



TABLE I

DASH NO.	NOMINAL THREAD SIZE UNC-2B	F - WIDTH ACROSS FLATS		G - WIDTH ACROSS CORNERS		H THICKNESS		TENSILE STRENGTH LBS-MIN
		MAX	MIN	MAX	MIN	MAX	MIN	
*1	.073-64	.156	.150	.221	.206	.050	.043	155
2	.066-56	.188	.180	.265	.247	.066	.057	220
*3	.099-48	.188	.180	.265	.247	.066	.057	290
4	.112-40	.250	.241	.354	.331	.098	.087	360
*5	.125-40	.312	.302	.442	.415	.114	.102	475
6	.138-32	.312	.302	.442	.415	.114	.102	540
7	.164-32	.344	.332	.486	.456	.130	.117	840
8	.190-24	.375	.362	.530	.497	.130	.117	1,050
*9	.216-24	.438	.423	.619	.581	.161	.148	1,450
10	.250-20	.438	.425	.619	.584	.235	.203	2,860
11	.3125-18	.562	.547	.795	.751	.283	.249	4,710
12	.375-16	.625	.606	.884	.832	.346	.310	6,970
13	.4375-14	.750	.728	1.061	1.000	.394	.356	9,560
14	.500-13	.812	.788	1.149	1.082	.458	.418	12,750
15	.625-11	1.000	.969	1.414	1.330	.569	.525	20,300
16	.750-10	1.125	1.088	1.591	1.494	.680	.632	30,050
17	.875-9	1.312	1.269	1.856	1.742	.792	.740	41,550
18	1.000-8	1.500	1.450	2.121	1.991	.903	.847	54,500
19	1.125-7	1.688	1.631	2.386	2.239	1.030	.970	68,600
20	1.250-7	1.875	1.812	2.652	2.489	1.126	1.062	87,200
21	1.375-6	2.062	1.994	2.917	2.738	1.237	1.169	103,900
22	1.500-6	2.250	2.175	3.182	2.986	1.348	1.276	126,400

NOTES:

- MATERIAL:** Carbon steel, Grade A, in accordance with procurement specification. Tensile strengths are based on a minimum ultimate tensile strength of 60,000 PSI for size 0.216 and smaller and 90,000 PSI for sizes larger than 0.216.
- PROTECTIVE COATING:** Cadmium plated in accordance with QQ-P-416, Type II, Class 3.
- THREADS:** Threads shall be in accordance with Screw-Thread Standards for Federal Services, Handbook H28.
- BEARING SURFACE:** Bearing surface shall be perpendicular to the axis of the thread within 4° for sizes 0.216 and smaller, within 3° for sizes 0.250 thru 1.000, and within 2° for sizes larger than 1.000.
- CHAMFER:** Sizes 0.216 and smaller shall have tops and bottoms flat without chamfer. Sizes 0.250 and larger shall have tops flat and chamfered (25° ± 2°) or washer crowned. (The diameter of the top circle shall be equal to the maximum width across flats within a tolerance of minus 15 percent.)
- SIDE TAPER:** The angle between the thread axis and the sides of the nut shall not exceed 2°.
- DIMENSIONS:** All dimensions in Table I are in inches. All dimensions in Table II are in millimetres.
- PART NUMBER:** The MS part number consists of the MS number, plus the dash number. Example: MS27040-1.
- Dimensions for sizes 0.216 and smaller are in accordance with ANSI B18.6.3.
- Referenced documents shall be of the issue in effect on date of invitations for bid.
- For design feature purposes, this standard takes precedence over procurement documents referenced herein.
- Dash numbers 1, 3, 5 and 9 are INACTIVE FOR DESIGN AFTER 1 FEBRUARY 1974.

For changes see sheets 1 and 2.

This military standard is approved for use by all Departments and Agencies of the Department of Defense. Selection for all new engineering and design applications and for repetitive use shall be made from this document.

