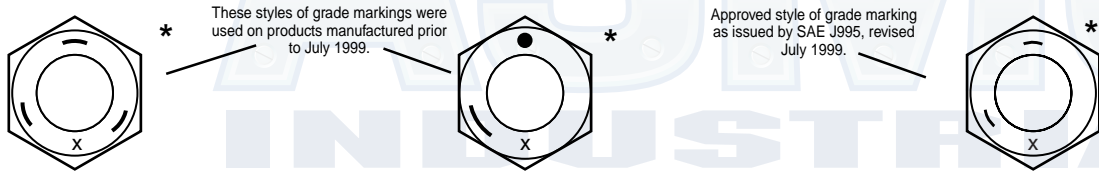
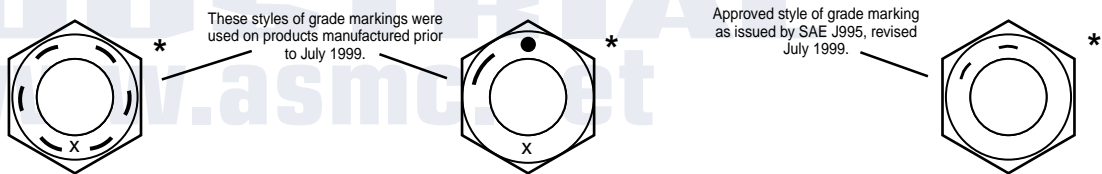


| GRADE-5 & GRADE-8 FINISHED HEX NUTS | | | | | | | | | | ANSI/ASME B18.2.2 |
|--|--------|--------------------|-------|-------|----------------------|-------|-----------------------|-------|-------|----------------------|
| Nominal or Basic Major Diameter of Thread | | F | | | G | | H | | | |
| | | Width Across Flats | | | Width Across Corners | | Thickness of Hex Nuts | | | |
| | | Basic | Max | Min | Max | Min | Basic | Max | Min | |
| 1/4 | 0.2500 | 7/16 | 0.438 | 0.428 | 0.505 | 0.488 | 7/32 | 0.226 | 0.212 | |
| 5/16 | 0.3125 | 1/2 | 0.500 | 0.489 | 0.577 | 0.557 | 17/64 | 0.273 | 0.258 | |
| 3/8 | 0.3750 | 9/16 | 0.562 | 0.551 | 0.650 | 0.628 | 21/64 | 0.337 | 0.320 | |
| 7/16 | 0.4375 | 11/16 | 0.688 | 0.675 | 0.794 | 0.768 | 3/8 | 0.385 | 0.365 | |
| 1/2 | 0.5000 | 3/4 | 0.750 | 0.736 | 0.866 | 0.840 | 7/16 | 0.448 | 0.427 | |
| 9/16 | 0.5625 | 7/8 | 0.875 | 0.861 | 1.010 | 0.982 | 31/64 | 0.496 | 0.473 | |
| 5/8 | 0.6250 | 15/16 | 0.938 | 0.922 | 1.083 | 1.051 | 35/64 | 0.559 | 0.535 | |
| 3/4 | 0.7500 | 1-1/8 | 1.125 | 1.088 | 1.299 | 1.240 | 41/64 | 0.665 | 0.617 | |
| 7/8 | 0.8750 | 1-5/16 | 1.312 | 1.269 | 1.516 | 1.447 | 3/4 | 0.776 | 0.724 | |
| 1 | 1.0000 | 1-1/2 | 1.500 | 1.450 | 1.732 | 1.653 | 55/64 | 0.887 | 0.831 | |
| 1 1/8 | 1.1250 | 1-11/16 | 1.688 | 1.631 | 1.949 | 1.859 | 31/32 | 0.999 | 0.939 | |
| 1 1/4 | 1.2500 | 1-7/8 | 1.875 | 1.812 | 2.165 | 2.066 | 1 1/16 | 1.094 | 1.030 | |
| 1 3/8 | 1.375 | 2-1/16 | 2.062 | 1.994 | 2.382 | 2.273 | 1 11/64 | 1.206 | 1.138 | |
| 1 1/2 | 1.5000 | 2-1/4 | 2.250 | 2.175 | 2.598 | 2.480 | 1 9/32 | 1.317 | 1.245 | |



GRADE-5

| | |
|---------------------------------|---|
| Description | A finished hex nut made from steel with a maximum carbon content of 0.55%, a minimum manganese content of 0.30%, and a maximum sulfur content of 0.15%. |
| Applications/ Advantages | For use with bolts with a minimum tensile strength equal to or less than the specified proof stress of the nut. |
| Material | AISI 1008 - 1026 or equivalent steel |
| Core Hardness | Rockwell C32 maximum |
| Proof Load | 1/4 through 1 in. <u>Coarse thread</u> : 120,000 psi.; <u>Fine thread</u> : 109,000 psi. 1-1/8 through 1-1/2 in. <u>Coarse thread</u> : 105,000 psi.; <u>Fine thread</u> : 94,000 psi. |
| Plating | See Appendix-A for plating information. |



GRADE-8

| | |
|---------------------------------|---|
| Description | A finished hex nut made from steel with a maximum carbon content of 0.55%, a minimum manganese content of 0.30% and a maximum sulfur content of 0.05%. The purchaser and producer of the nuts may agree to allow a sulfur content of 0.33% maximum provided that the manganese content is at least 1.35%. |
| Applications/ Advantages | For use with bolts with a minimum tensile strength equal to or less than 150,000 psi.. |
| Material | AISI 1021 - 1045 or equivalent steel |
| Core Hardness | 1/4 through 5/8 in.: Rockwell C24 - C32 3/4 through 1 in.: Rockwell C26 - C34 Over 1 in. through 1-1/2 in.: Rockwell C26 - C36 |
| Proof Load | 1/4 through 1-1/2 in.: 150,000 psi. |
| Plating | See Appendix-A for plating information. |

*Product standards require all grade-marked nuts 1/4" diameter and larger to have a raised or depressed insignia identifying its manufacturer. "X" represents one location such an insignia may appear.