

MIL-STD-1373  
 NOTICE-2  
27 November 1972

# MILITARY STANDARD

## SCREW-THREAD, MODIFIED, 60°, STUB. DOUBLE

TO ALL HOLDERS OF MIL-STD-1373.

<u>1. New Page</u>	<u>Date</u>	<u>SUPERSEDED PAGE</u>	<u>Date</u>
3	27 November 1972	3	8 April 1971
4	27 November 1972	4	8 April 1971
11	27 November 1972	11	3 November 1971
12	8 April 1971 (Reprinted without change)		
13	27 November 1972	13	8 April 1971
14	8 April 1971 (Reprinted without change)		

2. Retain this Notice and insert before the table of contents.

3. Holders of MIL-STD-1373 will verify that page change(s) and addition(s) indicated above have been entered. The Notice page will be retained as a check sheet. This issuance, together with appended page(s), is a separate publication. Each Notice is to be retained by stocking points until the Military Standard is completely revised or cancelled.

Custodians:

Army - EL  
 Navy - EC

Preparing activity:

Navy - EC  
 (Project MISC-0869)

Review activities:

Army - SC

User activities:

Navy - YD, SH, AS

FSC MISC

MIL-STD-1373  
27 November 1972

TABLE III. Class 2A  
.1428 Pitch  
Modified 60° Stub External Double Thread Series  
Symbol DS-2A

Designation			Allow- ance	External Thread-Limits of Size							
Thread Size	Pitch	Lead		Major Diameter			Pitch Diameter			Minor Diameter	
				Limits		Toler- ance	Limits		Toler- ance	Limits	
				Max	Min		Max	Min		Max	Min
2.0000	.1428	.2857	.0020	1.9980	1.9860	.0120	1.9360	1.9260	.0100	1.8685	1.8505
2.2500				2.2480	2.2360		2.1860	2.1760		2.1185	2.1005
2.7500				2.7480	2.7360		2.6860	2.6760		2.6185	2.6005
3.0000				2.9980	2.9860		2.9360	2.9260		2.8685	2.8505
3.2500				3.2480	3.2360		3.1860	3.1760		3.1185	3.1005
3.5000				3.4980	3.4860		3.4360	3.4260		3.3685	3.3505

Note: Formulas for these values are given in table VII.

TABLE IV. Class 2B  
.05 Pitch  
Modified 60° Stub Internal Double Thread Series  
Symbol DS-2B

Designation			Thread Size	Pitch	Lead	Internal Thread-Limits of Size					
						Minor Diameter		Pitch Diameter		Major Diameter	
						Limits		Limits		Limits	
						Min	Max	Min	Max	Min	Max
.2500	.05	.1	.2183	.2263	.0080	.2320	.2400	.0080	.2520	.3640	
.3750			.3433	.3513		.3570	.3650		.3770	.3890	
.5000			.4683	.4763		.4820	.4900		.5020	.5140	
.5625			.5308	.5388		.5445	.5525		.5645	.5765	
.6250			.5933	.6013		.6070	.6150		.6270	.6390	

Note: Formulas for these values are given in table VII.

TABLE V. Class 2B  
0.1 Pitch  
Modified 60° Stub Internal Double Thread Series  
Symbol DS-2B

Designation			Thread Size	Pitch	Lead	Internal Thread-Limits of Size					
						Minor Diameter		Pitch Diameter		Major Diameter	
						Limits		Limits		Limits	
						Min	Max	Min	Max	Min	Max
.6875	.1	.1	.6417	.6517	.0100	.6615	.6715	.0100	.6811	.6975	
.7500			.7042	.7142		.7240	.7340		.7540	.7700	
.8750			.8292	.8392		.8490	.8590		.8790	.8950	
1.0000			.9542	.9642		.9740	.9840		.1.0040	.1.0200	

MIL-STD-1373  
27 November 1972

TABLE V. Class 2B  
0.1 Pitch  
Modified 60° Stub Internal Double Thread Series  
Symbol DS-2B (Continued)

