

RATIONALE

LEAD THREAD CHAMFER TO AS1132, REVISE DIMENSION FOR HOLE CENTER TO BEARING FACE TO BASIC, UPDATE TO ASME Y14.5-2018, ADD POSITION REQUIREMENT FOR DRILLED HOLE, REVISE FILLET RADIUS TO CR, GENERAL EDITORIAL UPDATES.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9505A, AMENDMENT 1. THIS SAE STANDARD MAY RETAIN THE SAME PART NUMBERS ESTABLISHED BY THE ORIGINAL MILITARY DOCUMENT.

ANY REQUIREMENTS ASSOCIATED WITH QUALIFIED PRODUCTS LISTS (QPL'S) MAY CONTINUE TO BE MANDATORY FOR DoD CONTRACTS. REQUIREMENTS RELATING TO QPL'S HAVE NOT BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.

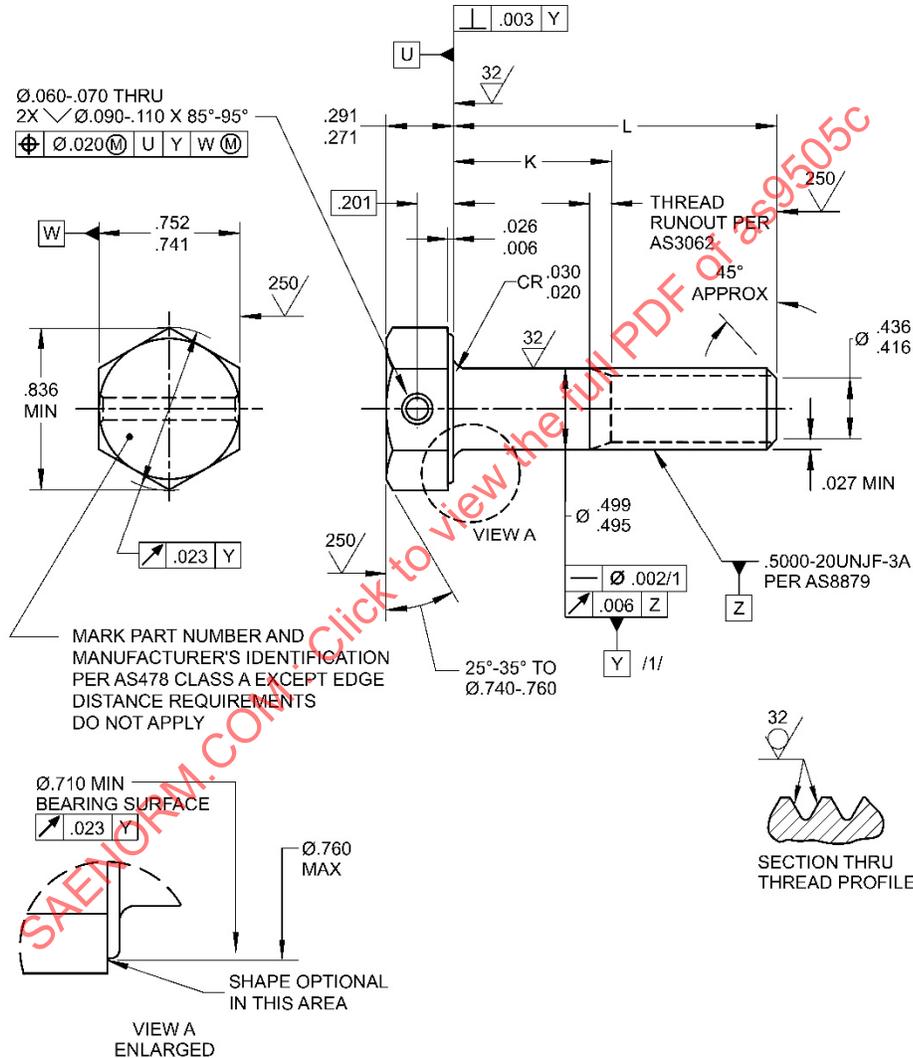
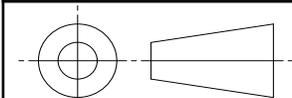


FIGURE 1 - BOLT

For more information on this standard, visit
<https://www.sae.org/standards/content/AS9505C/>

THIRD ANGLE PROJECTION



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7477



AEROSPACE STANDARD

BOLT, MACHINE - HEXAGON HEAD, DRILLED,
1 HOLE, FULL SHANK, CRES, UNS S66286,
130 KSI MIN, .5000-20 UNJF-3A

AS9505™
SHEET 1 OF 3

REV. C

SAE Executive Standards Committee 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.

TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NO.	L	K	APPROX MASS LB/100	PART NO.	L	K	APPROX MASS LB/100
MS9505-04	.802- .822	.105- .125	8.30	MS9505-31	3.240- 3.260	1.940- 2.000	21.83
MS9505-05	.865- .885	.105- .125	8.65	MS9505-32	3.365- 3.385	2.065- 2.125	22.52
MS9505-06	.928- .948	.105- .125	9.00	MS9505-33	3.490- 3.510	2.190- 2.250	23.22
MS9505-07	.990- 1.010	.105- .125	9.35	MS9505-34	3.615- 3.635	2.315- 2.375	23.91
MS9505-08	1.052- 1.072	.105- .125	9.72	MS9505-35	3.740- 3.760	2.440- 2.500	24.60
MS9505-09	1.115- 1.135	.105- .125	10.04	MS9505-36	3.865- 3.885	2.565- 2.625	25.30
MS9505-10	1.178- 1.198	.105- .125	10.39	MS9505-37	3.990- 4.010	2.690- 2.750	25.99
MS9505-11	1.240- 1.260	.105- .125	10.73	MS9505-38	4.115- 4.135	2.815- 2.875	26.68
MS9505-12	1.302- 1.322	.105- .125	11.08	MS9505-39	4.240- 4.260	2.940- 3.000	27.38
MS9505-13	1.365- 1.385	.105- .125	11.43	MS9505-40	4.365- 4.385	3.065- 3.125	28.08
MS9505-14	1.428- 1.448	.128- .188	11.78	MS9505-41	4.490- 4.510	3.190- 3.250	28.77
MS9505-15	1.490- 1.510	.190- .250	12.12	MS9505-42	4.615- 4.635	3.315- 3.375	29.46
MS9505-16	1.552- 1.572	.252- .312	12.48	MS9505-43	4.740- 4.760	3.440- 3.500	30.15
MS9505-17	1.615- 1.635	.315- .375	12.87	MS9505-44	4.865- 4.885	3.565- 3.625	30.84
MS9505-18	1.678- 1.698	.378- .438	13.16	MS9505-45	4.990- 5.010	3.690- 3.750	31.54
MS9505-19	1.740- 1.760	.440- .500	13.51	MS9505-46	5.115- 5.135	3.815- 3.875	32.23
MS9505-20	1.865- 1.885	.565- .625	14.20	MS9505-47	5.240- 5.260	3.940- 4.000	32.52
MS9505-21	1.990- 2010	.690- .750	14.89	MS9505-48	5.365- 5.385	4.065- 4.125	33.62
MS9505-22	2.115- 2.235	.815- .875	15.59	MS9505-49	5.490- 5.510	4.190- 4.250	34.31
MS9505-23	2.240- 2.260	.940-1.000	16.28	MS9505-50	5.615- 5.635	4.315- 4.375	35.01
MS9505-24	2.365- 2.385	1.065-1.125	16.97	MS9505-51	5.740- 5.760	4.440- 4.500	35.70
MS9505-25	2.490- 2.510	1.190-1.250	17.67	MS9505-52	5.865- 5.885	4.565- 4.625	36.39
MS9505-26	2.615- 2.635	1.315-1.375	18.36	MS9505-53	5.990- 6.010	4.690- 4.750	37.09
MS9505-27	2.740- 2.760	1.440-1.500	19.05	MS9505-54	1.802- 1.822	.502- .562	13.85
MS9505-28	2.865- 2.885	1.565-1.625	19.75	MS9505-55	1.928- 1.948	.628- .688	14.55
MS9505-29	2.990- 3.010	1.690-1.750	20.44				
MS9505-30	3.115- 3.135	1.815-1.875	21.14				

NOTES:

- FOR PART NUMBERS MS9505-04 THROUGH MS9505-24, DATUM Z (THREAD PD) SHALL REPLACE DATUM Y.
- MATERIAL: CORROSION AND HEAT RESISTANT STEEL AMS5731 (COMPOSITION SIMILAR TO UNS S66286).
- PROCUREMENT SPECIFICATION: AS7477.
- FLUORESCENT PENETRANT INSPECTION PER ASTM E1417/E1417M TYPE 1, SENSITIVITY LEVEL 2 MINIMUM.
- INCOMPLETE THREADS NOT TO ENTER FILLET.
- SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 125 MICRONS Ra.
- BREAK SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
- DIMENSIONING AND TOLERANCING PER ASME Y14.5-2018.
- DIMENSIONS ARE IN INCHES.
- DO NOT USE UNASSIGNED PART NUMBERS.
- UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATIONS MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.

	AEROSPACE STANDARD	AS9505™ SHEET 2 OF 3	REV. C
	BOLT, MACHINE - HEXAGON HEAD, DRILLED, 1 HOLE, FULL SHANK, CRES, UNS S66286, 130 KSI MIN, .5000-20 UNJF-3A		