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DOCUMENT NO. \ REVISION \ TITLE	CONCERTO PROJECT: N/A	DAX PROJECT:	N/A	
ES2000 \ REV BC \ MAT	ERIAL AND PROCESS SPECIFICATIONS INDEX			8110-3 REQD N
STC NUMBER: N/A	REQUESTING DOCUMENT(S): N/A		PRODUCTION ORDER	R: N/A
PART NUMBER	PART NAME		MODEL(S)	CODE
ES2000 REVISION BC H THESE CHANGES INCI CURRENT EPS DOCUM SECTION 8.2.4 CREATE ALLOY PARTS WHEN T ALL CHANGES WERE I	IANGE WAS MADE \ IMPLEMENTATION INSTRUCTIONS: (AS BEEN REVISED TO ADD 8 DOCUMENTS & UPLUDE MINOR UPDATES, INCLUDED REVISIONS, TENTS AND, APPLYING CODE "L" TO SS8483. (D TO ADD TENSILE TESTING ALLOWANCE FOR TENSILE STRENGTH IS CALLED OUT IN A DRAW MADE TO IMPROVE CLARITY AND PRODUCIBILE (TS: WEIGHT BALANCE STRUCTURAL STRENGTH RE	THE ADI APPLICA ING. ITY	DITION OF A	INUM
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ACCOUNTABLE MANAGER CERTIFICATION COMPLIANCE			DM	



ERICKSON SPECIFICATION:	ES 2000	
TITLE:	MATERIAL AND PROCESS	S SPECIFICATIONS INDEX
PREPARED BY:	SIGNATURE ON FILE J.R. AVGERIS	/
APPROVED BY:		22
APPROVED BY:	SIGNATURE ON FILE ARILD BARRETT	/
APPROVED BY:	SIGNATURE ON FILE	
	DALE ROBERTS	/

REV: <u>60</u>
DATE: 5-15-25

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TABLE OF CONTENTS

TABLE OF CONTENTS	ii
TABLE OF REVISIONS	iii
1. SCOPE	1
2. PRIORITY	1
3. APPLICABILITY	1
4. CODE	2
5. GOVERNMENT AND INDUSTRY SPECIFICATIONS	3
6. ERICKSON, SIKORSKY, AND HERITAGE SPECIFICATIONS	31
7. NOTES	37
8. SUPPLEMENTAL INFORMATION	45



TABLE OF REVISIONS

REV	DESCRIPTION	BY	APPROVED	DATE
IR	INITIAL RELEASE	J. AVGERIS	K.D.R.	06/24/2008
A	ADD THE FOLLOWING SPECIFICATIONS: QQ-S-763 TO AMS-QQ-S-763; AMS-H-6875 TO AMS2759; QQ-P-416 TO AMS-QQ-P-416; AMS-QQ-P-416 TO ES0035; MIL-P-8585 TO ES0043; MIL-C-13924 TO MIL-DTL-13924; MIL-C-5541 TO MIL-DTL-5541; MIL-W-8611 TO MIL-STD- 2219; MIL-S-6721 TO AMS 5510 AND AMS 5512; MIL-S-5000 TO AMS-S-5000; AMS-S-5000 TO AMS 6415 AND AMS 6484; MIL-H-7199 TO AMS-H-7199; MIL-S-18729; AMS 6345; AMS 6350; AMS 6351; MIL-L-81352 TO MIL-PRF-81352; QQ-A-362 TO QQ-A-250/5; WW-T-789 TO WW-T-700/6; WW-T-700/6 TO AMS-WW-T-700/6; MIL-C-22750 TO MIL-PRF-22750; MIL-A- 8902 TO QQ-A-250/18; QQ-A-250/18 TO AMS-QQ-A-250/18; QQ-A-561 TO QQ-A-250/1; MIL-A-22771 TO AMS-A-22771; QQ-A-355 TO QQ-A-250/4; WW-T-785 TO WW-T-700/3; MIL- M-3171 TO AMS-M-3171; QQ-C-320 TO AMS-QQ-C-320; AMS-QQ-C-320 TO AMS 2460; MIL-S-13165 TO AMS-S- 13165; ES0048 TO ES2000; MIL-STD-1907; MIL-W-5088 TO AS50881; QQ-S-365 TO SS8487; MIL-C-26074 TO AMS-C- 26074; AMS-QQ-A-250/11 TO AMS 4025, AMS 4026 OR AMS 4027; WW-T-700/4 TO AMS-WW-T-700/4	J. AVGERIS	W.L.J.	07/30/2008
В	ADD THE FOLLOWING SPECIFICATIONS: MIL-C-6021 TO MIL-STD-2175; MIL-STD-2175 TO AMS-STD-2175; AMS-STD-2175 TO AMS 2175; QQ-M-44 TO AMS 4375 OR AMS 4376 OR AMS 4377; SS8797 TO SS8798; SS8798 TO ES0037; SS9070 TO ES9070; MIL-W-6858 TO AMS-W-6858; AMS-W-6858 TO AWS D17.2/D17.2M; MIL-C-5688 TO MIL-DTL-5688; MIL-C-5424 TO MIL-W-5424; MIL-W-5424 TO MIL-DTL-83420; MIL-B-5087 TO MIL-STD-464; MS33584 TO AS4330; AMS-STD-2219 TO AWS D17.1; MIL-R-6130 TO ASTM D 6576; QQ-N-290 TO AMS-QQ-N-290; AND10136 TO AMS10136; SUPPLEMENTAL INFORMATION SECTION 8	J. AVGERIS	A.K.B.	09/04/2008
С	ADD THE FOLLOWING SPECIFICATIONS: MIL-C-15035 TO MIL-I-24768/14, MIL-I-24768/15 OR MIL-I-24768/16; MIL-F-7179 TO MIL-STD-7179; MIL-W-16878 TO MIL-DTL-16878; AMS-C-5541 TO MIL-C-5541; QQ-P-35 TO AMS-QQ-P-35; AMS-QQ-P-35 TO AMS 2700; AMS-QQ-A-250/1 TO ASTM B 209; MIL-S-7720 TO AMS-S-7720; MIL-S-18729 TO AMS 6345, AMS 6350 OR AMS 6351; MIL-R-7362 TO AMS-R-7362; AMS-T-6736 TO AMS 6360, AMS 6361 OR AMS 6362; MIL-I-23053 TO MIL-DTL-23053; MIL-DTL-23053 TO AMS-DTL-23053; MIL-R-3065 TO ASTM D 2000; MIL-P-7788 TO AS7788; MIL-T-9047 TO AMS-T-9047; UPDATE SECTION 3.2 VERBIAGE; ADD SS8407; ADDED NOTES 13-16	J. AVGERIS	A.K.B.	09/17/2008



REV	DESCRIPTION	BY	APPROVED	DATE
D	MODIFIED VERBIAGE IN SECTION 3.2 TO ALLOW THE USE OF REVISION RANGE OF ES2000 FOR USE. CORRECTED TYPO, WAS: MIL-C-15035 NOW: MIL-P-15035; MIL-T-6845 TO AMS-T-6845; AMS-QQ-N-290 TO AMS 2403 OR AMS 2423; MIL-R-5031 TO AWS A5.9 OR AWS A5.14; MIL-R-83248 TO AMS 3216, AMS 3218, AMS 7259 OR AMS 7276; MIL-W-6101 TO QQ-W-470; MIL-P-15037 TO MIL-I-24768; MIL-P-19834 TO MIL-DTL-19834; MIL-C-490 TO TT-C-490; MIL-L-7178 TO TT-L-32; TT-L-32 TO A-A-3165; AND10134 TO AMS10134; AMS 4112 TO AMS 4339; MIL-C-16173 TO MIL-PRF-16173; MIL-W-8604 TO MIL-STD-2219; MIL-S-8802 TO AMS-S-8802; MIL-C-20692 TO MIL-PRF-20696; MIL-S-5059 TO MULTIPLE; MIL-C-14550 TO AMS 2418; MIL-S-18729 UPDATE NOTE 14; AMS-S-13165 TO AMS 2430; SS8797&SS8798 FROM "C,S" TO "NONE"; ADD SECTION 8.3 FOR CMQ/MRS MATERIAL; UPDATE SECTION 8.1; MIL-T-7993 TO MIL-T-9046; SS5075 TO ES5075; SS8010 TO ES8010; SS8439 TO ES8439.	J. AVGERIS	A.K.B.	12/04/2008
Е	QQ-S-365 TO ASTM-B-700; SS8014 TO QQ-A-367; QQ-A-270 TO QQ-A-200/8; MIL-S-7502 TO MIL-S-8802; SS8413 TO MIL-STD-865; MIL-S-8879 TO AS8879; MIL-P-8184 TO MIL-PRF-8184; SS8052 TO SS8043; AS1182; MIL-S-6855 TO MIL-R-6855; UPDATE NOTE 11; UPDATE SECTION 2.1	J. AVGERIS	A.K.B.	02/09/2009
F	WW-T-787 TO WW-T-700/4; MIL-R-3043 TO MIL-PRF-3043; MIL-H-5606 TO MIL-PRF-5606; MIL-A-148 TO QQ-A-1876; MIL-STD-2219 TO AWS D17.1; MIL-B-007883 TO AWS C3.4/3.4M OR AWS C3.5/3.5M OR AWS C3.6/3.6M OR AWS C3.7/3.7M; AWS A5.31; AMS 3195; TT-P-1757 TO ES0043; ADD ALTERNATE TEMPER ALLOWANCE IN SECTION 8.4	J. AVGERIS	A.K.B.	06/17/2009
G	CORRECTED ERROR IN NOTE 10, WAS: AMS 1377. ADDED THE FOLLOWING SPECIFICATIONS AND ALLOWABLE ALTERNATES: 008-93003 TO MIL-DTL-5541 AND ADDED NOTE 25; 008- 93005 TO ES0043; 115-12112 TO ES0037 & ES9070 AND ADDED NOTE 26. ADDED SENTENCE TO SCOPE	A. WARREN	A.K.B.	09/24/2009
Н	CORRECTED TYPOGRAPHICAL ERROR ON SHEET 19	A. WARREN	A.K.B.	09/29/2009
J	MODIFIED / CORRECTED CONFLICTING VERBIAGE IN SECTION 3.2. ADDED THE FOLLOWING SPECIFICATIONS: ES0092 AND ADDED NOTE 27, IPC A-610, IPC WHMA-A-620, ES0038, ES0039, SS8770	A. WARREN	A.K.B.	01/19/2010
K	ADDED ES0045, MIL-PRF-23377, AND SS8806 TO THE LIST OF APPROVED SPECIFICATIONS, ADDED SECTIONS 8.5 AND 8.6. ADDED THE FOLLOWING SPECIFICATIONS AND ALLOWABLE ALTERNATES: MIL-B-5697 TO MIL-DTL-22499; MIL-M-18012 TO AS18012; MIL-P-5425 TO MIL-PRF-5425; MIL-P-8585 TO TT-P-1757 AND ADDED NOTE 28.	A. WARREN	C.A.N.	05/27/2010



REV	DESCRIPTION	BY	APPROVED	DATE
L	ADDED AMS 2430 REV R, AMS 2700 REV C, AMS 2759 REV D, AMS 4081 REV J, AMS 4083 REV K, AMS 5510 REV S, AMS 5513 REV J, AMS 5519 REV N, AMS 5524 REV L, AMS 5901 REV C, AMS 5902 REV C, AMS 5911 REV B, AMS 5912 REV B, AMS 5913 REV B, AMS-QQ-N-290 REV B, AMS-QQ-P-416 REV C, AMS-T-7081 REV A, ASTM B 545 '02, ASTM B 700 '08, MIL-DTL-5688 REV E – AMENDMENT 1, MIL-DTL-83420 REV M – AMENDMENT 1, MIL-STD-10 REV A, MIL-STD-7179 '09, QQ-W-423 REV B, ES0043 REV F, ES0045 REV H, ES0065 REV IR, SS8435 REV 8, AND SS9575 REV 1. ADDED FOLLOWING SPECIFICATIONS & ALLOWABLE ALTERNATES: MIL-R-6855 TO MIL-PRF-6855, MIL-R-25897 TO MIL-R-83248, MIL-T-10727 TO ASTM B 545, SS5052 REV 4 TO SS5052 REV 2, SS8428 TO MIL-STD-865, AND SS9597 TO SS9574. ADDED SECTION 8.2.3, 8.6.2, 8.7, NOTES 29-33, AND ADDED A TEMPER ALLOWANCE IN 8.4.	A. WARREN	J.R.A.	12/20/2010
M	AND ADDED A TEMI ER ALLOWANCE IN 8.4. ADDED SS8776 AND ES8776	D. MAYER	W.L.J.	03/31/2011
N	UPDATED LATEST APPROVED REVISION OF ES0045, ADDED ES1049 THRU ES1053 SUPERSEDING SS1049 THRU SS1053, ADDED VK5114 VARNISH AND SUPERSEDING MIL-PRF-22750, ADDED ES0056	D. MAYER	JR AVGERIS	04/11/2011
P	ADDED CODE "L" TO ALL ERICKSON SPECIFICATIONS AND SPECIFIES ES0037 AS SUPERSEDING SS9100	D. MAYER	JR AVGERIS	05/06/2011
R	ADDED MIL-DTL-7788 TO SUPERSEDE AS7788	D. MAYER	JR AVGERIS	05/23/2011
Т	REVISE NOTE 29 TO DEFINE CLASS EQUIVALENCY FOR MIL-T-9047, REVISE NOTE 7 TO ADD DEFAULT TYPE AND GRADE FOR ASTM B 700, ADD AMS-QQ-A-225/8 TO SECTION 8.4 FOR ALTERNATE TEMPER.	J. WHITAKER	JR AVGERIS	06/24/2011
U	ADDED SS9991	D. MAYER	W.L.J.	06/29/2011
V	ADDED ES4007, SUPERSEDING SS4007	D. MAYER	W.L.J.	07/14/2011
W	ADDED NOTE 34 APPLICABLE TO QQ-A-267, QQ-A-200/3 & AMS-QQ-A-200/3.	A. WARREN	J.R.A.	08/11/2011
Y	ADDED ES9208, SUPERSEDING SS9208 AND ADDS SECT. 8.8 TO ALLOW FOR ES9208 TO SUPPLEMENT ALL MANUFACTURE, REPAIR & OVERHAUL. CLARIFIES SECTION 2.2 FOR SPECIFICATION REVISION USE. REMOVED SECTION 8.6 (MOVED TO ES9208)	A. WARREN	J.R.A.	09/08/2011
AA	ADDED AMS-S-18729 TO SUPERSEDE MIL-S-18729. MOVED AMS 6345, 6350 & 6351 TO SUPERSEDE AMS-S- 18729 AND REVISED NOTE 14. ADDED QQ-R-566. ADDED AWS A5.10 TO SUPERSEDE QQ-R-566. ADDED NOTE 35, APPLICABLE TO QQ-R-566 AND AWS A5.10 ADDED SS8013 REV 7 AS THE EARLIEST AND LATEST APPROVED REVISION. UPDATED LATEST APPROVED REVISION OF ASTM E1417. UPDATED LATEST APPROVED REVISION OF ASTM E1444	D. SCHUCH	J.R.A.	10/28/2011



REV	DESCRIPTION	BY	APPROVED	DATE
AB	REFORMAT DOCUMENT, ADD HEADERS, STANDARDIZE MARGINS; ADD ASTM E 797, MIL-A-8625, & ES0088, ES2000, AND NOTE 36; ADD 8.9 AND 8.10; ADD TITLE TO SS5052. ADD ES0107. REVISE NOTE 1 IN SECTION 7.	G. TYLER	W.L.J.	4/02/2012
AC	CORRECTED TYPO IN REVISION AND TITLE FOR SS9597 AND BY PROPERLY LISTING MIL-STD-10. REVISED AMS2770, ES0045, ES2000, ES5075, ES9208. ADDED ASME B46.1, IPC/J-STD-001, MIL-C-8514, MIL-I-8474, ES0084, SS5100, SS8015, SS8603, SS8607, SS8612, SS8651, SS8659, SS8669, SS8693, SS8705, SS8778, SS9048, SS9067, SS9211, SS9214, SS9250. AND NOTE 37 & 38.	J. SCHAECHER	JR. AVGERIS	9/10/2012
AD	CORRECTED TYPO AMS2770, AMS-C-26074, AMS-WW-T-700/3, MIL-A-8902, WW-T-700/3, WW-T-787. REVISED AMS2175, AMS2418, AMS2430, AMS2700, AMS3195, AMS4375, AMS4376, AMS4377 (and correct typo), AMS6345, AMS6350, AMS6351, AMS6415, AMS6484, AMS7276, AMS10134, AMS10136, AMS-A-22771, AMS-C-8837, AMS-H-6875, AMS-QQ-A-200/2 (and correct typo), AMS-QQ-A-225/6, AMS-QQ-A-250/8, AMS-QQ-A-250/13, AMS-QQ-A-250/18, AMS-QQ-A-367, AMS-S-8802, AMS-WW-T-700/6, AS50881, ASTM-D2000, MIL-C-8514, MIL-DTL-5688, MIL-DTL-7788, MIL-DTL-16878, MIL-DTL-19834, MIL-DTL-83420, MIL-124768/1, MIL-PRF-5606, MIL-PRF-6855, MIL-PRF-16173, MIL-PRF-22750, MIL-PRF-23377 (and add CODE L), MIL-STD-464, ES0045. ADDED AMS2404, AMS5643, AMS5862.	J. SCHAECHER	JR. AVGERIS	12/16/2012
AE	ADDED: AMS4049, AMS6260, ASTM A581/A581M, ASTM A582/A582M, ASTM B96/B96M, ASTM B241/B241M, SS8486; REVISE: AMS2772, AMS-QQ-A-250/4, AMS-QQ-A-250/5, AMS-QQ-A-250/13, AMS-R-7362, ASTM B209, ASTM E1444/E1444M, SS8013, SS8043, SS8407, SS8435, AND TT-C-490; ADD NOTE 39 TO AMS-QQ-S-763AND CORRECTED ALT. SPEC CALLOUT FOR SS8014.	J. SCHAECHER	JR. AVGERIS	3/15/2013
AF	ADDED: AMS-QQ-A-225/8 REV A AND B, AMS-5743, MIL-P-7105, SAE-AS71051, AMS-6414, MIL-S-8844, AMS-6257, SS8426, MIL-A-8625, Type III, REVISED: AWS D17.2/D17.2M ADDED NOTES 40 AND 41, UPDATED AMS 5643 ADDED SEC 8.11 ADDED DUPONT #4817 AND DUPONT #4817N TO 8.11.1.	T. PETRIE	JR. AVGERIS	8/28/2013
AG	ADDED: AMS 4027 AS AN ALTERNATE TO SER 50091 WITH NOTE 42; AMS 6274 REV M SUPERSEDED BY AMS 6274 REV P; AMS-C-6183 REV A AS ALTERNATE TO MIL-C-6193 REV B; AN-QQ-A-696 SUPERSEDED BY MIL-A-8625 CURRENT REV.; ASTM B 152 REV 9 SUPERSEDED BY ASTM B152 REV 13; MIL-L-8937 REV D SUPERSEDED BY MIL-L-46010 REV B (NOW MIL-PRF-46010H); MIL-P-23377 (CORRECT MIL-PRF-23377 REVISION LEVEL); ES0051 & ES0052 AS ALTERNATE TO SS8651; SS8015 REV 12, SS8705 REV 16 SUPERSEDED BY REV 17 CORRECT: TYPO IN SECTION 8.11 FROM SILER TO SILVER, AMS-C-8837 (WAS MS-C-8837)	J. JORDAN / G. TYLER	JR. AVGERIS	4/11/2014



