FEDERAL SUPPLY CLASS
4730

RATIONALE

1. THIS STANDARD IS BEING REVISED TO REDUCE THE OPERATING PRESSURES FOR ALUMINUM, SIZES -10 AND ABOVE. THIS WAS PROMPTED BY MS20819/AS5176 WHICH ELIMINATED ALUMINUM AS AN OPTIONAL METAL. AND AS A RESULT, THE OPERATING PRESSURES FOR MANY OTHER MIL-F-5509/AS4841 AS4842/AS4843/AS4875 FLARED FITTING PARTS, THAT USED ALUMINUM, WERE REDUCED, FOR SIZES -10 AND ABOVE.
2. UPDATED NADCAP NOTE PER AEROSPACE STYLE MANUAL. SEE /4/
3. ADDED CADMIUM WARNING NOTE PER AEROSPACE STYLE MANUAL.
4. ADDED TITANIUM NOTE /17/ . LEGACY FROM AN938
5. INCLUDED CADMIUM IN TITANIUM NOTE /17/. FROM COMMENT AND LEGACY FROM AN938.
6. REDUCED WEIGHTS BY 10%. FROM COMMENT.
7. ADDED IVD FINISH AND FLAG NOTE /18/ TO PIN FOR "V" FINISH OPTION FOR ALUMINUM. FROM COMMENT.
8. ADDED CRES 347 AND INACTICATIVATED IT TO CRES 321 CODE R. LEGACY FROM AN938 AND COMMENT.

