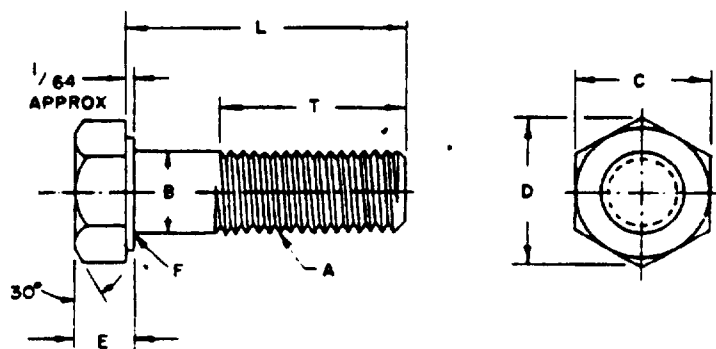


THIS MILITARY STANDARD IS APPROVED BY THE NAVAL SEA SYSTEMS COMMAND, DEPARTMENT OF THE NAVY AND SHALL BE USED BY THAT ACTIVITY. ALL OTHER MILITARY ACTIVITIES ARE REQUIRED TO EMPLOY THIS STANDARD WHERE SUITABLE.

FED. SUP CLASS
5306



(B) Denotes Changes

APPROVED 8 May 1957 REVISED (A) 19 August 1966 (B) 29 November 1989

P. A. SH Other Cust	INTERNATIONAL INTEREST	TITLE Bolts, Machine, Hexagon Head, Semifinished Corrosion Resisting Steel UNC-2A, Nonmagnetic	MILITARY STANDARD
PROCUREMENT SPECIFICATION MIL-S-1222 (B)			MS 16208(SH)
SUPERSEDES:			SHEET 1 OF 6

This military standard is approved by the Naval Sea Systems Command, Department or the Navy, and shall be used by that activity. All other military activities are required to employ this standard where suitable.

Nominal size		1/4		5/16		3/8		7/16	
Threads per inch		20-UNC2A		18-UNC2A		16-UNC2A		14-UNC2A	
(A)	Threads per inch	0.250		0.312		0.375		0.437	
(B)	Body diameter	.217		.276		.334		.394	
(C)	Width across flats	.437		.500		.562		.625	
	Max	.425		.484		.544		.603	
(D)	Width across corners	.505		.577		.650		.722	
	Max	.484		.552		.620		.687	
(E)	Head height	.163		.211		.243		.291	
	Max	.150		.195		.226		.272	
(F)	Radius	.031		.031		.031		.031	
	Min	.009		.009		.009		.009	

(L)	Length	Tolerance		MS part no	FIIN	MS part no	FIIN	MS part no	FIIN
		Size 1/4 to 3/8	Size 7/16 to 1/2						
1/4				1					
3/8				2					
1/2				3					
5/8				4					
3/4				5					
7/8				6					
1				7					
1-1/4				8					
1-1/2				9					
1-3/4				10					
2				11					
2-1/4				12					
2-1/2				13					
2-3/4				14					
3				15					
3-1/4				16					
3-1/2				17					
3-3/4				18					
4				19					
4-1/4				20					
4-1/2				21					
4-3/4				22					
5				23					
5-1/2				24					
6				25					
6-1/2				26					
7				27					
7-1/2				28					
8				29					
9				30					

(B) Denotes changes

P. A. SH Other Cont.	INTERNATIONAL INTEREST	TITLE Bolts, Machine, Hexagon Head, Semi-Finished, Corrosion Resisting Steel UNC-2A, Nonmagnetic	MILITARY STANDARD MS 16208(SH)
PROCUREMENT SPECIFICATION (B) MIL-S-1222	SUPERSEDES		SHEET 2 OF 6

DD FORM 1 MAY 73 672-1 (LIMITED COORDINATION) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE (Project 5306-N174)

APPROVED 8 May 1957 REVISED (A) 19 August 1966 (B) 29 November 1989

FED. SUP CLASS
5306

This military standard is approved by the Naval Sea Systems Command, Department of the Navy and shall be used by that activity. All other military activities are required to employ this standard where suitable.

