

RATIONALE

1. FIX TYPOS, RETYPE TABLES, REVISE GRAPHICS AND GENERAL UPDATES.
2. REVISE NOTE 5 TO CHANGE PROCUREMENT SPECIFICATION AND TO CLARIFY QPL REQUIREMENTS. FOR THE REDUCED WELD WALL THICKNESS SHOWN IN TABLE 2B (SIZE 03-018, 08-022, ETC...), REFER TO AS4510/2 FOR REDUCED PRESSURE TESTING (LESS THAN AS85421) QUALIFICATION REQUIREMENTS.
3. REVISE TABLE 1 AND 2 TO CLARIFY PROCUREMENT SPECIFICATION, MATERIAL, RECOMMENDED OPERATING PRESSURES AND APPLICABLE SIZE AND TUBE WALL CODES.
4. SIZE 03-018 WAS INCORRECTLY RATED AT 5000 PSI, CHANGE TO 3000 PSI IN BOTH CRES AND TITANIUM TO MATCH PROCUREMENT SPECIFICATION. USERS SHOULD USE SIZE 03-022 FOR 5000 PSI APPLICATIONS.

REV.
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AS4230™

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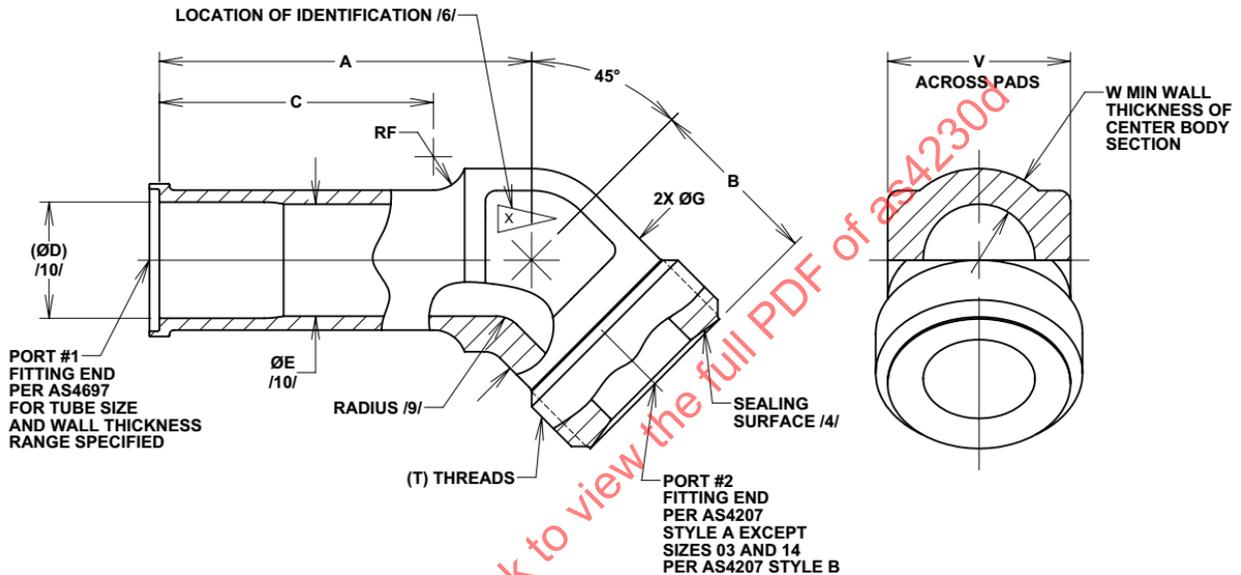
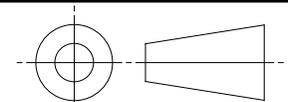


FIGURE 1 - FITTING, ELBOW, 45°

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THIRD ANGLE PROJECTION



CUSTODIAN: G-3/G-3B

PROCUREMENT SPECIFICATION: AS85421 OR AS85720 /5/



AEROSPACE STANDARD

(R) FITTING, ELBOW, 45°, EXTERNAL THREAD, BEAM SEAL TO INTEGRAL WELD RING

AS4230™
SHEET 1 OF 4

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TABLE 1 - DIMENSIONS AND WEIGHTS