P.A. WC	TITLE	MILITARY STANDARD
Other Cust SH 82	NUT, PLAIN, SQUARE - STEEL, CADMIUM PLATED	MS 27040
PROCUREMENT SPECIFICATION FF-N-836	SUPERSEDES: BBNX1, BBNX2, BBNX3, BBOX1 and BBOX2	SHEET 1 OF 2

REVIEWER: AV, IS, MU
USER: AS, AT, WC, YD

(B)
TABLE II
METRIC TRANSLATION OF TABLE I

DASH NO.	NOMINAL THREAD SIZE		F - WIDTH ACROSS FLATS		G - WIDTH ACROSS CORNERS		H THICKNESS	
	DIA	PITCH	MAX	MIN	MAX	MIN	MAX	MIN
*1	1.85	.40	3.96	3.81	5.61	5.23	1.27	1.09
2	2.16	.45	4.78	4.57	6.73	6.27	1.68	1.45
*3	2.51	.53	4.78	4.57	6.73	6.27	1.68	1.45
4	2.84	.64	6.35	6.12	8.99	8.41	2.49	2.21
*5	3.18	.64	7.92	7.67	11.23	10.54	2.90	2.59
6	3.50	.79	7.92	7.67	11.23	10.54	2.90	2.59
7	4.17	.79	8.74	8.43	12.34	11.50	3.30	2.97
8	4.83	1.06	9.52	9.19	13.46	12.62	3.30	2.97
*9	5.49	1.06	11.12	10.74	15.72	14.76	4.09	3.76
10	6.35	1.27	11.12	10.80	15.72	14.81	5.97	5.16
11	7.94	1.41	14.27	13.89	20.19	19.08	7.19	6.32
12	9.52	1.59	15.88	15.39	22.45	21.13	8.79	7.87
13	11.11	1.81	19.05	18.49	26.95	25.40	10.01	9.04
14	12.70	1.95	20.62	20.02	29.18	27.48	11.63	10.62
15	15.88	2.31	25.40	24.61	35.92	33.78	14.45	13.34
16	19.05	2.54	28.58	27.64	40.41	37.95	17.27	16.05
17	22.22	2.82	33.32	32.23	47.14	44.25	20.12	18.80
18	25.40	3.18	38.10	36.83	53.87	50.57	22.94	21.51
19	28.58	3.63	42.88	41.43	60.60	56.87	26.16	24.64
20	31.75	3.63	47.62	46.02	67.36	63.22	28.60	26.97
21	34.92	4.23	52.37	50.65	74.09	69.55	31.42	29.69
22	38.10	4.23	57.15	55.24	80.82	75.84	34.24	32.41

REVIEWER: AV, IS, MU
USER: AS, AT, MC, YD

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APPROVED 23 NOV 1960 REVISED (A) 12 OCT 1966 (B) FOR CHANGES SEE SHEETS 1 AND 2.

P.A. WC Other Cont SH 82	TITLE NUT, PLAIN, SQUARE - STEEL, CADMIUM PLATED	MILITARY STANDARD MS 27040
PROCUREMENT SPECIFICATION FF-N-836	SUPERSEDES: BBNX1, BBNX2, BBNX3, BBOX1 and BBOX2	SHEET 2 OF 2

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

OMB Approval
No. 22-R255

INSTRUCTIONS: The purpose of this form is to solicit beneficial comments which will help achieve procurement of suitable products at reasonable cost and minimum delay, or will otherwise enhance use of the document. DoD contractors, government activities, or manufacturers/ vendors who are prospective suppliers of the product are invited to submit comments to the government. Fold on lines on reverse side, staple in corner, and send to preparing activity. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements. Attach any pertinent data which may be of use in improving this document. If there are additional papers, attach to form and place both in an envelope addressed to preparing activity.

DOCUMENT IDENTIFIER AND TITLE

MS27040 Rev B, Nut, Plain, Square - Steel, Cadmium Plated

NAME OF ORGANIZATION AND ADDRESS

CONTRACT NUMBER

MATERIAL PROCURED UNDER A

DIRECT GOVERNMENT CONTRACT SUBCONTRACT

1. HAS ANY PART OF THE DOCUMENT CREATED PROBLEMS OR REQUIRED INTERPRETATION IN PROCUREMENT USE?

A. GIVE PARAGRAPH NUMBER AND WORDING.

B. RECOMMENDATIONS FOR CORRECTING THE DEFICIENCIES

2. COMMENTS ON ANY DOCUMENT REQUIREMENT CONSIDERED TOO RIGID

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YES NO (If "Yes", in what way?)

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