ASME Y14.35M-1997 (Revision of ASME Y14.35M-1992)

# REVISION OF ENGINEERING DRAWINGS AND ASSOCIATED DOCUMENTS

AN AMERICAN NATIONAL STANDARD





### **ADOPTION NOTICE**

ASME Y14.35M-1997, Revision of Engineering Drawings and Associated Documents, was adopted on 20 October 1997 for use by the Department of Defense (DoD). Proposed changes by DoD activities must be submitted to the DoD Adopting Activity; Commander, US Army TACOM-ARDEC, ATTN: AMSTA-AR-EDE-S, Picatinny Arsenal, NJ 07806-5000. DoD activities may obtain copies of this Standard from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094. The private sector and other Government agencies may purchase copies from the American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.

Custodians:

Army --- AR

Navy-SA

Air Force—16

DLA-DH

Adopting Activity:

Army—AR

(Project DRPR-0348)

### Review activities:

Army—AT, AV, CE, CR, EA, ER, GL, ME, MI, SC, SM, TE Navy—AS, CH, EC, MC, OS, SH, TD, YD-1 Air Force—11, 13, 19, 68, 70, 71, 79, 80, 84, 90, 99 DLA—CS, DH, GS, IS NSA—NS

AMSC N/A AREA DRPR DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

### AN AMERICAN NATIONAL STANDARD

# REVISION OF ENGINEERING DRAWINGS AND ASSOCIATED DOCUMENTS

**ASME Y14.35M-1997** (Revision of ASME Y14.35M-1992)



Date of Issuance: December 8, 1997

This Standard will be revised when the Society approves the issuance of a new edition. There will be no addenda or written interpretations of the requirements of this Standard issued to this edition.

ASME is the registered trademark of The American Society of Mechanical Engineers.

This code or standard was developed under procedures accredited as meeting the criteria for American National Standards. The Consensus Committee that approved the code or standard was balanced to assure that individuals from competent and concerned interests have had an opportunity to participate. The proposed code or standard was made available for public review and comment which provides an opportunity for additional public input from industry, academia, regulatory agencies, and the public-at-large.

ASME does not "approve," "rate," or "endorse" any item, construction, proprietary device, or activity.

ASME does not take any position with respect to the validity of any patent rights asserted in connection with any items mentioned in this document, and does not undertake to insure anyone utilizing a standard against liability for infringement of any applicable Letters Patent, nor assume any such liability. Users of a code or standard are expressly advised that the determination of the validity of any such patent rights, and the risk of infringement of such rights, is entirely their own responsibility.

Participation by federal agency representative(s) or person(s) affiliated with industry is not to be interpreted as government or industry endorsement of this code or standard.

ASME accepts responsibility for only those interpretations issued in accordance with governing ASME procedures and policies which preclude the issuance of interpretations by individual volunteers.

No part of this document may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

The American Society of Mechanical Engineers 345 E. 47th Street New York, NY 10017

Copyright © 1997 by
THE AMERICAN SOCIETY OF MECHANICAL ENGINEERS
All Rights Reserved
Printed in U.S.A.



### **FOREWORD**

(This Foreword is not part of ASME Y14.35M-1997.)

Subcommittee 35, Revision of Engineering Drawings, was formed in November 1981, as a subcommittee of ASME Standards Committee Y14, Engineering Drawing and Related Documentation Practices. The Subcommittee is charged with the responsibility of preparing a standard that establishes methods for identifying and recording revisions to original drawings, and associated documentation or digital data files. Every effort has been made to place emphasis on those practices found to be common to industry at large and that are documented by MIL-STD-100, Engineering Drawing Practices.

This Standard is a revision of ASME Y14.35M-1992. The following is a summary of the significant differences between ASME Y14.35M-1992 and this revision:

- (a) provided coverage for approval indicator;
- (b) added a requirement to identify the applicable dimensioning and tolerance standard being used by the drawing. When a dimensioning and tolerance standard is not identified, one shall be added.
  - (c) clarified the requirement for the removal of previous revision history entries;
- (d) removed the paragraph on government required practices and updated the Foreword accordingly;
- (e) replaced the term "CAGE Code" with "design activity identification" where required throughout the Standard.

