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REV. A
AS10081

FEDERAL SUPPLY CLASS
4030

RATIONALE

THIS STANDARD HAS BEEN REVISED TO UPDATE THE PRE-SWAGE SHANK ID (DIAMETER "N") FOR THE .375 INCH (9.53 MM) DIAMETER CABLE. THIS REVISION WAS RECOMMENDED BY THE DEFENSE LOGISTICS AGENCY - AVIATION, WHO VERIFIED THAT THE NEW DIMENSION WOULD ELIMINATE A POSSIBLE INTERFERENCE FIT OF THIS TERMINAL SIZE AND STILL MEET ALL ITS LOAD REQUIREMENTS. THE TABLES WERE ALSO EITHER DUPLICATED OR UPDATED TO ADD EQUIVALENT DIMENSIONS IN SI UNITS.

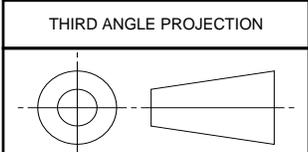
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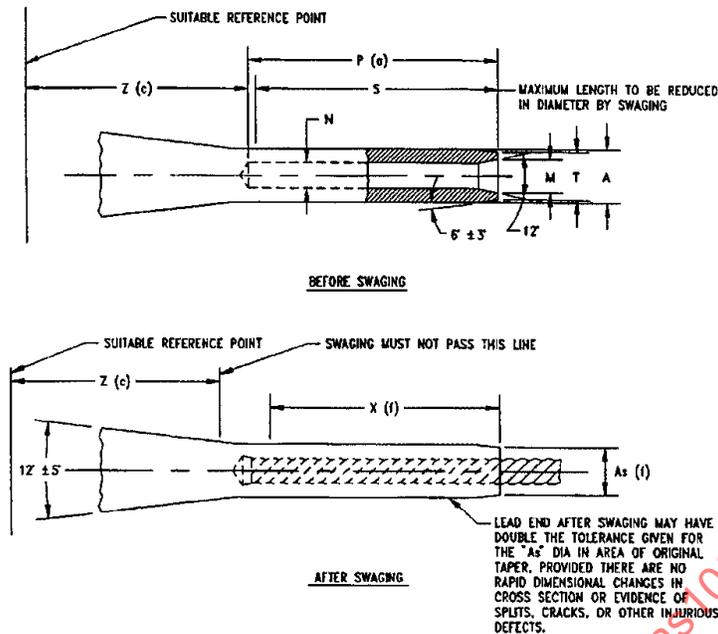
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CUSTODIAN: A-6		PROCUREMENT SPECIFICATION: MIL-DTL-781	
	AEROSPACE STANDARD		AS10081 SHEET 1 OF 4
	(R) TERMINAL SHANK-SWAGING, DIMENSIONS FOR		

ISSUED 1999-08 REVISED 2014-11



REQUIREMENTS:

- BORE "P" MAY EXTEND THROUGH THE ENTIRE TERMINAL IF SO INDICATED ON THE TERMINAL DETAIL DRAWING.
- IN TERMINALS IN WHICH THE SWAGING OPERATION PRODUCES A LONGITUDINAL FIN OR PARTING LINE ON TWO DIAMETRICALLY OPPOSITE SIDES OF THE SWAGING PORTION, THE DIMENSIONS AS MEASURED ACROSS THE FINNS OR PARTING LINES SHALL NOT EXCEED "As" BY MORE THAN .010 INCH (0.25 MM).
- DIMENSION "Z" SHALL BE SPECIFIED ON ALL DETAIL DRAWINGS WHICH DO NOT PROVIDE A SHOULDER SWAGING STOP.
- SHANK "S" CABLE HOLE SHALL BE CONCENTRIC AND PARALLEL TO AXIS WITHIN "K" (2K FULL INDICATOR READING).
- THESE LOADS ARE APPLICABLE WHEN TERMINALS ARE SWAGED ONTO CABLE CONFORMING TO MIL-W-83420.
- SWAGED TERMINALS WILL CONFORM TO "As" DIAMETER FOR LENGTH "X"; DIMENSION "X" SHALL BE SPECIFIED ON ALL DETAIL DRAWINGS.
- REMOVE ALL BURRS AND SHARP EDGES.

NOTES:

- DIMENSIONS IN INCHES AND MILLIMETERS.
- TERMINALS COVERED BY DRAWINGS MS21259, MS20667, MS20668, AND MS21260 SHALL BE USED WHENEVER POSSIBLE.
- THIS DRAWING IS FOR USE IN DESIGN OF SPECIAL TERMINALS OF CORROSION RESISTANT STEEL FOR USE ON AIRCRAFT AND APPLICATIONS WHERE MAXIMUM SAFETY AND MINIMUM WEIGHT ARE REQUIRED.
- SPECIAL TERMINALS INCORPORATING THE SWAGING TERMINAL SHANK SHALL BE MANUFACTURED IN ACCORDANCE WITH MIL-DTL-781.
- A CHANGE BAR (I) LOCATED IN THE LEFT MARGIN IS FOR THE CONVENIENCE OF THE USER IN LOCATING AREAS WHERE TECHNICAL REVISIONS, NOT EDITORIAL CHANGES, HAVE BEEN MADE TO THE PREVIOUS ISSUE OF THIS DOCUMENT. AN (R) SYMBOL TO THE LEFT OF THE DOCUMENT TITLE INDICATES A COMPLETE REVISION OF THE DOCUMENT, INCLUDING TECHNICAL REVISIONS. CHANGE BARS AND (R) ARE NOT USED IN ORIGINAL PUBLICATIONS, NOR IN DOCUMENTS THAT CONTAIN EDITORIAL CHANGES ONLY.

