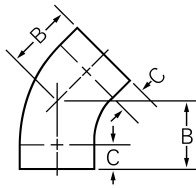
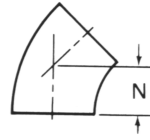


Copper-Nickel Butt Welding Fittings

45° Long Radius Elbows - NAVSEA 810-1385880, Revision D



NAVSEA



ANSI B16.9

- UNS Designation Numbers: 90-10 (UNS C70600) and 70-30 (UNS C71500).
- Nominal Chemicals 90-10: Copper 88.6%, Nickel 10.0%, Iron 1.4%.
- Nominal Chemicals 70-30: Copper 69.5%, Nickel 30.0%, Iron 0.5% .

Nominal Pipe Size	OD	B (Min)	C (Min)	N	Class 200		90-10 Part Number	70-30 Part Number	Class 50		90-10 Part Number
					Nominal Wall	Weight			Nominal Wall	Weight	
1/4	.540	45/64	9/32		.065	.03	477419	477443			
3/8	.675	57/64	3/8		.065	.04	477435	477469			
1/2	.840	1 1/16	7/16	5/8	.065	.05	269816	477477			
3/4	1.050	15/16	15/32	7/16	.065		418716	477485			
1	1.315	1 1/8	1/2	7/8	.065	.1	229604	477493			
1 1/4	1.660	1 11/32	9/16	1	.072	.2	132679	477516			
1 1/2	1.900	1 5/8	11/16	1 1/8	.072	.3	132912	249442			
2	2.375	1 31/32	23/32	1 3/8	.083	.5	132475	270053			
2 1/2	2.875	2 7/16	7/8	1 3/4	.083	.8	113162	249450			
3	3.500	2 49/64	29/32	2	.095	1.2	132336	269858			
3 1/2	4.000	3 11/64	15/16	2 1/4	.095	2	132394	473740			
4	4.500	3 29/64	31/32	2 1/2	.109	3	113285	113497			
5	5.563	4 13/64	1 3/32	3 1/8	.125	5	113340	113528			
6	6.625	4 29/32	1 11/64	3 3/4	.134	9	133065	132865			
8	8.625	6 11/32	1 3/8	5	.148	19	132297	132881			
10	10.75	7 25/32	1 9/16	6 1/4	.187	38	132792	130253	.134	27	435807
12	12.75	9 9/64	1 11/16	7 1/2	.250	45	130295	132548	.156	28	435815
14	14.00	9 1/4	1/2	8 3/4	.250	60	130350	477532	.165	40	436764
16	16.00	10 1/2	1/2	10	.250	79	130415	435695	.165	52	435255
18	18.00	11 3/4	1/2	11 1/4	.250	100	130457	477558	.180	72	435336
20	20.00	13	1/2	12 1/2	.250	122	477590	477605	.180	126	465381
22	22.00	14	1/2	13 1/2	.250	148			.180	107	436780
24	24.00	15 1/2	1/2	15	.250	175	229696	477613	.180	126	436811
30**	30.00	19	1/2	18 1/2	.250	272					
36**	36.00	22 3/4	1/2	22 1/4	.250	391					

Dimensions are in inches. All weights are approximate.

Specifications: pg. 60. Tolerances: pg. 58.

Wall thicknesses for class 200, size 14" and larger are per Alaskan standard.

Sizes not shown may be available upon request.

Available in "regular" thickness (similar to Schedule 40s).