Where this Standard is specified as a requirement in a document, its defined requirements are assumed to be consistent with the needs of the user. Therefore, each user provides appropriate interpretations, as the need arise, consistent with the environment in which it is applied.

The successful revision of this Standard is attributed to the subcommittee members and their respective companies, and the departments and agencies of the United States Government.

Suggestions for improvement of this Standard are welcome. They should be sent to The American Society of Mechanical Engineers, Attention: Secretary, Y14 Main Committee, 345 East 47th Street, New York, NY 10017.

This revision was approved as an American National Standard on September 29, 1997.



# ASME STANDARDS COMMITTEE Y14 Engineering Drawing and Related Documentation Practices

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

### **OFFICERS**

F. Bakos, Jr., Chair K. E. Wiegandt, Vice Chair C. J. Gomez, Secretary

### **COMMITTEE PERSONNEL**

- A. R. Anderson, Dimensional Control Systems
- F. Bakos, Jr., Eastman Kodak Co.
- D. E. Bowerman, Copeland Corp.
- E. H. Boyer
- J. V. Burleigh, The Boeing Co.
- R. A. Chadderdon, Southwest Consultants
- M. E. Curtis, Jr., Rexnord Corp.
- R. W. DeBolt
- L. W. Foster, L. W. Foster Associates, Inc.
- C. J. Gomez, The American Society of Mechanical Engineers
- B. A. Harding, Purdue University
- K. S. King, Naval Surface Warfare Center, Dahlgren Division
- H. S. Lachut, Jr., ABB Combustion Engineering Systems
- C. G. Lance, Santa Cruz Technology Center
- P. J. McCuistion, Ohio University
- P. E. McKim, Caterpillar Inc.
- C. D. Merkley, IBM Corp.
- E. Niemiec
- D. L. Ragon, Deere & Company, John Deere Dubuque Works
- R. L. Rickman, Oklaloosa-Walton Community College
- R. W. Stockdale
- R. P. Tremblay, U. S. Department of the Army, ARDEC
- G. H. Whitmire, Whitmire Associates
- K. E. Wiegandt, Sandia National Laboratory
- B. A. Wilson, McDonnell Douglas
- P. Wreede, E-Systems, Inc.

# SUBCOMMITTEE 35 — REVISION OF ENGINEERING DRAWINGS

- J. V. Burleigh, Chair, The Boeing Co.
- P. G. Buckley
- J. L. Burns
- L. G. Davis
- W. R. Dunn
- W. L. Engle



- J. Mays, E-Systems, Inc.
- P. J. McCuistion, Ohio University
- R. P. Tremblay, U. S. Department of the Army, ARDEC
- M. F. Watts, ABB Kent-Taylor, Inc.

### **CONTENTS**

For	eword		iii
		Committee Roster	V
1	Gene	rai	1
2	Appli	cable Documents	1
3	Dofin	iitions	1
3	3.1	Approval	1
	3.2	Associated Documents	1
	3.3	Canceled Drawing	1
	3.4	Change	1
	3.5	Commercial and Government Entity (CAGE) Code	1
	3.6	Data Processing System	1
	3.7	Design Activity	2
	3.8	Document	2
	3.8 3.9	Drawing	2
		Digital Data	2
	3.10	Fit	2
		Form	2
	3.12	Function	2
	3.13	Original	2
	3.14	Revision	2
	3.15	Revision Authorization Document	2
	3.16		2
	3.17	Revision History Block	2
	3.18	Superseded	2
	3.19	Total Number of Sheets	2
4	Drav	ving Practices	2
	4.1	Revision Methods	3
	4.2	Dimensional Changes	3
	4.3	Redrawn Drawings	3
	4.4	Superseding a Drawing	3
	4.5	Revisions of Digital Data	
5	lden	tifying Revisions on Drawings	5
•	5.1	Revision Letters	
	5.2	Identifying Revision Locations	
	5.3	Multiple Changes	
	5.3	•	_