REV	DESCRIPTION	BY	APPROVED	DATE
AH	ADDED: AMS-QQ-P-416 AS AN ACCEPTABLE ALTERNATE TO ES0035.	T. PETRIE	JR AVGERIS	4/30/14
AJ	ADDED: ES9054 AS AN ACCEPTABLE ALTERNATE TO SS9054 REMOVED: ES8805 WHICH WAS INADVERTENTLY ADDED AT REV AG	T. PETRIE	JR AVGERIS	5/7/14
AK	ADDED: SS8435 AS AN ALTERNATE TO AMS 2700; AMS-T-6845B AS AN ALTERNATE TO AMS-T-6845A; AMS 4083L SUPERSEDING AMS 4083K; AMS 2770 Rev. K SUPERSEDING Rev. J; ASTM B545 Rev. 2013 SUPERSEDING Rev. 1997; ASTM D1056 AND MIL-STD-670 ALONG WITH THEIR INTERCHANGEABILITY WITH THE ADDITION OF NOTE 43. EAC 2059 AS A SUBSTITUTE TO SS8651 FOR 'BOND BY' DATE ONLY WOITH THE ADDITION OF NOTE 44. REVISED TITLE PAGE FORMAT.	J. WHITAKER	JR AVGERIS	7/1/14
AL	ADDED: SS8622 REV. 6; UPDATED LATEST REVISION OF AWS D17.1 TO 2010; UPDATED LATEST REVISION OF AWS A5.10 TO 2012; ADDED NOTE 45; ADDED ES0064 AS SUPERSEDED BY AWS A5.10, ADDED AMS 4048 AS ALTERNATE TO AMS-QQ-A-250/13, ADDED SS9529 AS ALTERNATE TO SS9532, UPDATED LATEST REVISION OF SS8013 TO REV. 9, ADDED MIL-PRF-81352 TO SUPERSEDE MIL-L-19538, UPDATED LATEST REVISION OF ASTM E1417 TO REV. 13.	J. JORDAN	JR AVGERIS	8/1/14
AM	ADDED: SS4011 AND SS8402; UPDATED LATEST REVISION OF ES0038 AND REMOVED "NONE" CODE, UPDATED LATEST REVISION OF SS8805, SS8806, AMS-QQ-A-250/5, AND AMS2460; ADDED AMS-T-9046 AS SUPERSEDED BY MULTIPLE, ADDED MIL-T-7081 AS SUPERSEDED BY AMS-T-7081, ADDED MIL-P-8116 AS SUPERSEDED BY MIL-PRF-8116, ADDED MIL-S-6872 AS SUPERSEDED BY DOD-STD-1866, ADDED MIL-P-79 AS SUPERSEDED BY MIL-I-24768/8, MIL-I-24768/10 THROUGH MIL-I24768/14 AND MIL-I-24768/16, ADDED MIL-P-3803 AS SUPERSEDED BY MIL-P-26692, ADDED MIL-W-6860 AS SUPERSEDED BY MIL-W-6858; CLARIFY NOTE 32; ADD NOTES 46 THRU 49.	A. ROYCE	JR AVGERIS	12/8/14
AN	UPDATED LATEST REVISION OF AMS2404, AMS2770, AMS3195, AMS5518, AMS5643, AMS5862, AMS6360, AMS6361, AMS6362, AMS7259, AMS-DTL-22499, AMS-H-7199, AMS-M-3171, AMS-QQ-A-200/2, AMS-QQ-A-200/3, AMS-QQ-A-200/8, AMS-QQ-A-200/11, AMS-QQ-A-225/9, AMS-QQ-A-250/3, AMS-QQ-A-250/4, AMS-QQ-A-250/8, AMS-QQ-A-250/12, AMS-QQ-A-250/18, AMS-QQ-S-763, AMS-S-7720, AS4330, AS50881, ASTM A228, ASTM A581, ASTM B96, ASTM B209, ASTM B241, ASTM D6576, ASTM E797, AWS A5.9, MIL-P-7788, MIL-P-26692, MIL-PRF-22750, TT-C-490, SS8622, SS8806, SS9054 AND NOTE 39. ADDED AMS2759/6, AMS2759/7, AMS2759/8, AMS-S-6090, MIL-S-6090, SS9030, AND SS9122. ADDED MIL-P-6889 AS SUPERSEDED BY MIL-P-8585.	J. SCHAECHER	JR. AVGERIS	2/16/15



REV	DESCRIPTION	BY	APPROVED	DATE
AP	REMOVED: ES1049 THRU ES1053, ES4007, ES5075, ES9054, SS1049 THRU SS1053, SS4007, SS5075, SS9054, SS9991. ADD: PARAGRAPH 3.3 FOR COMMUNICATION, AMS6440/AMS6444/AMS6447 SUPERSEDES MIL-S-7420, ASTM-B107 SUPERSEDES QQ-M-31, ES0018, ES0076, SS2380, SS8445, SS8482, and SS8752. UPDATED: PARAGRAPH 3.2 FOR ALTERNATE SPECS WITH PARENTHESIS, AMS2430, AMS2770, AMS4049, AMS5643, AM5862, AMS6257, AMS6260, AMS6274, AMS6345, AMS6350, AMS6351, AMS6414, AMS6415, AMS6484, AMS-C-8837, AMS-C-26074, AMS-F-7190, AMS-H-6088, AMS-QQ-A-200/8, AMS-QQ-N-290, AMS-QQ-P-416, AMS-QQ-S-763, AMS-S-6090, AMS-S-8802, AMS-S-13165, AMS-S-18729, AMS-WW-T-700/6, AN-QQ-A-696, AS50881, ASTM B96/B96M, ASTM B209, ASTM B241/B241M, ASTM E1417, ASTM E1444, MIL-A-8625, MIL-DTL-83420, MIL-L-19538, MIL-PRF-3043, MIL-S-6090, MIL-S-7420, TT-C-490, ES0084, ES8439, SS5100, SS8043, SS8407, SS8416, SS8486, SS8603, SS8705, SS8776, SS8778, SS8805, SS8806, SS9030, SS9048, SS9070, SS9122, SS9214, SS9529, SS9574.	J. SCHAECHER	JR AVGERIS	1/10/2017
AR	Added: AMS 4462 as a replacement for AMS 4041 for specified thicknesses (See Note 50), AMS 6265.	J. WHITAKER	JR AVGERIS	3/27/2017
AT	ADD: Note 51, AMS4190, AMS6382, SS8866, SS9530, SS9590 UPDATE: Note 31 and 45, AMS2404, AMS2418, AMS3216, AMS4375, AMS5643, AMS5862, AMS-QQ-A-225/4, AMS-S-6758, AMS-STD-2219, AMS-WW-T-700/4, ASTM A228/A228M, ASTM A582/A582M, ASTM D2000, AWS D17.1, MIL-DTL-83420, MIL-STD-2219, ES0045, SS8015, SS8603, SS8607, SS8622, SS8651, SS8669, SS8705, SS8802, SS8806, SS9122, SS9211	J. SCHAECHER	JR AVGERIS	2/19/2018



REV	DESCRIPTION	BY	APPROVED	DATE
AU	ADD: AMS2380, AMS2759/1, AMS2759/2, AMS2759/3, AMS2759/4, AMS2759/5, AMS2759/9, AMS2759/10, AMS2759/11, AMS2759/12, AMS4115, AMS4116, AMS4117, AMS4128, AS23053, SS8630 UPDATE: AMS2380, AMS2403, AMS2404, AMS2423, AMS2430, AMS2700, AMS2759, AMS2759/6, AMS2759/7, AMS2759/8, AMS2771, AMS2772, AMS3218, AMS4025, AMS4041, AMS4048, AMS4339, AMS4462, AMS4901, AMS4902, AMS4903, AMS4904, AMS4907, AMS4909, AMS4910, AMS4911, AMS4915, AMS4916, AMS4917, AMS4918, AMS4939, AMS4940, AMS4988, AMS4989, AMS490, AMS5517, AMS5903, AMS5904, AMS5905, AMS5906, AMS5907, AMS5910, AMS6360, AMS6382, AMS-A-22771, AMS-DTL-22499, AMS-DTL-23053, AMS-M-3171, AMS-QQ-A-200/3, AMS-QQ-A-225/6, AMS-QQ-A-367, AMS-T-7081, AMS-WW-T-700/3, ASTM B700, ASTM D2000, ASTM E797, AWS A5.9/A5.9M, AWS A5.10/A5.10M, AWS A5.14/A5.14M, AWS A5.31M/A5.31, AWS C3.4M/C3.4, AWS C3.5M/3.5, AWS C3.6M/3.6, AWS C3.7M/3.7, AWS D17.1/D17.1M, IPC-A-610, IPC J-STD-001, IPC/WHMA-A-620, MIL-PRF-5606, MIL-PRF-16173, TT-C-490, ES0045, SS7777, SS8010, SS8013, SS8016, SS8607, SS9214, Note 6, Para 8.2.2.	J. SCHAECHER	W.L.J.	10/12/2018
AV	ADD: ES0050, ES7001, SS8766, SS9170/980 UPDATE: AMS 2759/3, AMS 2759/7, AMS2759/9, AMS 2770, SS8407, SS9048, SS9214	J. WHITAKER	I.J.B.	6/18/2019
AW	ADD: MIL-STD-867 UPDATE: AMS2759, AMS2759/1, AMS2759/2, AMS2759/3, AMS3195, AMS4041, AMS4083, AMS4901, AMS4904, AMS4911, AMS4919, AMS4990, AMS5512, AMS5516, AMS5518, AMS5519, AMS5743, AMS5902, AMS5911, AMS5912, AMS5913, AMS6345, AMS6350, AMS6351, AMS6361, AMS6362, AMS6444, AMS6447, AMS7276, AMS-C-6183, AMS-QQ-A-200/3, AMS-S-8802, AS1182, AS23053, AS50881, ASTM A228/A228M, ASTM B152, MIL-DTL-13924, MIL-DTL-16878, MIL-P-3803, MIL-P-26692, MIL-STD-7179, TT-C-490, ES0045, ES0084, SS5100, SS8015, SS8043, SS8407, SS8607, SS8622, SS8630, SS8651, SS8669, SS8766, SS8778, SS8866, SS9170/680, SS9214	J. SCHAECHER	JR Avgeris	8/04/2020



REV	DESCRIPTION	BY	APPROVED	DATE
AX	ADD: AMS5507, AMS5511, AMS5659, AMS-C-7438, AMS-P-21922, AMS-QQ-A-250/2, ASTM B124, ASTM B150, ASTM B169, ASTM B221, ASTM B235, ASTM B283, ASTM D2475, ASTM D3167, ASTM E112, ASTM E140, ASTM E340, ASTM E407, ASTM E1742, MIL-C-7438, MIL-C-18012, MIL-DTL-16232, MIL-F-5656, MIL-M-5354, MIL-P-21922, MIL-PRF-8625, MIL-PRF-21922, MIL-PRF-60346, MIL-R-60346, MIL-STD-453, MIL-STD-1312/6, MIL-STD-1312/13, MIL-STD-1312/20, MIL-W-7986, NAS 4002, NASM1312/6, NASM1312/13, NASM1312/20, QQ-A-430, QQ-C-465, ES0016, ES0022, ES0023, ES0025, ES0070, SS4200/200, SS8423, SS8442, SS8712, SS8767, SS8768, SS8769, SS8884, SS9014, SS9036, SS9578, NOTE 52, 53 AND 54. UPDATE: AMS2403, AMS2430, AMS2759/5, AMS2770, AMS4083, AMS4900, AMS4907, AMS4909, AMS5524, AMS-DTL-23053, AMS-H-6875, AMS-QQ-A-225/8, AMS-QQ-N-290, AMS-QQ-P-416, ASTM B96, ASTM B700, ASTM D1056, ASTM D6576, AWS C3.6, MIL-A-8625, MIL-DTL-7788, MIL-DTL-16878, MIL-STD-464, MIL-STD-865, MIL-STD-2219, ES8010, SS4011, SS5100, SS8015, SS8043, SS8407, SS8435, SS8482, SS8486, SS8487, SS8607, SS8612, SS8622, SS8630, SS8651, SS8659, SS8669, SS8693, SS8752, SS8766, SS8802, SS8805, SS8866, SS9030, SS9100, SS9122, SS9170/680, SS9211, SS9214, SS9529, SS9574, SS9590, NOTE 44. MINOR UPDATES TO ALTERNATE SPECIFICATION COLUMN TO CORRECTLY IDENTIFY WITH PARENTHESIS AND IN THE PROPER ORDER.	Joe Schaecher	JR Avgeris	4/01/2021
AY	ADD: AMS6359 UPDATE: AMS2175, AMS2403, AMS2418, AMS2759/1, AMS2759/2, AMS2759/7, AMS4115, AMS4116, AMS4128, AMS4190, AMS4910, AMS4915, AMS4917, AMS5513, AMS5643, AMS5659, AMS5743, AMS6265, AMS6274, AMS6440, AMS6444, AMS-P-21922, AMS-PRF-21922, AMS-QQ-A-250/5, AMS-QQ-P-416, ASME B46.1, ASTM A582, ASTM B107, ASTM B209, ASTM B221, ASTM B545, ASTM E112, ASTM E1417, ASTM E1444, AWS A5.10, IPC WHMA-A-620, MIL-DTL-5688, MIL-DTL-16232, MIL-P-3803, MIL-P-26692, NAS4002, TT-C-490, ES0065, SS5052, SS5100, SS8015, SS8407, SS8416, SS8612, SS8622, SS8705, SS9014, SS9030, SS9048, SS9122, SS9211, SS9574 AND NOTE 49.	Joe Schaecher	David Mayer	3/16/2022
BA	ADD: L-P-410A, SUPERSEDING MIL-P-46060 (MR) UPDATE: Note 43 to include more cross-referenced grades.	K. MARTINSON	Jeff Johnson	4/25/2022



REV	DESCRIPTION	BY	APPROVED	DATE
BB	ADD: "R" code Section 4.7, AMS 2761, AMS-I-7444, ASTM B80, ASTM B194, ASTM B196/B196M, ASTM B197/B197M, MIL- DTL-32495, MIL-I-7444, MIL-T-8504, MIL-T-8808, QQ-C-530, QQ-M-56, ES0099, ES0101, ES0102, ES0103, ES0104, ES0105, ES0108, ES0109, ES0111, ES0115, ES0116, SS6006, SS8481, SS8658, SS9152, Note 55, Note 56 UPDATE: AMS 2460, AMS-H-6875, AMS-S-8802, AMS-QQ-P-416, ASTM E797/E797M, ASTM E1444/E1444M, ASTM E797/E797M, ASTM E1444/E1444M, AWS D17.1/D17.1M, MIL-DTL-13924, MIL-L-8937, MIL-S-8802, ES0051, ES0070, SS8603, SS8639, SS8659, SS8705, SS8752, SS8778, Note 23, Note 45	Joshua Walters	David Mayer	11/25/2024
BC	UPDATE: AMS 2772, AMS 4027, AMS 4048, AMS 5513, AMS 6360, AMS 6415, SS8752 ADDING: AMS 4037, AMS 4078, AMS 5639, MIL-STD-1501, EPS0002, EPS0004, EPS0006, EPS0007, SS8483 "L", SS8555, ES2000 SECTION 8.2.4 CORECTING FORMATTING: SECTIONS 8.4, 8.7, & 8.8	Joshua Walters	DaMar	05/15/2025



1. SCOPE

The purpose of this document is to define the earliest and latest approved revisions of Government, Industry, Sikorsky, and Erickson specifications allowed for use when specified or referenced on approved EAC technical data. Direct superseding and alternate material specifications are established in this specification. In addition, this specification provides supplemental information, allowances and requirements related to materials and manufacturing processes.

2. PRIORITY

The revisions of Material and Process Specifications used on EAC drawings, manufacturing and overhaul documents, and Erickson Specifications shall be of the priority listed below:

- 2.1. If an EAC document calls for a specific revision of a Material and Process Specification, that revision or the revision range listed in ES2000 are the only revisions allowed for use. Written consent from EAC Engineering is required in order to use a revision other than that listed on the document or in ES2000.
- 2.2. If no revision is listed on the document for the Material and Process Specification, the revision range within this document (ES2000) is to be used. If the Specification is not listed in this document, the revision that is to be used is that which was current at the time the drawing was last revised (the date of amending data is not applicable for this requirement).

3. APPLICABILITY

3.1. EARLIER OR LATER REVISIONS

The use of earlier or later revisions than that listed within this document is prohibited without written consent from EAC Engineering (unless specified on the document as stated in 2.1 above). In order to use an earlier or later revision the requesting organization (e.g. supplier, overhaul department, materials department, etc.) must submit a request in writing to EAC Engineering specifically requesting the revision and applicable component affected by this previous revision.

3.2. OTHER SPECIFICATIONS

If the material or process specification is not listed in this document, the revision to be used is that which was current when the drawing was last revised (or creation date if revision of drawing is IR). Further, if the approved data adds or modifies a specification listed in the document, the revision of that specification shall be that which was current as of the approved data release date.

If the original alternate specification was canceled and/or superseded by another, it will be shown in parenthesis. The current Alternate Spec will be shown without parentheses. Any of the listed alternate specifications may be used.

3.3. **COMMUNICATION**

Erickson is the Design Approval Holder (DAH) for the S-64 Air-Crane. When Erickson took over this responsibility from Sikorsky, all references in drawings, specifications, etc. to Sikorsky automatically transferred to Erickson. Therefore, any reference to Sikorsky for written or verbal communication in any drawing or specification would default to Erickson Incorporated in regard to parts that are used on the S-64.



4. CODE

The codes indicated herein are developed in order to provide information related to the specification beyond the earliest approved revision. The list below establishes each code as well as a specific description.

- 4.1. "S" Superseded: The specification has been replaced for future procurement. Unless otherwise specified on the drawing or procuring document, the outdated specification may continue to be used.
- 4.2. "I" Inactive: The specification has been deemed inactive by the governing body and is not to be used for new designs. However, the inactive document may continue to be used where specified.
- 4.3. "C" Cancelled: The specification has been cancelled by the governing body. The cancelled specification may continue to be used as indicated in this document.
- 4.4. "M" Hazardous Material: This material should not be used unless absolutely necessary due to environmental, health, safety, or other potentially hazardous issues.
- 4.5. "NONE" Not to be used This specification may not be used in any application and the alternate (if designated) may be used. If no alternate is specified, contact EAC Engineering for further instruction.
- 4.6. "L" Latest The latest released revision of the document may be used.
- 4.7. "R" Requirement The latest released version of the specification at issuance of PO or start of WO or MO shall be used. If a newer version becomes available after issuance of PO or start of WO or MO, it may be used.



