ASTM A815 S32750 Tee Specification

ASTM A815 S32750 Tee Manufacturer and Supplier

ASTM A815 S32750 Tee is a butt-weld pipe fitting made from **super duplex stainless steel UNS S32750 (SAF 2507, 1.4410).** Tees are used to combine or split flow in a pipeline, and the S32750 alloy offers excellent strength and resistance to corrosion, especially in chloride-rich and offshore environments.

Applicable Standards:

- **Material Standard**: ASTM A815 / ASME SA815
- **Material Grade**: S32750 (UNS S32750 / 1.4410 / SAF 2507)
- **Manufacturing Standard**: ASME B16.9 / MSS SP-75
- **End Type**: Butt-weld (BW)
- **Size Range**: ½" to 24" (DN15 – DN600)
- **Wall Thickness**: SCH10 to SCH160 / XXS
- **Forming Method**: Hot formed / cold formed
- **Heat Treatment**: Solution annealed

Types of Tees:

- **Equal Tee** – Same branch and run diameters
- **Reducing Tee** – Smaller branch size
- **Barred Tee** – With flow restriction bars for piggable lines

Chemical Composition (UNS S32750):

Element	Content (%)
Chromium (Cr)	24.0 – 26.0
Nickel (Ni)	6.0 – 8.0
Molybdenum (Mo)	3.0 – 5.0
Nitrogen (N)	0.24 – 0.32
Carbon (C)	≤ 0.030
Manganese (Mn)	≤ 1.20
Silicon (Si)	≤ 0.80
Phosphorus (P)	≤ 0.035
Sulfur (S)	≤ 0.020

Element	Content (%)
Iron (Fe)	Balance

Mechanical Properties:

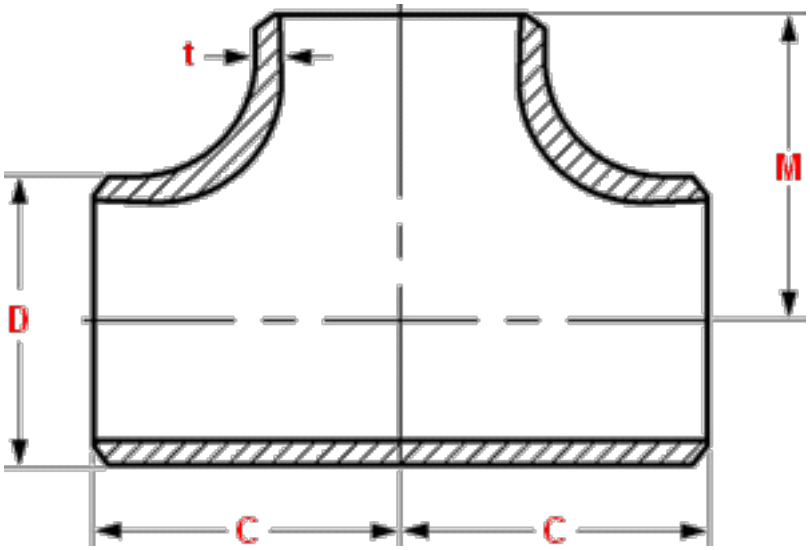
Property	Value (min)
Tensile Strength	≥ 795 MPa
Yield Strength (0.2%)	≥ 550 MPa
Elongation	≥ 15%
Hardness	≤ 32 HRC
Impact Resistance	Excellent (low temp OK)

Testing & Certification:

- Positive Material Identification (PMI)
- Hydrostatic & NDT (upon request)
- Dimensional Inspection
- Visual & Surface Finish Checks
- EN 10204 3.1 / 3.2 Mill Test Certificate
- NACE MR0175 / ISO 15156 compliance for sour service