6	Rec	Recording Revisions							
	6.1	Revision History Block Entries	7						
	6.2	Transfer of Drawings Between Design Activities	8						
7	Revision Control Methods								
	7.1	Drawing Level Method	9						
	7.2	Sheet Level Method	9						
	7.3	All Sheets Same Revision Level Method	9						
	7.4	Revision Status of Sheets	9						
	7.5	Adding or Deleting Sheets	11						
	7.6	Sheet or Drawing Cancellation	11						
	7.7	Drawing Reinstatement	11						
8	Ass	sociated Document Revisions							
Fig	jures								
1		ations for a Redrawn Drawing	4						
2	Nota	ations for a Superseding Drawing	4						
3	Not	ations for a Superseded Drawing	5						
4		Sequence Number							
5	-	evision Symbol							
6		one and Rev Columns							
7		Description Column							
8		mples of Revision Status of Sheets Block	10						
9		Drawing Sheet Reinstatement							

### ENGINEERING DRAWING AND RELATED DOCUMENTATION PRACTICES

# REVISION OF ENGINEERING DRAWINGS AND ASSOCIATED DOCUMENTS

### 1 GENERAL

This Standard defines the practices for revising drawings and associated documentation and establishes methods for identification and recording revisions. The revision practices of this Standard apply to any form of original drawing and associated documentation.

### **2 APPLICABLE DOCUMENTS**

When the following American National Standards as referenced in this Standard are superseded by a revision approved by the American National Standards Institute, the revision shall apply to the extent specified herein.

ASME Y14.1-1995, Decimal Inch Drawing Sheet Size and Format

ASME Y14.1M-1995, Metric Drawing Sheet Size and Format

ASME Y14.2M-1992, Line Conventions and Lettering ASME Y14.5M-1994, Dimensioning and Tolerancing ASME Y14.24M-1989, Types and Applications of

ASME Y14.34M-1996, Associated Lists

**Engineering Drawings** 

Publisher: The American Society of Mechanical Engineers, 345 East 47th St., New York, NY 10017

### **3 DEFINITIONS**

The following paragraphs define certain terms used in this Standard for which a common understanding is considered necessary.

### 3.1 Approval

An endorsement applied manually or electronically attesting to the correctness of a document or a revision made on a document.

**3.1.1 Approval Indicator.** Any symbol adopted by the design activity to indicate approval.

### 3.2 Associated Documents

General reference to documentation supportive of and directly related to drawing content, such as Parts Lists, Data Lists, Index Lists, Wiring Lists, and Application Lists.

### 3.3 Canceled Drawing

A drawing which has been removed from the drawing system and the part or assembly shown on the drawing is removed from all next assembly usage. Drawings which have been superseded or become obsolete are also considered to be canceled drawings.

### 3.4 Change

A specific alteration made to a drawing or associated document as part of a revision.

# 3.5 Commercial and Government Entity (CAGE) Code

A five character code listed in Cataloging Handbook H4/H8, Commercial and Government Entity (CAGE) Code, which is assigned to commercial and government activities that manufacture or develop items, or provide services or supplies for the government. When used with a drawing number or part number, the CAGE Code designates the design activity from whose series the drawing or part number is assigned. The CAGE Code was previously called "manufacturers code," or "Federal Supply Code for Manufacturer's (FSCM)" (ASME Y14.24M). For the commercial sector where there is no requirement for the Commercial and Government Entity (CAGE) Code, the CAGE Code block may be eliminated.

### 3.6 Data Processing System

A system used to collect, process, and reproduce data in a selected format through the use of electronic or other automated equipment.



### 3.7 Design Activity

An activity having responsibility for the design of an item. The activity may be government, commercial, or nonprofit organization (ASME Y14.24M).

**3.7.1 Design Activity, Current.** An activity currently having responsibility for the design of an item, and the preparation or maintenance of drawings and associated documents. Current design activity could be the original activity or new activity when that responsibility is transferred from another design activity (ASME Y14.24M).

**3.7.2 Design Activity, Original.** An activity having had responsibility originally for the design of an item and whose drawing number, name and address (city and state), or CAGE Code is shown in the title block of the drawings and associated documents (ASME Y14.24M).

### 3.8 Document

A specification, drawing, list, standard, pamphlet, report, or any printed, typewritten, or other information relating to the design procurement, manufacture, test, or acceptance inspection of an item or service.

### 3.9 Drawing

An engineering document or digital data file(s) that discloses directly or by reference, by means of graphic or textual presentations, or combinations of both, the physical and functional requirements of an item (ASME Y14.24M).

### 3.10 Digital Data

Data created and stored on a computer system which employs a display on which the user and the computer interact to create entities for producing layouts, drawings, numerical control tapes, or other engineering data.