| BASIC NO. AS4230 /16/ SIZE AND TUBE WALL CODES | (NOM. TUBE SIZE) | PORT #1 STYLE /10/ | T THREAD PER AS8879 CLASS 3A | A | B | C | D | E | F ±.005 | G MIN | V | | W | LB/EA MAX CRES | LB/EA MAX TI | |
|---|------------------------|--------------------------|------------------------------------|-------|-------|-------|-------|--------|------------|----------|--------|--------|-------|----------------------|--------------------|-------|
| | | | | | | | | | | | | | | | | |
| 03-018 | .188 | A | .3750-28 UNJS | .832 | .378 | .610 | .146 | - | .080 | .285 | .360- | .377 | .055 | .0175 | .0100 | |
| 03-022 | .188 | A | .3750-28 UNJS | .832 | .378 | .610 | .138 | - | .080 | .285 | .360- | .377 | .055 | .0175 | .0100 | |
| 04-022 | .250 | B | .4375-24 UNJS | .832 | .420 | .680 | .200 | .184- | .194 | .080 | .329 | .360- | .377 | .060 | .0204 | .0116 |
| 05-022 | .312 | B | .5000-24 UNJS | .887 | .438 | .650 | .262 | .232- | .242 | .080 | .391 | .423- | .440 | .060 | .0300 | .0171 |
| 05-028 | .312 | B | .5000-24 UNJS | .887 | .438 | .650 | .250 | .232- | .242 | .080 | .391 | .423- | .440 | .060 | .0300 | .0171 |
| 06-022 | .375 | B | .5625-20 UNJS | 1.005 | .471 | .740 | .325 | .297- | .307 | .090 | .454 | .485- | .502 | .060 | .0388 | .0222 |
| 06-028 | .375 | B | .5625-20 UNJS | 1.005 | .471 | .740 | .313 | .297- | .307 | .090 | .454 | .485- | .502 | .060 | .0388 | .0222 |
| 06-032 | .375 | B | .5625-20 UNJS | 1.005 | .471 | .740 | .305 | .297- | .307 | .090 | .454 | .485- | .502 | .060 | .0388 | .0222 |
| 08-022 | .500 | B | .7188-20 UNJS | 1.180 | .528 | .820 | .450 | .398- | .408 | .090 | .547 | .547- | .565 | .065 | .0592 | .0338 |
| 08-043 | .500 | B | .7188-20 UNJS | 1.180 | .528 | .820 | .408 | .398- | .408 | .090 | .547 | .547- | .565 | .065 | .0592 | .0338 |
| 10-028 | .625 | B | .8438-18 UNJS | 1.243 | .619 | .880 | .563 | .512- | .523 | .125 | .673 | .673- | .691 | .070 | .0874 | .0500 |
| 10-043 | .625 | B | .8438-18 UNJS | 1.243 | .619 | .880 | .533 | .512- | .523 | .125 | .673 | .673- | .691 | .070 | .0874 | .0500 |
| 10-055 | .625 | A | .8438-18 UNJS | 1.243 | .619 | .880 | .509 | - | .125 | .673 | .673- | .691 | .070 | .0874 | .0500 | |
| 12-028 | .750 | B | 1.0000-16 UNJ | 1.392 | .685 | .980 | .688 | .649- | .660 | .125 | .860 | .860- | .878 | .095 | .132 | .0753 |
| 12-055 | .750 | A | 1.0000-16 UNJ | 1.392 | .685 | .980 | .634 | - | .125 | .860 | .860- | .878 | .095 | .132 | .0753 | |
| 12-065 | .750 | A | 1.0000-16 UNJ | 1.392 | .685 | .980 | .614 | - | .125 | .860 | .860- | .878 | .095 | .132 | .0753 | |
| 14-032 | .875 | B | 1.1250-16 UNJ | 1.562 | .753 | 1.090 | .805 | .769- | .780 | .125 | 1.110 | 1.110- | 1.128 | .105 | .234 | .134 |
| 14-065 | .875 | A | 1.1250-16 UNJ | 1.562 | .753 | 1.090 | .739 | - | .125 | 1.110 | 1.110- | 1.128 | .105 | .234 | .134 | |
| 16-043 | 1.000 | B | 1.2500-14 UNJS | 1.617 | .783 | 1.150 | .908 | .862- | .874 | .125 | 1.110 | 1.110- | 1.128 | .110 | .239 | .136 |
| 16-078 | 1.000 | A | 1.2500-14 UNJS | 1.617 | .783 | 1.150 | .838 | - | .125 | 1.110 | 1.110- | 1.128 | .110 | .239 | .136 | |
| 16-089 | 1.000 | A | 1.2500-14 UNJS | 1.617 | .783 | 1.150 | .816 | - | .125 | 1.110 | 1.110- | 1.128 | .110 | .239 | .136 | |
| 20-055 | 1.250 | B | 1.5781-14 UNJS | 1.750 | .836 | 1.170 | 1.134 | 1.115- | 1.128 | .180 | 1.360 | 1.355- | 1.380 | .110 | .344 | .197 |
| 20-089 | 1.250 | A | 1.5781-14 UNJS | 1.750 | .836 | 1.170 | 1.066 | - | .180 | 1.360 | 1.355- | 1.380 | .110 | .344 | .197 | |
| 24-055 | 1.500 | B | 1.8438-14 UNJS | 1.900 | 1.003 | 1.270 | 1.384 | 1.324- | 1.337 | .180 | 1.610 | 1.605- | 1.630 | .130 | .557 | .318 |