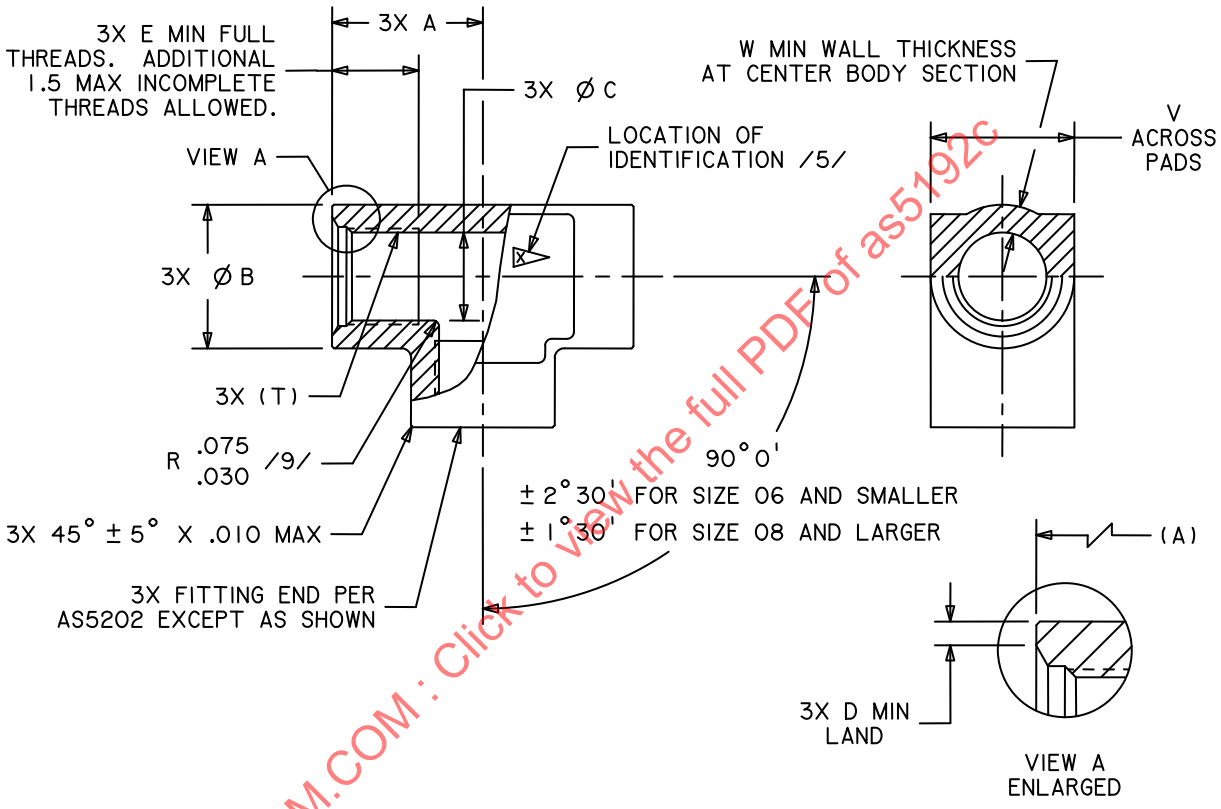

FIGURE 1 - FITTING, TEE

INACTIVE IN PART /19/

THIRD ANGLE PROJECTION

ISSUED 2000-07 REVISED 2008-11

CUSTODIAN: SAE G-3/G-3B

PROCUREMENT SPECIFICATION: /4/ AS4875

SAE Aerospace
An SAE International Group

AEROSPACE STANDARD

(R) FITTING, TEE, INTERNAL STRAIGHT THREAD PORT

SAE AS5192

REV. C

TABLE 1A - DIMENSIONS

BASIC NO. AS5192 /18/ SIZE CODE	(NOMINAL TUBE SIZE)	T THREAD PER AS8879 CLASS 3B	A	B ±.016	C +.000 -.015	D	E	V	W
04	.250	.4375-20 UNJF	.787	.688	.397	.040	.483	.735-.753	.050
05	.312	.5000-20 UNJF	.787	.750	.459	.040	.452	.735-.753	.050
06	.375	.5625-18 UNJF	.849	.813	.516	.040	.475	.797-.815	.050
08	.500	.7500-16 UNJF	1.037	1.063	.697	.071	.569	1.047-1.065	.050
10	.625	.8750-14 UNJF	1.193	1.188	.815	.071	.638	1.173-1.191	.070
12	.750	1.0625-12 UNJ	1.396	1.438	.991	.077	.730	1.418-1.443	.080
16	1.000	1.3125-12 UNJ	1.568	1.688	1.241	.077	.777	1.668-1.693	.090
20	1.250	1.6250-12 UNJ	1.771	2.000	1.553	.077	.824	1.980-2.005	.110

TABLE 1B - WEIGHTS

BASIC NO. AS5192 /18/ SIZE CODE	LB/EA APPROX REF AL	LB/EA APPROX REF STEEL	LB/EA APPROX REF TI
04	.0539	.155	.0854
05	.0534	.153	.0845
06	.0533	.153	.0844
08	.126	.362	.200
10	.170	.488	.269
12	.284	.814	.449
16	.378	1.09	.599
20	.510	1.47	.780

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

/1/ MATERIAL:

a. DASH AS CODE LETTER - TYPE 4130 STEEL FORGING OR BAR PER AMS6370 OR AMS-S-6758, OR TYPE 4140 STEEL BAR PER AMS6382. /2/

b. CODE LETTER J - TYPE 304 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5639.

c. CODE LETTER K - TYPE 316 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5648.

d. CODE LETTER R - TYPE 321 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5645.

e. CODE LETTER S - TYPE 347 CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5646. /19/

f. CODE LETTER T - TYPE 6AL-4V TITANIUM ALLOY FORGING OR BAR PER AMS4928. /17/

g. CODE LETTER W - TYPE 7075-T73 ALUMINUM ALLOY FORGING PER AMS4141; OR TYPE 7075-T73 ALUMINUM ALLOY BAR PER AMS-QQ-A-225/9; OR TYPE 7075-T7351 ALUMINUM ALLOY BAR PER AMS4124. /2/

/2/ HEAT TREATMENT:

a. DASH AS MATERIAL CODE LETTER - SEE HARDNESS REQUIREMENT PER PROCUREMENT SPECIFICATION.

b. MATERIAL CODE LETTER W - SEE PROCUREMENT SPECIFICATION.

c. OTHER MATERIAL CODE LETTERS - NONE.

