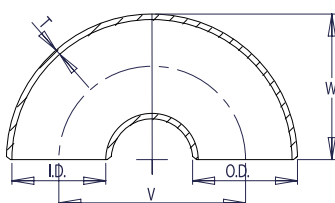


SHORT RADIUS SCHEDULE STD



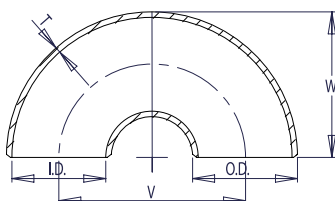
WELDBEND NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in inches.
3. For bevel detail see page 107.
4. For dimensional tolerances see page 108.
5. For sizes larger than 24" please call.
6. All weights are in pounds and approximated or estimated.

* This size and thickness does not correspond to any pipe schedule number.

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to Center	Back to Face	Pipe Schedule Number	Approx. Weight in Pounds
	O.D.	I.D.	T	V	W		
1	1.32	1.049	0.133	2.00	1.62	40	0.50
1 ¼	1.66	1.380	0.140	2.50	2.06	40	0.80
1 ½	1.90	1.610	0.145	3.00	2.44	40	1.10
2	2.38	2.067	0.154	4.00	3.19	40	1.90
2 ½	2.88	2.469	0.203	5.00	3.94	40	4.00
3	3.50	3.068	0.216	6.00	4.75	40	6.00
3 ½	4.00	3.548	0.226	7.00	5.50	40	8.70
4	4.50	4.026	0.237	8.00	6.25	40	12.20
5	5.56	5.047	0.258	10.00	7.75	40	19.20
6	6.62	6.065	0.280	12.00	9.31	40	32.90
8	8.62	7.981	0.322	16.00	12.31	40	64.90
10	10.75	10.020	0.365	20.00	15.38	40	112.00
12	12.75	12.000	0.375	24.00	18.38	*	157.00
14	14.00	13.250	0.375	28.00	21.00	30	208.00
16	16.00	15.250	0.375	32.00	24.00	30	257.00
18	18.00	17.250	0.375	36.00	27.00	*	325.00
20	20.00	19.250	0.375	40.00	30.00	20	416.00
24	24.00	23.250	0.375	48.00	36.00	20	592.00

SHORT RADIUS SCHEDULE XS



WELDBEND NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in inches.
3. For bevel detail see page 107.
4. For dimensional tolerances see page 108.
5. For sizes larger than 24" please call.
6. All weights are in pounds and approximated or estimated.

* This size and thickness does not correspond to any pipe schedule number.

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to Center	Back to Face	Pipe Schedule Number	Approx. Weight in Pounds
	O.D.	I.D.	T	V	W		
1	1.32	0.962	0.179	2.00	1.62	80	0.70
1 ¼	1.66	1.278	0.191	2.50	2.06	80	1.00
1 ½	1.90	1.500	0.200	3.00	2.44	80	1.50
2	2.38	1.939	0.218	4.00	3.19	80	2.90
2 ½	2.88	2.323	0.276	5.00	3.94	80	5.20
3	3.50	2.900	0.300	6.00	4.75	80	8.20
3 ½	4.00	3.364	0.318	7.00	5.50	80	11.70
4	4.50	3.826	0.337	8.00	6.25	80	16.40
5	5.56	4.813	0.375	10.00	7.75	80	27.70
6	6.62	5.761	0.432	12.00	9.31	80	45.70
8	8.62	7.625	0.500	16.00	12.31	80	96.30
10	10.75	9.750	0.500	20.00	15.38	60	143.00
12	12.75	11.750	0.500	24.00	18.38	*	212.00
14	14.00	13.000	0.500	28.00	21.00	*	271.00
16	16.00	15.000	0.500	32.00	24.00	40	339.00
18	18.00	17.000	0.500	36.00	27.00	*	425.00
20	20.00	19.000	0.500	40.00	30.00	30	555.00
24	24.00	23.000	0.500	48.00	36.00	*	778.00

BUTTWELD FITTINGS TOLERANCES



Weldbend Fittings			3R 90° and 3R 45° Elbows	90° and 45° Elbows and Tees	Reducers and Lap Joint Stub Ends	Caps	180° Return Bends			Stub Ends		
Pipe Size	Outside Diameter	Inside Diameter	Center to End	Center to End	Overall Length	Overall Length	Center to Center	Back to Face	Alignment of Ends	Outside Diameter of Lap	Thickness of Lap	Radius of Lap
	O.D.	I.D.	C, A	C, A, B, R	L, J	H	V	W		K	T	N
½ to 2 ½	+0.06, -0.03	0.03	0.09	0.06	0.06	0.12	0.25	0.25	0.03	+0, -0.03	+0, -0.03	+0.06, -0
3 to 3 ½	0.06	0.06	0.09	0.06	0.06	0.12	0.25	0.25	0.03	+0, -0.03	+0, -0.06	+0.06, -0
4	0.06	0.06	0.09	0.06	0.06	0.12	0.25	0.25	0.03	+0, -0.03	+0, -0.06	+0.06, -0
5 to 8	+0.09, -0.06	0.06	0.09	0.06	0.06	0.25	0.25	0.25	0.03	+0, -0.03	+0, -0.06	+0.06, -0
10 to 18	+0.16, -0.12	0.12	0.12	0.09	0.09	0.25	0.38	0.25	0.06	+0, -0.06	+0, -0.06	+0.12, -0
20 to 24	+0.25, -0.19	0.19	0.12	0.09	0.09	0.25	0.38	0.25	0.06	+0, -0.06	+0, -0.06	+0.12, -0
26 to 30	+0.25, -0.19	0.19	0.25	0.12	0.19	0.38						
30 to 48	+0.25, -0.19	0.19	0.38	0.19	0.19	0.38						

WELDBEND NOTES

1. All dimensions are in inches.
2. Tolerances are equal plus and minus unless indicated.
3. The inside diameter and nominal wall thickness at ends are to be specified by purchaser.
4. Please refer to ASME B16.9 for further information regarding tolerances.
5. Minimum wall thickness of 87.5% applies.
6. The out-of-round is the sum of the absolute values of the plus and minus tolerances.

Pipe Size	Off Angle	Off Plane
½ – 4	0.03	0.06
5 – 8	0.06	0.12
10 – 12	0.09	0.19
14 – 16	0.09	0.25
18 – 24	0.12	0.38
26 – 30	0.19	0.38
32 – 42	0.19	0.50
44 – 48	0.19	0.75

