Engineering Drawing
and Related
Documentation
Practices

ASME Y14.6-2001

[Revision and Consolidation of ANSI Y14.6-1978 (R1998)
and ANSI Y14.6M-1981 (R1998)]

REAFFIRMED 2025

SCREW THREAD REPRESENTATION

An American National Standard

The American Society of
Mechanical Engineers

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The American Society of
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AN AMERICAN NATIONAL STANDARD

SCREW THREAD REPRESENTATION

ASME Y14.6-2001

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and ANSI Y14.6M-1981 (R1998)]

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FOREWORD

This Standard establishes American National Standard drafting practices for depicting screw threads on drawings and other documents. It is beyond the scope of this Standard to present engineering and manufacturing specifications for screw threads.

The original issue of this Standard was approved on December 13, 1957. It was designated ASA Y14.6-1957, and then redesignated ANSI Y14.6-1957 after the American Standards Association (ASA) became the American National Standards Institute (ANSI) in 1969. The 1957 document was revised and approved as an American National Standard on July 26, 1978. It was designated ANSI Y14.6-1978. A metric supplement was approved on September 21, 1981 and was designated ANSI Y14.6aM-1981.

This revision consolidates the metric supplement, Y14.6aM, and the basic Y14.6 Standard. It also updates these standards in accordance with the latest issues of ASME B1 series Screw Thread Standards, and provides corrections where necessary.

Suggestions for the improvement of this Standard will be welcome. They should be sent to The American Society of Mechanical Engineers, Attn: Secretary, Y14 Main Committee, Three Park Avenue, New York, NY 10016-5990.

This revision was approved as an American National Standard on November 2, 2001.

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Engineering Drawing and Related Documentation Practices

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ENGINEERING DRAWING AND RELATED DOCUMENTATION PRACTICES

SCREW THREAD REPRESENTATION

1 GENERAL

1.1 Scope

This Standard establishes requirements for pictorial representation, specification, and dimensioning of screw threads on drawings; it is not concerned with standards for dimensional control of screw threads. Information helpful in the design and selection of screw threads to meet specific requirements is included in the B1 series of the ASME Standards for Screw Threads (see para. 1.3).

1.2 Application

Straight Unified inch (UN/UNR/UNJ form) and metric (M/MJ form) screw threads are emphasized in this Standard in consideration of their wide use and general purpose applications. The same drafting practices apply to straight and taper threads, Acme, Stub Acme, Buttress, thread insert, and interference fit threads except for differences noted.

1.3 Applicable Documents

The following documents form a part of this Standard to the extent specified herein. The latest edition shall apply.

AS 71051, Pipe Threads, Taper, Aeronautical National Form, Symbol ANPT, Design and Inspection Standard

Publisher: Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096-0001

ASME B1.1, Unified Inch Screw Threads (UN and UNR Thread Form)
ASME B1.3M, Screw Thread Gaging Systems for Dimensional Acceptability-Inch and Metric Screw Threads (UN, UNR, M, and MJ)
ASME B1.5, Acme Screw Threads
ASME B1.7M, Nomenclature, Definitions, and Letter Symbols for Screw Threads
ASME B1.8, Stub Acme Screw Threads
ASME B1.9, Buttress Inch Screw Threads
ASME B1.10M, Unified Miniature Screw Threads
ASME B1.11, Microscope Objective Thread
ASME B1.12, Class 5 Interference-Fit Thread
ASME B1.13M, Metric Screw Threads — M Profile
ASME B1.15, Unified Inch Screw Threads (UNJ Thread Form)
ASME B1.20.1, Pipe Threads, General Purpose (Inch)
ASME B1.20.3, Dryseal Pipe Threads (Inch)
ASME B1.20.7, Hose Coupling Screw Threads (Inch)
ASME B1.21M, Metric Screw Threads: MJ Profile
ASME B18.29.1, Helical Coil Screw Thread Inserts (Inch Series)
ASME B18.29.2M, Helical Coil Screw Thread Inserts (Metric Series)
ASME Y14.5M, Dimensioning and Tolerancing

Publisher: The American Society of Mechanical Engineers (ASME International), Three Park Avenue, New York, NY 10016-5990; ASME Order Department: 22 Law Drive, Box 2300, Fairfield, NJ 07007-2300

CGA V-1, Compressed Gas Cylinder Valve Outlet and Inlet Connections

Publisher: Compressed Gas Association (CGA), 4221 Walney Road, Chantilly, VA 20151-2923

FED-STD-H28, Screw-Thread Standards for Federal Services
FED-STD-H28/2, Unified Inch Screw Threads — UN and UNR Thread Forms
FED-STD-H28/5, Unified Miniature Screw Threads
FED-STD-H28/7, Pipe Threads, General Purpose
FED-STD-H28/8, Dryseal Pipe Threads
FED-STD-H28/9, Gas Cylinder Valve Outlet and Inlet Threads
FED-STD-H28/10, Hose Coupling and Fire Hose Coupling Screw Threads
FED-STD-H28/12, Acme Threads
FED-STD-H28/13, Stub Acme Threads
FED-STD-H28/14, Buttress Screw Threads — 7°/45° Flank Angles
FED-STD-H28/16, Microscope Objective and Nosepiece Threads, 0.8000-36AMO