FEDERAL SUPPLY CLASS
4730

RATIONALE

ADDED STANDARD CONFIGURATION 242424.

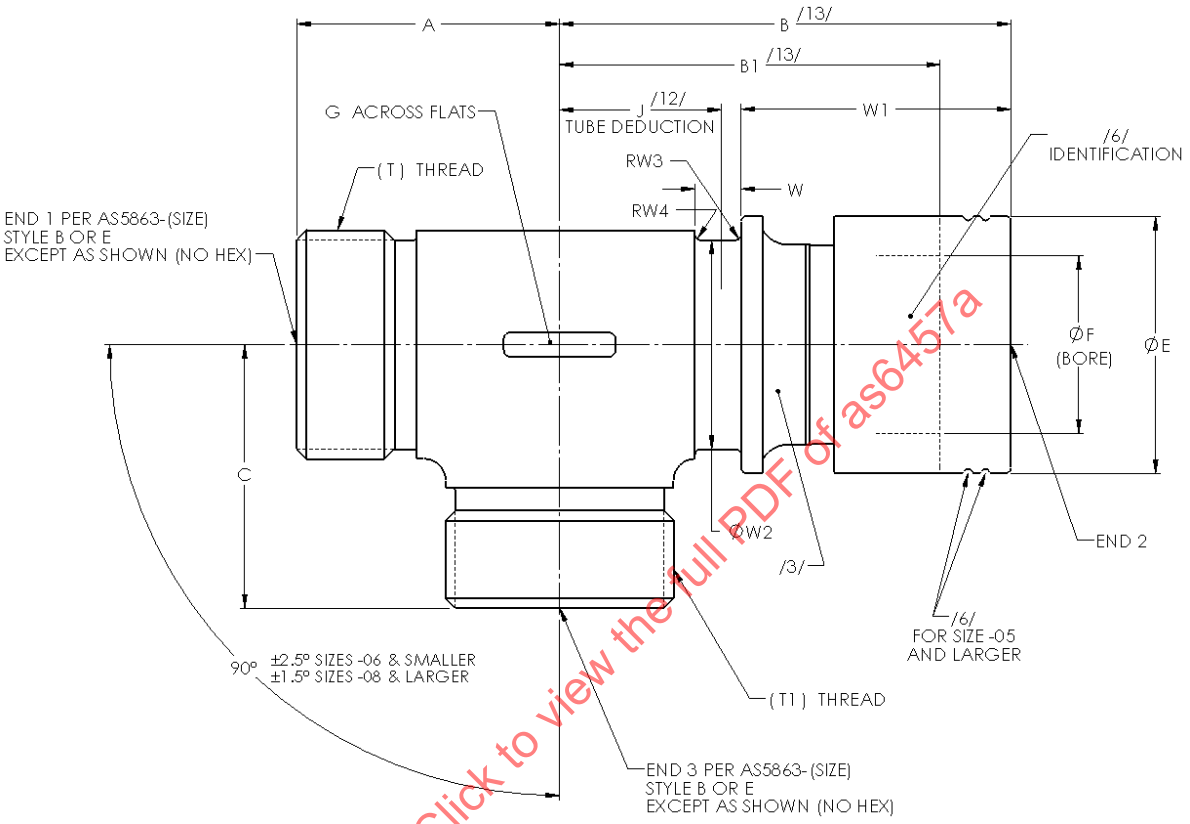
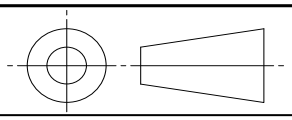


FIGURE 1 - TEE, AXIALLY SWAGED TO MALE FLARELESS ON THE RUN, MALE FLARELESS ON THE SIDE

SAE values your input. To provide feedback on this Technical Report, please visit
http://www.sae.org/technical/standards/AS6457A

