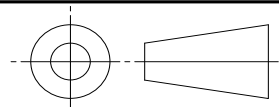
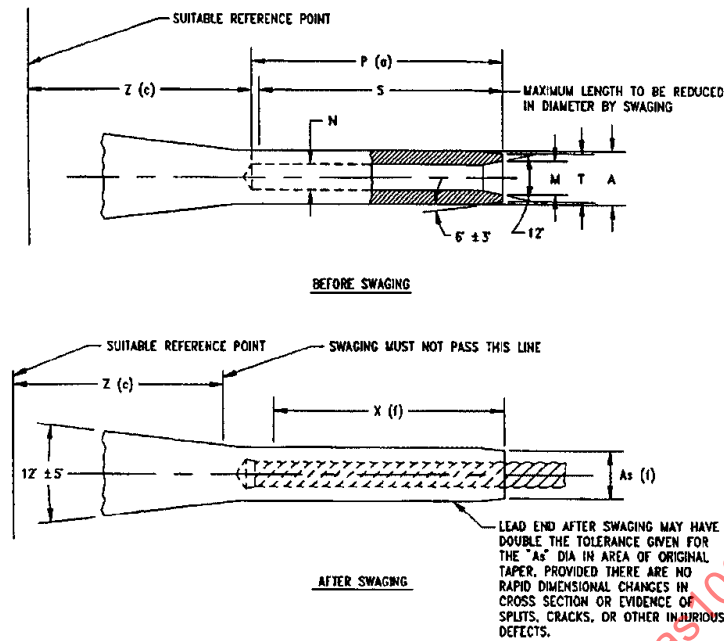


SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

REV. A	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. NOTICE THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD AND10081 REV 4. THIS SAE STANDARD MAY RETAIN THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT. ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LISTS (QPL) MAY CONTINUE TO BE MANDATORY FOR DOD CONTRACTS. REQUIREMENTS RELATING TO QPLS HAVE NOT BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.	
AS10081	SAENORM.COM : Click to view the full PDF of as10081a	
SAE values your input. To provide feedback on this Technical Report, please visit http://www.sae.org/technical/standards/AS10081A		THIRD ANGLE PROJECTION 
CUSTODIAN: A-6		PROCUREMENT SPECIFICATION: MIL-DTL-781
	AEROSPACE STANDARD (R) TERMINAL SHANK-SWAGING, DIMENSIONS FOR	AS10081 SHEET 1 OF 4
		REV. A



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 FIN 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 -.000	T DIAMETER		(b) As DIAMETER	(f) X MIN				
.063	480	.160	+.000 -.005	.008	.090	+.010 -.000	.078	+.005 -.000	+0.031 -.000	1.042	.969	.138	+.000 -.005	.138	+.000 -.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			+.000 -.010					.010		.430		+.012 -.000		.404	+.008 -.000	+0.047 -.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	+.000 -.010	.015	.860	+.015 -.000	.781	+.012 -.000	+0.062 -.000	6.511	6.438	1.250	+.000 -.012	1.250	+.000 -.012	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	
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	+0.00 -0.13	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	0.38	18.34	+0.25 -0.00	16.66	+0.30 -0.00	140.00	+1.57 -0.00	138.10	25.40	+0.00 -0.25	25.40	+0.00 -0.25	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	0.51	25.73	+0.38 -0.00	23.39	+0.30 -0.00	182.00	+2.39 -0.00	180.20	36.50	+0.00 -0.38	36.50	+0.00 -0.38	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					



AEROSPACE STANDARD

(R) TERMINAL SHANK-SWAGING,
DIMENSIONS FORAS10081
SHEET 3 OF 4REV.
A