### 3.11 Fit

The ability of an item to physically interface or interconnect with or become an integral part of another item.

### 3.12 Form

The shape, size, dimensions, mass, weight, and other physical parameters which uniquely characterize an item. For software, form denotes the language and media.

### 3.13 Function

The action or actions which an item is designed to perform.

### 3.14 Original

The current design activity's full size reproducible drawing or digital data file(s) on which is kept the revision record recognized as official.

### 3.15 Revision

Changes made to an original drawing or associated document after authorized release which requires the revision level to be advanced.

### 3.16 Revision Authorization Document

A document recognized as the authority for making a change to a drawing or associated documentation.

Revision authorization documents are frequently identified by terms, such as Alteration Notice (AN), Advance Drawing Change Notice (ADCN), Change in Design (CID), Drawing Change Notice (DCN), Engineering Change Notice (ECN), Engineering Change Order (ECO), Engineering Notice (EN), Engineering Order (EO), or Notice of Revision (NOR).

### 3.17 Revision History Block

A designated area on the drawing reserved for describing or summarizing revisions to the drawing and for recording certain specifics regarding the revisions.

### 3.18 Superseded

A notation used to indicate that a document has been replaced by another document with a different document number or to indicate that an original has been replaced by a new original.

### 3.19 Total Number of Sheets

The number of active sheets that make up the drawing.

### **4 DRAWING PRACTICES**

Drawing practices associated with drawing changes shall be consistent with those already used on the drawing to be revised unless the latest applicable standards



can be incorporated without conflict. When a drawing is revised and does not reference the dimensioning and tolerancing standard or applicable issue, determination of the applicable standard or issue shall be made and the proper standard then specified on the drawing and recorded as a change in the Revision History block or in the applicable Change Authorization document. Any change to a drawing after release, including a change to rights in data or security classification, requires the revision level to be advanced and shall be recorded in the Revision History block. Revision History block requirements are defined in ASME Y14.1 or ASME Y14.1M.

NOTE: Addition of Distribution statement and delivery contract numbers to copies of contractors drawings upon release for delivery to the government do not require revision level advance.

### 4.1 Revision Methods

Changes may be made by adding, deleting, or crossing out the information or by redrawing the drawing.

- **4.1.1 Deleting.** The deleted line, word, or detail shall not show in subsequent reproduction. The area where data was removed shall accept new data without smudging, spreading, or feathering.
- **4.1.2 Crossing Out.** The crossing out of data shall be by one or two lines through each line of text, or by a series of diagonal parallel lines at a uniform spacing through the entire deleted detail. Each crossed out area shall permit readability in reproduction of the drawing following incorporation of the revision. Superseding data, or reference to its location, may be placed adjacent to the crossed out portion. Line conventions shall be in accordance with ASME Y14.2M.

### 4.2 Dimensional Changes

When dimensional changes are made and the product definition is on a computer system, the scale of the feature and the dimensions shall be maintained. When dimensional changes are made and the product definition is on manually prepared originals, the scale of the feature and the dimensions should be maintained. If not maintained, the practice for out of scale dimensions in ASME Y14.5M shall be used.

### 4.3 Redrawn Drawings

Depending on the circumstances, drawings may be redrawn either with or without change and shall include the original date and contract number as applicable. 4.3.1 Redrawn Drawing With Change. When a revision warrants redrawing of the drawing, the revision letter next in sequence shall be entered in the REV column of the Revision History block of the new drawing original. The names of the individuals whose signatures appeared in the Title block of the old original and the revisions record, if retained, are entered on the new original. Enter the notation REDRAWN WITH CHANGE in the DESCRIPTION column of the Revision History block on the new original; accompany this entry with the required entries in accordance with para. 6.1.3. All previous revision symbols and crossed out areas may be omitted. See Fig. 1 sketch (a).

### 4.3.2 Redrawn Drawing Without Change.

When a drawing, or a sheet of a drawing, is to be replaced because of loss, destruction, or degradation due to age, it may be redrawn without change. The replacement shall duplicate the requirements of the old original which is being replaced. The names of the individuals whose signatures appear in the Title block of the old original and revision record, if retained, are entered on the new original. The notation REDRAWN WITHOUT CHANGE with the signature of those who prepared the replacement and date shall be entered in the Revision History block. The advancement of the revision letter is not required. See Fig. 1 sketch (b).