THIRD ANGLE PROJECTION



ISSUED 2011-07 REVISED 2015-06

CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS6116

AEROSPACE STANDARD

FITTING ASSEMBLY, TEE, AXIALLY SWAGED TO MALE FLARELESS ON THE RUN, MALE FLARELESS ON THE SIDE, HYDRAULIC, UP TO 1500 PSI

AS6457
SHEET 1 OF 4

REV. A

TABLE 1A - DIMENSIONS A THROUGH E

BASIC NO. AS6457/15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	A ±.015	B MAX	B1 MAX	C ±.015	ØE MAX
040404	.250	.250	.250	.767	1.112	.959	.767	.435
050505	.3125	.3125	.3125	.786	1.258	1.110	.786	.503
060606	.375	.375	.375	.846	1.464	1.237	.846	.580
080808	.500	.500	.500	1.032	1.765	1.505	1.032	.755
101010	.625	.625	.625	1.158	1.843	1.603	1.158	.929
121212	.750	.750	.750	1.346	2.103	1.823	1.346	1.150
161616	1.000	1.000	1.000	1.505	2.618	2.238	1.505	1.474
202020	1.250	1.250	1.250	1.627	3.069	2.654	1.627	1.768
242424	1.500	1.500	1.500	1.747	3.600	3.105	1.747	2.070

TABLE 1B - DIMENSIONS F THROUGH J

BASIC NO. AS6457/15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	ØF MIN	G ±.015	J /12/ TUBE DEDUCTION	
040404	.250	.250	.250	.253	.438	.419	+.150/-.180
050505	.3125	.3125	.3125	.3155	.465	.435	+.150/-.180
060606	.375	.375	.375	.378	.563	.492	+.150/-.195
080808	.500	.500	.500	.503	.750	.590	+.150/-.210
101010	.625	.625	.625	.629	.875	.663	+.150/-.200
121212	.750	.750	.750	.754	1.063	.783	+.150/-.245
161616	1.000	1.000	1.000	1.004	1.304	.928	+.150/-.330
202020	1.250	1.250	1.250	1.255	1.618	1.104	+.150/-.375
242424	1.500	1.500	1.500	1.505	1.806	1.275	+.150/-.425

TABLE 1C - DIMENSIONS T THROUGH W1

BASIC NO. AS6457/15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	(T) THREAD PER AS8879	(T1) THREAD PER AS8879	W MIN	W1 MAX
040404	.250	.250	.250	.4375-20 UNJF-3A	.4375-20 UNJF-3A	.185	.604
050505	.3125	.3125	.3125	.5000-20 UNJF-3A	.5000-20 UNJF-3A	.180	.724
060606	.375	.375	.375	.5625-18 UNJF-3A	.5625-18 UNJF-3A	.195	.883
080808	.500	.500	.500	.7500-16 UNJF-3A	.7500-16 UNJF-3A	.210	1.076
101010	.625	.625	.625	.8750-14 UNJF-3A	.8750-14 UNJF-3A	.225	1.076
121212	.750	.750	.750	1.0625-12 UNJ-3A	1.0625-12 UNJ-3A	.235	1.201
161616	1.000	1.000	1.000	1.3125-12 UNJ-3A	1.3125-12 UNJ-3A	.260	1.566
202020	1.250	1.250	1.250	1.6250-12 UNJ-3A	1.6250-12 UNJ-3A	.285	1.829
242424	1.500	1.500	1.500	1.8750-12 UNJ-3A	1.8750-12 UNJ-3A	.310	2.178

TABLE 1D - DIMENSIONS W2 THROUGH W4 AND WEIGHTS

BASIC NO. AS6457/15/ SIZE CODE	NOMINAL TUBE SIZE END 1	NOMINAL TUBE SIZE END 2	NOMINAL TUBE SIZE END 3	ØW2 ±.002	W3 MAX	W4 MAX	WEIGHT APPROX LB/EA
040404	.250	.250	.250	.320	.020	.020	.020
050505	.3125	.3125	.3125	.371	.020	.020	.025
060606	.375	.375	.375	.463	.020	.020	.035
080808	.500	.500	.500	.595	.020	.020	.070
101010	.625	.625	.625	.758	.020	.020	.105
121212	.750	.750	.750	.903	.025	.025	.130
161616	1.000	1.000	1.000	1.196	.035	.035	.295
202020	1.250	1.250	1.250	1.460	.035	.035	.475
242424	1.500	1.500	1.500	1.704	.035	.035	.800

NOTES:

/1/ MATERIALS:

CODE LETTER "D"

BODY - TYPE 6061-T6 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/8.

