.451	240.05	0.719	18.25
		120					9.062	230	9.232	234.5	0.844	21.45
		140					8.75	222	8.959	227.55	1	25.4
		160					8.5	216	8.74	222	1.125	28.6
12	300	STD					12	305	12.053	306.15	0.375	9.55
		40					11.938	303	11.999	304.75	0.406	10.3
		XS					11.75	298	11.834	300.6	0.5	12.7
		60					11.626	295	11.725	297.8	0.562	14.25
		80	12.75	323.8	12.97	329	11.374	289	11.505	292.25	0.688	17.5
		100					11.062	281	11.232	285.3	0.844	21.45
		120					10.75	273	10.959	278.35	1	25.4
		140					10.5	267	10.74	272.8	1.125	28.6
		160					10.126	257	10.413	264.5	1.312	33.3
14	350	STD					13.25	337	13.303	337.9	0.375	9.55
		40					13.124	333	13.192	335.1	0.438	11.15
		XS					13	330	13.084	332.35	0.5	12.7
		60	14	355.6	14.25	362	12.812	325	12.92	328.15	0.594	15.1
		80					12.5	318	12.646	321.2	0.75	19.05
		100					12.124	308	12.318	321.9	0.938	23.85
		120					11.812	300	12.044	305.9	1.094	27.8
		140					11.5	292	11.771	299	1.25	31.75
		160					11.188	284	11.498	292.05	1.406	35.7

Nominal Pipe Size		Schedule Number or wall	A				B		C (3)		t	
			Pipe Outside Diameter (1)		Valve Outside Diameter(2)		Nominal Inside Diameter		Machined Inside		Nominal Wall Thickness	
In	mm		In	mm	In	mm	In	mm	In	mm	In	mm
16	400	STD					15.25	387	15.303	388.7	0.375	9.55
		40					15	381	15.084	383.15	0.5	12.7
		60					14.688	373	14.811	376.2	0.656	16.65
		80	16	406.4	16.25	413	14.312	364	14.482	367.85	0.844	21.45
		100					13.938	354	14.155	359.55	1.031	26.2
		120					13.562	344	13.826	351.2	1.219	30.95
		140					13.124	333	13.442	341.45	1.438	36.55
		160					12.812	325	13.17	334.5	1.594	40.5
18	450	STD					17.25	438	17.303	439.5	0.375	9.55
		XS					17	432	17.084	433.95	0.5	12.7
		40					16.878	429	16.975	431.15	0.562	14.25
		60	18	457.12	18.28	464	16.5	419	16.646	422.8	0.75	19.05
		80					16.124	410	16.318	414.5	0.938	23.85
		100					15.688	398	15.936	404.75	1.156	29.35
		120					15.25	387	15.553	395.05	1.375	34.95
		140					14.876	378	15.225	386.7	1.562	39.65
20	500	STD					19.25	489	19.303	490.3	0.375	9.55
		XS					19	483	19.084	484.75	0.5	12.7
		40					18.812	478	18.92	480.55	0.594	15.1
		60	20	508	20.31	516	18.376	467	18.538	470.85	0.812	20.6
		80					17.938	456	18.155	461.15	1.031	26.2
		100					17.438	443	17.717	450	1.281	32.55
		120					17	432	17.334	440.3	1.5	38.1
		140					16.5	419	16.896	429.15	1.75	44.45
22	550	STD					21.25	540	21.303	541.1	0.375	9.55
		XS					21	533	21.084	535.55	0.5	12.7
		60					20.25	514	20.428	518.85	0.875	22.25
		80	22	558.8	22.34	567	19.75	502	19.99	507.75	1.125	28.6
		100					19.25	489	19.553	496.65	1.375	34.95
		120					18.75	476	19.115	485.5	1.625	41.3
		140					18.25	464	18.678	474.4	1.875	47.65
		160					17.75	451	18.24	463.3	2.125	54
24	600	STD					23.25	591	23.303	591.9	0.375	9.55
		XS					23	584	23.084	586.35	0.5	12.7
		30					22.876	581	22.975	583.55	0.562	14.25
		40					22.624	575	22.755	578	0.688	17.5
		60	24	609.6	24.38	619	22.062	560	22.263	565.5	0.969	24.6
		80					21.562	548	21.826	554.4	1.219	30.95
		100					20.938	532	21.28	540.5	1.531	38.9
		120					20.376	518	20.788	528	1.812	46
		140					19.876	505	20.35	516.9	2.062	52.36
		160					19.312	491	19.857	504.35	2.344	59.55
26	650	10	26	66.4	26.38	670	25.376	645	25.413	645.5	0.312	7.9
		20					25	635	25.084	637.15	0.5	12.7
28	700	10					27.376	695	27.413	696.3	0.312	7.9
		20	28	711.2	28.38	721	27	686	27.084	687.95	0.5	12.7
		30					26.75	679	26.865	682.35	0.625	15.9

Nominal Pipe Size		Schedule Number or wall	A				B		C (3)		t	
			Pipe Outside Diameter (1)		Valve Outside Diameter(2)		Nominal Inside Diameter		Machined Inside		Nominal Wall Theckness	
In	mm		In	mm	In	mm	In	mm	In	mm	In	mm
30	750	10					29.376	746	29.413	747.1	0.312	7.9
		20	30	762	30.38	772	29	737	29.084	738.75	0.5	12.7
		30					28.75	730	28.865	733.15	0.625	15.9
32	800	10	32	812.8	32.5	825	31.376	797	31.413	797.9	0.312	7.9
		20					31	787	31.084	789.55	0.5	12.7
		30					30.75	781	30.865	783.95	0.625	15.9
		40					30.624	778	30.755	781.2	0.688	17.5
34	850	10	34	863.6	34.5	876	33.376	848	33.413	848.7	0.312	7.9
		20					33	838	33.084	840.35	0.5	12.7
		30					32.75	832	32.865	833.75	0.625	15.9
		40					32.624	829	32.755	832	0.688	17.5
36	900	10	36	914.4	36.5	927	35.376	899	35.413	899.5	0.312	7.9
		20					35	889	35.084	891.15	0.5	12.7
		30					34.75	883	34.865	885.55	0.625	15.9
		40					34.5	876	34.646	880	0.75	19.05

**NOTES:**

- (1) Letter designations signify
  - (a) STD = standard wall thickness
  - (b) XS = extra-strong wall thickness
  - (c) XXS = double extra-strong wall thickness
- (2) The diameters listed are not requirements. They are provided for the convenience of the user.
- (3) Internal machining for continuous backing rings for sizes DN 50 (NPS 2) and smaller is not contemplated.