

FED-STD-H28/13A  
17 February 1989  
SUPERSEDING  
FED-STD-H28/13  
31 August 1978  
(See Note)

**FEDERAL STANDARD**  
**SCREW-THREAD STANDARDS FOR FEDERAL SERVICES**  
**SECTION 13**  
**STUB ACME THREADS**

This standard was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

AMSC N/A

THDS

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

FED-STD-H28/13A

## INFORMATION SHEET ON FEDERAL STANDARDS

This Federal Standard is issued in loose leaf form to permit the insertion or removal of new or revised pages and sections.

All users of Federal Standards should keep them up to date by inserting revised or new pages as issued and removing superseded and cancelled pages.

New and revised pages will be issued under Change Notices which will be numbered consecutively and will bear the date of issuance. Change Notices should be retained and filed in front of the Standard until such time as they are superseded by a reissue of the entire Standard.

## FOREWORD

This section was developed to provide Stub Acme Threads for the Federal Services. The present issue is a complete revision of FED-STD-H28/13 dated 31 August 1978.

FED-STD-H28/13A was prepared by the Defense Industrial Supply Center (DLA-IS) and incorporates the American National Standard for Stub Acme Screw Threads, ASME/ANSI B1.8-1988. Significant changes from the previous issue include the following:

- (1) Added designation for multiple threads.
- (2) Changed tolerances for internal thread minor diameters and external thread major diameters for 1/4, 5/16, 3/8 and 7/16 sizes from 0.0050 in. to 0.05P values.
- (3) Added indicating type gages as an option.

## SECTION 13 - STUB ACME THREADS

1. Scope. This section provides the standards for Stub Acme screw threads. Stub Acme threads are reduced height versions of general purpose Acme threads standardized in FED-STD-H28/12.

2. Referenced documents.

2.1 Government publications. The issues of the following documents in effect on the date of invitation for bids or request for proposal form a part of this standard to the extent specified herein.

Federal standards.

FED-STD-H28/1      Nomenclature, Definitions and Letter Symbols for  
Screw Threads

FED-STD-H28/12      Acme Threads

(Activities outside the Federal Government may obtain copies of Federal specifications, standards and commercial item descriptions as outlined under General Information in the Index of Federal Specifications, Standards and Commercial Item Descriptions. The Index, which includes cumulative bi-monthly supplements as issued, is for sale on a subscription basis by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

(Single copies of these standards and other Federal specifications, standards, and commercial item descriptions required by activities outside the Federal Government for bidding purposes are available from the General Services Administration Specification Section, Room 6662, 7th and D Streets, S.W., Washington, DC 20407; telephone (202) 472-2205.

(Federal Government activities may obtain copies of Federal standardization documents, and the Index of Federal Specifications, Standards, and Commercial Item Descriptions from established distribution points in their agencies.)

2.2 Other publications. The following document forms a part of this standard to the extent specified herein. Unless a specific issue is identified, the issue in effect on date of invitation for bids or request for proposal shall apply.

American National Standard.

ASME/ANSI B1.8-1988 - Stub Acme Screw Threads

## FED-STD-H28/13A

(Application for copies should be addressed to the American Society of Mechanical Engineers, United Engineering Center, 345 East 47th Street, New York, NY 10017-2330 or the American National Standards Institute, 1430 Broadway, New York, NY 10018-3308.)

3. Definitions. The terms applicable to this standard are defined in FED-STD-H28/1.

4. General requirements. Stub Acme screw threads and thread gages shall be in accordance with ASME/ANSI B1.8-1988.

5. Detailed requirements.

5.1 Standard threads. The standard Stub Acme threads are symmetrical in form with included angles of  $29^{\circ}$ , have a thread height of 0.3 pitch and a fit corresponding to Class 2G of FED-STD-H28/12. These are specified in Section 1 of ASME/ANSI B1.8-1988.