Designation			Internal Thread-Limits of Size							
Thread Size	Pitch	Lead	Minor Diameter			Pitch Diameter			Major Diameter	
			Limits		Tolerance	Limits		Tolerance	Limits	
			Min	Max		Min	Max		Min	Max
1.1250	.1	.2	1.0650	1.0770	.0120	1.0910	1.1030	.0120	1.1290	1.1490
1.2500			1.1900	1.2020		1.2160	1.2280		1.2540	1.2740
1.3750			1.3150	1.3270		1.3410	1.3530		1.3790	1.3990
1.5000			1.4400	1.4520		1.4660	1.4780		1.5040	1.5240
1.7500			1.6900	1.7020		1.7160	1.7280		1.7540	1.7740
2.0000			1.9400	1.9520		1.9660	1.9780		2.0040	2.0240
2.2500			2.1900	2.2020		2.2160	2.2280		2.2540	2.2740
2.5000			2.4400	2.4520		2.4660	2.4780		2.5040	2.5240
2.6250			2.5650	2.5770		2.5910	2.6030		2.6290	2.6490
2.7500			2.6900	2.7020		2.7160	2.7280		2.7540	2.7740
3.0000			2.9400	2.9520		2.9660	2.9780		3.0040	3.0240
3.2500			3.1900	3.2020		3.2160	3.2280		3.2540	3.2740

Note: Formulas for these values are given in table VII.

TABLE VI. Class 2B  
.1428 Pitch  
Modified 60° Stub Internal Double Thread Series  
Symbol DS-2B

Designation			Internal Thread-Limits of Size							
Thread Size	Pitch	Lead	Minor Diameter			Pitch Diameter			Major Diameter	
			Limits		Tolerance	Limits		Tolerance	Limits	
			Min	Max		Min	Max		Min	Max
2.0000	.1428	.2857	1.8908	1.9028	.0120	1.9380	1.9500	.0120	2.0055	2.0255
2.2500			2.1408	2.1528		2.1880	2.2000		2.2555	2.2755
2.7500			2.6408	2.6528		2.6880	2.7000		2.7555	2.7755
3.0000			2.8908	2.9028		2.9380	2.9500		3.0055	3.0255
3.2500			3.1408	3.1528		3.1880	3.2000		3.2555	3.2755
3.5000			3.3908	3.4028		3.4380	3.4500		3.5055	3.5255

Note: Formulas for these values are given in table VII.

MIL-STD-1373

27 November 1972

TABLE X.  
Double 60° Stub Modified Thread Form Basic Dimensions, .1428 Pitch  
(See figure 1)

Thread Size	Depth of Thread (Basic) h	Total Depth of Thread	Width of Flats							
			External Thread (Screw)				Internal Thread (Nut)			
			F <sub>C</sub> (Major D.)		F <sub>R</sub> (Minor D.)		F <sub>C</sub> (Minor D.)		F <sub>R</sub> (Major D.)	
			Basic	Max Min	Basic	Max Min	Basic	Max Min	Basic	Max Min
2.0000	.0619	.0647	.0357	.0425 .0298	.0324	.0382 .0220	.0443	.0512 .0373	.0324	.0394 .0209
2.2500										
2.7500										
3.0000										
3.2500										
3.5000										

Note: Formulas for these values are given in table XI.

TABLE XI.  
FORMULAS FOR CALCULATING WIDTH OF FLATS

External Thread (screw)		
F <sub>C</sub> (Major Dia)	BASIC	$= P/2 - [(Max\ Major\ D.\ Screw) - (Max\ P.D.\ screw)] \tan 30^\circ$
	MAX	$= P/2 - [(Min\ Major\ D.\ Screw) - (Max\ P.D.\ screw)] \tan 30^\circ$
	MIN	$= P/2 - [(Max\ Major\ D.\ screw) - (Min\ P.D.\ screw)] \tan 30^\circ$
F <sub>R</sub> (Minor Dia)	BASIC	$= P/2 - [(Max\ P.D.\ screw) - (Max\ Minor\ D.\ screw)] \tan 30^\circ$
	MAX	$= P/2 - [(Min\ P.D.\ screw) - (Max\ Minor\ D.\ screw)] \tan 30^\circ$
	MIN	$= P/2 - [(Max\ P.D.\ screw) - (Min\ Minor\ D.\ screw)] \tan 30^\circ$
Internal Thread (nut)		
F <sub>C</sub> (Minor Dia)	BASIC	$= P/2 - [(Min\ P.D.\ nut) - (Min\ Minor\ D.\ nut)] \tan 30^\circ$
	MAX	$= P/2 - [(Min\ P.D.\ nut) - (Max\ Minor\ D.\ nut)] \tan 30^\circ$
	MIN	$= P/2 - [(Max\ P.D.\ nut) - (Min\ Minor\ D.\ nut)] \tan 30^\circ$
F <sub>R</sub> (Minor Dia)	BASIC	$= P/2 - [(Min\ Major\ D.\ nut) - (Min\ P.D.\ nut)] \tan 30^\circ$
	MAX	$= P/2 - [(Min\ Major\ D.\ nut) - (Max\ P.D.\ nut)] \tan 30^\circ$
	MIN	$= P/2 - [(Max\ Major\ D.\ nut) - (Min\ P.D.\ nut)] \tan 30^\circ$

