

ASME Y14.37-2012

Composite Part Drawings

**Engineering Drawing and Related
Documentation Practices**

AN AMERICAN NATIONAL STANDARD



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FOREWORD

This Standard establishes engineering practices for the definition of Composite Parts and together with related documentation practices in the Y14 Series will enable full composite part definition.

When this Standard is specified as a requirement, its defined requirements are assumed to be consistent with the needs of the user. Therefore, each user provides appropriate application consistent with the environment in which it is applied. Those who use this Standard as a requirement for contractual purposes should keep the following facts in mind:

(a) This Standard should be tailored to meet any specific needs. All users shall take careful note of the necessity of tailoring this Standard and the contents. The extent of tailoring will in large part be governed by drawing ownership and the logistics intent.

(b) It is not the intent of this Standard to prevent individual organizations from designing specific drawing practices that meet their individual needs, but rather to provide common engineering delineation standards to aid the increasing interchange of drawing among industry, government, and other users.

It is well recognized that individual companies have many detailed requirements for their specific method of operation. Consequently, the minimum requirements set forth in this Standard will provide them flexibility in implementation.

The successful creation and release of this Standard is attributed to the subcommittee members and their respective companies.

Suggestions for improvement of this Standard are welcome. They should be sent to the American Society of Mechanical Engineers; Attn: Secretary, Y14 Standards Committee; Three Park Avenue; New York, NY 10016-5900.

This Standard was approved as an American National Standard on April 10, 2012.



ASME Y14 COMMITTEE

Engineering Drawing and Related Documentation Practices

(The following is the roster of the Committee at the time of approval of this Standard.)

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SUBCOMMITTEE 37 — COMPOSITE PART DRAWINGS

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General. ASME Standards are developed and maintained with the intent to represent the consensus of concerned interests. As such, users of this Standard may interact with the Committee by requesting interpretations, proposing revisions, and attending Committee meetings. Correspondence should be addressed to:

Secretary, Y14 Standards Committee
The American Society of Mechanical Engineers
Three Park Avenue
New York, NY 10016-5990
<http://go.asme.org/Inquiry>

Proposing Revisions. Revisions are made periodically to the Standard to incorporate changes that appear necessary or desirable, as demonstrated by the experience gained from the application of the Standard. Approved revisions will be published periodically.

The Committee welcomes proposals for revisions to this Standard. Such proposals should be as specific as possible, citing the paragraph number(s), the proposed wording, and a detailed description of the reasons for the proposal, including any pertinent documentation.

Proposing a Case. Cases may be issued for the purpose of providing alternative rules when justified, to permit early implementation of an approved revision when the need is urgent, or to provide rules not covered by existing provisions. Cases are effective immediately upon ASME approval and shall be posted on the ASME Committee Web page.

Requests for Cases shall provide a Statement of Need and Background Information. The request should identify the Standard, the paragraph, figure or table number(s), and be written as a Question and Reply in the same format as existing Cases. Requests for Cases should also indicate the applicable edition(s) of the Standard to which the proposed Case applies.

Attending Committee Meetings. The Y14 Standards Committee regularly holds meetings or telephone conferences, which are open to the public. Persons wishing to attend any meeting or telephone conference should contact the Secretary of the Y14 Standards Committee or check our Web site at <http://cstools.asme.org/csconnect/CommitteePages.cfm?Committee=C6400000>.



COMPOSITE PART DRAWINGS

1 SCOPE

This Standard establishes the definition of composite parts that are not covered within the existing ASME Y14 Series of standards. This Standard defines exceptions and additional requirements to existing ASME standards for defining composite parts. Composite parts as addressed by this Standard are inseparable assemblies of composite materials that may include noncomposite material(s). When no exception or additional requirements are stated, existing ASME standards shall apply.

1.1 ASME Y14 Series Conventions

The conventions in paras. 1.1.1 through 1.1.10 are guidance used in this and other ASME Y14 Series of standards.

1.1.1 Mandatory, Nonmandatory, Guidance, and Optional Words

(a) The word “shall” establishes a mandatory requirement.

(b) The word “will” establishes an intended, mandatory requirement.

(c) The words “should” and “may” establish a non-mandatory practice.

(d) The words “typical,” “example,” “for reference,” or the Latin abbreviation “e.g.” indicate suggestions given for guidance only.

(e) When the text of this Standard has an “or” statement, it indicates that there are two or more options on how to comply with the stated requirement.

1.1.2 Cross-Reference of Standards. Cross-reference of standards in text with or without a date following the standard identity is interpreted as follows:

(a) reference to other ASME Y14 Series of standards in the text without a date following the Standard identity indicates the issue of the standard as identified in the References section (section 2) shall be used to meet the requirement

(b) reference to other ASME Y14 Series of standards in the text with a date following the standard identity indicates that only that issue of the standard shall be used to meet the requirement

1.1.3 Invocation of Referenced Standards. The following examples define the invocation of a standard

when specified in the References section (section 2) and referenced in the text of this Standard:

(a) When the text states “dimensioning and tolerancing shall be in accordance with ASME Y14.5-2009,” with no limitations to a specific subject or area of the Standard, the entire text of ASME Y14.5-2009 is invoked.

(b) When the text states “assign part or identifying numbers in accordance with ASME Y14.100-2004,” only the paragraph requirements on Part or Identifying Number assignment in ASME Y14.100-2004 are invoked.

(c) When the text states “for gaging principles see ASME Y14.43,” the text provides a cross-reference of where to find guidance for dimensioning and tolerancing for gages and fixtures, and no portion of ASME Y14.43 is invoked.

1.1.4 Parentheses Following a Definition. When a definition is followed by a standard referenced in parentheses, the standard referenced in parentheses is the controlling standard for the definition.

1.1.5 Notes. Notes depicted in this Standard in ALL UPPERCASE letters are intended to reflect actual drawing entries. Notes depicted in initial uppercase or lowercase letters are to be considered supporting data to the contents of this Standard and are not intended for literal entry on drawings. A statement requiring the addition of a note with the qualifier “such as” is a requirement to add a note, and the content of the text is allowed to vary to suit the application.

1.1.6 Acronyms and Abbreviations. Acronyms and abbreviations are spelled out the first time used in this Standard followed by the acronym or abbreviation in parentheses. The acronym is used thereafter throughout the text.

1.1.7 Units. U.S. Customary units are featured in this Standard. It should be understood that International System of Units (SI) could equally have been used without prejudice to the principles established.

1.1.8 Figures. The figures in this Standard are intended only as illustrations to aid the user in understanding the practices described in the text. In some cases figures show a level of detail as needed for emphasis. In other cases, figures are incomplete by intent so as to illustrate a concept or facet thereof. The absence of figure(s) has no bearing on the applicability of the stated requirements or practice. The absence of a listing is not a reason to assume inapplicability. When the letter