5. GOVERNMENT AND INDUSTRY SPECIFICATIONS

SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
A-A-3165	A	A	LACQUER, GLOSS, FOR AIRCRAFT USE			
AMS 2175	JULY 2003	A (R2018)	CASTINGS, CLASSIFICATION AND INSPECTION OF			
AMS 2380	F	G	APPROVAL AND CONTROL OF PREMIUM-QUALITY TITANIUM ALLOYS			
AMS 2403	L	R	PLATING, NICKEL GENERAL PURPOSE			
AMS 2404	F	J	PLATING, ELECTROLESS NICKEL			
AMS 2418	G	K	PLATING, COPPER			
AMS 2423	D	Е	PLATING, NICKEL HARD DEPOSIT			
AMS 2430	N	U	SHOT PEENING, AUTOMATIC		SS8766 SS8767 SS8768 SS8769 ES0050	
AMS 2460	JULY 2007	В	PLATING, CHROMIUM			
AMS 2700	В	F	PASSIVATION OF CORROSION RESISTANT STEELS		SS8435	
AMS 2759	D	G	HEAT TREATMENT OF STEEL PARTS GENERAL REQUIREMENTS			
AMS 2759/1	-	J	HEAT TREATMENT OF CARBON AND LOW-ALLOY STEEL PARTS MINIMUM TENSILE STRENGTH BELOW 220 KSI (1517 MPA)			
AMS 2759/2	-	K	HEAT TREATMENT OF LOW-ALLOY STEEL PARTS MINIMUM TENSILE STRENGTH 220 KSI (1517 MPA) AND HIGHER			
AMS 2759/3	-	J	HEAT TREATMENT PRECIPITATION- HARDENING CORROSION- RESISTANT AND MARAGING STEEL PARTS			
AMS 2759/4	-	D	HEAT TREATMENT AUSTENITIC CORROSION-RESISTANT STEEL PARTS			
AMS 2759/5	-	F	HEAT TREATMENT MARTENSITIC CORROSION-RESISTANT STEEL PARTS			
AMS 2759/6	В	С	GAS NITRATING AND HEAT TREATMENT OF LOW-ALLOY STEEL PARTS			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 2759/7	В	Е	CARBURIZING AND HEAT TREATMENT OF CARBURIZING GRADE STEEL PARTS			
AMS 2759/8	A	В	ION NITRIDING			
AMS2759/9	-	Е	HYDROGEN EMBRITTLEMENT RELIEF (BAKING) OF STEEL PARTS			
AMS 2759/10	-	В	AUTOMATED GASEOUS NITRIDING CONTROLLED BY NITRIDING POTENTIAL			
AMS 2759/11	-	A	STRESS RELIEF OF STEEL PARTS			
AMD 2759/12	-	В	HEAT TREATMENT OF ALUMINUM ALLOY RAW MATERIALS			
AMS 2761	-	IR	HEAT TREATMENT OF STEEL AND RAW MATERIALS			
AMS 2770	Н	R	HEAT TREATMENT OF WROUGHT ALUMINUM ALLOY PARTS			
AMS 2771	С	F	HEAT TREATMENT OF ALUMINUM ALLOY CASTINGS			
AMS 2772	Е	Н	HEAT TREATMENT OF ALUMINUM ALLOY RAW MATERIALS			
AMS 3195	Е	Н	SILICONE RUBBER SPONGE CLOSED CELL, MEDIUM			
AMS 3216	G	Н	FLUOROCARBON (FKM) RUBBER HIGH-TEMPERATURE – FLUID RESISTANT LOW COMPRESSION SET 70 TO 80			
AMS 3218	С	D	FLUOROCARBON (FKM) RUBBER HIGH-TEMPERATURE-FLUID RESISTANT LOW COMPRESSION SET 85 TO 95			
AMS 4025	L	М	ALUMINUM ALLOY, SHEET AND PLATE 1.0MG – 0.60SI – 0.28CU – 0.20CR (6061-0) ANNEALED			
AMS 4026	М	М	ALUMINUM ALLOY, SHEET AND PLATE 1.0MG – 0.60SI – 0.28CU – 0.20CR (6061; -T4 SHEET, -T451 PLATE) SOLUTION HEAT TREATED AND NATURALLY AGED			
AMS 4027	N	Р	ALUMINUM ALLOY, SHEET AND PLATE 1.0MG – 0.60SI – 0.28CU – 0.20CR (6061; -T6 SHEET, -T651 PLATE) SOLUTION AND PRECIPITATION HEAT TREATED			
AMS 4037	R	R	ALUMINUM ALLOY, SHEET AND PLATE 4.4CU - 1.5MG - 0.60MN (2024; - T3 FLAT SHEET, -T351 PLATE) SOLUTION HEAT TREATED			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 4041	P	Т	ALUMINUM ALLOY, SHEET AND PLATE, ALCLAD 4.4CU – 1.5MG – 0.60MN (2024, T3 SHEET/-T351 PLATE WITH 1 ½ % ALCLAD) SOLUTION HEAT TREATED, COLD WORKED AND NATURALLY AGED	S	AMS 4462	50
AMS 4048	N	R	ALUMINUM ALLOY SHEET AND PLATE, ALCLAD 5.6ZN – 2.5MG – 1.6CU – 0.23CR (ALCLAD 7075; -0) ANNEALED			
AMS 4049	L	М	ALUMINUM ALLOY, SHEET AND PLATE, ALCLAD 5.6ZN – 2.5MG – 1.6CU – 0.23CR (ALCLAD 7075; -T6 SHEET – T651 PLATE) SOLUTION AND PRECIPITATION HEAT TREATED			
AMS 4078	L	L	ALUMINUM ALLOY SHEET AND PLATE 5.6ZN - 2.5MG - 1.6CU - 0.23CR 7075: (-T73 SHEET, -T7351 PLATE) SOLUTION HEAT TREATED AND OVERAGED			
AMS 4081	J	J	ALUMINUM ALLOY, TUBING, HYDRAULIC, SEAMLESS, DRAWN, ROUND 1.0MG – 0.60SI – 0.28CU – 0.20CR (6061-T4) SOLUTION HEAT TREATED AND NATURALLY AGED			
AMS 4083	K	М	ALUMINUM ALLOY TUBING, HYDRAULIC, SEAMLESS, DRAWN, ROUND 1.0MG – 0.60SI – 0.28CU – 0.20CR (6061-T6) SOLUTION AND PRECIPITATION HEAT TREATED			
AMS 4112	D	D	ALUMINUM ALLOY BARS, RODS, AND WIRE 4.4CU – 11.5MG – 0.6MN (2024-T6) ROLLED, DRAWN, OR COLD FINISHED	C,S	AMS 4339	
AMS 4115	-	K	ALUMINUM ALLOY, ROLLED OR COLD-FINISHED, BAR, RODS, WIRE AND FLASH WELDED RINGS AND STOCK FOR FLASH WELDING RINGS ANNEALED 1.0MG-0.60SI-0.28CU- 0.20CR (6061-0)			
AMS 4116	-	K	ALUMINUM ALLOY, BAR, RODS, AND WIRE 1.0MG-0.60SI-0.30CU- 0.20CR (6061-T4) COLD FINISHED, SOLUTION HEAT TREATED AND NATURALLY AGED			
AMS 4117	-	K	ALUMINUM ALLOY, ROLLED OR COLD FINISHED BARS, RODS, AND WIRE			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 4128	-	E	ALUMINUM ALLOY, BARS, ROLLED OR COLD FINISHED 1.0MG-0.60SI- 0.30CU-0.20CR (6061-T451) SOLUTION HEAT TREATED AND STRESS RELIEVED BY STRETCHING			
AMS 4190	K	L	ALUMINUM ALLOY, WELDING WIRE 5.2SI (4043)			
AMS 4339	A	В	ALUMINUM ALLOY, ROLLED OR COLD FINISHED BARS AND RODS 4.4CU – 1.5MG – 0.60MN (2024-T851) SOLUTION HEAT TREATED, COLD WORKED, AND ARTIFICIALLY AGED			
AMS 4375	K	М	SHEET AND PLATE, MAGNESIUM ALLOY 3.0AL – 1.0ZN – 0.20MN (AZ31B-O) ANNEALED AND RECRYSTALLIZED			
AMS 4376	G	Н	PLATE, MAGNESIUM ALLOY 3.0AL – 1.0ZN – 0.20MN (AZ31B-H26) COLD ROLLED AND PARTIALLY ANNEALED			
AMS 4377	Н	J	MAGNESIUM ALLOY, SHEET AND PLATE 3.0AL – 1.0ZN – 0.20MN (AZ31B-H24) COLD ROLLED, PARTIALLY ANNEALED			
AMS 4462	IR	A	ALUMINUM ALLOY, SHEET AND PLATE, ALCLAD 4.4CU – 1.5MG – 0.6MN (ALCLAD 2024, -T3 SHEET, - T351 PLATE) SOLUTION HEAT TREATED, COLD WORKED AND NATURALLY AGED			
AMS 4900	Р	R	TITANIUM SHEET, STRIP, AND PLATE COMMERCIALLY PURE ANNEALED, 55 KSI YIELD STRENGTH			
AMS 4901	S	U	TITANIUM SHEET, STRIP, AND PLATE COMMERCIALLY PURE ANNEALED, 70.0 KSI			
AMS 4902	K	L	TITANIUM, SHEET, STRIP AND PLATE COMMERCIALLY-PURE ANNEALED, 40.0 KSI YIELD STRENGTH			
AMS 4903	В	С	TITANIUM ALLY SHEET, STRIP, AND PLATE 6AL – 4V SOLUTION HEAT TREATED			
AMS 4904	В	D	TITAINIUM ALLOY SHEET, STRIP, AND PLATE 6AL – 4V SOLUTION HEAT TREATED AND AGED			
AMS 4907	K	М	TITANIUM ALLOY, SHEET, STRIP, AND PLATE 6.0AL – 4.0V, EXTRA LOW INTERSTITIAL ANNEALED			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 4909	J	L	TITANIUM ALLOY, SHEET, STRIP, AND PLATE 5AL – 2.5SN, EXTRA LOW INTERSTITIAL ANNEALED			
AMS 4910	P	S	TITANIUM ALLOY, SHEET, STRIP, AND PLATE 5AL – 2.5SN ANNEALED			
AMS 4911	N	R	TITANIUM ALLOY, SHEET, STRIP, AND PLATE 6AL – 4V ANNEALED			
AMS 4915	L	N	TITANIUM ALLOY SHEET, STRIP, AND PLATE 8AL – 1V – 1MO SINGLE ANNEALED			
AMS 4916	K	L	TITANIUM ALLOY SHEET, STRIP, AND PLATE 8 AL – 1MO – 1V DUPLEX ANNEALED			
AMS 4917	Н	K	TITANIUM ALLOY SHEET STRIP AND PLATE 13.5V – 11CR – 3.0AL SOLUTION HEAT TREATED			
AMS 4918	N	P	TITANIUM ALLOY, SHEET STRIP, AND PLATE 6AL – 6V – 2SN ANNEALED			
AMS 4919	Н	J	TITANIUM ALLOY SHEET, STRIP, AND PLATE 6AL – 2SN – 4ZR – 2MO – 0.08SI DUPLEX ANNEALED			
AMS 4939	В	C	TITANIUM ALLOY SHEET, STRIP, AND PLATE 3AL – 8V – 6CR – 4MO – 4ZR SOLUTION HEAT TREATED			
AMS 4940	В	С	TITANIUM SHEET, STRIP, AND PLATE COMMERCIALLY PURE ANNEALED, 25.0 KSI YIELD STRENGTH			
AMS 4988	С	D	TITANIUM ALLOY SHEET, STRIP, AND PLATE 6AL – 6V – 2SN SOLUTION HEAT TREATED			
AMS 4989	С	D	TITANIUM ALLOY SHEET, STRIP, AND PLATE 3AL – 2.5V ANNEALED			
AMS 4990	В	D	TITANIUM ALLOY SHEET, STRIP, AND PLATE 6AL – 6V – 2SN SOLUTION HEAT TREATED AND AGED			
AMS 5507	Н	Н	STEEL, CORROSION AND HEAT- RESISTANT, SHEET, STRIP, AND PLATE 17CR – 13NI – 2.5MO (316L) SOLUTION HEAT TREATED			
AMS 5510	R	S	STEEL, CORROSION AND HEAT- RESISTANT, SHEET, STRIP AND PLATE 18CR – 10.5NI – 0.040TI (SAE 30321) SOLUTION HEAT TREATED			
AMS 5511	Н	K	STEEL, CORROSION-RESISTANT, SHEET, STRIP, AND PLATE			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 5512	L	М	STEEL, CORROSION AND HEAT- RESISTANT, SHEET, STRIP, AND PLATE 18CR – 10.5NI – 0.80CB (SAE 30347) SOLUTION HEAT TREATED			
AMS 5513	Н	L	STEEL, CORROSION-RESISTANT, SHEET, STRIP, AND PLATE 19CR – 9.2NI (SAE 30304) SOLUTION HEAT TREATED			
AMS 5516	Р	R	STEEL, CORROSION-RESISTANT, SHEET, STRIP, AND PLATE 18CR – 9.0NI (SAE 30302) SOLUTION HEAT TREATED			
AMS 5517	L	M	STEEL, CORROSION RESISTANT, SHEET AND STRIP 18CR – 8NI (SAE 30301) COLD ROLLED, 125 KSI TENSILE STRENGTH			
AMS 5518	L	N	STEEL, CORROSION RESISTANT, SHEET AND STRIP 18CR – 8NI COLD ROLLED, 150 KSI TENSILE STRENGTH			
AMS 5519	M	P	STEEL, CORROSION RESISTANT, SHEET AND STRIP 18CR – 8NI (SAE 30301) COLD ROLLED, 185 KSI TENSILE STRENGTH			
AMS 5524	K	M	STEEL, CORROSION AND HEAT- RESISTANT, SHEET, STRIP AND PLATE 18CR – 13NI – 2.5MO (SAE 30316) SOLUTION HEAT TREATED			
AMS 5639	J	J	STEEL, CORROSION-RESISTANT, BARS, WIRE, FORGINGS, MECHANICAL TUBING, RINGS AND FORGING AND RING STOCK 19CR - 10NI SOLUTION HEAT TREATED			
AMS 5643	Q	W	STEEL, CORROSION-RESISTANT, BARS, WIRE, FORGINGS, MECHANICAL TUBING, AND RINGS 16CR – 4.0NI – 0.30CB (NB) – 4.0CU SOLUTION HEAT TREATED, PRECIPITATION HARDENABLE			
AMS 5659	Р	Т	STEEL, CORROSION-RESISTANT, BARS, WIRE, FORGINGS, RINGS, AND EXTRUSIONS 15CR-4.5NI-0.30CB(NB)-3.5CU CONSUMANLE ELECTRODE REMELTED SOLUTION HEAT TREATED, PRECIPITATION HARDENABLE			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 5743	G	K	STEEL, CORROSION AND HEAT- RESISTANT, BARS AND FORGINGS, 15.5CR – 4.5NI – 2.9MO – 0.10N CONSUMABLE ELECTRODE REMELTED SOLUTION HEAT TREATED, SUB-ZERO COOLED, EQUILIZED, AND OVER-TEMPERED			
AMS 5862	J	М	STEEL, CROSSION-RESISTANT, SHEET, STRIP, AND PLATE 15CR- 4.5NI-0.30CB(NB)-3.5CU CONSUMABLE ELECTRODE REMELTED, SOLUTION HEAT TREATED PRECIPITATION- HARDENABLE			
AMS 5901	В	С	STEEL, CORROSION RESISTANT, SHEET, STRIP, AND PLATE 18CR – 8NI (30301) SOLUTION HEAT TREATED			
AMS 5902	В	D	STEEL, CORROSION-RESISTANT, SHEET AND STRIP 18CR – 8NI (30301) COLD ROLLED, ¾ HARD, 175 KSI TENSILE STRENGTH			
AMS 5903	В	С	STEEL, CORROSION RESISTANT, SHEET, STRIP, AND PLATE 18CR – 9.0NI (30302) COLD ROLLED, ¼ HARD, 125 KSI TENSILE STRENGTH			
AMS 5904	В	С	STEEL, CORROSION RESISTANT, SHEET AND STRIP 18CR – 9.0NI (30302) COLD ROLLED, ½ HARD, 150 KSI TENSILE STRENGTH			
AMS 5905	В	С	STEEL, CORROSION RESISTANT, SHEET AND STRIP 18CR – 9.0NI (30302) COLD ROLLED, ¾ HARD, 175 KSI TENSILE STRENGTH			
AMS 5906	В	С	STEEL, CORROSION RESISTANT, SHEET STRIP 18CR – 9.0NI (30302) COLD ROLLED, FULL HARD, 185 KSI TENSILE STRENGTH			
AMS 5907	В	С	STEEL, CORROSION AND HEAT RESISTANT, SHEET, STRIP, AND PLATE 17CR – 12NI – 2.5MO (30316) COLD ROLLED, ¼ HARD, 125 KSI TENSILE STRENGTH			
AMS 5910	В	С	STEEL, CORROSION RESISTANT, SHEET, STRIP, AND PLATE 19CR – 9.2NI (30304) COLD ROLLED, 125 KSI TENSILE STRENGTH			
AMS 5911	A	С	STEEL, CORROSION RESISTANT, SHEET AND STRIP 19CR – 9.2NI (30304) COLD ROLLED, ½ HARD, 150 KSI TENSILE STRENGTH			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 5912	A	С	STEEL, CORROSION RESISTANT, SHEET AND STRIP 19CR – 9.2NI (30304) COLD ROLLED, ¾ HARD, 175 KSI TENSILE STRENGTH			
AMS 5913	A	С	STEEL, CORROSION RESISTANT, SHEET AND STRIP 19CR – 9.2NI (30304) COLD ROLLED, FULL HARD, 185 KSI TENSILE STRENGTH			
AMS 6257	E	F	STEEL BARS, FORGINGS, AND TUBING 1.6SI – 0.82CR – 1.8NI – 0.40MO – 0.08V CONSUMABLE ELECTRODE VACUUM REMELTED NORMALIZED AND TEMPERED			
AMS 6260	N	S	STEEL, BARS, FORGINGS AND TUBING (1.2CR – 3.2NI – 0.12MO (9310)			
AMS 6265	Н	R	STEEL, BARS, FORGINGS, MECHANICAL TUBING AND FORGING STOCK 1.2Cr – 3.25 Ni – 0.12Mo (0.07 – 0.13C) (9310) VACUUM CONSUMABLE ELECTRODE REMELTED			
AMS 6274	M	S	STEEL, BARS, FORGINGS, AND TUBING 0.50Cr-0.55Ni-0.20Mo (8620)			
AMS 6345	В	E	STEEL, SHEET, STRIP, AND PLATE 0.95CR – 0.20MO (4130) NORMALIZED OR OTHERWISE HEAT TREATED			
AMS 6350	K	P	STEEL SHEET, STRIP, AND PLATE 0.95CR – 0.20MO (4130)			
AMS 6351	G	L	STEEL, SHEET, STRIP, AND PLATE 0.95CR – 0.20MO (4130) SPHEROIDIZED			
AMS 6359	K	L	STEEL, SHEET, STRIP, AND PLATE 0.80CR - 1.8NI - 0.25MO (0.38 - 0.43C) (SAE 4340)			
AMS 6360	L	R	STEEL MECHANICAL TUBING, SEAMLESS, 0.95CR - 0.20MO (0.28 - 0.33C) (4130), AIRCRAFT QUALITY, NORMALIZED AND TEMPERED, OR STRESS RELIEVED			_
AMS 6361	Е	G	STEEL TUBING, SEAMLESS 0.95CR – 0.20MO (4130) 125 KSI TENSILE STRENGTH			
AMS 6362	F	Н	STEEL TUBING, SEAMLESS 0.95CR – 0.20MO (4130) 150 KSI TENSILE STRENGTH			
AMS 6382	L	R	STEEL, BARS, FORGINGS, AND RINGS 0.95CR – 0.20MO (0.38 – 0.43C) (SAE 4140) ANNEALED			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS 6414	L	М	STEEL, BAR, FORGINGS, AND TUBING 0.80CR – 1.8NI – 0.25MO (4340) VACUUM CONSUMABLE ELECTRODE REMELTED			
AMS 6415	S	V	STEEL, BARS, FORGINGS, MECHANICAL TUBING, AND FORGING STOCK 0.80CR - 1.8NI - 0.25MO (0.38 - 0.43C) (SAE 4340)			
AMS 6440	S	Т	STEEL, BARS, FORGINGS, AND TUBING 1.45CR (0.93 – 1.05C) (SAE 52100) PREMIUM AIRCRAFT- QUALITY, CONSUMABLE ELECTRODE VACUUM REMELTED		MIL-S-7420	
AMS 6444	М	P	STEEL, BARS, FORGINGS, AND TUBING 1.45CR (0.93 – 1.05C) (SAE 52100) PREMIUM AIRCRAFT- QUALITY, CONSUMABLE ELECTRODE VACUUM REMELTED		MIL-S-7420	
AMS 6447	Н	J	STEEL, BARS, FORGINGS, AND TUBING 1.4CR (0.93 – 1.05C) (SAE 52100) ELECTROSLAG REMELTED		MIL-S-7420	
AMS 6484	С	E	STEEL, BARS, FORGINGS, AND TUBING 0.80CR – 1.8NI – 0.25MO (4340) NORMALIZED AND TEMPERED			
AMS 7259	D	E	RUBBER: FLUOROCARBON (FKM) HIGH-TEMPERATURE-FLUID RESISTANT LOW COMPRESSION SET 85 TO 95 HARDNESS FOR SEALS IN FUEL SYSTEMS AND SPECIFIC ENGINE OIL SYSTEMS			
AMS 7276	G	J	RUBBER: FLUOROCARBON (FKM) HIGH-TEMPERATURE-FLUID RESISTANT LOW COMPRESSION SET FOR SEALS IN FUEL SYSTEMS AND SPECIFIC ENGINE OIL SYSTEMS			
AMS 10134	A	В	ANGLE – UNEQUAL LEG EXTRUDED			
AMS 10136	A	В	TEE – EXTRUDED			
AMS-A-22771	A	D	ALUMINUM ALLOY FORGINGS, HEAT TREATED			
AMS-C-5541	A	A	CHEMICAL CONVERSION COATINGS ON ALUMINUM AND ALUMINUM ALLOYS	C,S	(MIL-C-5541) MIL-DTL-5541	
AMS-C-6183	A	В	CORK AND RUBBER COMPOSITION SHEET; FOR AROMATIC FUEL AND OIL RESISTANT GASKETS			
AMS-C-7438	A	A	CORE MATERIAL, ALUMINUM, FOR SANDWICH CONSTRUCTION			
AMS-C-8837	JUNE 1999	A	COATING, CADMIUM (VACUUM DEPOSITED)			
AMS-C-26074	В	D	ELECTROLESS NICKEL COATINGS		AMS 2404	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS-DTL-22499	SEPT 1998	В	SHIM STOCK, LAMINATED			
AMS-DTL-23053	JULY 1999	A	INSULATION SLEEVING, ELECTRICAL, HEAT SHRINKABLE, GENERAL SPECIFICATION FOR	С	AS 23053	
AMS-F-7190	A	В	FORGING, STEEL, FOR AIRCRAFT/AEROSPACE EQUIPMENT AND SPECIAL ORDNANCE APPLICATIONS			
AMS-H-6088	С	С	HEAT TREATMENT OF ALUMINUM ALLOYS	C,S	AMS 2770 AMS 2771 AMS 2772	1
AMS-H-6875	A	C	HEAT TREATMENT OF STEEL RAW MATERIALS		AMS 2759 AMS 2761	
AMS-H-7199	APRIL 2007	A	HEAT TREATMENT OF WROUGHT COPPER-BERYLLIUM ALLOYS, PROCESS FOR (COPPER ALLOYS: NUMBERS C17000, C17200, C17300, C17500, AND C17510)			
AMS-I-7444	-	A	INSULATION SLEEVING, ELECTRICAL, FLEXIABLE			
AMS-M-3171	OCT 2005	APR 1998 (R 2018)	MAGNESIUM ALLOY, PROCESSES FOR PRETREATMENT AND PREVENTION OF CORROSION ON			
AMS-P-21922	A	A	PLASTIC RODS AND TUBES, POLYETHYLENE			49
AMS-QQ-A-200/2	JULY 1997	В	ALUMINUM ALLOY 2014, BAR, ROD, SHAPES, TUBE, AND WIRE, EXTRUDED			
AMS-QQ-A-200/3	JULY 1997	A	ALUMINUM ALLOY 2024, BAR, ROD, SHAPES, TUBE, AND WIRE, EXTRUDED			34
AMS-QQ-A-200/8	JULY 1997	A	ALUMINUM ALLOY 6061, BAR, ROD, SHAPES, TUBE, AND WIRE, EXTRUDED			
AMS-QQ-A-200/11	JULY 1997	A	ALUMINUM ALLOY 7075, BAR, ROD, SHAPES, TUBE, AND WIRE, EXTRUDED			
AMS-QQ-A-225/4	JULY 1997	A	ALUMINUM ALLOY, 2014, BAR, ROD, WIRE AND SPECIAL SHAPES, ROLLED, DRAWN, OR COLD FINISHED			
AMS-QQ-A-225/6	SEPT 1998	В	ALUMINUM ALLOY, 2024, BAR, ROD, AND WIRE; ROLLED, DRAWN, OR COLD FINISHED			
AMS-QQ-A-225/8	SEPT 1998	В	ALUMINUM ALLOY 6061, BAR, ROD, AND WIRE, AND SPECIAL SHAPES; ROLLED, DRAWN, OR COLD FINISHED	C,S	AMS 4115 AMS 4116 AMS 4117 AMS 4128	
AMS-QQ-A-225/9	JULY 1997	A	ALUMINUM ALLOY 7075, BAR, ROD, WIRE, AND SPECIAL SHAPES; ROLLED, DRAWN, OR COLD FINISHED			47
AMS-QQ-A-250/1	JUNE 1998	A	ALUMINUM 1100, PLATE AND SHEET	C,S	ASTM B209	15