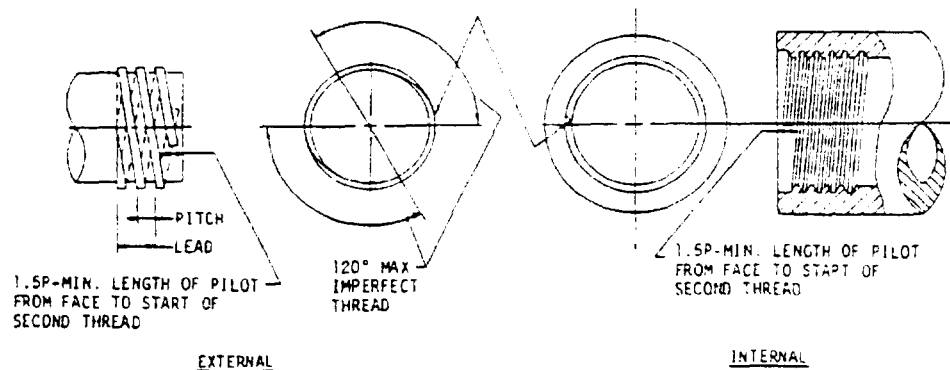


FIGURE 3. Thread start.

TABLE XII.  
Gage Measurements .05 Pitch

Size	Basic Helix Angle	Setting Plug (External Thread)								Plug Gage (Internal Thread)			
		Unplated				After Plating							
		Pitch Diameter		Measurement Over (3) Wires .02887 Diameter		Pitch Diameter		Measurement Over (3) Wires .02887 Diameter		Pitch Diameter		Measurement Over (3) Wires .02887 Diameter	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
.2500	7°52'	.2245	.2305	.26826	.27422	.2245	.2320	.26826	.27572	.2320	.2400	.27572	.28369
.3750	5°07'	.3495	.3555	.39299	.39898	.3495	.3570	.39299	.40048	.3570	.3650	.40048	.40847
.5000	3°48'	.4745	.4805	.51791	.52391	.4745	.4820	.51791	.52540	.4820	.4900	.52540	.53340
.5625	3°21'	.5370	.5430	.58038	.58638	.5370	.5445	.58038	.58788	.5445	.5525	.58788	.59588
.6250	3°01'	.5995	.6055	.64287	.64887	.5995	.6070	.64287	.65037	.6070	.6150	.65037	.65837

Note: A helix angle correction has been added.