RING - TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9.

2. FINISH:

BODY - CHEMICAL CONVERSION COAT PER MIL-DTL-5541 TYPE I CLASS 3.

RING - ANODIZE PER MIL-A-8625, TYPE II, CLASS 2, DYED GREEN, SIMILAR TO NO. 14187, 14193, OR 14223 OF FED-STD-595 AND SHALL BE DUPLEX SEALED.

/3/ COATINGS/LUBRICANTS:

BODY

a. DRY FILM LUBRICANT PER AS5272 TYPE I SHALL BE APPLIED TO THE OD OF THE AXIALLY SWAGED FITTING END. ADDITIONAL LUBRICANT APPLIED SHALL BE SPECIFIED BY MANUFACTURER. THE LUBRICANTS SHALL NOT BE IN CONTACT WITH THE SYSTEM FLUID.

b. POLYTETRAFLUOROETHYLENE (PTFE) COAT, LIGHT GREEN, SHALL BE APPLIED TO PORTIONS OF ID (BORE) UP TO THE FIRST GROOVE. OVERSPRAY IN GROOVE IS NOT PERMITTED.

c. A MINIMUM OF TWO GROOVES (END SIZE -05 AND LARGER) SHALL BE FILLED WITH ELASTOMERIC DIMETHYL SILOXANE COMPOUND. FOR SMALLER SIZE ENDS, A MINIMUM OF ONE GROOVE SHALL BE FILLED WITH THE COMPOUND.

/4/ PROCUREMENT SPECIFICATION: AS6116 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCTS LIST (QPL) PRI-QPL-AS6116 FOR THIS STANDARD. SEE www.eAuditNet.com FOR THE CURRENT QPL ON-LINE.

5. DIMENSIONS AND TOLERANCES NOT DEFINED ON THIS STANDARD SHALL BE SPECIFIED AND CONTROLLED BY THE MANUFACTURER. THE MANUFACTURER IS RESPONSIBLE TO ENSURE COMPLIANCE WITH THE PROCUREMENT SPECIFICATION.

/6/ IDENTIFICATION SHALL BE IN ACCORDANCE WITH AS6116 AND SHALL BE IDENTIFIED ON THE RING IN THE AREA SHOWN. FOR SIZE -05 AND LARGER, THE RING OD SHALL HAVE TWO GROOVES INDICATING DUAL SEALING BACK UP FEATURE.

7. FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH AS6124.

8. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, THE MAXIMUM MACHINED SURFACES SHALL BE 125 MICROINCHES Ra.

9. BREAK ALL EDGES .003 TO .010 INCHES UNLESS OTHERWISE SPECIFIED.

10. DIMENSIONING AND TOLERANCING: ASME Y14.5M-1994.

11. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.015, ANGULAR DIMENSIONS ±0°30'.

/12/ DIMENSION “J” IS THE ALLOWABLE TUBE END POSITIONING FOR SYSTEM LAYOUT DESIGN.

/13/ DIMENSION “B” IS THE FITTING ASSEMBLY LENGTH PRIOR TO SWAGE AND “B1” IS THE AFTER SWAGE ASSEMBLY LENGTH MEASURED FROM THE SWAGED RING.

/14/ PARTS FOR OXYGEN SYSTEMS SHALL BE IDENTIFIED IN THE PART NUMBER AS SUFFIX CODE “A” AND SHALL BE FURNISHED CLEANED, PACKAGED, AND LABELED IN ACCORDANCE WITH ARP1176 CATEGORY 1A.