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS-QQ-A-250/2	A	A	ALUMINUM ALLOY 3003, PLATE AND SHEET – UNS A93003	C,S	ASTM B209	
AMS-QQ-A-250/3	AUG 1997	A	ALUMINUM ALLOY ALCLAD 2014, PLATE AND SHEET			
AMS-QQ-A-250/4	SEPT 1998	В	ALUMINUM ALLOY 2024, PLATE AND SHEET			
AMS-QQ-A-250/5	SEPT 1998	С	ALUMINUM ALLOY ALCLAD 2024, PLATE AND SHEET			
AMS-QQ-A-250/8	SEPT 1998	С	ALUMINUM ALLOY 5052, PLATE AND SHEET			
AMS-QQ-A-250/11	AUG 1997	A	ALUMINUM ALLOY 6061, PLATE AND SHEET	C,S	AMS 4025 AMS 4026 AMS 4027	8
AMS-QQ-A-250/12	AUG 1997	A	ALUMINUM ALLOY 7075, PLATE AND SHEET – A97075			
AMS-QQ-A-250/13	AUG 1997	2007	ALUMINUM ALLOY ALCLAD 7075, PLATE AND SHEET	C,S	AMS 4048 AMS 4049	
AMS-QQ-A-250/18	AUG 1997	В	ALUMINUM 7075, PLATE AND SHEET ALCLAD ONE SIDE – UNS A97075			
AMS-QQ-A-367	-	E	ALUMINUM ALLOY FORGINGS			
AMS-QQ-C-320	В	В	CHROMIUM PLATING (ELECTRODEPOSITED)	C,S	AMS 2460	
AMS-QQ-N-290	A	С	NICKEL PLATING (ELECTRODEPOSITED)		AMS 2403 AMS 2423	17
AMS-QQ-P-35	A	A	PASSIVATION TREATMENTS FOR CORROSION-RESISTANT STEEL	C,S	AMS 2700	
AMS-QQ-P-416	В	F	PLATING, CADMIUM (ELECTRODEPOSITED)	L		
AMS-QQ-S-763	В	D	STEEL, CORROSION RESISTANT, BARS, WIRE, SHAPES, AND FORGINGS			39
AMS-R-7362	JUNE 1998	A	NITRILE RUBBER, SYNTHETIC, SOLID, SHEET, STRIP AND FABRICATED PARTS, SYNTHETIC OIL RESISTANT			
AMS-S-5000	A	A	STEEL, CHROME-NICKEL- MOLYBDENUM (E4340) BARS AND REFORGING STOCK	C,S	AMS 6415 AMS 6484	
AMS-S-6090	В	В	STEEL CARBURIZING AND NITRIDING, PROCESS FOR	C,S	AMS 2759/6 AMS 2759/7 AMS 2759/8	
AMS-S-6758	A	В	STEEL, CHROME-MOLYBDENUM (4130) BARS AND REFORGING STOCK (AIRCRAFT QUALITY)			
AMS-S-7720	A	В	STEEL, CORROSION-RESISTANT (18- 8) BARS, WIRE AND FORGING STOCK (AIRCRAFT QUALITY)			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AMS-S-8802	B	E	SEALING COMPOUND, TEMPERATURE RESISTANT, INTEGRAL FUEL TANKS AND FUEL CELL CAVITIES, HIGH ADHESION			23
AMS-S-13165	A	A	SHOT PEENING OF METAL PARTS	C,S	AMS 2430	
AMS-S-18729	A	A	STEEL PLATE, SHEET, AND STRIP, ALLOY 4130 AIRCRAFT QUALITY	C,S	AMS 6345 AMS 6350 AMS 6351	14
AMS-STD-2175	A	A	CASTINGS, CLASSIFICATION AND INSPECTION OF	C,S	AMS 2175	
AMS-STD-2219	A	A	FUSION WELDING FOR AEROSPACE APPLICATIONS	C,S	(MIL-STD-2219) AWS D17.1	
AMS-T-6736	В	В	TUBING, CHROME-MOLYBDENUM (4130 OR 8630) STEEL, SEAMLESS AND WELDED	C,S	AMS 6360 AMS 6361 AMS 6362	
AMS-T-6845	A	В	TUBING, STEEL, CORROSION- RESISTANT (S30400), AEROSPACE VEHICLE HYDRAULIC SYSTEM 1/8 HARD CONDITION			
AMS-T-7081	A	A	TUBE, ALUMINUM ALLOY, SEAMLESS, ROUND, DRAWN, 6061	C,S	AMS 4083	31
AMS-T-9046	В	В	TITANIUM AND TITANIUM ALLOY, SHEET, STRIP, AND PLATE	C,S	SEE NOTE	46
AMS-T-9047	A	A	TITANIUM AND TITANIUM ALLOY, BARS (ROLLED OR FORGED) AND REFORGING STOCK, AIRCRAFT QUALITY	C,S	SEE NOTE	29
AMS-W-6858	В	В	WELDING, RESISTANCE: SPOT AND SEAM	C,S	AWS D17.2/ D17.2M	
AMS-WW-T-700/3	A	В	TUBE, ALUMINUM ALLOY, DRAWN, SEAMLESS, 2024			
AMS-WW-T-700/4	A	В	TUBE, ALUMINUM ALLOY, DRAWN, SEAMLESS, 5052			
AMS-WW-T-700/6	A	С	TUBE, ALUMINUM ALLOY, DRAWN, SEAMLESS, 6061	I	SEE NOTE	31
AN-QQ-A-696	A	A	ANODIC-FILMS; CORROSION- PROTECTIVE (FOR) ALUMINUM ALLOYS	C,S	(MIL-A-8625) MIL-PRF-8625	
AND10134	3	3	ANGLE, UNEQUAL LEG EXTRUDED	C,S	AMS 10134	
AND10136	3	3	TEE – EXTRUDED	C,S	AMS 10136	
AS1182	С	D	STANDARD STOCK REMOVAL ALLOWANCE AIRCRAFT-QUALITY AND PREMIUM AIRCRAFT-QUALITY STEEL BARS AND MECHANICAL TUBING			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
AS4330	2005	A	TUBING, FLARED, STANDARD DIMENSIONS FOR, DESIGN STANDARD			
AS7788	1999	1999	PANELS, INFORMATION, INTEGRALLY ILLUMINATED – FSC 6220	C,S	MIL-DTL-7788	
AS8879	D	D	SCREW THREADS – UNJ PROFILE, INCH CONTROLLED RADIUS ROOT WITH INCREASED MINOR DIAMETER			
AS18012	1998	1998	MARKINGS FOR AIRCREW STATION DISPLAYS, DESIGN AND CONFIGURATION OF			
AS23053	~	A	INSULATION SLEEVING, ELECTRICAL, HEAT SHRINKABLE, GENERAL SPECIFICATION FOR			
AS50881	С	G	WIRING AEROSPACE VEHICLE			
AS71051	В	В	PIPE THREADS, TAPER, AERONAUTICAL NATIONAL FORM, SYMBOL ANPT – DESIGN AND INSPECTION STANDARD			
ASME B46.1	2009	2019	SURFACE TEXTURE (SURFACE ROUGHNESS, WAVINESS, AND LAY	L		37
ASTM A228/A228M	07	18	STANDARD SPECIFICATION FOR STEEL WIRE, MUSIC SPRING QUALITY			
ASTM A581/A581M	95b (2009)	95b (R2014)	FREE-MACHINING STAINLESS STEEL WIRE AND WIRE RODS			39
ASTM A582/A582M	12	21	FREE MACHINING STAINLESS STEEL BARS			39
ASTM B80	-	23	STANDARD SPECIFICAITON FOR MAGNESIUM ALLOY SAND CASTINGS			
ASTM B96/B96M	1999	20	COPPER-SILICON ALLOY PLATE, SHEET, STRIP, AND ROLLED BAR FOR GENERAL PURPOSES AND PRESSURE VESSELS			
ASTM B107/B107M	13	13 (R-2021)	MAGNESIUM-ALLOY EXTRUDED BARS, RODS, PROFILES, TUBES, AND WIRE			
ASTM B124/124M	17	20	COPPER AND COPPER-ALLOY FORGING ROD, BAR, AND SHAPES			
ASTM B150/150M	19	19	ALUMINUM BRONZE ROD, BAR, AND SHAPES			
ASTM B152/B152M	9	19	COPPER SHEET, STRIP, PLATE, AND ROLLED BAR			
ASTM B169/B169M	01	01	STANDARD SPECIFICATION FOR ALUMINUM BRONZE SHEET, STRIP, AND ROLLED BAR			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
ASTM B194	-	22	STANDARD SPECIFICATION FOR COPPER-BERYLLIUM ALLOY PLATE, SHEET, STRIP, AND ROLLED BAR			
ASTM B196/B196M	-	24	STANDARD SPECIFICATION FOR COPPER-BERYLLIUM ALLOY ROD AND BAR			
ASTM B197/B197M	-	20	STANDARD SPECIFICATION FOR COPPER-BERYLLIUM ALLOY WIRE			
ASTM B209/B209M	07	21A	ALUMINUM AND ALUMINUM- ALLOY SHEET AND PLATE			
ASTM B221	20	21	ALUMINUM AND ALUMINUM ALLOY EXTRUDED BARS, RODS, WIRE, PROFILES, AND TUBES			
ASTM B235	62	62	ALUMINUM ALLOY EXTRUDED TUBES	C,S	ASTM B221	
ASTM B241/B241M	2002	16	ALUMINUM AND ALUMINUM- ALLOY SEAMLESS PIPR AND SEAMLESS EXTRUDED TUBE			
ASTM B283	17	20	COPPER AND COPPER-ALLOY DIE FORGINGS (HOT-PRESSED)			
ASTM B545	97 (2009)	2013 (R2021)	ELECTRODEPOSITED COATINGS OF TIN			
ASTM B700	97	20	ELECTRODEPOSITED COATINGS OF SILVER FOR ENGINEERING USE			7
ASTM D1056	2014	20	FLEXIBLE CELLULAR MATERIALS- SPONGE OR EXPANDED RUBBER			43
ASTM D2000	08	2018	SYSTEM FOR RUBBER PRODUCTS IN AUTOMOTIVE APPLICATIONS			
ASTM D2475	01	01 (R2013)	FELT			
ASTM D3167	10	10 (R2017)	STANDARD TEST METHOD FOR FLOATING ROLLER PEEL RESISTANCE OF ADHESIVES			
ASTM D6576	07	20	FLEXIBLE CELLULAR RUBBER CHEMICALLY BLOWN			
ASTM E112	13	13 (R2021)	STANDARD TEST METHODS FOR DETERMINING AVERAGE GRAIN SIZE			
ASTM E140	12B(R19)E1	12B(R19)E19	STANDARD HARDNESS CONVERSION TABLES FOR METALS RELATIONSHIP AMONG BRINELL HARDNESS, VICKERS HARDNESS, ROCKWELL HARDNESS, SUPERFICIAL HARDNESS, KNOOP HARDNESS, AND SCLEROSCOPE HARDNESS			
ASTM E340	15	15	STANDARD PRACTICE FOR MACROETCHING METALS AND ALLOYS			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
ASTM E407	07(R15)E1	07(R15)E1	STANDARD PRACTICE FOR MICROETCHING METALS AND ALLOYS			
ASTM E797/E797M	05	21	MEASURING THICKNESS BY MANUAL ULTRASONIC PULSE-ECHO CONTACT METHOD			
ASTM E1417/1417M	05	21	LIQUID PENETRANT TESTING			9
ASTM E1444/E1444M	05	22	MAGNETIC PARTICLE TESTING FOR AEROSPACE			9
ASTM E1742/1742M	18	18	RADIOGRAPHIC EXAMINATION			
AWS A5.9/A5.9M	JAN 2006	2017	SPECIFICATION FOR BARE STAINLESS STEEL WELDING ELECTRODES AND RODS			
AWS A5.10/A5.10M	1999	2021	SPECIFICATION FOR BARE ALUMINUM AND ALUMINUM- ALLOY WELDING ELECTRODES AND RODS			35, 45
AWS A5.14/A5.14M	JAN 2009	2018	SPECIFICATION FOR NICKEL AND NICKEL-ALLOY BARE WELDING ELECTRODES AND RODS			
AWS A5.31M/A5.31	1992	2012	SPECIFICATION FOR FLUXES FOR BRAZING AND BRAZE WELDING			
AWS C3.4/C	2007	2016	SPECIFICATION FOR TORCH BRAZING			
AWS C3.5/C3.5M	2007	2016 AMD1	SPECIFICATION FOR INDUCTION BRAZING			
AWS C3.6/C3.6M	2008	2016 AMD 1	SPECIFICATION FOR FURNACE BRAZING			
AWS C3.7/C3.7M	2005	2011	SPECIFICATION FOR ALUMINUM BRAZING			
AWS D17.1/D17.1M	2001	2024	SPECIFICATION FOR FUSION WELDING FOR AEROSPACE APPLICATIONS			45, 51
AWS D17.2/D17.2M	2007	2013	SPECIFICATION FOR RESISTANCE WELDING FOR AEROSPACE APPLICATIONS			
DOD-STD-1866	1981	1981	SOLDERING PROCESS GENERAL (NON-ELECTRICAL)	С		
IPC A-610	D	G	ACCEPTABILITY OF ELECTRONIC ASSEMBLIES			
IPC J-STD-001	D	G	REQUIREMENTS FOR SOLDERED ELECTRICAL AND ELECTRONIC ASSEMBLIES	L		
IPC WHMA-A-620	A	D	REQUIREMENTS AND ACCEPTANCE FOR CABLE AND WIRE HARNESS ASSEMBLIES			
MIL-A-148	Е	Е	ALUMINUM FOIL	C,S	QQ-A-1876	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-A-8625	F	F(2)	ANODIC COATINGS FOR ALUMINUM AND ALUMINUM ALLOYS		MIL-PRF-8625 ES0088	36
MIL-A-8902	1960	1960	ALUMINUM ALLOY PLATE AND SHEET, ALCLAD ONE SIDE 7075	C,S	AMS-QQ-A- 250/18	
MIL-A-22771	D	D	ALUMINUM ALLOY FORGINGS, HEAT TREATED	C,S	AMS-A-22771	
MIL-B-5087	В	В	BONDING, ELECTRICAL, AND LIGHTNING PROTECTION, FOR AEROSPACE SYSTEMS	C,S	MIL-STD-464	
MIL-B-5697	A	A	BRASS, LAMINATED (SHIM STOCK)	C,S	MIL-DTL-22499	
MIL-B-007883	С	С	BRAZING OF STEELS, COPPER, COPPER ALLOYS NICKEL ALLOYS, ALUMINUM AND ALUMINUM ALLOYS	C,S	AWS C3.4/3.4M AWS C3.5/3.5M AWS C3.6/3.6M AWS C3.7/3.7M	24
MIL-C-490	A	A	CLEANING AND PREPARATION OF FERROUS AND ZINC COATED SURFACES FOR ORGANIC PROTECTIVE COATINGS	C,S	TT-C-490	
MIL-C-5424	В	В	WIRE ROPE, STEEL, (CORROSION RESISTING) FLEXIBLE, PREFORMED (FOR AERONAUTICAL USE)	C,S	MIL-W-5424	
MIL-C-5541	Е	Е	CHEMICAL CONVERSION COATINGS ON ALUMINUM AND ALUMINUM ALLOYS	C.S	MIL-DTL-5541	
MIL-C-5688	A	A	WIRE ROPE ASSEMBLIES; AIRCRAFT, PROOF TESTING AND PRESTRETCHING OF	C,S	MIL-DTL-5688	
MIL-C-6021	Н	Н	CASTINGS, CLASSIFICATION AND INSPECTION OF	C, S	SS8802 MIL-STD-2175	
MIL-C-6183	В	В	CORK AND RUBBER COMPOSITION SHEET; FOR AROMATIC FUEL AND OIL RESISTANT GASKETS	C,S	AMS-C-6183	
MIL-C-7438	G	G	CORE MATERIAL, ALUMINUM, FOR SANDWICH CONSTRUCTION	С	AMS-C-7438	
MIL-C-8514	С	C (1)	COATING COMPOUND, METAL PRETREATMENT, RESIN-ACID			38
MIL-C-8837	В	В	COATING, CADMIUM (VACUUM DEPOSITED)	C,S	AMS-C-8837	
MIL-C-13924	С	С	COATING, OXIDE, BLACK, FOR FERROUS METALS	C,S	MIL-DTL-13924	
MIL-C-14550	В	В	COPPER PLATING (ELECTRODEPOSITED)	C,S	AMS 2418	21
MIL-C-16173	D	D	CORROSION PREVENTIVE COMPOUND, SOLVENT CUTBACK, COLD-APPLICATION	C,S	MIL-PRF-16173	
MIL-C-18012	A	A	MARKINGS FOR AIRCREW STATION DISPLAYS, DESIGN AND CONFIGURATION OF	C,S	(MIL-M-18012) AS18012	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-C-20696	E	E	CLOTH, WATERPROOF, WEATHER RESISTANT	C,S	MIL-PRF-20696	
MIL-C-22750	Е	Е	COATING, EPOXY, HIGH SOLIDS	C,S	MIL-PRF-22750	
MIL-C-26074	Е	E	COATINGS, ELECTROLESS NICKEL, REQUIREMENTS FOR – SEE CANCELLATION NOTICE FOR APPLICATION	C,S	AMS-C-26074	
MIL-DTL-5541	F	F	CHEMICAL CONVERSION COATINGS ON ALUMINUM AND ALUMINUM ALLOYS			
MIL-DTL-5688	E (1)	E (3)	WIRE ROPE ASSEMBLIES; AIRCRAFT, PROOF TESTING AND PRESTRETCHING OF			
MIL-DTL-7788	G	J	PANELS, INFORMATION, INTEGRALLY ILLUMINATED			
MIL-DTL-13924	D	F	COATING, INORGANIC, BLACK, FOR FERROUS METALS			
MIL-DTL-16232	Н	H (AMD 1)	PHOSPHATE COATING, HEAVY, MANGANESE OR ZINC BASE			
MIL-DTL-16878	G	H (AMD 3)	WIRE, ELECTRICAL, INSULATED, GENERAL SPECIFICATION FOR			
MIL-DTL-19834	С	C (1)	PLATES, IDENTIFICATION OR INSTRUCTION, METAL FOIL, ADHESIVE BACKED GENERAL SPECIFICATION FOR			
MIL-DTL-22499	D	D	SHIM STOCK, LAMINATED	C,S	AMS-DTL-22499	
MIL-DTL-23053	E	E	INSULATION SLEEVING, ELECTRICAL, HEAT SHRINKABLE, GENERAL SPECIFICATION FOR	C,S	AMS-DTL-23053	
MIL- DTL-32495	IR	A	POWDERS FOR COLD SPRAY DEPOSITION			
MIL-DTL-83420	M (1)	P	WIRE ROPE, FLEXIBLE, FOR AIRCRAFT CONTROL, GENERAL SPECIFICATION FOR			
MIL-F-5656	A	A	FELT, WOOL, FOR AIRCRAFT APPL		ASTM D2475	
MIL-F-7179	G	G	FINISHES, COATINGS, AND SEALANTS, FOR THE PROTECTION OF AEROSPACE WEAPONS SYSTEMS	C,S	MIL-STD-7179	
MIL-F-7190	В	В	FORGING, STEEL, FOR AIRCRAFT/AEROSPACE EQUIPMENT AND SPECIAL ORDNANCE APPLICATIONS	C,S	AMS-F-7190	
MIL-H-5606	G	G	HYDRAULIC FLUID, PETROLEUM BASE; AIRCRAFT, MISSILE, AND ORDNANCE	C,S	MIL-PRF-5606	
MIL-H-6088	G	G	HEAT TREATMENT OF ALUMINUM ALLOYS	C,S	AMS-H-6088	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-H-6875	Н	Н	HEAT TREATMENT OF STEEL RAW MATERIALS	C,S	AMS-H-6875	
MIL-H-7199	A	A	HEAT TREATMENT OF WROUGHT COPPER-BERYLLIUM ALLOYS, PROCESS FOR (COPPER ALLOYS: NUMBERS C17000, C17200, C17300, C17500, AND C17510)	C,S	AMS-H-7199	
MIL-I-6866	В	В	INSPECTION, LIQUID PENETRANT	C,S	ASTM E1417	
MIL-I-6868	Е	Е	INSPECTION PROCESS, MAGNETIC PARTICLE	C,S	ASTM E1444	
MIL-I-7444	-	D	INSULATION SLEEVING, ELECTRICAL FLEXIBLE	C,S	AMS-I-7444	
MIL-I-8474	С	С	INSPECTION OF ALUMINUM ALLOY PARTSANODIZING PROCESS FO			
MIL-I-23053	Е	Е	INSULATION SLEEVING, ELECTRICAL, HEAT SHRINKABLE, GENERAL SPECIFICATION FOR	C,S	MIL-DTL-23053	
MIL-I-24768/1	FEB 1992	FEB 1992 (1)	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, GLASS-CLOTH, MELAMINE-RESIN (GME)			
MIL-I-24768/8	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, GLASS-CLOTH, MELAMINE-RESIN (GMG)			
MIL-I-24768/10	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, PAPER-BASE, PHENOLIC-RESIN (PBE)			
MIL-I-24768/11	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, PAPER-BASE, PHENOLIC-RESIN (PBG)			
MIL-I-24768/12	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THEMOSETTING, PAPER-BASE, PHENOLIC-RESIN (PBM)			
MIL-I-24768/13	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, COTTON-FABRIC- BASE, PHENOLIC-RESIN (FBE)			
MIL-I-24768/14	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, COTTON-FABRIC- BASE, PHENOLIC-RESIN (FBG)			
MIL-I-24768/15	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, COTTON-FABRIC- BASE, PHENOLIC-RESIN (FBI)			
MIL-I-24768/16	FEB 1992	FEB 1992	INSULATION, PLASTIC, LAMINATED, THERMOSETTING, COTTON-FABRIC- BASE, PHENOLIC-RESIN (FBM)			
MIL-L-7178	A	A	LACQUER, CELLULOSE NITRATE, GLOSS, FOR AIRCRAFT	C,S	A-A-3165 (TT-L-32)	
MIL-L-8937	D	D	LUBRICANT, SOLID FILM, HEAT CURED, CORROSION INHIBITING NATO CODE S-1738	C,S	(MIL-L-46010) MIL-PRF-46010	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-L-19538	В	В	LACQUER, ACRYLIC- NITROCELLULOSE CAMOFLAGE FOR AIRCRAFT USE	C,S	MIL-PRF-81352	
MIL-L-46010	В	E	LUBRICANT, SOLID FILM, HEAT CURED, CORROSION INHIBITING	S	MIL-PRF-46010	
MIL-L-81352	A	A	COATINGS, AIRCRAFT TOUCH-UP	C,S	MIL-PRF-81352	
MIL-M-3171	С	С	MAGNESIUM ALLOY, PROCESSES FOR PRETREATMENT AND PREVENTION OF CORROSION ON	C,S	AMS-M-3171	
MIL-M-5354	A	A	MAGNESIUM ALLOY ZK60A EXTRUDED BARS, RODS, AND SHAPES	C,S	ASTM B107	
MIL-M-18012	В	В	MARKINGS FOR AIRCREW STATION DISPLAYS, DESIGN AND CONFIGURATION OF	C,S	AS 18012	
MIL-P-79	С	С	PLASTIC RODS AND TUBES, THERMOSETTING, LAMINATED	C,S	MIL-I-24768/8 MIL-I-24768/10 MIL-I-24768/11 MIL-I-24768/12 MIL-I-24768/13 MIL-I-24768/14 MIL-I-24768/16	48
MIL-P-3803	1952	1952	PLASTIC, POLYTHYLENE, MOLDED AND EXTRUDED SHAPES, SHEETS AND TUBING	С	(MIL-P-21922) MIL-PRF-21922 AMS-P-21922 MIL-P-26692	49
MIL-P-5425	D	D	PLASTIC SHEET, ACRYLIC, HEAT RESISTANT	C,S	MIL-PRF-5425	
MIL-P-6889	A	A	PRIMER COATING, ZINC CHROMATE, LOW-MOISTURE SENSITIVITY	C,S	(MIL-P-8585) TT-P-1757	
MIL-P-7105	В	В	PIPE THREADS, TAPER, AERONAUTICAL NATIONAL FORM, SYMBOL ANPT, GENERAL REQUIREMENTS FOR	C,S	AS71051	
MIL-P-7788	F	F	PANELS, INFORMATION, INTEGRALLY ILLUMINATED	C,S	MIL-DTL-7788	
MIL-P-8116	В	В	PUTTY, ZINC CHROMATE, GENERAL PURPOSE	C,S	MIL-PRF-8116	
MIL-P-8184	Е	Е	PLASTIC SHEET, ACRYLIC, MODIFIED	C,S	MIL-PRF-8184	
MIL-P-8585	A	A	PRIMER COATING, ZINC CHROMATE, LOW-MOISTURE-SENSITIVITY	C,S	TT-P-1757	
MIL-P-15035	С	С	PLASTIC SHEET, LAMINATED, THERMOSETTING, COTTON-FABRIC- BASE, PHENOLIC-RESIN	C,S	MIL-I-24768/14 MIL-I-24768/15 MIL-I-24768/16	13
MIL-P-15037	Е	Е	PLASTIC SHEET, LAMINATED, THERMOSETTING, GLASS-CLOTH MELAMINE-RESIN	C,S	MIL-I-24768/1	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-P-19834	В	В	PLATES, IDENTIFICATION OR INSTRUCTION, METAL FOIL, ADHESIVE BACKED GENERAL SPECIFICATION FOR	C,S	MIL-DTL-19834	
MIL-P-21922	В	В	PLASTIC RODS AND TUBES, POLYETHYLENE	С	(MIL-PRF-21922) AMS-P-21922	
MIL-P-23377	E	F	PRIMER COATINGS: EPOXY, CHEMICAL AND SOLVENT RESISTANT	S	MIL-PRF-23377	
MIL-P-26692	1961	1961(1)	PLASTIC TUBE AND TUBING, POLYETHLENE		MIL-PRF-21922 AMS-P-21922	49
MIL-P-46060 (MR)	1963	1967(1)	PLASTIC, POLYAMIDE (NYLON), RIGID RODS, TUBES AND FLATS	C,S	L-P-410A	
MIL-PRF-3043	С	C	RESIN COATING, PERMANENT, FOR ENGINE COMPONENTS AND METAL PARTS			
MIL-PRF-5425	Е	E	PLASTIC SHEET, ACRYLIC, HEAT RESISTANT			
MIL-PRF-5606	Н	J	HYDRAULIC FLUID, PETROLEUM BASE; AIRCRAFT, MISSILE, AND ORDNANCE	I		
MIL-PRF-6855	F	F (1)	RUBBER, SYNTHETIC, SHEETS, STRIPS, MOLDED OR EXTRUDED SHAPES, GENERAL SPECIFICATION FOR			
MIL-PRF-8116	D	D	PUTTY, GENERAL PURPOSE, NON- HARDENING			
MIL-PRF-8184	F	F	PLASTIC SHEET, ACRYLIC, MODIFIED			
MIL-PRF-8625	F	F(2)	ANODIC COATINGS FOR ALUMINUM AND ALUMINUM ALLOYS		ES0088	36
MIL-PRF-16173	Е	E (2)	CORROSION PREVENTIVE COMPOUND, SOLVENT CUTBACK, COLD-APPLICATION			
MIL-PRF-20696	F	F	CLOTH, WATERPROOF, WEATHER RESISTANT			
MIL-PRF-21922	С	С	PLASTIC RODS AND TUBES, POLYETHYLENE	С	AMS-P-21922	49
MIL-PRF-22750	F	G(1)	COATING, EPOXY, HIGH SOLIDS			
MIL-PRF-23377	G	K	PRIMER COATINGS: EPOXY, HIGH- SOLIDS			
MIL-PRF-46010	F	Н	LUBRICANT, SOLID FILM, HEAT CURED, CORROSION INHIBITING NATO CODE – S-1738			
MIL-PRF-60346	D	D	ROVING, GLASS, FIBROUS			
MIL-PRF-81352	С	С	COATINGS, AIRCRAFT TOUCH-UP			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-R-3043	В	В	RESIN COATING, PERMANENT, FOR ENGINE COMPONENTS AND METAL PARTS	C,S	MIL-PRF-3043	
MIL-R-3065	Е	Е	RUBBER, FABRICATED PRODUCTS	C,S	ASTM D 2000	
MIL-R-5031	В	В	RODS AND WIRE, WELDING, CORROSION AND HEAT RESISTANT ALLOYS	C,S	AWS A5.9/ A5.9M AWS A5.14/ A5.14M	18
MIL-R-6130	С	С	RUBBER, CELLULAR, CHEMICALLY BLOWN	C,S	ASTM D 6576	
MIL-R-6855	Е	E	ELASTOMER, SYNTHETIC, SHEETS, STRIPS, MOLDED OR EXTRUDED SHAPES, GENERAL SPECIFICATION FOR	C,S	MIL-PRF-6855	
MIL-R-7362	D	D	RUBBER, SYNTHETIC, SOLID, SHEET, STRIP AND FABRICATED PARTS, SYNTHETIC OIL RESISTANT	C,S	AMS-R-7362	
MIL-R-25897	E	E	RUBBER, FLUOROCARBON ELASTOMER, HIGH TEMPERATURE, FLUID RESTISTANT	C,S	MIL-R-83248	
MIL-R-60346	С	С	ROVING, GLASS, FIBROUS		MIL-PRF-60346	
MIL-R-83248	С	С	RUBBER, FLUOROCARBON ELASTOMER, HIGH TEMPERATURE, FLUID AND COMPRESSION SET RESISTANT	C,S	AMS 3216 AMS 3218 AMS 7259 AMS 7276	19
MIL-S-5000	E	E	STEEL, CHROME-NICKEL- MOLYBDENUM (4340) BARS, AND FORGING STOCK	C,S	(AMS-S-5000) AMS 6415 AMS 6484	
MIL-S-5059	D	D	STEEL, CORROSION RESISTANT (18- 8) PLATE, SHEET AND STRIP	C,S	SEE NOTE	20
MIL-S-6090	A	A	STEEL CARBURIZING AND NITRIDING, PROCESSES FOR	С	AMS-S-6090	
MIL-S-6721	В	В	STEEL, CORROSION AND HEAT RESISTANT (CHEMICALLY STABILIZED) PLATE, SHEET AND STRIP	C,S	AMS 5510 AMS 5512	
MIL-S-6758	В	В	STEEL, CHROME-MOLYBDENUM (4130) BARS AND REFORGING STOCK (AIRCRAFT QUALITY)	C,S	AMS-S-6758	
MIL-S-6855	В	В	ELASTOMER, SYNTHETIC, SHEETS, STRIPS, MOLDED OR EXTRUDED SHAPES, GENERAL SPECIFICATION FOR	C,S	(MIL-R-6855) MIL-PRF-6855	
MIL-S-6872	В	В	SOLDERING PROCESS, GENERAL SPECIFICATION FOR	С	DOD-STD-1866	
MIL-S-7420	В	В	STEEL BARS, ALLOY, CHROMIUM, HIGH CARBON E52100 (AIRCRAFT QUALITY)	С	AMS 6440 AMS 6444 AMS 6447	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-S-7502	С	С	SEALING COMPOUND, INTEGRAL FUEL TANKS AND FUEL CELL CAVITIES, HIGH ADHESION, ACCELERATOR REQUIRED	C,S	AMS-S-8802 (MIL-S-8802)	23
MIL-S-7720	A	A	STEEL, CORROSION-RESISTANT (18- 8) BARS, WIRE AND FORGING STOCK (AIRCRAFT QUALITY)	C,S	AMS-S-7720	
MIL-S-8802	F	F	SEALING COMPOUND, TEMPERATURE-RESISTANT, INTEGRAL FUEL TANKS AND FUEL CELL CAVITIES, HIGH ADHESION	C,S	AMS-S-8802	23
MIL-S-8844	D	D	STEEL BAR, REFORGING STOCK, AND MECHANICAL TUBING, LOW ALLOY, PREMIUM QUALITY	C,S	SEE NOTE	40
MIL-S-8879	С	С	SCREW THREADS, CONTROLLED RADIUS ROOT WITH INCREASED MINOR DIAMETER, GENERAL SPECIFICATION FOR	C,S	AS8879	
MIL-S-13165	С	С	SHOT PEENING OF METAL PARTS	C,S	(AMS-S-13165) AMS 2430	
MIL-S-18729	С	С	STEEL PLATE, SHEET, AND STRIP, ALLOY 4130 AIRCRAFT QUALITY	C,S	(AMS-S-18729) AMS 6345 AMS 6350 AMS 6351	14
MIL-S-22499	D	D	SHIM STOCK, LAMINATED	C,S	MIL-DTL-22499	
MIL-STD-10	A	A	SURFACE ROUGHNESS, WAVINESS AND LAY	С	ASME B46.1	
MIL-STD-453	С	С	RADIOGRAPHIC EXAMINATION		ASTM E1742	
MIL-STD-464	A	D	ELECTROMAGNETIC ENVIRONMENTAL EFFECTS REQUIREMENTS FOR SYSTEMS			
MIL-STD-670	В	В	CLASSIFICATION SYSTEM AND TESTS FOR CELLULAR ELASTOMERIC MATERIALS	C,S	ASTM D1056	43
MIL-STD-865	D	E	SELECTIVE, BRUSH PLATING, ELECTRO-DESPOSITION			
MIL-STD-867	С	D	TEMPER ETCH INSPECTION			
MIL-STD-1312/6	IR	IR	FASTENER TEST METHOD 6, HARDNESS	C,S	NASM 1312/6	
MIL-STD-1312/13	A	A	FASTENER TEST METHOD 13, DOUBLE SHEAR TEST	C,S	NASM 1312/13	
MIL-STD-1312/20	IR	IR	FASTENER TEST METHOD 20, SINGLE SHEAR	C,S	NASM 1312/20	
MIL-STD-1501	G	G	CHROMIUM PLATING, LOW EMBRITTLEMENT, ELECTRODEPOSITION			



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-STD-1907	SEPT 1989	SEPT 1989	INSPECTION, LIQUID PENETRANT AND MAGNETIC PARTICLE, SOUNDNESS REQUIREMENTS FOR MATERIALS, PARTS AND WELDMENTS			
MIL-STD-2175	A	A	CASTINGS, CLASSIFICATION AND INSPECTION OF	C,S	AMS-STD-2175	
MIL-STD-2219	A	A	FUSION WELDING FOR AEROSPACE APPLICATIONS	С	AWS D17.1	45, 51
MIL-STD-7179	SEPT 1997	В	FINISHES, COATINGS, AND SEALANTS, FOR THE PROTECTION OF AEROSPACE WEAPONS SYSTEMS			
MIL-T-6734	JUNE 1950	JUNE 1950	TUBING, CHROME NICKEL MOLYBDENUM (8630) STEEL WELDED	C,S	(MIL-T-6736) AMS-T-6736	
MIL-T-6736	В	В	TUBING, CHROME-MOLYBDENUM, 4130 STEEL, SEAMLESS AND WELDED, AIRCRAFT QUALITY	C,S	AMS-T-6736	
MIL-T-6845	D	D	TUBING, STEEL, CORROSION- RESISTANT, (304) AEROSPACE VEHICLE HYDRAULIC SYSTEM 1/8 HARD CONDITION	C,S	AMS-T-6845	
MIL-T-7081	D	D	TUBE, ALUMINUM ALLOY, SEAMLESS, ROUND, DRAWN 6061, AIRCRAFT HYDRAULIC QUALITY	C,S	(AMS-T-7081) AMS 4083	
MIL-T-7993	A	A	TITANIUM, SHEET, STRIP AND PLATE (UNALLOYED)	C,S	(MIL-T-9046) AMS-T-9046	
MIL-T-8504	-	В	TUBING, STEEL, CORROSION- RESISTANT (304), AEROSPACE VEHICLE HYDRAULIC SYSTEMS, ANNEALED, SEAMLESS AND WELDED			
MIL-T-8808	-	В	TUBING, STEEL, CORROSION- RESISTANT (18-8 STABILIZED), AIRCRAFT HYDRAULIC QUALITY (USE SAE-AMS5556 AND SAE- AMS5557)			
MIL-T-9046	J	J	TITANIUM AND TITANIUM ALLOY, SHEET, STRIP, AND PLATE	C,S	AMS-T-9046	
MIL-T-9047	G	G	TITANIUM AND TITANIUM ALLOY BARS (ROLLED OR FORGED) AND REFORGING STOCK, AIRCRAFT QUALITY	C,S	AMS-T-9047	29
MIL-T-10727	С	С	TIN PLATING: ELECTRODEPOSITED OR HOT-DIPPED, FOR FERROUS AND NONFERROUS METALS	C,S	ASTM B545 SEE NOTE	33
MIL-W-5088	L	L	WIRING, AEROSPACE VEHICLE	I	AS50881	
MIL-W-5424	В	В	WIRE ROPE, STEEL, (CORROSION RESISTING) FLEXIBLE, PREFORMED (FOR AERONAUTICAL USE)	C,S	MIL-DTL-83420	11