3. FINISH:

a. DASH AS MATERIAL CODE LETTER - CADMIUM PLATE PER AMS-QQ-P-416, TYPE II, CLASS 2, DYE BLACK AND COAT WITH A LIGHT FILM OF OIL PER PROCUREMENT SPECIFICATION.

b. MATERIAL CODE LETTER J - PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

c. MATERIAL CODE LETTER K - PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

d. MATERIAL CODE LETTER R - PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

e. MATERIAL CODE LETTER S - PASSIVATE PER AMS2700 TYPE 6 OR TYPE 7 OR METHOD 2.

f. MATERIAL CODE LETTER T - ANODIZE PER AMS2488 OR FLUORIDE PHOSPHATE CONVERSION COAT PER AMS2486 WITH COLOR PER PROCUREMENT SPECIFICATION.

g. MATERIAL CODE LETTER W:

1. ANODIZE PER AMS2472 OR MIL-A-8625, TYPE II, CLASS 2, DYE BROWN, DUPLEX SEAL PER PROCUREMENT SPECIFICATION.

2. W CODE PARTS TO BE COATED WITH HIGH PURITY ALUMINUM ONLY WILL HAVE THE FINISH CODE LETTER “V” PLACED AFTER THE SIZE CODE IN THE PART NUMBER. THE FINISH WILL BE: COAT WITH HIGH PURITY ALUMINUM PER MIL-DTL-83488, CLASS 3, TYPE II, WITH MAXIMUM COATING THICKNESS OF .0005. GLASS BEAD PEEN PRESSURE SHALL BE 25 psi MAXIMUM.

/4/ PROCUREMENT SPECIFICATION: AS4875 EXCEPT AS SPECIFIED ON THIS STANDARD. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY AN ACCREDITED MANUFACTURER LISTED IN THE NATIONAL AEROSPACE AND DEFENSE CONTRACTORS ACCREDITATION PROGRAM (NADCAP) QUALIFIED MANUFACTURER LIST FOR THIS PRODUCT TYPE. THE QML IS AVAILABLE AT www.eAuditNet.com.

/5/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D, OR METHOD 7A3, 15A3 OR 15B.

a. FOR SIZES 06 AND SMALLER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, LETTERS "AS" AND MATERIAL CODE LETTER.

b. FOR SIZES 08 AND LARGER: MANUFACTURER'S NAME, CAGE CODE OR TRADEMARK, BASIC PART NUMBER AND MATERIAL CODE LETTER.

6. INTENDED USE: THIS PART IS DESIGNED FOR USE IN SYSTEMS WITH MAXIMUM OPERATING PRESSURES AS SHOWN IN TABLE 2.

TABLE 2 - OPERATING PRESSURES FOR ASSOCIATED MATERIAL

SIZE	MATERIAL	PSI
04-08	ALUMINUM ALLOY	3000
10-16	ALUMINUM ALLOY	1500
20	ALUMINUM ALLOY	1000
04-16	STEEL	3000
20	STEEL	1500
04-16	CORROSION RESISTANT STEEL	3000
20	CORROSION RESISTANT STEEL	1500
04-16	TITANIUM ALLOY	3000
20	TITANIUM ALLOY	1500

7. THIS STANDARD IS A FUNCTIONAL EQUIVALENT OF AN938 AND IS INTENDED TO BE SUITABLE AS A REPLACEMENT STANDARD.

8. WHEN MACHINED FROM BAR OR OVERSIZED FORGING, THE CENTER BODY DIMENSIONS SHALL CONFORM TO AS1376, TABLE 1.

/9/ RADIUS APPLICABLE FOR TITANIUM ALLOY PARTS ONLY.

10. A CHANGE BAR (l) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

11. INTERPRETATION OF DRAWING PER ARP4296.

12. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M; REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, MACHINED SURFACES TO BE 125 µin Ra. FORGED SURFACES MAY BE 250 µin Ra.

13. BREAK EDGES .003 TO .015 UNLESS OTHERWISE SPECIFIED.

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

15. DIMENSIONS IN INCHES. UNLESS OTHERWISE SPECIFIED, TOLERANCES: LINEAR DIMENSIONS ±.010, ANGULAR DIMENSIONS ±0°30'.

16. INVENTORIED PARTS CONFORMING TO THE PREVIOUS "LETTER CHANGE" MAY BE USED TO DEPLETION.

/17/ TITANIUM AND CADMIUM SHALL NOT BE USED FOR OXYGEN OR POTABLE WATER SYSTEMS.

/18/ EXAMPLE OF PART NUMBER: