

RATIONALE

UPDATE TO ASME Y14.5-2018, ADD NEW NOTE FOR SYSTEM 22 GAGING, ADD "COMPOSITION SIMILAR TO" TO NOTE 2, UPDATE MPI REFERENCE, ADD NEW NOTE FOR DISPOSITION OF EXISTING INVENTORY, GENERAL EDITORIAL UPDATES.

NOTICE

THE INITIAL SAE PUBLICATION OF THIS DOCUMENT WAS TAKEN DIRECTLY FROM U.S. MILITARY STANDARD MS9316. 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 QPL'S HAVE NOT BEEN ADOPTED BY THE SAE FOR THIS STANDARD AND ARE NOT PART OF THIS SAE DOCUMENT.

REV.
C

AS9316™

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.

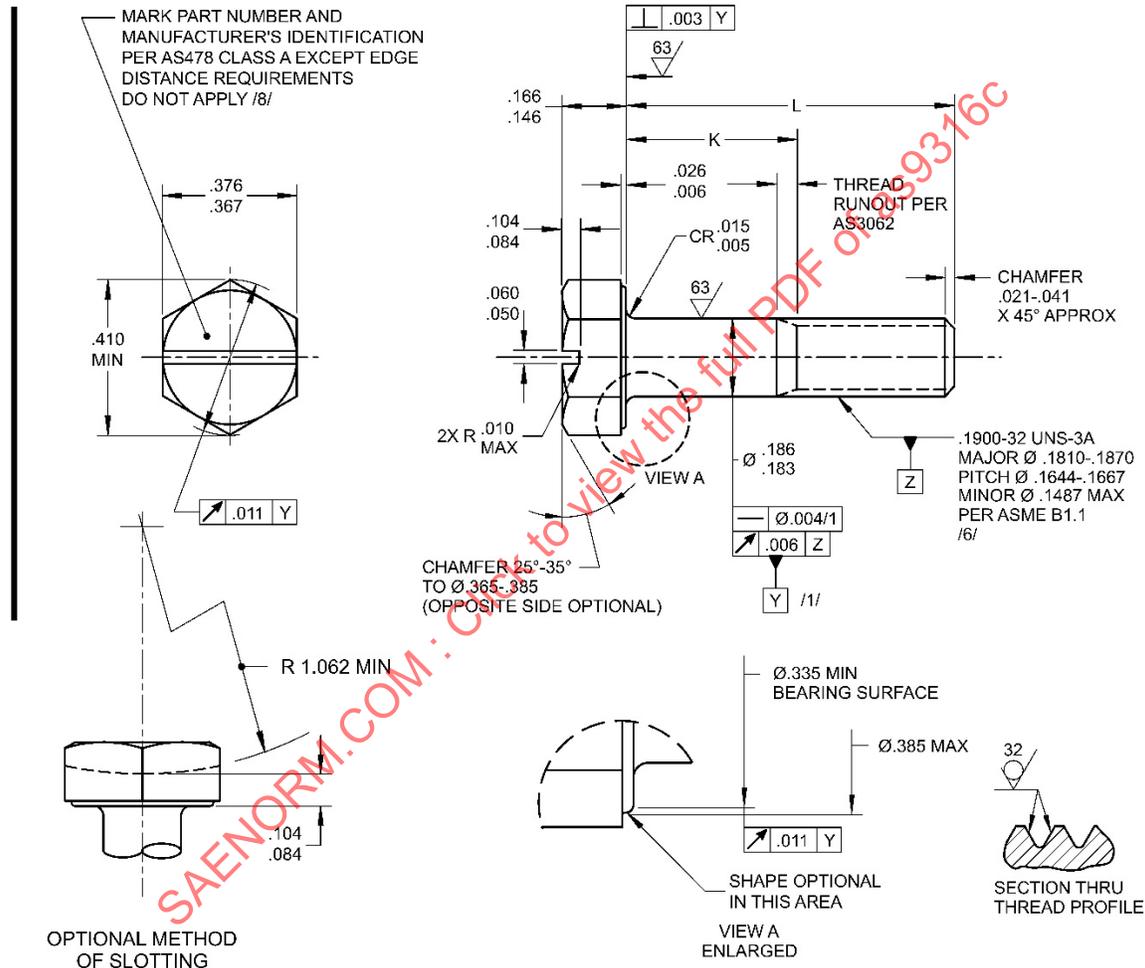
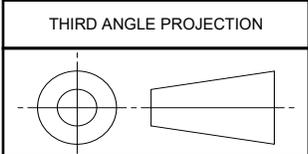


