

NEW Domestic finished hex nuts in any quantity you need.



Earnest Machine Products' line of domestic hex nuts is made from steel that is produced and parts manufactured in the USA.

Our domestic hex nuts are manufactured by cold forming to the following specifications:

PRODUCT ATTRIBUTES

U.S. made from U.S. melted steel
Grade 5 Zinc Clear
Grade 8 Zinc Yellow
Fine and Coarse threads
DFARS Compliant

MARKETS FOR U.S. DOMESTIC HEX NUTS

Military applications
Department of Transportation
Energy projects
Waterworks projects
Government infrastructure

AVAILABLE VALUE ADDED SERVICES

Broken & Full case quantities
Branded Drop Shipping
Kitting and Packaging
Rework services available
- Drilling
- Custom plating



MANUFACTURE

Hex nuts are manufactured in accordance with the latest revision of the following industry standards:

- ASME B18.2.2** Dimensional Requirements for Finished (also called Full) Hex Nuts
- SAE J995** Material and Physical Properties
- ASME B1.1** Thread Requirements
- SAE J122** Surface Discontinuities
- ASME B18.18** Inspection and Quality Assurance

Inquire today at **800.327.6378**
or visit **EarnestMachine.com**

THREADS

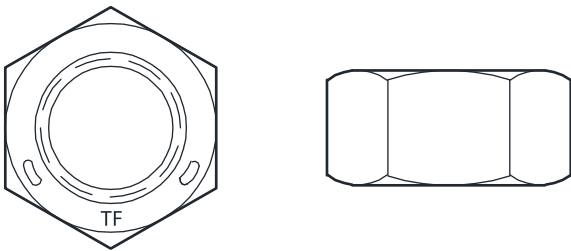
Threads are to the requirements of ANSI B1.1

Unified Threads, 2B Fit.

Thread acceptance per ASME B1.3, System 21.

MATERIAL AND PHYSICAL PROPERTIES

Grade 5



Chemical Composition: Grade 5

CARBON (C)	MANGANESE (MN)	PHOSPHORUS (P)	SULFUR (S)
Max	Min	Max	Max
0.55	0.30	0.05	0.15

Hardness: Grade 5

1/4 THRU 5/8	5/8 THRU 7/8
Rc 32 max	Rc 32 max

Proof Load: Grade 5

1/4 THRU 1 UNC	1/4 THRU 1 UNF
120,000 psi min	109,000 psi min

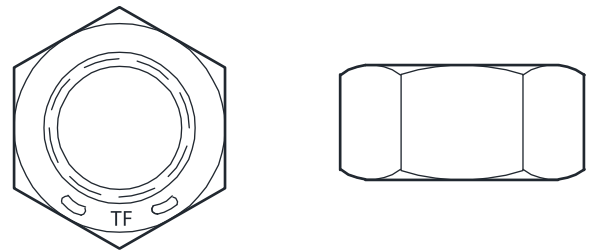
PLATING

Grade 5

Zinc with Trivalent Clear Chromate
(Reference ASTM B633 Type III SC1 or ASTM F1941)

RoHS and REACH Compliant

Grade 8



Chemical Composition: Grade 8

CARBON (C)	MANGANESE (MN)	PHOSPHORUS (P)	SULFUR (S)
Max	Min	Max	Max
0.55	0.30	0.04	0.05

Hardness: Grade 8

1/4 THRU 5/8	5/8 THRU 7/8
Rc 24/32	Rc 26/34

Proof Load: Grade 8

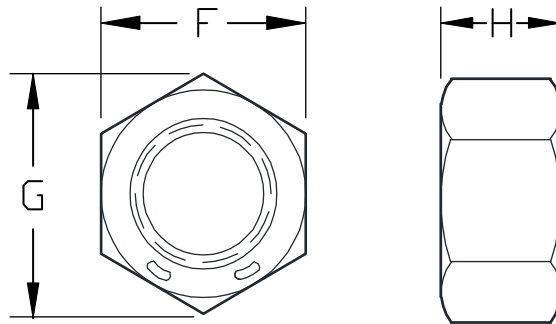
1/4 THRU 1 UNC	1/4 THRU 1 UNF
150,000 psi min	150,000 psi min

Grade 8

Zinc with Yellow Chromate
(Reference ASTM B633 Type II SC1 or ASTM F1941)

Plating thickness: .0002" (5 micron) min

Other platings and coatings available upon request.