4.3.3 Historical Annotations. When a drawing has been redrawn, the old original, if available, shall be marked as follows: The notation REPLACED (WITH or WITHOUT) CHANGE BY REV [Enter the revision letter of the superseding drawing or if no revision enter a—(dash).] shall be entered in the DESCRIPTION column of the superseded drawing. The notation SUPER-SEDED shall be placed as near to the Title block as possible, in 7 mm minimum high letters. Alternatively, other procedures may be used to purge superseded drawings from active status.

### 4.4 Superseding a Drawing

4.4.1 Superseding (New) Drawing. When a drawing is superseded by a drawing with a different number, enter the notation REPLACES WITH CHANGE DRAWING (Enter superseded drawing number.) REV [Enter superseded revision letter. If no revision enter a—(dash).] in the DESCRIPTION column of the superseding drawing. Follow the above notation with an entry in the description of change or reference to the revision authorization document in accordance with para. 6.1.3. See Fig. 2.



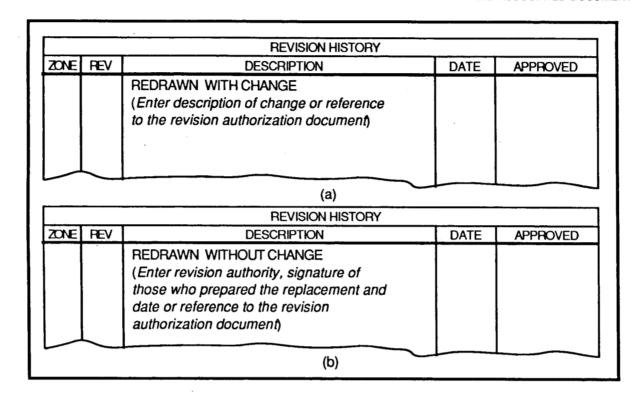


FIG. 1 NOTATIONS FOR A REDRAWN DRAWING

	REVISION HISTORY						
ZONE	REV	DESCRIPTION	DATE	APPROVED			
		REPLACES WITH CHANGE DRAWING 123XXXX7 REVC (Enter description of change or reference to the revision authorization document)					

FIG. 2 NOTATIONS FOR A SUPERSEDING DRAWING

No entry is required in the REV letter, DATE, or AP-PROVED column. New Title block approval entries apply.

**4.4.2 Superseded (Old) Drawing.** When the superseded drawing will be retained, enter the notation RE-PLACED WITH CHANGE BY DRAWING (Enter the superseding drawing number.) REV [Enter the revision letter of the superseding drawing or if no revision, enter

a — (dash).] in the DESCRIPTION column of the superseded drawing. Follow the above notation with an entry in the description of change or reference to the revision authorization document in accordance with para. 6.1.3. See Fig. 3. Complete the remainder of the Revision History block by entering the next sequential revision letter in the REV column and by entering the required approval signature(s) and dates (s) in the APPROVED and DATE columns.

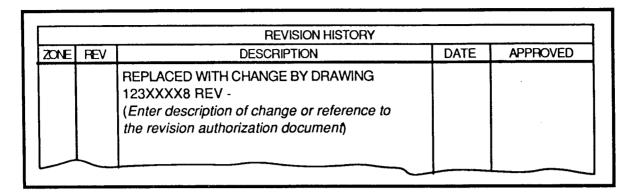


FIG. 3 NOTATIONS FOR A SUPERSEDED DRAWING

**4.4.3 Supersession of Digital Data.** For digital data files, alternative procedures may be used to indicate supersession information.

### 4.5 Revisions of Digital Data

Revisions of digital data files and copies of digital data files shall not be considered redraws in accordance with para. 4.3 except when the document is converted from a manually maintained to a digitally maintained document.

### **5 IDENTIFYING REVISIONS ON DRAWINGS**

### 5.1 Revision Letters

Upper case letters shall be used in sequence beginning with A and omitting letters "I," "O," "Q," "S," "X," and "Z". When the single letters have been exhausted, the revisions following "Y" shall be "AA," "AB" through "AY". Should "AA" to "AY" be exhausted, the next sequence shall be "BA," "BB," etc. Revision letters shall not exceed two characters. Initial issue of a drawing does not constitute need for a revision letter and may be indicated by the use of a — (dash).