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
MIL-W-6101	JUNE 1955	JUNE 1955	WIRE; SPRING STEEL (FOR AIRCRAFT APPLICATIONS)	C,S	(QQ-W-470) ASTM A228	
MIL-W-6858	D	D	WELDING, RESISTANCE: SPOT AND SEAM	C,S	AMS-W-6858	
MIL-W-6860	1950	1950	WELDING, ALUMINUM AND MAGNESIUM ALLOYS, SPOT AND SEAM	C,S	(MIL-W-6858) AMS-W-6858	
MIL-W-7986	IR	IR	WIRE AND ROD, ALUMINUM AND ALUMINUM ALLOY, FOR DIE HEADING	C,S	QQ-A-430	
MIL-W-8604	A	A	WELDING, FUSION; ALUMINUM ALLOYS; PROCESS AND PERFORMANCE OF	C,S	(MIL-STD-2219) D17.1	
MIL-W-8611	A	A	WELDING, METAL ARC AND GAS, STEELS, AND CORROSION AND HEAT RESISTANT ALLOYS; PROCESS FOR	C,S	(MIL-STD-2219) D17.1	
MIL-W-16878	F	F	WIRE, ELECTRICAL, INSULATED, GENERAL SPECIFICATION FOR	C,S	MIL-DTL-16878	
MS33584	С	С	TUBING END, STANDARD DIMENSIONS FOR FLARED	C,S	AS 4330	12
NAS 4002	8	12	FASTENER, ALLOY STEEL, EXTERNALLY THREADED, 160 KSI FTU, 95 KSI FSU, 450°F			
NASM 1312/6	1	1	FASTENER TEST METHOD 6, HARDNESS			
NASM 1312/13	2	2	FASTENER TEST METHOD 13, DOUBLE SHEAR TEST			
NASM 1312/20	2	2	FASTENER TEST METHOD 20, SINGLE SHEAR			
QQ-A-200/2	F	F	ALUMINUM ALLOY 2014, BAR, ROD, SHAPES, TUBE AND WIRE, EXTRUDED	C,S	AMS-QQ-A-200/2	
QQ-A-200/3	F	F	ALUMINUM ALLOY 2024, BAR, ROD, SHAPES, TUBE AND WIRE, EXTRUDED	C,S	AMS-QQ-A-200/3	34
QQ-A-200/8	F	F	ALUMINUM ALLOY 6061, BAR, ROD, SHAPES, TUBE AND WIRE, EXTRUDED	C,S	AMS-QQ-A-200/8	
QQ-A-200/11	Е	Е	ALUMINUM ALLOY 7075, BAR, ROD, SHAPES, TUBE AND WIRE, EXTRUDED	C,S	AMS-QQ-A- 200/11	
QQ-A-225/4	Е	Е	ALUMINUM ALLOY BAR, ROD, WIRE, AND SPECIAL SHAPES, ROLLED, DRAWN, OR COLD FINISHED, 2014	C,S	AMS-QQ-A-225/4	
QQ-A-225/6	E	E	ALUMINUM ALLOY BAR, ROD, AND WIRE, ROLLED, DRAWN, OR COLD FINISHED, 2024	C,S	AMS-QQ-A-225/6	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
QQ-A-225/8	E	E	ALUMINUM ALLOY 6061 BAR, ROD, WIRE AND SPECIAL SHAPES; ROLLED, DRAWN OR COLD FINISHED	C,S	(AMS-QQ-A- 225/8) AMS 4115 AMS 4116 AMS 4117 AMS 4128	
QQ-A-225/9	E	E	ALUMINUM ALLOY 7075 BAR, ROD, WIRE AND SPECIAL SHAPES; ROLLED, DRAWN OR COLD FINISHED	C,S	AMS-QQ-A-225/9	
QQ-A-250/1	F	F	ALUMINUM 1100, PLATE AND SHEET	C,S	(AMS-QQ-A- 250/1) ASTM B209	
QQ-A-250/3	F	F	ALUMINUM ALLOY ALCLAD 2014, PLATE AND SHEET	C,S	AMS-QQ-A-250/3	
QQ-A-250/4	Е	Е	ALUMINUM ALLOY 2024, PLATE AND SHEET	C,S	AMS-QQ-A-250/4	
QQ-A-250/5	F	F	ALUMINUM ALLOY ALCAD 2024, PLATE AND SHEET	C,S	AMS-QQ-A-250/5	
QQ-A-250/8	F	F	ALUMINUM ALLOY 5052, PLATE AND SHEET	C,S	AMS-QQ-A-250/8	
QQ-A-250/11	F	F	ALUMINUM ALLOY 6061, PLATE AND SHEET	C,S	(AMS-QQ-A- 205/11) AMS 4025 AMS 4026 AMS 4027	
QQ-A-250/12	F	F	ALUMINUM ALLOY 7075, PLATE AND SHEET	C,S	AMS-QQ-A- 250/12	
QQ-A-250/13	Е	E	ALUMINUM ALLOY ALCLAD 7075, PLATE AND SHEET	C,S	(AMS-QQ-A- 250/13) AMS 4049 AMS 4048	
QQ-A-250/18	F	F	ALUMINUM ALLOY ALCLAD ONE SIDE 7075, PLATE AND SHEET	C,S	AMS-QQ-A- 250/18	
QQ-A-266	A	A	ALUMINUM ALLOY BARS, RODS, WIRE, AND SPECIAL SHAPES; ROLLED, DRAWN, OR COLD FINISHED, 2014	C,S	(QQ-A-225/4) AMS-QQ-A-225/4	
QQ-A-267	A	A	ALUMINUM ALLOY BARS, RODS, AND SHAPES, EXTRUDED, 2024	C,S	(QQ-A-200/3) AMS-QQ-A-200/3	34
QQ-A-268	A	A	ALUMINUM ALLOY BAR, ROD AND WIRE, ROLLED, DRAWN, OR COLD FINISHED, 2024	C,S	(QQ-A-225/6) AMS-QQ-A-225/6	
QQ-A-270	A	A	ALUMINUM ALLOY; BARS, RODS AND SHAPES; EXTRUDED; 6061 AND 6062	C,S	(QQ-A-200/8) AMS-QQ-A-200/8	
QQ-A-277	A	A	ALUMINUM ALLOY BARS, RODS, AND SHAPES, EXTRUDED 7075	C,S	(QQ-A-200/11) AMS-QQ-A- 200/11	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
QQ-A-282	A	A	ALUMINUM ALLOY BARS, RODS, WIRE, AND SPECIAL SHAPES; ROLLED, DRAWN, OR COLD FINISHED, 7075	C,S	(QQ-A-225/9) AMS-QQ-A-225/9	
QQ-A-283	A	A	ALUMINUM ALLOY, PLATE, AND SHEET 7075	C,S	(QQ-A-250/12) AMS-QQ-A- 250/12	
QQ-A-287	В	В	ALUMINUM ALLOY PLATE AND SHEET, ALCLAD 7075	C,S	(QQ-A-250/13) (AMS-QQ-A- 250/13) AMS 4048 AMS 4049	2
QQ-A-318	С	С	ALUMINUM ALLOY PLATE AND SHEET 5052	C,S	(QQ-A-250/8) AMS-QQ-A-250/8	
QQ-A-325	В	В	ALUMINUM ALLOY BARS, RODS, WIRE, AND SPECIAL SHAPES; ROLLED, DRAWN, OR COLD FINISHED, 6061	C,S	(QQ-A-225/8) (AMS-QQ-A- 225/8) AMS 4115 AMS 4116 AMS 4117 AMS 4128	
QQ-A-327	В	В	ALUMINUM ALLOY PLATE AND SHEET 6061	C,S	(QQ-A-250/11) AMS 4025 AMS 4026 AMS 4027	3
QQ-A-355	С	С	ALUMINUM ALLOY, PLATE AND SHEET 2024	C,S	(QQ-A-250/4) AMS-QQ-A-250/4	5
QQ-A-362	В	В	ALUMINUM ALLOY PLATE AND SHEET, ALCLAD 2024	C,S	(QQ-A-250/5) AMS-QQ-A-250/5	4
QQ-A-367	Н	Н	ALUMINUM ALLOY FORGINGS	C,S	AMS-QQ-A-367	
QQ-A-430	С	С	ALUMINUM WIRE FOR RIVETS			
QQ-A-561	D	D	ALUMINUM ALLOY PLATE AND SHEET, 1100	C,S	(QQ-A-250/1) ASTM B209	
QQ-A-1876	1974	1974	ALUMINUM FOIL			
QQ-C-320	В	В	CHROMIUM PLATING (ELECTRODEPOSITED)	C,S	(AMS-QQ-C-320) AMS 2460	
QQ-C-465	A	A	COPPER-AUMINUM ALLOYS; ROD, FLAT PRODUCTS WITH FINISHED EDGES, SHAPES, AND FORGINGS	С	ASTM B124 ASTM B150 ASTM B169 ASTM B283	
QQ-C-530	-	С	COPPER-BERYLLIUM ALLOY BAR, ROD, AND WIRE (COPPER ALLOY NUMBERS 172 AND 173)	С	ASTM B194 ASTM B196/B196M ASTM B197/197M	55
QQ-M-31	В	В	MAGNESIUM ALLOY BARS, RODS, AND SPECIAL SHAPED SECTIONS, EXTRUDED	C,S	ASTM B107	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
QQ-M-44	В	В	MAGNESIUM ALLOY PLATE AND SHEET (AZ31B)	C,S	AMS 4375 AMS 4376 AMS 4377	10
QQ-M-56	-	В	MAGNESIUM ALLOY, SAND CASTINGS	C,S	ASTM B80	
QQ-N-290	A	A	NICKEL PLATING (ELECTRODEPOSITED)	C,S	(AMS-QQ-N-290) AMS 2403 AMS 2423	
QQ-P-35	С	С	PASSIVATION TREATMENTS FOR CORROSION-RESISTANT STEEL	C,S	(AMS-QQ-P-35) AMS 2700	
QQ-P-416	F	F	PLATING, CADMIUM (ELECTRODEPOSITED)	C,S	AMS-QQ-P-416	
QQ-R-566	В	В	RODS AND ELECTRODES, WELDING, ALUMINUM AND ALUMINUM ALLOYS	C,S	AWS A5.10/A5.10M	35
QQ-S-365	D	D	SILVER PLATING, ELECTRODEPOSITED; GENERAL REQUIREMENTS FOR	C,S	SS8487 ASTM-B-700	7
QQ-S-763	F	F	STEEL BARS, WIRE, SHAPES, AND FORGINGS; CORROSION RESISTANT	C,S	AMS-QQ-S-763	
QQ-W-423	В	В	WIRE, STEEL, CORROSION- RESISTING	C, S	SEE NOTE	30
QQ-W-470	В	В	WIRE, STEEL, CARBON, SPRING, MUSIC	C,S	ASTM A228/ A228M	
TT-C-490	Е	Н	CHEMICAL CONVERSION COATINGS AND PRETREATMENTS FOR METALLIC SUBSTRATES (BASE FOR ORGANIC COATINGS)			
TT-L-32	A	A	LACQUER, CELLULOSE NITRATE, GLOSS FOR AIRCRAFT USE	C,S	A-A-3165	
TT-P-1757	В	В	PRIMER COATING, ALKYD BASE, ONE COMPONENT			28
VK5114	-	-	PLYWOOD SEALER	S	MIL-PRF-22750	
WW-T-700/3	F	F	TUBE, ALUMINUM ALLOY DRAWN, SEAMLESS, 2024	C,S	AMS-WW-T- 700/3	
WW-T-700/4	F	F	TUBE, ALUMINUM ALLOY, DRAWN, SEAMLESS, 5052	C,S	AMS-WW-T- 700/4	
WW-T-700/6	F	F	TUBE, ALUMINUM ALLOY, DRAWN, SEAMLESS, 6061	C,S	AMS-WW-T- 700/6	
WW-T-785	В	В	TUBE, ALUMINUM ALLOY, ROUND, SQUARE, RECTANGULAR, AND OTHER SHAPES, DRAWN, SEAMLESS, 2024	C,S	(WW-T-700/3) AMS-WW-T- 700/3	
WW-T-787	В	В	TUBE, ALUMINUM ALLOY, ROUND, SQUARE, RECTANGULAR, AND OTHER SHAPES, DRAWN, SEAMLESS, 5052	C,S	(WW-T-700/4) AMS-WW-T- 700/4	



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
WW-T-789	В	В	TUBE, ALUMINUM ALLOY, ROUND, SQUARE, RECTANGULAR, AND OTHER SHAPES, DRAWN, SEAMLESS 6061 AND 6062	C,S	(WW-T-700/6) AMS-WW-T- 700/6	



6. ERICKSON, SIKORSKY, AND HERITAGE SPECIFICATIONS

Note: Erickson "ES" or Sikorsky Specifications, are not <u>globally</u> applicable to all Erickson Engineering drawings unless approved through this specification (ES2000), or applied to a general arrangement drawing.

SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
008-93003	В	В	CHEMICAL FILM TREATMENT OF ALUMINUM PARTS		MIL-DTL-5541	25
008-93005	С	C	APPLICATION OF PRIMER		ES0043	
115-12112	С	С	IDENTIFICATION AND MARKING PROCEDURES		ES0037, ES9070	26
EPS0002	С	С	COLD WORKING OF HOLES IN ALUMINUM, STEEL AND TITANIUM, SPLIT SLEEVE METHOD	R		
EPS0004	IR	IR	PROTECTIVE TREATMENT, LUBRICANT APPLICATION METHOD	R		
EPS0006	С	С	BALANCING PROCEDURE FOR HIGH SPEED SHAFT	R		
EPS0007	D	D	REQUIREMENTS FOR MAIN & TAIL ROTOR BLADE BOLT MANUFACTURING	R		
ES0016	С	С	ADHESIVE BONDING MAIN AND TAIL ROTOR BLADES S-64E / S-64F HELICOPTER	I	ES0070	
ES0018	A	A	HANDLING, MARKING, PACKAGING, PACKING, SHIPPING, AND STORING REQUIREMENTS FOR ITEMS USED IN ADHESIVE BONDING OPERATIONS			
ES0019	IR	IR	SUPERSEDED MATERIALS & PROCESSES SPECIFICATIONS REFERENCE INDEX	NONE	ES2000	
ES0022	A	A	CLEAN ROOM FOR ADHESIVE BONDING OPERATIONS S-64E / S-64F HELICOPTER	L		
ES0023	A	A	SURFACE PREPARATION OF PARTS FOR ADHESIVE BONDING, MAIN AND TAIL ROTOR BLADES S-64E / S-64F HELICOPTER	I	SS8752	
ES0025	A	A	PEEL TEST COUPON ROTOR BLADE BONDING	I	SS8651 § 4.4.2.3.1	
ES0035	D	D	LOW EMBRITTLEMENT CADMIUM PLATING	L	AMS-QQ-P-416	
ES0037	F	Н	IDENTIFICATION MARKING OF PARTS	L		
ES0038	В	В	PROCUREMENT OF ALUMINUM ALLOYS		ES2000	
ES0039	IR	IR	PROCUREMENT OF STEEL ALLOYS	NONE	ES2000	
ES0043	D	F	FINISH SPECIFICATION FOR ERICKSON AIR-CRANE AIRCRAFT	L		
ES0045	G	AD	HARDWARE SUBSTITUTIONS	L		