Nominal size (Continued)				1/4		5/16		3/8		7/16	
(A) Threads per inch (Continued)				20-UNC2A		18-UNC2A		16-UNC2A		14-UNC2A	
(L) Length (Continued)				MS part no		MS part no		MS part no		MS part no	
Tolerance				FIIN		FIIN		FIIN		FIIN	
Size 1/4 to 3/8				Size 5/8 to 1-1/4		Size 7/16 to 1/2		Size 3/8 to 1/2		Size 1/2 to 3/4	
10		+1/16									
11											
12											
13											
14											
15											
16											
18											
20											
Nominal size				1/2		5/8		3/4		7/8	
(A) Threads per inch				13-UNC2A		11-UNC2A		10-UNC2A		9-UNC2A	
(B) Body diameter				0.500		0.625		0.750		0.875	
				.450		.566		.685		.803	
(C) Width across flats				.750		.937		1.125		1.312	
				.725		.906		1.088		1.269	
(D) Width across corners				.866		1.083		1.299		1.516	
				.826		1.033		1.240		1.447	
(E) Head height				.323		0.403		0.483		0.563	
				.302		.378		.455		.531	
(F) Radius				.031		.062		.062		.062	
				.009		.021		.021		.021	
(L) Length				MS part no		MS part no		MS part no		MS part no	
1/4				---		---		---		---	
3/8				---		---		---		---	
1/2				100		---		---		---	
5/8				---		---		---		---	
3/4				101		135		161		195	
7/8				---		---		---		---	
1				102		136		162		196	
1-1/4				103		137		163		197	
1-1/2				104		138		164		198	
1-3/4				105		139		165		199	
2				106		140		166		200	
2-1/4				107		141		167		201	
2-1/2				108		142		168		202	
2-3/4				109		143		169		203	
3				110		144		170		204	
3-1/4				111		145		171		205	
3-1/2				112		146		172		206	

(B) Denotes changes

P. A. Other Code SH	INTERNATIONAL INTEREST	TITLE Bolts, Machine, Hexagon Head, Semi-Finished, Corrosion Resisting Steel UNC-2A, Nonmagnetic	MILITARY STANDARD MS 16208(SH)
PROCUREMENT SPECIFICATION MIL-S-1222		SUPERSEDES:	SHEET 3 OF 6

APPROVED 8 May 1957 REVISED 19 August 1966 29 November 1989

DD FORM 672-1 (LIMITED COORDINATION) PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE (Project 5306-N174)

FED. SUP CLASS
5306

This military standard is approved by the Naval Sea Systems Command, Department of the Navy, and shall be used by that activity. All other military activities are required to employ this standard where suitable.

Nominal size (Continued)		Tolerance		1/2		5/8		3/4		7/8	
(A) Threads per inch (Continued)		Size 1/4 to 3/8		Size 7/16 to 1/2		Size 5/8 to 1-1/4		13-UNC2A		11-UNC2A	
(L) Length (Continued)		Size 1/4 to 3/8		Size 7/16 to 1/2		Size 5/8 to 1-1/4		MS part no		FIIN	
3-3/4											
4											
4-1/4											
4-1/2											
4-3/4											
5											
5-1/2											
6											
6-1/2											
7											
7-1/2											
8											
9											
10											
11											
12											
13											
14											
15											
16											
18											
20											

(B) Denotes changes

P. A. SH Other Cost	INTERNATIONAL INTEREST	TITLE Bolts, Machine, Hexagon Head, Semi-Finished, Corrosion Resisting Steel UNC-2A, Nonmagnetic	MILITARY STANDARD MS 16208(SH)
PROCUREMENT SPECIFICATION (B) MIL-S-1222	SUPERSEDES:		SHEET 4 OF 6

DD FORM 672-1 (LIMITED COORDINATION)

APPROVED 8 May 1957 REVISED (A) 19 August 1966 (B) 29 November 1989

FED. SUP CLASS 5306

(Project 5306-N174)

This military standard is approved by the Naval Sea Systems Command, Department of the Navy, and shall be used by that activity. All other military activities are required to employ this standard where suitable.