The revision letter is the identification of the revision level of the sheet or drawing. The identity of the revision authorization document or an itemized description of change(s) is included in the Revision History block as part of the revision. Other practices which may require special accommodations for revision identification are as follows.

(a) When a revision authorization document preassigns a revision letter in advance of the changes being incorporated in the original and describes the specific drawing changes, the changes may be identified by simply referencing the revision authorization document in the Revision History block. This practice may be sup-

plemented by using revision symbols on the face of the drawing. On the other hand, when the revision authorization document preassigns the revision letter and does not describe each change, the changes shall be itemized in the Revision History block, and the applicable revision letter from the revision authorization document is applied.

- (b) When a revision authorization document does not preassign a revision letter in advance of the changes being incorporated in the original drawing and describes the specific drawing changes, the changes may be identified by simply referencing the revision authorization document in the Revision History block and assigning the applicable revision letter. Drawing changes on the face of the drawing may be identified by the assigned revision symbol. On the other hand, when the revision authorization document does not preassign the revision letter and does not describe each change, the drawing changes shall be itemized in the Revision History block.
- (c) When several revision authorization documents are incorporated at the same time and have preassigned revision letters, they shall be incorporated individually as separate revisions in alphabetic sequence to the drawing. The revision letters used on the drawing and the revision letter used on the revision authorization document providing approval shall be the same.
- (d) When several revision authorization documents are incorporated at the same time and do not have preassigned revision letters, they shall be incorporated as a group. The changes may be entered in numeric sequence to permit ready identification of a specific change. In this case the appropriate sequence number will appear as a suffix to the revision letter in the field of the drawing. The incorporation of multiple, nonpreassigned revision level, revision authorization documents shall only raise the revision letter one level.

REVISION HISTORY					
ZONE	REV	DESCRIPTION	DATE	APPROVED	
		SHEET 1			
		(1)			
1 1		(2)	1		
·		SHEET 2			
		(3)			
		(4)			

FIG. 4 SEQUENCE NUMBER

(e) When minor changes not affecting form, fit, or function, such as correction of misspelled words or addition of reference dimensions, are required on the drawing, the changes should be incorporated at the same time as other revision authorization documents.

### 5.2 Identifying Revision Locations

Whether incorporating a change or replacing the drawing with change, a revision location shall be identified by one or more of the following methods:

- (a) revision symbol in the field of the drawing (see para. 5.4);
  - (b) description in the Revision History block;
- (c) zone locations in the ZONE column of the Revision History block;
- (d) revision authorization document identified in the DESCRIPTION or other dedicated column of the Revision History block.

### 5.3 Multiple Changes

All changes authorized by a single revision authorization document shall be incorporated into the document at the same time. All changes to a drawing incorporated at one time shall be identified by the same revision letter if the revision letter is assigned at the time the changes are incorporated. The changes may be numbered sequentially to permit ready identification of a specific change. In this case the appropriate sequence number will appear as a suffix to the revision letter in the field of the drawing.

**5.3.1 Sequence Number Use.** Where a revision involves two or more individual changes on a drawing, each change may be identified by a sequence number enclosed in parentheses preceding the description of the

change. Use a continuous unbroken sequence for the entire set of changes under each revision or a continuous unbroken sequence to each affected sheet through the entire set of changes under each revision. When revision symbols are used in accordance with para. 5.4, the sequence number may be included in the symbol as a suffix to the revision letter. See Figs. 4 and 5.

### 5.4 Revision Symbol

The revision symbol may be used to identify an item or area of change on the drawing. The symbol should be placed at or near the location affected by the change. Where many individual changes required by the revision authorization document would create an overly crowded condition, a single revision symbol may be used. See Fig. 5 sketch (d).

**5.4.1 Symbol Application**. When a revision symbol is used, the revision letter, and the sequence number

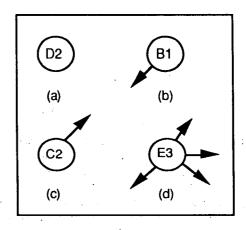


FIG. 5 REVISION SYMBOL

when used, shall be enclosed in a circle to form a revision symbol. See Fig. 5 sketch (a). A leader(s) may be added to the circle to indicate a specific location. See Fig. 5 sketches (b), (c), and (d).