Dimensions Butt Weld Straight Tees

ASME B16.9

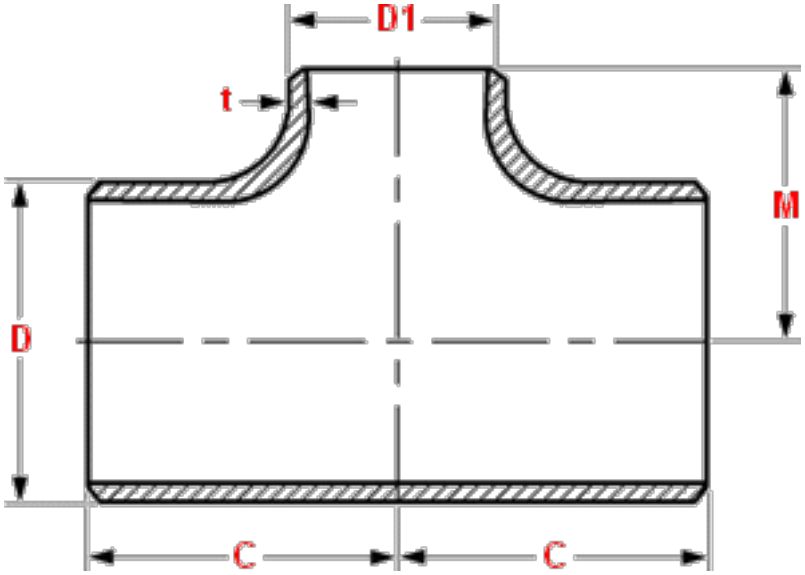


NPS	O.D. D	Center to End C	Center to End M
1/2	21.3	25	25
3/4	26.7	29	29
1	33.4	38	38
1.1/4	42.2	48	48
1.1/2	48.3	57	57
2	60.3	64	64
2.1/2	73	76	76
3	88.9	86	86
3.1/2	101.6	95	95
4	114.3	105	105
5	141.3	124	124
6	168.3	143	143
8	219.1	178	178
10	273	216	216

12	323.8	254	254
14	355.6	279	279
16	406.4	305	305
18	457	343	343
20	508	381	381
22	559	419	419
24	610	432	432
26	660	495	495
28	711	521	521
30	762	559	559
32	813	597	597
34	864	635	635
36	914	673	673
38	965	711	711
40	1016	749	749
42	1067	762	711
44	1118	813	762
46	1168	851	800
48	1219	889	838

Dimensions Butt Weld Reducing Tees

ASME B16.9



NPS	O.D. D	O.D. D1	Center to End C	Center to End M
3/4 - 1/2	26.7	21.3	29	29
1 - 1/2	33.4	21.3	38	38
1 - 3/4	33.4	26.7	38	38
1.1/4 - 1/2	42.2	21.3	48	48
1.1/4 - 3/4	42.2	26.7	48	48
1.1/4 - 1	42.2	33.4	48	48
1.1/2 - 1/2	48.3	21.3	57	57
1.1/2 - 3/4	48.3	26.7	57	57
1.1/2 - 1	48.3	33.4	57	57
1.1/2 - 1.1/4	48.3	42.2	57	57

2 - 3/4	60.3	26.7	64	44
2 - 1	60.3	33.4	64	51
2 - 1.1/4	60.3	42.2	64	57
2 - 1.1/2	60.3	48.3	64	60
2.1/2 - 1	73	33.4	76	57
2.1/2 - 1.1/4	73	42.2	76	64
2.1/2 - 1.1/2	73	48.3	76	67
2.1/2 - 2	73	60.3	76	70
3 - 1.1/4	88.9	42.2	86	70
3 - 1.1/2	88.9	48.3	86	73
3 - 2	88.9	60.3	86	76
3 - 2.1/2	88.9	73	86	83
3.1/2 - 1.1/2	101.6	48.3	95	79
3.1/2 - 2	101.6	60.3	95	83
3.1/2 - 2.1/2	101.6	73	95	89
3.1/2 - 3	101.6	88.9	95	92
4 - 1.1/2	114.3	48.3	105	86
4 - 2	114.3	60.3	105	89
4 - 2.1/2	114.3	73	105	95
4 - 3	114.3	88.9	105	98
4 - 3.1/2	114.3	101.6	105	102
NPS	O.D. D	O.D. D1	Center to End C	Center to End M
5 - 2	141.3	60.3	124	105
5 - 2.1/2	141.3	73	124	108