SPECIFICATION	EARLIEST APPROVED	LATEST APPROVED	TITLE	CODE	ALTERNATE	NOTES
SIECIFICATION	REVISION	REVISION		CODE	SPECIFICATION	NOTES
ES0048	С	F	REVISIONS OF SIKORSKY SPECIFICATIONS APPROVED BY ERICKSON AIR-CRANE, INC.	NONE	ES2000	
ES0050	A	A	MATERIAL AND PROCESS SPECIFICATION INDEX			
ES0051	IR	С	PROCESS SPECIFICATION FOR ADHESIVE BONDING, MAIN AND TAIL ROTOR BLADES	L		56
ES0052	IR	D	FABRICATION CONTROL & MANUFACTURING PROCEDURES – ROTARY WING BLADE	L		
ES0056	IR	IR	WIRE & CABLE SUBSTITUTION SELECTION	L		
ES0061	IR	IR	ERICKSON AIR-CRANE MATERIAL AND PROCESS SPECIFICATION INDEX	NONE	ES2000	
ES0064	IR	IR	WELDING-SUPPLEMENTARY INFORMATION	C, S	AWS A5.10	
ES0065	IR	A	SELECTION AND USE OF CONNECTORS	L		
ES0070	IR	Е	FABRICATION CONTROL AND MANUFACTURING PROCEDURES, TAIL ROTOR BLADES	L		44, 56
ES0076	В	В	PLASTIC MEDIA-BLASTING PROCEDURE	L		
ES0084	С	F	SUBSTANTIATION TEST REQUIREMENTS FOR ALTERNATATE MANUFACTURING SOURCES OF TRANSMISSION GEARBOX ASSEMBLIES AND ESSENTIAL COMPONENTS	L		
ES0088	IR	IR	ANODIC COATINGS FOR ALUMINUM AND ALUMINUM ALLOYS	L		36
ES0092	IR	IR	MPI ACCEPTANCE C- SUPPLEMENTARY INFORMATION	L		27
ES0099	-	-	PROCESS SPECIFICATION FOR COMPOSITE FABRICATION, COMPOSITE MAIN AND TAIL ROTOR BLADES	R		
ES0101	-	-	FABRICATION CONTROL & MFG PROCEDURES, COMPOSITE MRB	R		
ES0102	-	-	ADHESIVE, FILM AND PASTE, MAIN AND TAIL ROTOR BLADES	R		
ES0103	-	-	POLYAMIDE HONEYCOMB CORE	R		
ES0104	-	-	FOAM, CLOSED CELL, RIGID	R		
ES0105	-	-	ADHESIVE, EPOXY BASE, EXPANDING	R		
ES0107	IR	IR	AQUEOUS CLEANING	L		
ES0108	-	-	NON-DESTRUCTIVE INSPECTION OF COMPOSITES	R		
ES0109	-	-	EXPANDED COPPER MESH AND SURFACING FILM	R		



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
ES0111	-	-	PROCESS SPECIFICATION FOR FINISH PAINT, COMPOSITE MRB	R		
ES0115	-	-	STATIC BALANCE OF COMPOSITE MAIN ROTOR BLADES	R		
ES0116	-	-	CRITICAL COMPOSITE PARTS, COMPOSITE MAIN ROTOR BLADE	R		
ES2000	IR	AY	MATERIAL AND PROCESS SPECIFICATIONS INDEX	L		
ES7001	A	A	STRIP PANEL FASTENER	L		
ES8010	IR	A	PLATE BAR AND SHAPES OF 6061 ALUMINUM ALLOY FOR ROTARY WING AND RUDDER BLADES	L		
ES8439	IR	A	FLUSHING AIRCRAFT HOSE AND TUBING, PROCEDURE FOR	L		
ES8776	IR	IR	MACHINING AND CHEMICAL MILLING OF ALUMINUM ALLOYS, ALKALINE ETCH PROCESS	L		
ES9070	IR	IR	SERIAL NUMBERING OF DETAIL PARTS, ASSEMBLIES AND EQUIPMENT	L		
ES9208	IR	G	PRODUCT DEFINITION AND ACCEPTANCE CRITERIA	L		
SER 50091	6	6	GENERAL SPECIFICATION FOR PROCUREMENT OF MAIN AND TAIL ROTOR POCKET SKINS AND SUBSEQUENT OPERATIONS	S	AMS 4027	42
SS4011	4	5	PRESS FIT PARTS – ASSEMBLY	L		
SS4200/200	2	2	FLUSHING PROCEDURE, AIRCRAFT HOSE AND TUBING		ES8439	
SS5052	2	5	THREAD RELIEFS	C	SEE NOTE	32
SS5100	35	47	HOLE SIZES	L		
SS6006	IR	4	ADAPTER CONTROL ROD			
SS7001	11	11	STRIP PANEL FASTENER	NONE	ES7001	
SS7777	22	47	SIKORSKY AIRCRAFT MATERIAL AND PROCESS SPECIFICATIONS INDEX	NONE	ES2000	
SS8010	1	2	PLATE, BAR & SHAPES OF 6061 ALUMINUM ALLOY FOR ROTARY WINGS & RUDDERS	NONE	ES8010	
SS8013	7	10	ALUMINUM ALLOY, 7075-T73 HEAT TREATMENT OF	L		
SS8014	3	3	ALUMINUM ALLOY 7075-T73 DIE FORGINGS	C,S	AMS-QQ-A-367	22
SS8015	11	15	CARBURIZING & HEAT TREATING OF CASE HARDENING STEEL			
SS8043	4	7	ALUMINUM ALLOYS, HEAT TREATABLE WROUGHT ALLOYS, PROCESSING OF	L		



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
SS8052	1	1	STRESS RELIEVING 7075 ALUMINUM ALLOY	C,S	SS8043	
SS8402	2	3	BLAST CLEANING	I		
SS8407	10	15	STRESS RELIEF AND EMBRITTLEMENT RELIEF BAKING AND TESTING OF STEEL PARTS	L		
SS8413	1	1	BRUSH PLATING OF CADMIUM ON STEEL OR COPPER BASED PARTS	C,S	MIL-STD-865	
SS8416	11	15	PHOSPHATE COATING MANGANESE, OF STEEL	L		
SS8423	7	7	DEGREASING OF METAL PARTS	L		
SS8426	3	4	HARD ANODIZING OF ALUMINUM ALLOYS	C,S	SEE NOTE	41
SS8428	4	4	BRUSH PLATING, ELECTRODEPOSITED	C,S	MIL-STD-865	
SS8435	8	9	PASSIVATION OF CORROSION RESISTANT STEEL	L		
SS8439	3	3	FLUSHING AIRCRAFT HOSE & TUBING, PROCEDURE FOR	NONE	ES8439	
SS8442	7	7	VAPOR BLASTING	L		
SS8445	8	8	TITANIUM ALLOY 6AL-4V GORGING, DYNAMIC GRADE			
SS8481	IR	1	ANODIZE, BRUSH CHROMIC/SULFURIC ACID			
SS8482	6	6	PHOSPHORIC ACID ANODIZING	L		
SS8483	IR	13	ANODIC COATINGS FOR ALUMINUM AND ALUMINUM ALLOYS	L		
SS8486	12	15	CHEMICAL SURFACE TREATMENT OF ALUMINUM PARTS & ALUMINUM ALLOYS	L		
SS8487	3	4	SILVER PLATING, ELECTRODEPOSITED	L		
SS8555	25	25	AIRCRAFT PAINT REQUIREMENTS			
SS8603	1	6	ADHESIVE PRIMER, APPLICATION OF	L		56
SS8607	8	12	ADHESIVE BONDING, SYSTEM "C" MAIN & TAIL ROTOR BLADES	L		
SS8612	7	14	FILM ADHESIVE BONDING SYSTEM, STRUCTURAL COMPONENTS	L		
SS8622	6	13	MULTIPLE PART PASTE ADHESIVES	L		
SS8630	22	29	SEALING & INSULATION OF MATING SURFACES	L		
SS8639	-	6	BONDING VULCANIZATION, RUBBER TO METAL AND CURED COMPOSITE			56
SS8651	24	28	ADHESIVE BONDING, MAIN AND TAIL ROTOR BLADES, PROCESS SPECIFICATION FOR	L	ES0051 ES0052 ES0070 EAC2059	44, 52, 53



SPECIFICATION	EARLIEST APPROVED REVISION	LATEST APPROVED REVISION	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
SS8658	-	8	APPLICATION OF 2-COMPONENT EPOXY	S	ES0043	
SS8659	IR	2	ADHESIVE BONDING (STRUCTURAL), REQUIREMENTS FOR	L		56
SS8669	19	26	ADHESIVE BONDING	L		53
SS8693	4	8	BRUSH COATING & TOUCH-UP OF ALUMINUM & ALUMINUM ALLOY SURFACE TREATMENTS	L		
SS8705	16	21	SURFACE TEMPER ETCH INSPECTION			
SS8712	2	3	ETCHING REMOVAL OF FLOWED METAL	L		
SS8752	9	1 <u>8</u>	PREPARATION OF SURFACES FOR ADHESIVE BONDING	L		56
SS8766	6	10	SHOT PEENING OF TITANIUM ALLOYS	L	ES0050	
SS8767	5	7	SHOT PEENING, AUTOMATIC	L	ES0050	
SS8768	2	2	SHOT PEENING OF STEEL ALLOYS	L	ES0050	
SS8769	4	4	SHOT PEENED METAL PARTS. LOCAL REWORK OF	L	ES0050	
SS8770	8	8	MARKING OF PARTS	NONE	ES0037 (SS8797)	
SS8776	7	9	CHEMICAL MILLING OF ALUMINUM ALLOYS, ALKALINE ETCH PROCESS	S	ES8776	
SS8778	5	7	STAINLESS STEEL, SURFACE PREPARATION FOR BONDING	L		56
SS8797	15	15	IDENTIFICATION MARKING OR PARTS, METHODS FOR	NONE	ES0037 (SS8798)	
SS8798	12	12	IDENTIFICATION MARKING OF PART METHODS FOR	NONE	ES0037	
SS8802	6	12	CASTINGS, CLASSIFICATION AND RADIOGRAPHIC INSPECTION OF	L		
SS8805	8	14	INSPECTION PROCESS, MAGNETIC PARTICLE		ES0092 SEE NOTE	27
SS8806	9	16	INSPECTION, LIQUID PENETRANT	L	SEE NOTE	
SS8866	10	11	LUBRICANT, SOLID FILM, APPLICATION OF	L		
SS8884	1	1	BOND CYCLE CERTIFICATION (BCC) PROCEDURES	NONE		53
SS9014	6	7	PROCEDURES PLATE, IDENTIFICATION ELECTRICAL 7 ELECTRONIC COMPONENT NUMBERING	L		
SS9030	35	39	TAPE IDENTIFICATION TUBING – PRINTED	L	SEE SS9122 NOTE 15 FOR TAPE SHELF-LIFE	
SS9036	11	12	DECALCOMANIAS, FABRICATION AND APPLICATION OF	L		
SS9048	8	12	PLATES, PHOTOGRAPHIC, (PHOTOSENSITIVE ALUMINUM), PHOTO-ETCH & METAL PHOTO AND LASER MARKING, PROCESS FOR	L		



SPECIFICATION	EARLIEST APPROVED	LATEST APPROVED	TITLE	CODE	ALTERNATE SPECIFICATION	NOTES
SS9067	REVISION 66	REVISION 66	IDENTIFICATION PLATE MULTIPLE LINES	L		
SS9070	9	10	SERIAL NUMBERING AND TRADEMARK IDENTIFICATION OF DETAILS, ASSEMBLIES, AND EQUIPMENT	NONE	ES9070	
SS9100	5	5	ID MARKING OF ALTERED, SELECTED & SPECIAL BOLTS	L	ES0037	
SS9122	18	23	SHELF-LIFE, OUT-TIME, AND STORAGE CONDITIONS FOR NONMETALLIC MATERIALS	L		
SS9152	-	2	PROPERTY EVALUATION METHODS FOR NONMETALLIC MATERIALS			56
SS9170/680	4	5	EXPENDABLE MANUFACTURING MATERIALS (EMM) WIPING CLOTHS	L		
SS9208	49	49	PRODUCT DEFINITION DESIGN CRITERIA	NONE	ES9208	
SS9211	7	17	FLIGHT SAFETY PARTS SOURCE APPROVAL, QUALITY & TEST REQUIREMENTS	L		
SS9214	3	10	ALTERNATE ORGANIC FINISHES	L		
SS9250	2	2	SURFACE FINISHES	I	(MIL-STD-10) ASME B46.1	37
SS9529	2	4	RUBBER, POLYURETHANE, GENERAL PURPOSE	L		
SS9530	10	10	RUBBER, POLYURETHANE, MILLABLE	С	SS9529	
SS9532	10	10	RUBBER, POLYURETHANE CAST	S	SS9529	
SS9574	3	5	CLOTH, GLASS, FINISHED, FOR PLASTIC LAMINATES	L		
SS9575	1	1	WINDOWS, TRANSPARENT PLASTIC, SIGHT GLASS – MARKING OF	I		
SS9578	18	18	CLOTH, GLASS, EPOXY RESIN PREIMPREGNATED	L		
SS9590	5	5	CASTING RESIN (PLASTIC), USE OF	L		
SS9597	2	2	CLOTH, GLASS FOR PLASTIC LAMINATES	C,S	SS9574	



7. NOTES

- 1. AMS 2770 is to be used for aluminum alloy products heat treated by fabricators. AMS 2771 is for the heat treatment of aluminum alloy castings. AMS 2772 is for the heat treatment of aluminum alloy products heat treated by the producer. Whenever "Heat treat by Alcoa licensed heat treat vendor" or similar is called out on the drawing, any heat treat vendor that complies/adheres with AMS 2770 is acceptable.
- 2. For 7075-T6 material per QQ-A-287 with a thickness range of 0.250 thru 3.000 inches, use 7075-T651 mechanical properties when using QQ-A-250/13.
- 3. For 6061-T4 material per QQ-A-327 with a thickness range of 0.250 thru 3.000 inches, use 30 ksi for the tensile strength and 16 ksi for the yield strength. For 6061-T6 material per QQ-A-327 with a thickness range of 0.250 thru 3.000 inches, use 42 ksi for the tensile strength and 35 ksi for the yield strength.



4. It is acceptable to use QQ-A-250/5 for all heat treatments, thicknesses, and sheet/plate widths **EXCEPT** for those noted in the following table:

Heat	Thickness	Sheet/Plate Width
Treatment		
-T3	0.063" -0.128 "	All
-T4	0.010" -0.062	All
-T42	0.250" – 1.000"	All
-T36	0.020" - 0.500"	Over 48"
-T86	0.020" – 0.500"	Over 30"

Also, for -T4 tempering in QQ-A-362 use the mechanical properties of -T351 in QQ-A-250/5 and for -T6 tempering in QQ-A-362 use the mechanical properties of -T62 in QQ-A-250/5.

5. It is acceptable to use QQ-A-250/4 for all heat treatments, thicknesses, and sheet/plate widths **EXCEPT** for those noted in the following table:

Heat	Thickness	Sheet/Plate Width
Treatment		
-T36	0.020" – 0.500"	Over 48"
-T42	0.250" – 1.000"	All
-T86	0.020" – 0.499"	Over 30"

Also, for -T4 tempering in QQ-A-355 with a thickness of 0.250" – 3.000" use the mechanical properties of -T351 in QQ-A-250/4 and for -T6 tempering in QQ-A-355 use the mechanical properties of -T62 in QQ-A-250/4. For -T81 material in QQ-A-355 use the mechanical properties of -T851 in QQ-A-250/4.

- 6. Removed.
- 7. When QQ-S-365 or ASTM B700 is called out on the drawing and the type and grade are not specified, SS8487 Type I, Grade B may be used. If ASTM B700 is used in lieu of QQ-S-365, the following Grades and Classes replace the Types and Grades respectively listed for QQ-S-365:

QQ-S-365	ASTM B700
Type I	Grade A
Type II	Grade D
Type III	Grade B or C
Grade A	Class S
Grade B	Class N

- 8. Use AMS 4025 for -O or -F conditions, use AMS 4026 for -T4, -T451 and -T42 conditions and use AMS 4027 for -T6, -T62 and -T651 conditions.
- 9. Acceptance criteria per MIL-STD-1907.
- 10. Use AMS 4375 to -O temper, use AMS 4376 for -H26 temper and use AMS 4377 for -H24 temper.



- 11. Use Type 1, Composition B as the default when using MIL-DTL-83420 unless Type II, Composition B is specified on the drawing or procuring document. Contact EAC Engineering for instruction when rope diameters greater than 3/8" are specified and MIL-DTL-83420 is being used as an alternate.
- 12. Contact EAC Engineering for instruction on tubing sizes greater than 2.0 inches.
- 13. When FBE material is called out, contact EAC Engineering for instruction. It is acceptable to use MIL-I-24768/15 when FBI material is called out and MIL-I-24768/16 when FBM material is called out. When FBG material is called out, it is acceptable to use MIL-I-24768/14 for material thicknesses less than 0.500" For FBG material thicknesses equal to or greater than 0.500", contact EAC Engineering for instruction on alternate usage.
- 14. It is acceptable to use AMS 6345, AMS 6350 or AMS 6351 as an alternate to MIL-S-18729 or AMS-S-18729 for all thicknesses where the heat treatment is 125 ksi or less or for all heat treatments when the material thickness is equal to or less than 0.125". Contact EAC Engineering for instruction on heat treatments/thicknesses that do not comply with this note.
- 15. ASTM B209 may be used as an alternate for the material and heat treatments specified within the original specification only.
- 16. For 4130 steel, AMS 6360 may be used for as an alternate for the Normalized condition, AMS 6361 may be used for the HT-125 condition and AMS 6362 may be used for the HT-150 condition. For all other conditions and material type alternates contact EAC Engineering for instruction.
- 17. Where AMS-QQ-N-290 Class 1 is called out, AMS 2403 may be used as an alternate and where AMS-QQ-N-290 Class 2 is called out, AMS 2423 may be used as an alternate. If the Grade (thickness) of plating is specifically called out, the user may refer to AMS-QQ-N-290 for the plating thickness requirement when using AMS 2403 or AMS 2423.
- 18. When MIL-R-5031 is called out, AWS A5.9 or AWS A5.14 may be used as an alternate as specified in the table below. If MIL-R-5031 Class 7, 9, 13 or 15 is specified contact EAC Engineering for alternate material usage:

CROSS-REFERENCE TABLE FOR MIL-R-5031 MATERIALS				
MIL-R-5031	AWS A5.9	AWS A5.14		
CLASS 1	ER 308	-		
CLASS 2	ER 309	-		
CLASS 3	ER 310	-		
CLASS 4	ER 316	-		
CLASS 5	ER 347	-		
CLASS 6	ER 349	-		
CLASS 8	-	ER NiCrFe-5		
CLASS 8A	-	ER NiCrFe-5		
CLASS 10	-	ER NiMo-1		
CLASS 11	-	ER NiCrMo-5		
CLASS 12	-	ER NiMo-3		
CLASS 14	-	ER NiCrFe-7		
CLASS 16	ER 308L	-		
CLASS 17	ER 316L	-		



19. When MIL-R-83248 is specified, the following alternate specifications may be cross referenced from the table below:

MIL-R-83248	Alternate
Type I, Class 1	AMS 7276
Type I, Class 2	AMS 7259
Type II, Class 1	AMS 3216
Type II, Class 2	AMS 3218

20. When MIL-S-5059 is specified, the following alternate specification may be cross referenced from the table below:

M	IL-S-5059	AMS
ALLOY	TEMPER	Document
301	ANNEALED	AMS 5901
	1/4 HARD	AMS 5517
	½ HARD	AMS 5518
	¾ HARD	AMS 5902
	FULL HARD	AMS 5519
302	ANNEALED	AMS 5516
	1/4 HARD	AMS 5903
	½ HARD	AMS 5904
	¾ HARD	AMS 5905
	FULL HARD	AMS 5906
304	ANNEALED	AMS 5513
	1/4 HARD	AMS 5910
	½ HARD	AMS 5911
	¾ HARD	AMS 5912
	FULL HARD	AMS 5913
316	ANNEALED	AMS 5524
	1/4 HARD	AMS 5907

- 21. If the classification (thickness) of plating is specifically called out, the user may refer to MIL-C-14550 for the plating thickness requirement when using AMS 2418, otherwise the thickness specified on the approved data is to be met.
- 22. When using QQ-A-367 in lieu of SS8014, the following stipulations must be met:
 - a. Die forgings per QQ-A-367 are only to be used. If hand forgings are desired on a specific component, contact EAC Engineering for approval.
 - b. The mechanical properties of section thicknesses greater than 4 inches shall be specified on the drawing. If the mechanical properties are not specified for sections greater than 4 inches in thickness, contact EAC Engineering for instruction.
 - c. Grain direction must be specified on the drawing when QQ-A-367 is used in lieu of SS8014. If no grain direction is specified, contact EAC Engineering for instruction.
- 23. For classes specified in MIL-S-7502 that are not accounted for in MIL-S-8802 contact EAC for instruction on replacement. The number after a letter in Class designations (i.e. Class B-2) only refers to the application time in hours. It is acceptable to utilize alternate application times within the specified Class as needed (ex. Class B-1/2 can be used where Class B-2 is called out).