**5.4.2 Omitting Symbols.** On drawings where use of revision symbol(s) may conflict with other symbols used on the drawing creating a possible misinterpretation, the revision description will be adequate.

### **6 RECORDING REVISIONS**

Changes to drawings shall be recorded in the Revision History block. The Revision History block format shall be in accordance with ASME Y14.1 or ASME Y14.1M and completed as follows.

### **6.1 Revision History Block Entries**

**6.1.1 ZONE Column.** When a drawing is zoned and the locations of changes to the drawing are recorded using the drawing zone method, the zone to which each revision description applies shall be entered in the ZONE column. When a single change is made to several zones, the zone entries may be made in the DESCRIPTION column immediately after the description of change. See Fig. 6 sketch (c). Zone listings for multisheet changes may be accomplished by one of the methods defined in Fig. 6 sketch (a) or (b).

**6.1.2 REV Column.** The revision letter assigned to a particular revision is the only character allowed to be entered in the REV column. See Fig. 6.

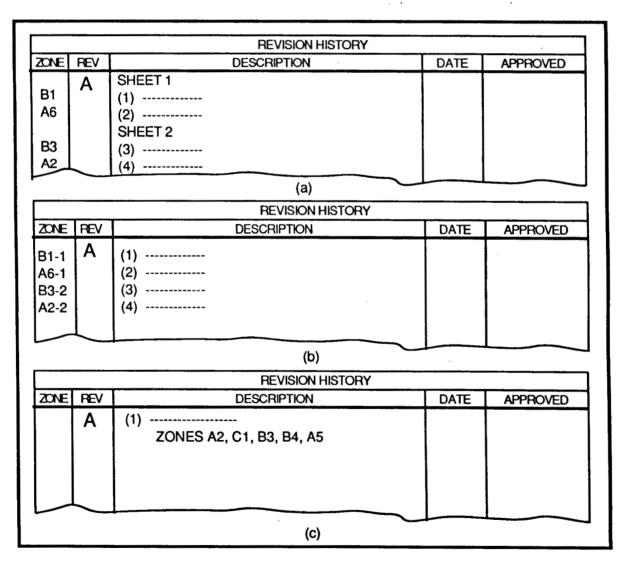


FIG. 6 ZONE AND REV COLUMNS

	REVISION HISTORY						
ZONE	REV	DESCRIPTION	DATE	APPROVED			
		(1) REVISED PICTURE TO DELETE -1 AND ALL COMPONENTS (2) REVISED PARTS LIST AND PICTURE SHEET TO SHOW RELEASE OF -2 AND ALL COMPONENTS					
	_						

FIG. 7 DESCRIPTION COLUMN

- **6.1.3 DESCRIPTION Column.** Record changes made to a drawing by one or more of the following methods.
- (a) Enter a description of change in the DESCRIP-TION column. When used, the appropriate sequence number in accordance with para. 5.3.1 shall precede each entry in the column. See Fig. 7.
- (b) When changes resulting from one or more revision authorization documents are so extensive or complicated as to make a clear description impracticable, but not such as to require redrawing, the entry in the DESCRIPTION column may be limited to a clearly phrased general description of the change such as COMPLETELY REVISED FOR RELOCATION OF OXYGEN SYSTEM or a statement such as GENERAL CHANGE ZONES A1, B3, C4 and the revision authorization identifier(s) listed.
- (c) Removal of revision history is accomplished using one of the following methods.
- (1) Remove one complete revision record entry at a time until enough space is available to record the current revision, starting with the oldest revision recorded and continuing in alphabetical order until sufficient space is available.
  - (2) Remove all previous revision history.
- (3) Remove all previous revision history but retain a line entry for each revision level that identifies the revision authorization document(s) and date of revision.
- (4) Remove all previous revision history except that associated with the revision immediately preceding the current revision.

NOTE: Revision entries addressing rights in data or security classification shall be retained.

(d) A reference to the revision authorization document may be used in lieu of detailing the revision description

in the Revision History block, provided the revision authorization document describes the specific drawing changes.