TABLE XIII.  
Gage Measurements 0.1 Pitch

Size	Basic Helix Angle	Setting Plug (External Thread)								Plug Gage (Internal Thread)			
		Unplated				After Plating							
		Pitch Diameter		Measurement Over (3) Wires .05774 Diameter		Pitch Diameter		Measurement Over (3) Wires .05774 Diameter		Pitch Diameter		Measurement Over (3) Wires .05774 Diameter	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
.6875	5°30'	.6520	.6600	.73903	.74702	.6520	.6615	.73903	.74852	.6615	.6715	.74852	.75851
.7500	5°02'	.7145	.7225	.80146	.80945	.7145	.7240	.80146	.81095	.7240	.7340	.81095	.82094
.8750	4°17'	.8395	.8475	.92637	.93436	.8395	.8490	.92637	.93586	.8490	.8590	.93586	.94586
1.0000	3°45'	.9645	.9725	1.05131	1.05931	.9645	.9740	1.05131	1.06080	.9740	.9840	1.06080	1.07080
1.1250	3°20'	1.0790	1.0890	1.16577	1.17573	1.0790	1.1030	1.16577	1.17776	1.0910	1.1030	1.17776	1.18976
1.2500	3°00'	1.2040	1.2140	1.29064	1.30074	1.2040	1.2160	1.29064	1.30274	1.2160	1.2280	1.30274	1.31477
1.3750	2°43'	1.3290	1.3390	1.41562	1.42562	1.3290	1.3410	1.41562	1.42762	1.3410	1.3530	1.42762	1.43962
1.5000	2°29'	1.4540	1.4640	1.54062	1.55062	1.4540	1.4660	1.54062	1.55262	1.4660	1.4780	1.55262	1.56462
1.7500	2°07'	1.7040	1.7140	1.79062	1.80062	1.7040	1.7160	1.79062	1.80262	1.7160	1.7280	1.80262	1.81462
2.0000	1°51'	1.9540	1.9640	2.04062	2.05062	1.9540	1.9660	2.04062	2.05262	1.9660	1.9780	2.05262	2.06462
2.2500	1°39'	2.2040	2.2140	2.29062	2.30062	2.2040	2.2160	2.29062	2.30262	2.2160	2.2280	2.30262	2.31462
2.5000	1°29'	2.4540	2.4640	2.54062	2.55062	2.4540	2.4660	2.54062	2.55262	2.4660	2.4780	2.55262	2.56462

Note: A helix angle correction has been added for wire dimensions above the dashed line.

MTL-STD-1373  
8 April 1971

TABLE XIII  
Cage Measurements 0.1 Pitch (Continued)

Size	Basic Helix Angle	Setting Plug (External Thread)								Plug Cage (Internal Thread)			
		Unplated				After Plating							
		Pitch Diameter		Measurement Over (3) Wires .05774 Diameter		Pitch Diameter		Measurement Over (3) Wires .05774 Diameter		Pitch Diameter		Measurement Over (3) Wires .05774 Diameter	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2.6250	1°24'	2.5790	2.5890	2.66562	2.67562	2.5790	2.5910	2.66562	2.67762	2.5910	2.6030	2.67762	2.68962
2.7500	1°21'	2.7040	2.7140	2.79062	2.80062	2.7040	2.7160	2.79062	2.80262	2.7160	2.7280	2.80262	2.81462
3.0000	1°14'	2.9540	2.9640	3.04062	3.05062	2.9540	2.9660	3.04062	3.05262	2.9660	2.9780	3.05262	3.06462
3.2500	1°8'	3.2040	3.2140	3.29062	3.30062	3.2040	3.2160	3.29062	3.30262	3.2160	3.2280	3.30262	3.31462

TABLE XIV  
Cage Measurements .1428 Pitch

Size	Basic Helix Angle	Setting Plug (External Thread)								Plug Gage (Internal Thread)			
		Unplated				After Plating							
		Pitch Diameter		Measurement Over (3) Wires .08248 Diameter		Pitch Diameter		Measurement Over (3) Wires .08248 Diameter		Pitch Diameter		Measurement Over (3) Wires .08248 Diameter	
		Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
2.0000	2°42'	1.9260	1.9360	2.04972	2.05972	1.9260	1.9380	2.04972	2.06172	1.9380	1.9500	2.06172	2.07372
2.2500	2°23'	2.1760	2.1860	2.29972	2.30972	2.1760	2.1880	2.29972	2.31172	2.1880	2.2000	2.31172	2.32372
2.7500	1°56'	2.6760	2.6860	2.79972	2.80972	2.6760	2.6880	2.79972	2.81172	2.6880	2.7000	2.81172	2.82372
3.0000	1°47'	2.9260	2.9360	3.04972	3.05972	2.9260	2.9380	3.04972	3.06172	2.9380	2.9500	3.06172	3.07372
3.2500	1°38'	3.1760	3.1860	3.29972	3.30972	3.1760	3.1880	3.29972	3.31172	3.1880	3.2000	3.31172	3.32372
3.5000	1°31'	3.4260	3.4360	3.54972	3.55972	3.4260	3.4380	3.54972	3.56172	3.4380	3.4500	3.56172	3.57372

MIL-STD-1373

8 April 1971

**Custodians:**

Army - EL

Navy - EC

**Review activities:**

Army - SC

**User activities:**

Navy - YD, SH, AS

**Preparing activity:**

Navy - EC

(Project MISC-0722)