5.2 Special thread forms. When design requirements do not permit the use of the standard 0.3 pitch thread height Stub Acme thread or the standard 0.5 pitch thread height of Acme threads specified in FED-STD-H28/12, modified form threads in accordance with Appendix A of ASME/ANSI B1.8-1988 should be used. These special forms are the

Modified Form 1 Stub Acme with basic thread height of 0.375P  
Modified Form 2 Stub Acme with basic thread height of 0.25P

5.3 Special fit threads. When reduced backlash in the threads is required, the tolerances and allowances for general purpose Acme thread Classes 3G and 4G may be applied to the Stub Acme threads.

5.4 Thread series. ASME/ANSI B1.8-1988 provides a series of standard diameters and their corresponding numbers of threads per inch. If this series cannot be used, preference should be given to the use of a standard number of threads per inch as tabulated in that standard.

5.5 Thread designations. Standard and special threads shall be designated in accordance with paragraph 1.14 or Appendix A of ASME/ANSI B1.8-1988, as applicable.

5.6 Thread gages. Thread gages are specified in Section 2 of ASME/ANSI B1.8-1988. Pitch diameter measurements using wires are delineated in Appendix B of that standard.

FED-STD-H28/13

6. Notes.

6.1 Supersession note. In addition to superseding FED-STD-H28/13 dated 31 August 1978, this document also supersedes Appendix A13 of FED-STD-H28 dated 31 March 1978 where it applies to Stub Acme threads.

## MILITARY INTERESTS:

Custodians:

Army- AR  
Navy - AS  
Air Force - 99

Review Activity:

Navy - EC

## CIVIL AGENCY COORDINATING ACTIVITIES:

GSA - 7FXE  
NASA - JFK

## PREPARING ACTIVITY:

DLA - IS

(DoD Project THDS-0075)

**INSTRUCTIONS:** In a continuing effort to make our standardization documents better, the DoD provides this form for use in submitting comments and suggestions for improvements. All users of military standardization documents are invited to provide suggestions. This form may be detached, folded along the lines indicated, taped along the loose edge (**DO NOT STAPLE**), and mailed. In block 5, be as specific as possible about particular problem areas such as wording which required interpretation, was too rigid, restrictive, loose, ambiguous, or was incompatible, and give proposed wording changes which would alleviate the problems. Enter in block 6 any remarks not related to a specific paragraph of the document. If block 7 is filled out, an acknowledgement will be mailed to you within 30 days to let you know that your comments were received and are being considered.

**NOTE:** This form may not be used to request copies of documents, nor to request waivers, deviations, or clarification of specification requirements on current contracts. 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.

---

(Fold along this line)

---

(Fold along this line)

DEFENSE LOGISTICS AGENCY

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

**BUSINESS REPLY MAIL**  
FIRST CLASS PERMIT NO. 4988 WASHINGTON D. C.  
POSTAGE WILL BE PAID BY THE DEFENSE LOGISTICS AGENCY

Defense Industrial Supply Center  
ATTN: DISC-ECF  
700 Robbins Ave.  
Philadelphia, PA 19111-5096

NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL <i>(See Instructions - Reverse Side)</i>					
1. DOCUMENT NUMBER FED-STD-H28/13A		2. DOCUMENT TITLE STUB ACME THREADS			
3a. NAME OF SUBMITTING ORGANIZATION			4. TYPE OF ORGANIZATION ( <i>Mark one</i> ) <input type="checkbox"/> VENDOR <input type="checkbox"/> USER <input type="checkbox"/> MANUFACTURER <input type="checkbox"/> OTHER ( <i>Specify</i> ): _____		
b. ADDRESS ( <i>Street, City, State, ZIP Code</i> )					
5. PROBLEM AREAS					
a. Paragraph Number and Wording:					
b. Recommended Wording:					
c. Reason/Rationale for Recommendation:					
6. REMARKS					
7a. NAME OF SUBMITTER ( <i>Last, First, MI</i> ) - Optional			b. WORK TELEPHONE NUMBER ( <i>Include Area Code</i> ) - Optional		
c. MAILING ADDRESS ( <i>Street, City, State, ZIP Code</i> ) - Optional			8. DATE OF SUBMISSION (YYMMDD)		