TABLE 2 - SIZE AND TUBE WALL CODES, RECOMMENDED MAXIMUM SYSTEM PRESSURE

TABLE 2A - SIZE AND TUBE WALL CODES FOR AS85720, AS4510, AND AS4510/2

| BASIC NO. AS4230 /16/ SIZE AND TUBE WALL CODES | RANGE OF NOMINAL TUBE WALL FOR PORT #1 /7/ /16/ | RECOMMENDED MAXIMUM SYSTEM PRESSURE (PSI) | |
|---|---|--|------|
| | | /5/ /7/ | |
| | | TI | CRES |
| 03-022 | .019-.022 | 5000 | 5000 |
| 04-022 | .019-.022 | 5000 | 5000 |
| 05-028 | .023-.028 | 5000 | 5000 |
| 06-032 | .029-.032 | 5000 | 5000 |
| 08-043 | .033-.043 | 5000 | 5000 |
| 10-055 | .044-.055 | 5000 | 5000 |
| 12-065 | .056-.065 | 5000 | 5000 |
| 16-089 | .079-.089 | 5000 | 5000 |

TABLE 2B - SIZE AND TUBE WALL CODES FOR AS85421, AS4510, AND AS4510/2

| BASIC NO. AS4230 /16/ SIZE AND TUBE WALL CODES | RANGE OF NOMINAL TUBE WALL FOR PORT #1 /7/ /16/ | RECOMMENDED MAXIMUM SYSTEM PRESSURE (PSI) /5/ /7/ | |
|---|---|---|------|
| | | TI | CRES |
| 03-018 | .016-.018 | 3000 | 3000 |
| 05-022 | .019-.022 | 4000 | 3000 |
| 06-022 | .019-.022 | 3000 | 3000 |
| 06-028 | .023-.028 | 4000 | 3000 |
| 08-022 | .019-.022 | 2000 | 2000 |
| 10-028 | .023-.028 | 2000 | 2000 |
| 10-043 | .033-.043 | 4000 | 3000 |
| 12-028 | .023-.028 | 2000 | 2000 |
| 12-055 | .044-.055 | 4000 | 3000 |
| 14-032 | .029-.032 | 2000 | 2000 |
| 14-065 | .056-.065 | 4000 | 3000 |
| 16-043 | .033-.043 | 2000 | 2000 |
| 16-078 | .066-.078 | 4000 | 3000 |
| 20-055 | .044-.055 | 2000 | 2000 |
| 20-089 | .079-.089 | 4000 | 3000 |
| 24-055 | .044-.055 | 2000 | 2000 |

NOTES:

/1/ MATERIAL:

- a. CODE LETTER T - TYPE 6Al-4V TITANIUM ALLOY FORGING OR BAR PER AMS4965.
- b. CODE LETTER P - TYPE 17-4PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5643.
- c. CODE LETTER V - TYPE 15-5PH CORROSION RESISTANT STEEL FORGING OR BAR PER AMS5659.

2. HEAT TREATMENT:

- a. MATERIAL CODE LETTER T - NONE.
- b. MATERIAL CODE LETTERS P AND V - HEAT TREAT TO CONDITION H1075 PER AMS2759/3.

3. FINISH:

- a. MATERIAL CODE LETTER T - NONE.
- b. MATERIAL CODE LETTER P AND V - PASSIVATE PER AMS2700, TYPE 2 OR 8.

/4/ SOLID FILM LUBRICANT: APPLY SOLID FILM LUBRICANT PER AS5272, TYPE I TO THE SEALING SURFACE OF THE AS4207 FITTING END. OVERSPRAY IN BORE IS NOT PERMITTED.

/5/ PROCUREMENT SPECIFICATION: AS85421 FOR MAXIMUM SYSTEM PRESSURE 4000 PSI AND BELOW OR AS85720 FOR MAXIMUM SYSTEM PRESSURE ABOVE 4000 PSI, SEE TABLES 2A AND 2B FOR APPLICABLE SIZE AND TUBE WALL CODES AND THE RECOMMENDED MAXIMUM SYSTEM PRESSURE. THESE PARTS SHALL BE QUALIFIED TO THE APPLICABLE REQUIREMENT OF PROCUREMENT SPECIFICATION AS A COMPLETE ASSEMBLY. THE WELDED FITTING END AND WELDED FITTING PARTS SHALL MEET THE PERFORMANCE REQUIREMENTS OF AS4510. PRODUCT SUPPLIED TO THIS SPECIFICATION SHALL BE MANUFACTURED BY THE ACCREDITED MANUFACTURER LISTED IN THE PERFORMANCE REVIEW INSTITUTE (PRI) QUALIFIED PRODUCT LIST (QPL) PRI-QPL-AS85421 OR PRI-QPL-AS85720 AS APPLICABLE FOR THIS STANDARD. SEE www.eAuditNet.com FOR CURRENT QPL ONLINE.

/6/ IDENTIFICATION AT LOCATION SHOWN: MARK PER AS478 CLASS C OR D, OR METHOD 7A3, 15A3, OR 15B. MANUFACTURER'S IDENTIFICATION, CAGE CODE NUMBER OR TRADEMARK, BASIC NUMBER, MATERIAL CODE LETTER, AND TUBE WALL CODE.

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|---|--|--------------------------------|-------------------------|
|  | AEROSPACE STANDARD | AS4230™ SHEET 3 OF 4 | REV. D |
| | (R) FITTING, ELBOW, 45°, EXTERNAL THREAD, BEAM SEAL TO INTEGRAL WELD RING | | |