Nominal size		1		1-1/8		1-1/4		1-3/8		1-1/2	
		8-UNC2A		7-UNC2A		6-UNC2A		6-UNC2A		6-UNC2A	
(A) Threads per inch	Max	1.000	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125	1.125
(B) Body diameter	Min	0.919	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032	1.032
(C) Width across flats	Max	1.500	1.687	1.687	1.687	1.687	1.687	1.687	1.687	1.687	1.687
	Min	1.450	1.631	1.631	1.631	1.631	1.631	1.631	1.631	1.631	1.631
(D) Width across corners	Max	1.732	1.949	1.949	1.949	1.949	1.949	1.949	1.949	1.949	1.949
	Min	1.653	1.859	1.859	1.859	1.859	1.859	1.859	1.859	1.859	1.859
(E) Head height	Max	0.67	0.718	0.718	0.718	0.718	0.718	0.718	0.718	0.718	0.718
	Min	.591	.658	.658	.658	.658	.658	.658	.658	.658	.658
(F) Radius	Max	.093	.093	.093	.093	.093	.093	.093	.093	.093	.093
	Min	.062	.062	.062	.062	.062	.062	.062	.062	.062	.062
(L) Length	Tolerance	Size 1/4 to 3/8	Size 7/16 to 1/2	Size 5/8 to 1-1/2							
1/4											
3/8											
1/2											
5/8											
3/4											
7/8											
1											
1-1/4											
1-1/2											
1-3/4											
2											
2-1/4											
2-1/2											
2-3/4											
3											
3-1/4											
3-1/2											
3-3/4											
4											
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4-1/2											
4-3/4											
5											
5-1/2											
6											
6-1/2											
7											
7-1/2											
8											
9											
10											

(B) Denotes changes

P. A. SH Other Cost	INTERNATIONAL INTEREST	TITLE Bolts, Machine, Hexagon Head, Semi-Finished, Corrosion Resisting Steel UNC-2A, Nonmagnetic	MILITARY STANDARD MS 16208(SH)
PROCUREMENT SPECIFICATION (B) MIL-S-1222	SUPERSEDES:	SHEET 5 OF 6	

APPROVED 8 May 1957 REVISED (A) 19 August 1966 (B) 29 November 1989

This military standard is approved by the Naval Sea Systems Command, Department of the Navy, and shall be used by that activity. All other military activities are required to employ this standard where suitable.

Nominal size (Continued)		Tolerance		1		1-1/8		1-1/4		1-3/8		1-1/2	
(A) Threads per inch (Continued)				8-UNC2A		7-UNC2A		7-UNC2A		6-UNC2A		6-UNC2A	
(L) Length (Continued)	Size 1/4 to 3/8	Size 7/16 to 1/2	Size 5/8 to 1-1/2	MS part no	FIIN part no	MS part no	FIIN part no	MS part no	FIIN part no	MS part no	FIIN part no	MS part no	FIIN part no
11	+1/16	+3/32	+3/16	---	---	---	---	---	---	---	---	---	---
12				---	---	---	---	---	---	---	---	---	---
13				---	---	---	---	---	---	---	---	---	---
14				---	---	---	---	---	---	---	---	---	---
15				---	---	---	---	---	---	---	---	---	---
16				---	---	---	---	---	---	---	---	---	---
18				---	---	---	---	---	---	---	---	---	---
20				---	---	---	---	---	---	---	---	---	---

(B) Material: Austenitic corrosion resisting steel shall be in accordance with class 303, 303SE, 304, 305, 316, 321, 347, or 384 of ASTM F 593.

Magnetic permeability: Magnetic permeability shall be $\mu_M = 2.0$ maximum when measured with a permeability indicator in accordance with MIL-I-17214.

Protective coating: Passivate in accordance with QQ-P-35.

Threads: Threads shall be UNC2A in accordance with FED-STD-H28.

Thread length: Minimum thread length shall be twice the nominal size (diameter) plus 1/4 inch for lengths to 6 inches inclusive and twice the nominal diameter plus 1/2 inch for lengths over 6 inches. Bolts too short for minimum thread length shall be threaded as close to the head as practicable.

Dimensions: All dimensions are in inches, unless otherwise specified.

NOTES:

1. In case of conflict with any document referenced herein, this standard shall govern.
2. Referenced documents shall be the issue in effect on date of invitation for bids.

(B) Denotes changes

P. A. SH Other Cast	INTERNATIONAL INTEREST	TITLE Bolts, Machine, Hexagon Head, Semi-Finished, Corrosion Resisting Steel UNC-2A, Nonmagnetic	MILITARY STANDARD
PROCUREMENT SPECIFICATION (B) MIL-S-1222	SUPERSEDES:		MS 16208 (SH)
			SHEET 6 OF 6

DD FORM 672-1 (LIMITED COORDINATION)
PREVIOUS EDITIONS OF THIS FORM ARE OBSOLETE
(Project 5306-N174)

FED. SUP CLASS
5306

APPROVED 8 May 1957 REVISED **(A)** 19 August 1966 **(B)** 29 November 1989