DIMENSIONS FOR HEX NUTS (ASME B18.2.2)

SIZE	WIDTH ACROSS FLATS (F)			THICKNESS (G)			WIDTH ACROSS CORNERS (H)		BEARING SURFACE DIAMETER	COUNTERSINK DIAMETER	BEARING SURFACE FLATNESS	
	NOM	MAX	MIN	NOM	MAX	MIN	MAX	MIN			GRADE 5	GRADE 8
1/4	7/16	.438	.428	7/32	.226	.212	.505	.488	.407	.280	.015	.010
5/16	1/2	.500	.489	17/64	.273	.258	.577	.557	.465	.342	.016	.011
3/8	9/16	.562	.551	21/64	.337	.320	.650	.628	.523	.405	.017	.012
7/16	11/16	.688	.675	3/8	.385	.365	.794	.768	.641	.472	.018	.013
1/2	3/4	.750	.736	7/16	.448	.427	.866	.840	.699	.540	.019	.014
9/16	7/8	.875	.861	31/64	.496	.473	1.010	.982	.818	.607	.020	.015
5/8	15/16	.938	.922	35/64	.559	.535	1.083	1.051	.876	.675	.021	.016
3/4	1 1/8	1.125	1.088	41/64	.665	.617	1.299	1.240	1.034	.810	.023	.018
7/8	1 5/16	1.312	1.269	3/4	.776	.724	1.516	1.447	1.206	.945	.025	.020

SIZES

Grade 5 Finished Hex Nut Zinc Clear Trivalent - Coarse Thread

SIZE	GRADE	PART	THREAD	FINISH	CASE QTY
1/4	Grade 5	Hex Nut	Coarse	Zinc Clear	8,000
5/16	Grade 5	Hex Nut	Coarse	Zinc Clear	5,000
3/8	Grade 5	Hex Nut	Coarse	Zinc Clear	3,000
7/16	Grade 5	Hex Nut	Coarse	Zinc Clear	1,800
1/2	Grade 5	Hex Nut	Coarse	Zinc Clear	1,300
9/16	Grade 5	Hex Nut	Coarse	Zinc Clear	900
5/8	Grade 5	Hex Nut	Coarse	Zinc Clear	700
3/4	Grade 5	Hex Nut	Coarse	Zinc Clear	400
7/8	Grade 5	Hex Nut	Coarse	Zinc Clear	250

Grade 8 Finished Hex Nut Zinc Yellow - Coarse Thread

SIZE	GRADE	PART	THREAD	FINISH	CASE QTY
1/4	Grade 8	Hex Nut	Coarse	Zinc Yellow	8,000
5/16	Grade 8	Hex Nut	Coarse	Zinc Yellow	5,000
3/8	Grade 8	Hex Nut	Coarse	Zinc Yellow	3,000
7/16	Grade 8	Hex Nut	Coarse	Zinc Yellow	1,800
1/2	Grade 8	Hex Nut	Coarse	Zinc Yellow	1,300
9/16	Grade 8	Hex Nut	Coarse	Zinc Yellow	900
5/8	Grade 8	Hex Nut	Coarse	Zinc Yellow	700
3/4	Grade 8	Hex Nut	Coarse	Zinc Yellow	400
7/8	Grade 8	Hex Nut	Coarse	Zinc Yellow	250

Grade 5 Finished Hex Nut Zinc Clear Trivalent - Fine Thread

SIZE	GRADE	PART	THREAD	FINISH	CASE QTY
1/4	Grade 5	Hex Nut	Fine	Zinc Clear	8,000
5/16	Grade 5	Hex Nut	Fine	Zinc Clear	5,000
3/8	Grade 5	Hex Nut	Fine	Zinc Clear	3,000
7/16	Grade 5	Hex Nut	Fine	Zinc Clear	1,800
1/2	Grade 5	Hex Nut	Fine	Zinc Clear	1,300
9/16	Grade 5	Hex Nut	Fine	Zinc Clear	900
5/8	Grade 5	Hex Nut	Fine	Zinc Clear	700
3/4	Grade 5	Hex Nut	Fine	Zinc Clear	400
7/8	Grade 5	Hex Nut	Fine	Zinc Clear	250

Grade 8 Finished Hex Nut Zinc Yellow Trivalent - Fine Thread

SIZE	GRADE	PART	THREAD	FINISH	CASE QTY
1/4	Grade 8	Hex Nut	Fine	Zinc Yellow	8,000
5/16	Grade 8	Hex Nut	Fine	Zinc Yellow	5,000
3/8	Grade 8	Hex Nut	Fine	Zinc Yellow	3,000
7/16	Grade 8	Hex Nut	Fine	Zinc Yellow	1,800
1/2	Grade 8	Hex Nut	Fine	Zinc Yellow	1,300
9/16	Grade 8	Hex Nut	Fine	Zinc Yellow	900
5/8	Grade 8	Hex Nut	Fine	Zinc Yellow	700
3/4	Grade 8	Hex Nut	Fine	Zinc Yellow	400
7/8	Grade 8	Hex Nut	Fine	Zinc Yellow	250