	AEROSPACE STANDARD	AS10081 SHEET 2 OF 4	REV. A
	(R) TERMINAL SHANK-SWAGING, DIMENSIONS FOR		

TABLE 1A - DIMENSIONS IN U.S. INCH-POUND UNITS

NOMINAL CABLE DIAMETER REF	(e) MINIMUM ALLOWABLE BREAKING STRENGTH LB REF	TERMINAL DIMENSIONS													
		BEFORE SWAGING							AFTER SWAGING						
		A DIAMETER	(d) K	M DIAMETER	N DIAMETER	(a) P DRILL DEPTH	S +.062 -0.000	T DIAMETER	(b) As DIAMETER	(f) X MIN					
.063	480	.160	.008	.090	+.010 -0.000	.078	+.005 -0.000	1.042	+.031 -0.000	.969	.138	.138	+.000 -0.005	.700	
.094	920	.218		.119		.109		1.261		1.188		.190		.190	.800
.125	2000	.250		.154		.141		1.511		1.438		.219		.219	1.050
.156	2800	.297		.188		.172		1.761		1.688		.250		.250	1.290
.188	4200	.359		.223		.203		2.011		1.938		.313		.313	1.310
.219	5600	.427		.257		.234		2.261		2.188		.375		.375	1.550
.250	7000	.494		.291		.265		2.511		2.438		.438		.438	1.700
.281	8000	.563		.326		.297		2.761		2.688		.500		.500	1.890
.313	9800	.635		.360		.328		3.011		2.938		.563		.563	2.060
.375	14 400	.703		.010		.430		+.012 -0.000		.404		+.008 -0.000		3.511	+.047 -0.000
.438	17 600	.781	.514		.468	4.011	3.938		.688	.688	3.570				
.500	22 800	.844	.584		.531	4.698	4.625		.750	.750	4.310				
.563	28 500	.984	.653		.594	5.011	4.938		.875	.875	4.510				
.625	35 000	1.109	.722		.656	5.511	5.438		1.000	1.000	5.040				
.750	49 600	1.359	.860		.781	6.511	6.438		1.250	1.250	5.800				
.875	66 500	1.593	1.013		.921	7.166	7.094		1.437	1.437	6.310				
1.000	85 400	1.812	1.151		1.046	8.229	8.156		1.625	1.625	7.260				
1.125	106 400	2.000	1.289		1.171	9.135	9.062		1.812	1.812	7.610				
1.250	129 400	2.218	1.443		1.312	10.198	10.125		2.000	2.000	8.450				
1.375	153 600	2.500	1.581	1.437	11.229	11.156	2.250	2.250	9.200						
1.500	180 500	2.750	1.720	1.562	12.135	12.062	2.500	2.500	10.090						

TABLE 1B - DIMENSIONS IN SI UNITS

NOMINAL CABLE DIAMETER REF	(e) MINIMUM ALLOWABLE BREAKING STRENGTH KN REF	TERMINAL DIMENSIONS													
		BEFORE SWAGING							AFTER SWAGING						
		A DIAMETER	(d) K	M DIAMETER	N DIAMETER	(a) P DRILL DEPTH	S +1.57 -0.00	T DIAMETER	(b) As DIAMETER	(f) X MIN					
1.59	2.14	4.06	0.20	2.29	+0.25 -0.00	1.98	+0.13 -0.00	26.47	+0.79 -0.00	24.61	3.51	3.51	+0.00 -0.13	17.78	
2.38	4.09	5.54		3.02		2.77		32.03		30.18		4.83		4.83	20.32
3.18	8.90	6.35		3.91		3.58		38.38		36.53		5.56		5.56	26.67
3.97	12.46	7.54		4.78		4.37		44.73		42.88		6.35		6.35	32.77
4.76	18.68	9.12		5.66		5.16		51.08		49.23		7.95		7.95	33.27
5.56	24.91	10.85		6.53		5.94		57.43		55.58		9.53		9.53	39.37
6.35	31.14	12.55		7.39		6.73		63.78		61.93		11.13		11.13	43.18
7.14	35.59	14.30		8.28		7.54		70.13		68.28		12.70		12.70	48.01
7.94	43.59	16.13		9.14		8.33		76.48		74.63		14.30		14.30	52.32
9.53	64.05	17.86		0.25		10.92		+0.30 -0.00		10.26		+0.20 -0.00		89.18	+1.19 -0.00
11.11	78.29	19.84	13.06		11.89	101.90	100.00		17.48	17.48	90.68				
12.70	101.40	21.44	14.83		13.49	119.30	117.50		19.05	19.05	109.50				
14.29	126.80	24.99	16.59		15.09	127.30	125.40		22.23	22.23	114.60				
15.88	155.70	28.17	18.34		16.66	140.00	138.10		25.40	25.40	128.00				
19.05	220.60	34.52	21.84		19.84	165.40	163.50		31.75	31.75	147.30				
22.23	295.80	40.46	25.73		23.39	182.00	180.20		36.50	36.50	160.30				
25.40	379.90	46.02	29.24		26.57	209.00	207.20		41.28	41.28	184.40				
28.58	473.30	50.80	32.74		29.74	232.00	230.20		46.02	46.02	193.30				
31.75	575.60	56.34	36.65		33.32	259.00	257.20		50.80	50.80	214.60				
34.93	683.20	63.50	40.16	36.50	285.20	283.40	57.15	57.15	233.70						
38.10	802.90	69.85	43.69	39.67	308.20	306.40	63.50	63.50	256.30						