5 - 3	141.3	88.9	124	111
5 - 3.1/2	141.3	101.6	124	114
5 - 4	141.3	114.3	124	117
6 - 2.1/2	168.3	73	143	121
6 - 3	168.3	88.9	143	124
6 - 3.1/2	168.3	101.6	143	127
6 - 4	168.3	114.3	143	130
6 - 5	168.3	141.3	143	137
8 - 3.1/2	219.1	101.6	178	152
8 - 4	219.1	114.3	178	156
8 - 5	219.1	141.3	178	162
8 - 6	219.1	168.3	178	168
10 - 4	273	114.3	216	184
10 - 5	273	141.3	216	191
10 - 6	273	168.3	216	194
10 - 8	273	219.1	216	203
12 - 5	323.8	141.3	254	216
12 - 6	323.8	168.3	254	219
12 - 8	323.8	219.1	254	229
12 - 10	323.8	273	254	241
14 - 6	355.6	168.3	279	238
14 - 8	355.6	219.1	279	248
14 - 10	355.6	273	279	257
14 - 12	355.6	323.8	279	270

16 - 6	406.4	168.3	305	264
16 - 8	406.4	219.1	305	273
16 - 10	406.4	273	305	283
16 - 12	406.4	323.8	305	295
16 - 14	406.4	355.6	305	305
NPS	O.D. D	O.D. D1	Center to End C	Center to End M
18 - 8	457	219.1	343	298
18 - 10	457	273	343	308
18 - 12	457	323.8	343	321
18 - 14	457	355.6	343	330
18 - 16	457	406.4	343	330
20 - 8	508	219.1	381	324
20 - 10	508	273	381	333
20 - 12	508	323.8	381	346
20 - 14	508	355.6	381	356
20 - 16	508	406.4	381	356
20 - 18	508	457	381	368
22 - 10	559	273	419	359
22 - 12	559	323.8	419	371
22 - 14	559	355.6	419	381
22 - 16	559	406.4	419	381
22 - 18	559	457	419	394
22 - 20	559	508	419	406
24 - 10	610	273	432	384

24 - 12	610	323.8	432	397
24 - 14	610	355.6	432	406
24 - 16	610	406.4	432	406
24 - 18	610	457	432	419
24 - 20	610	508	432	432
24 - 22	610	559	432	432
26 - 12	660	323.8	495	422
26 - 14	660	355.6	495	432
26 - 16	660	406.4	495	432
26 - 18	660	457	495	444
26 - 20	660	508	495	457
26 - 22	660	559	495	470
26 - 24	660	610	495	483
NPS	O.D. D	O.D. D1	Center to End C	Center to End M
28 - 12	711	323.8	521	448
28 - 14	711	355.6	521	457
28 - 16	711	406.4	521	457
28 - 18	711	457	521	470
28 - 20	711	508	521	483
28 - 22	711	559	521	495
28 - 24	711	610	521	508
28 - 26	711	660	521	521
30 - 10	762	273	559	460
30 - 12	762	323.8	559	473

30 - 14	762	355.6	559	483
30 - 16	762	406.4	559	483
30 - 18	762	457	559	495
30 - 20	762	508	559	508
30 - 22	762	559	559	521
30 - 24	762	610	559	533
30 - 26	762	660	559	546
30 - 28	762	711	559	546
32 - 14	813	355.6	597	508
32 - 16	813	406.4	597	508
32 - 18	813	457	597	521
32 - 20	813	508	597	533
32 - 22	813	559	597	546
32 - 24	813	610	597	559
32 - 26	813	660	597	572
32 - 28	813	711	597	572
32 - 30	813	762	597	584