FIGURE 1 - SCREW

For more information on this standard, visit
<https://www.sae.org/standards/content/AS9316C/>



CUSTODIAN: E-25

PROCUREMENT SPECIFICATION: AS7454



AEROSPACE STANDARD

SCREW, MACHINE - HEXAGON HEAD, SLOTTED,
 FULL SHANK, ALLOY STEEL, UNS K14675,
 135 KSI MIN, .1900-32 UNS-3A

AS9316™
 SHEET 1 OF 3

REV.
C

ISSUED 2000-08 REAFFIRMED 2017-04 REVISED 2022-09

TABLE 1 - PART NUMBERS AND DIMENSIONS

PART NUMBER	L	K	APPROX. MASS LB/100
MS9316-02	.428 - .448	<u>1/</u>	.90
MS9316-03	.490 - .510	<u>1/</u>	1.03
* MS9316-04	.552 - .572	<u>1/</u>	1.16
MS9316-05	.615 - .635	<u>1/</u>	1.28
MS9316-06	.678 - .698	<u>1/</u>	1.41
MS9316-07	.740 - .760	.065 - .125	1.54
* MS9316-08	.802 - .822	.128 - .188	1.67
MS9316-09	.865 - .885	.190 - .250	1.79
MS9316-10	.928 - .948	.252 - .312	1.93
MS9316-11	.990 - 1.010	.315 - .375	2.05
* MS9316-13	1.115 - 1.135	.440 - .500	2.31
MS9316-15	1.240 - 1.260	.565 - .625	2.57
MS9316-17	1.365 - 1.385	.690 - .750	2.82
* MS9316-19	1.490 - 1.510	.815 - .875	3.08

1/ THREAD TO HEAD. MAXIMUM TWO IMPERFECT THREADS.

* PREFERRED LENGTHS.

NOTES:

NOTICE

THIS DOCUMENT REFERENCES A PART WHICH CONTAINS CADMIUM AS A PLATING MATERIAL. CONSULT LOCAL OFFICIALS IF YOU HAVE QUESTIONS CONCERNING CADMIUM'S USE.

- 1/ FOR PART NUMBERS MS9316-02 THRU MS9316-10 DATUM Z (THREAD PD) SHALL REPLACE DATUM Y.
2. MATERIAL: LOW ALLOY STEEL PER AMS6304 (COMPOSITION SIMILAR TO UNS K14675).
3. PROCUREMENT SPECIFICATION: AS7454.
4. FINISH: DIFFUSED NICKEL-CADMIUM PLATE PER AMS2416. DIMENSIONS ARE AFTER PLATING. CONTACT POINTS PERMISSIBLE. PD MAY BE REDUCED .0012 MAXIMUM BEFORE PLATING.
5. MAGNETIC PARTICLE INSPECTION PER ASTM E1444/E1444M BEFORE PLATING.
- 6/ ACCEPTABILITY OF SCREW THREADS SHALL BE DETERMINED BASED ON ASME B1.3M, SYSTEM 22.
7. SURFACE TEXTURE: SYMBOLS PER ASME Y14.36M. REQUIREMENTS PER ASME B46.1. UNLESS OTHERWISE SPECIFIED, SURFACES TO BE 250 MICROINCHES Ra.
- 8/ FOR PARTS MANUFACTURED PRIOR TO ISSUE OF AS9316 REV. A, PARTS MARKED ONLY WITH THE MATERIAL CODE "E37" ARE ACCEPTABLE.
9. BREAK SHARP EDGES .003 TO .015, UNLESS OTHERWISE SPECIFIED.
10. DIMENSIONS ARE IN INCHES.
11. DIMENSIONING AND TOLERANCING PER ASME Y14.5-2018.
12. DO NOT USE UNASSIGNED PART NUMBERS.
13. UNLESS OTHERWISE SPECIFIED, PART INVENTORY MANUFACTURED TO PREVIOUS REVISIONS OF THE APPLICABLE DRAWING OR SPECIFICATION MAY BE PROCURED AND USED UNTIL STOCK IS DEPLETED.

	AEROSPACE STANDARD	AS9316™ SHEET 2 OF 3	REV. C
	SCREW, MACHINE - HEXAGON HEAD, SLOTTED, FULL SHANK, ALLOY STEEL, UNS K14675, 135 KSI MIN., .1900-32 UNS-3A		