- 24. Where MIL-B-007883 is called out for resistance brazing contact EAC engineering for direction.
- 25. Use Type I, Class 1A per MIL-DTL-5541 when "CHEMFILM (ALODINE)" per 008-93003 is specified.
- 26. When a drawing requires serialization per 115-12112, ES9070 may be used. It is acceptable to use ES0037 in lieu of 115-12112 for all other part marking requirements.
- 27. ES0092 is to be used in conjunction with SS8805 only when drawing requires Magnetic Particle Inspection (MPI) per SS8805 and specifies any form of the following where x = any quality grade designation, and # = any number that the drawing specifies: "Quality Grade x, S= #, N= #"
- 28. The application process of TT-P-1757 may be supplemented by ES0043.
- 29. When "Class 5" or "Comp 6" Per MIL-T-9047 is specified, Titanium Alloy 6AL-4V is to be used. When "Class 2" Per MIL-T-9407 is specified Titanium Alloy 5AL-2.5Sn is to be used. For all other classification, compositions, and/or grades specified without an alloy specified, contact EAC Engineering for required alloy.
- 30. When QQ-W-423 is called out, the following alternate specifications may be cross referenced from the table below depending on drawing specified alloy and temper classification. If no alloy or temper classification is specified on the drawing, contact Engineering. If alloy and class is not covered in the table below, contact Engineering.

ALLOY	CONDITION A ANNEALED	CONDITION B SPRING TEMPER
302	ASTM A 580	ASTM A 313
304	ASTM A 580	ASTM A 313
305	ASTM A 580	ASTM A 313
310	ASTM A 580	
316	ASTM A 580	ASTM A 313
410	ASTM A 580	
420	ASTM A 580	
430	ASTM A 580	

- 31. When 6061-T4 per AMS-T-7081 or (AMS) WW-T-700/6 is specified, the alternate specification is AMS 4081. When 6061-T6 per AMS-T-7081 or (AMS) WW-T-700/6 is specified, the alternate specification is AMS 4082.
 - For tubing, use the following:
 - When WW-T-700/6 (AMS-WW-T-700/6) is listed, use MIL-T-7081, AMS-T-7081, AMS 4083, or AMS 4081 (for -T4 only).
 - For all other required tempers, contact Engineering.
- 32. When SS5052 is specified, use Rev 4, Sheet 1 and Rev 2. Sheet 2, Table 1.
- 33. When MIL-T-10727 is specified, ASTM B545 may be used as an alternate for Type I (Electrodeposited) tin plating. For Type II (Hot-dipped) tin plating contact EAC engineering for instruction on alternate methods.



- 34. Properties for -T3 were formerly specified as -T4. Therefore, when -T4 per QQ-A-267, QQ-A-200/3 or AMS-QQ-A-200/3 is specified, -T3, -T3510 or T3511 may be used.
- 35. For classes specified in QQ-R-566 that are not accounted for in AWS A5.10, contact EAC Engineering for instruction on replacement.
- 36. MIL-A-8625 is supplemented by ES0088 except as noted in ES0088. Alternately, ES0088 may be used in lieu of MIL-A-8625 except as noted in ES0088.
- 37. SS9250 has been deemed inactive by the Sikorsky 8/30/62 and is not to be used for new designs and references to MIL-STD-10A. MIL-STD-10A was cancelled on 1/03/66 and referenced to use B46.1. However, the inactive document may continue to be used where specified.
- 38. Per SS9214, use of MIL-C-8514 (wash primer) is not mandatory and may be omitted when MIL-P-23377, MIL-PRF-85582 or Courtaulds 515X349 epoxy primers are used.
- 39. Per AMS-QQ-S-763 Note 6.5, Free machining grades Classes 303, 303Se, 416, 416Se, 430F and 430FSe under QQ-S-763C should be purchased to ASTM A582 or ASTM A581.
- 40. When MIL-S-8844 Class I is specified, AMS 6414 may be used as an alternate. AMS 6257 may be used when Class II is specified.
- 41. MIL-A-8625, Type III may be used as an alternate to SS8426.
- 42. Aluminum alloy sheet per AMS 4027 may be used as an alternate to all of the aluminum alloy sheet requirements in SER 50091. This includes, but is not limited to, the physical properties (chemical analysis, strength, bend test, workmanship, and heat treatment), mechanical tolerances, material test methods, and inspection reports (certs). For SER 50091, AMS 4027 supersedes Federal Specification QQ-A-250/11 in its entirety.
- 43. When using MIL-STD-670 and ASTM D1056 interchangeably, the following cross-reference table is to be used to determine the required grade equivalence. (Excerpt from ASTM D1056-20 Table X1.2)

D1056-77 Grade Numbers	D1056-85 to -20 Grade Numbers	MIL-STD-670B Grade Numbers	D1056-77 Grade Numbers	D1056-85 to -20 Grade Numbers	MIL-STD-670B Grade Numbers
RO 10	1A0	RO 1	RE 41 E2	2B1	SBE 3
RO 11	1A1	RO 3	RE 42 E2	2B2	SBE 7
RO 12	1A2	RO 7	RE 43 E2	2B3	SBE 11
RO 13	1A3	RO 11	RE 44 E2	2B4	SBE 15
RO 14	1A4	RO 15	RE 45 E2	2B5	SBE 20
RO 15	1A5	RO 20			
SBO 10	1B0	SBO 1	RE 41 E1	2C1	SCE 3
SBO 11	1B1	SBO 3	RE 42 E1	2C2	SCE 7
SBO 12	1B2	SBO 7	RE 43 E1	2C3	SCE 11
SBO 13	1B3	SBO 11	RE 44 E1	2C4	SCE 15
SBO 14	1B4	SBO 15	RE 45 E1	2C5	SCE 20
SBO 15	1B5	SBO 20			



- 44. EAC2059 is a substitute for SS8651 para 3.2.3.1.2.e only. This increased the bond time limit from 4 to 8 years for component primed with EC-3917 adhesive primer. Time limit is based on the components being properly primed per the applicable process specification, and handled, packaged, and stored as stated in ES0018.
- 45. When no welding filler metal is listed on drawing, follow AWS A5.10 guidelines (Also see Note 51). For AWS D17.1/D17.1M, unless otherwise specified, Class A will apply.
- 46. The table below shows the superseding specifications for AMS-T-9046

AMS-T-9046B		SAE		AMS-T-9046B
TYPE	AMS-T-9046 MATERIAL DESIGNATION	ALLOY	CONDITION	SUPERCEDING SPECIFICATION
Commercially Pure	CP-1 CP-2 CP-3	Commercially Pure	70 ksi Yield Strength 55 ksi Yield Strength	AMS 4900 AMS 4900 AMS 4902
Hamum	CP-4	-	40 ksi Yield Strength 25 ksi Yield Strength	AMS 4940
Alpha Titanium	A-1 A-2	5Al-2.5Sn 5Al-2.5Sn (ELI)	Annealed Annealed	AMS 4910 AMS 4909
Alloys	A-4	8AI-1Mo-1V	Annealed Duplex Annealed	AMS 4915 AMS 4916
	AB-1	6AI-4V	Annealed Solution Treated STA	AMS 4911 AMS 4903 AMS 4904
All Dr. Tr.	AB-2	6Al-4V (ELI)	Annealed	AMS 4907
Alpha-Beta Titanium Alloys	АВ-3	6Al-6V-2Sn	Annealed Solution Treated STA	AMS 4918 AMS 4988 AMS 4990
ľ	AB-4	6Al-2Sn-4Zr-2Mo	Duplex Annealed	AMS 4919
	AB-5	3Al-2.5V	Annealed	AMS 4989
Data Titarium Allaua	B-1	13V-11Cr-3Al	Solution Treated	AMS 4917
Beta Titanium Alloys	B-3	3Al-8V-6Cr-4Mo- 4Zr	Solution Treated	AMS 4939

- 47. For AMS-QQ-A-225/9, 7075-T651 is an acceptable alternate condition for 7075-T6.
- 48. It is acceptable to use MIL-I-24768/8 when GMG is called out for wall thicknesses less than 1", MIL-I-24768/10 when PBE is called out, MIL-I-24768/11 when PBG is called out, MIL-I-24768/12 when PBM is called out, MIL-I-24768/13 when FBE is called out for wall thicknesses of less than 1", MIL-I-24768/14 when FBG is called out, and MIL-I-24768/16 when FBM is called out. For GMC and FBE with a wall thickness greater than 1", contact EAC engineering.



- 49. MIL-P-26692, MIL-PRF-21922 or AMS-P-21922 are acceptable alternates for tubing.
- 50. Revision R of AMS 4041 states that the revision deletes the thin sheet portion of the document which is thicknesses ranging from 0.008" to 0.187". The supersession noted therefore applies to these thicknesses only.
- 51. For 6061 aluminum, ER4943 filler rod may be substituted for AMS 4190 (4043) filler rod.
- 52. Alternate specifications ES0051 and ES0052 for main rotor blades only and ES0070 for tail rotor blades only.
- 53. When a specification requires certification to SS8884, the procuring activity shall instead use the applicable process specification called out on the drawing. It is acceptable to use the certification procedures within SS8651 revision 26 or SS8669 revision 20, as applicable.
- 54. Alodine is a metal protective coating. Henkel, the manufacturer of Alodine, is changing the name of the product from Alodine to Bonderite, but the actual product is unchanged. Henkel Bonderite products are allowed to be used as an alternate to the former Henkel Alodine products.
- 55. ASTM B194 0.188" to 0.375" thick material may not be used as an alternate to QQ-C-530 without individual approval from engineering.
- 56. It is permissible to use standard Unbleached, untreated, and non-wax Kraft paper in leu of A-A-203.



8. SUPPLEMENTAL INFORMATION

- 8.1. Alternate Extrusion Numbers.
 - 8.1.1. Where obsolete extrusion numbers are called out in the engineering drawings (e.g. Pioneer Aluminum, Harvey, Reynolds, ANDXXXXX, etc.), industry cross-reference tables may be used (i.e. the Tiernay Metals catalog, Castle Metals website, etc.) to select the currently available equivalent for the purposes of material procurement, creation of part fabrication instructions, and inspection of incoming material. Quality shall verify the extrusion shape conforms to the dimensions referenced on the applicable engineering drawing upon completion of the fabricated part.
 - If the drawing specified extrusion is not available, a larger extrusion may be obtained and cut to size 8.1.2. provided all dimensions for the final shape referenced on the applicable engineering drawing are conformed to (e.g. flange widths, thicknesses, internal and external radii), and the material type is not changed.
- Supplementary Requirements, Information and Clarification of Drawing callouts.
 - 8.2.1. In-process procedures for 2024, 6061 and 7075 sheet, tubing and extrusion shall be in accordance with the following:
 - 8.2.1.1. For 7075, 2024 and 6061 sheet, extrusion, and tubing, when -0 temper material is specified, the parts may be formed in the as-quenched (-W) condition and aged after forming in accordance with the drawing requirements. Time intervals and holding temperatures between quenching and forming shall be in accordance with AMS 2770. Extrusions formed in the –W condition shall be fluorescent penetrant inspected in accordance with ASTM E1417, Accept/Reject criteria in accordance with MIL-STD-1907.
 - 8.2.1.2. For 7075 extrusions and tubing and 6061 sheet, extrusion and tubing, when -T6 or -T6511 tempers are specified, material may be annealed to the -0 temper in accordance with AMS 2770 prior to forming and heat treated to the -T6 or -T62 temper in accordance with AMS 2770 after forming.
 - 8.2.1.3. For 7075 sheet, 0.020 inch or greater in thickness, extrusion, and tubing and 6061 sheet, extrusion and tubing, when -T6 or -T6511 tempers are specified, material may be solution treated to the as-quenched (-W) condition in accordance with AMS 2770, formed and aged to the -T6 or -T62 temper in accordance with AMS 2770. Time intervals and holding temperatures between quenching and forming shall be in accordance with AMS 2770. Extrusions formed in the -W condition shall be fluorescent penetrant inspected in accordance with ASTM E1417, Accept/Reject criteria in accordance with MIL-STD-1907.



8.2.2. AMS-QQ-A-250/5, AMS-QQ-A-250/13, AMS-QQ-A-225/6, AMS-QQ-A-225/9: Some older drawings specify only the final part condition and no initial material condition. If the bend radii are tighter than SS5200 bend radii or there is joggling the following initial material conditions may be used.

For drawings specifying 2024-T3 sheet, the initial material condition is -O and heat treated after forming to -T62 per AMS 2770.

For drawings specifying 2024-T42 or -T62 sheet, the initial material condition is -O and heat treated after forming to the -T42 or -T62, respectively, per AMS 2770.

For drawings specifying 2024-T6 sheet, the initial material condition is -O except -T3 may be used when the drawing bend radius conforms to the -T3 requirement of SS5200 and there is no joggling. If -O temper is initially used, heat treat after forming to -T62 per AMS 2770. If -T3 is initially used in lieu of -T6, heat treat after forming to -T81 per AMS 2770.

For 2024-T6 bar and plate the initial material condition is -T351 and processed per SS8043 to -T851.

For drawings specifying 7075-T6 sheet, the initial material condition is -O and heat treated after forming to -T62 per AMS 2770.

Material	Initial Temper	Used Temper	Final Temper	Heat Treat Spec
2024 Sheet	-T3	-0 (AQ, W)	-T62	AMS 2770
2024 Sheet	-T42	-0	-T42	AMS 2770
2024 Sheet	-T62	-0	-T62	AMS 2770
		-0	-T62	
2024 Sheet	-T6	-T3	-T81	AMS 2770
2024 Sheet		Bend radius per SS5200,		ANIS 2110
		No joggles		
2024	-T6	-351	-T851	SS8043
Plate – Bar				
7075 Sheet	-T6	-0	-T6 -T62	AMS 2770



- For any material, when the drawing specified temper/condition is not directly available from the 8.2.3 material supplier, it is acceptable to purchase material and process to the exact temper/condition specified on the drawing (or allowable temper per section 8.4) prior to any machining or processing.
- 8.2.4 When a drawing specifies a minimum tensile strength for aluminum alloy sheet metal parts and heat treat per an industry standard specification (i.e. AMS 2770, MIL-H-6088, etc.) tensile testing, per the industry standard specification, is not required when the drawing required material specification minimum tensile strength at final heat treat condition is equal to or above that of the specified drawing minimum tensile strength. Material is to be heat treated to the drawing required condition (T42, T6, etc.). Remaining material testing requirements and procedures per the specified industry standard specification must be performed.

This allowance does not apply to machined parts, castings, extrusions, rotor blade components, life limited parts, and/or where the design utilizes a design specification which requires tensile testing (i.e. SS8013, etc.).

Usage of Chem. Mill Quality (CMQ)/ Minimum Residual Stress (MRS) material.

Chem. Mill Quality (CMQ)/ Minimum Residual Stress (MRS) material is allowed for use as an alternate quality of material used in EAC applications as long as the material type, heat treatment and procuring specification does not deviate from the approved data.



8.4 Alternate temper allowances.

Specification	Alloy	Drawing Specified Temper	Acceptable Alternate Temper(s)
AMS 4152, AMS 4164, AMS 4165, AMS-QQ-A-200/3	2024 Extrusion (Rod, Bar, Shapes)	T3, T3510, T3511	T3, T3510, T3511
AMS 4025, AMS 4027, AMS-QQ-A-250/11	6061 Sheet	T6, T62	T6, T62
AMS 4025, AMS 4027, AMS-QQ-A-250/11	6061 Plate	T62, T651	T62, T651
AMS 4080, AMS 4082, AMS-WW-T-700/6	6061 Drawn Tube	T6, T62	T6, T62
AMS 4127, MIL-A-22771, QQ-A-367	6061 Die Forging	T6, T652	T6, T652
AMS 4127, AMS 4248, MIL-A-22771, AMS-QQ-A-367	6061 Hand Forging	T6, T652	T6, T652
AMS 4161, AMS 4172, AMS-QQ-A-200/8	6061 Extrusion (Rod, Bar, Shapes)	T4, T4510, T4511	T4, T4510, T4511
AMS 4150, AMS 4173, AMS-QQ-A-200/8	6061 Extrusion (Rod, Bar, Shapes)	T6, T6510, T6511	T6, T6510, T6511
AMS 4045, AMS-QQ-A-250/12, AMS-QQ-A-250/13	7075 Sheet	T6, T62	T6, T62
AMS 4122, AMS 4123, AMS 4186, AMS 4187, AMS-QQ-A-225/9	7075 Bar, Rod, and Shapes: Rolled, Drawn, or Cold-finished	T6, T651, T62	T6, T651, T62
AMS 4124, AMS-QQ-A-225/9	7075 Bar, Rod, and Shapes: Rolled, Drawn, or Cold-finished	T73, T7351	T73, T7351
AMS-QQ-A-200/11	7075 Extrusion (Rod, Bar, Shapes)	T6, T651, T6511, T62	T6, T651, T6511, T62
AMS-QQ-A-200/11	7075 Extrusion (Rod, Bar, Shapes)	T73, T73510, T73511	T73, T73510, T73511
AMS-QQ-A-200/15	7075 Extrusion (Rod, Bar, Shapes)	T76, T76510, T76511	T76, T76510, T76511
AMS-QQ-A-225/6	2024 Drawn (Rod, Bar, Wire)	Т4	T351 .0500-6.500 section thicknesses only
AMS-QQ-A-225/8	6061 Bar, Rod, Wire, and Special Shapes: Rolled, Drawn, or Cold-finished	T6, T62, T651	T6, T62, T651

8.5 Alternate hardware allowances.

For all alternate hardware substitutions, it is acceptable to use ES0045.

- 8.6 REMOVED See ES9208 for standard definition of when dimensions and surface roughness applies.
- 8.7 Selection and use of electrical connectors.

For all selection and use of electrical connectors on S-64E and S-64F Aircraft, ES0065 may be used to supplement drawing requirements.



8.8 Default product definition and acceptance criteria.

ES9208 is acceptable for use to provide default product definition and acceptance criteria (unless otherwise specified on the drawing) for all manufacture, repair, and overhaul of EAC design.

8.9 Alternate Nylon Resin:

DuPont Zytel® 101 may be used in lieu of DuPont FM10001.

- 8.10 Alternate Composite Material:
 - 8.10.1 Resin per MIL-R-9300 Type I Grade 0 may be used in lieu of resin per MIL-R-7575 Grade A Class 0 or MIL-R-7575 Type I.
 - 8.10.2 7781 Fabric per SS9574 may be used in lieu of 181 or 481 Fabric (per SS9597).
 - 8.10.3 SS9578-007 (Glass Cloth Pre-impregnated with Epoxy Resin) may be used in lieu of the above combinations of wet lay-up composite materials.
- 8.11 Alternate Conductive Silver Compositions:
 - 8.11.1 DuPont 4817N may be used in lieu of DuPont 4817.