

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

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FED-STD-H28/13A

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## 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

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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

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(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.

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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:

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Air Force - 99

Review Activity:

Navy - EC

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(DoD Project THDS-0075)

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