- **6.1.4 DATE Column.** The date entered in the DATE column shall be the date the revision was incorporated on the drawing.
- **6.1.5 APPROVED Column.** Authorized signature(s), name, or approval indicator, as required, shall be entered to indicate approval of the change(s) made to the drawing.
- **6.1.6 Separating Revisions.** Each revision entry shall be separated by a horizontal line drawn across the complete Revision History block.
- **6.1.7 Revision Description for Digital Data.** Revise digital data in accordance with para. 6.1.3 with the following exceptions.
- (a) The revision description shall not identify a revision to a digital data file as a redraw except as noted in para. 4.5.
- (b) Revise the digital data file identification to reflect the current revision letter.
- (c) Electronically generated names or signatures are allowed provided there is an electronic authorization system. The system procedures shall provide for entry of the name or a signature of the responsible individuals in the Title block and Revision History block of the drawing.

# 6.2 Transfer of Drawings Between Design Activities

When transferring design responsibility for a drawing from one design activity to another, the drawing number, part number, and the design activity identification, as-



signed to the drawing shall not be changed. The design activity identification such as company name, address, CAGE Code, etc., as applicable, of the new design activity shall be added above the Title block by revision action. An explanatory notation may accompany the entry of the new design activity identification above the Title block.

### 7 REVISION CONTROL METHODS

Revision and changes to drawings and associated documents shall be accomplished only by or through the authority of the current design activity. Revisions shall use one of the methods defined in para. 7.1, 7.2, or 7.3. These methods shall not be intermixed on the same drawing.

### 7.1 Drawing Level Method

The Drawing Level Method is made up of the following elements.

### 7.1.1 Revision Letters

- (a) Revision letters are assigned in an independent sequence against the drawing.
- (b) Revision letters are assigned in an independent sequence against each different type of associated documents.
- (c) The same revision letter is applied to sheet 1 and each sheet affected.
- (d) The latest revision letter represents the revision level of the drawing.
- (e) Enter current revision letter in the Sheet REV block located adjacent to the Drawing Number block in the Title block, Microfilm Drawing Number block and the Margin Drawing Number block when included on the drawing form.

### 7.1.2 Revision History Block

- (a) Record entries in the DESCRIPTION column in accordance with para. 6.1.3 on the first sheet for all affected sheet(s). Additional Revision History blocks may be added when required in accordance with ASME Y14.1 and ASME Y14.1M.
- (b) A Revision History block entry on an unaffected sheet is not required.

### 7.2 Sheet Level Method

The Sheet Level Method is made up of the following elements.

### 7.2.1 Revision Letters

(a) Revision letters are assigned in an independent sequence against each sheet of the drawing.

- (b) Revision letters are assigned in an independent sequence against each different type of associated documents.
- (c) Enter current revision letter in the Sheet REV block located adjacent to the Drawing Number block in the Title block, Microfilm Drawing Number block, and the Margin Drawing Number block when included on the drawing form.

### 7.2.2 Revision History Block

- (a) Record entries in the DESCRIPTION column in accordance with para. 6.1.3 on each sheet affected.
- (b) A Revision History block entry on an unaffected sheet is not required.

### 7.3 All Sheets Same Revision Level Method

All Sheets Same Revision Level Method is made up of the following elements.

### 7.3.1 Revision Letter

- (a) Revision letters are assigned in an independent sequence against the drawing.
- (b) Revision letters are assigned in an independent sequence against each different type of associated documents.
- (c) The same revision letter is applied to each sheet of the drawing without regard to the specific sheet(s) to which the revision applies.
- (d) Enter current revision letter in the Sheet REV block located adjacent to the Drawing Number block in the Title block, Microfilm Drawing Number block and the Margin Drawing Number block when included on the drawing form.

### 7.3.2 Revision History Block

- (a) Record entries in the DESCRIPTION column in accordance with para. 6.1.3 on the first sheet.-Additional Revision History blocks may be added when required in accordance with ASME Y14.1 and ASME Y14.1M.
- (b) When Revision History blocks are used on continuation sheets, all sheets shall be updated whether there is any other change on a specific sheet.

### 7.4 Revision Status of Sheets

7.4.1 Revision Status of Sheets Block. A Revision Status of Sheets block is required on multisheet drawings. The Revision Status of Sheets block is a tabulation similar to that shown in Fig. 8. Locate the Revision Status of Sheets block on sheet one in the area of the Revision History block or Title block or on a separate sheet for drawings in book-form. The Revision



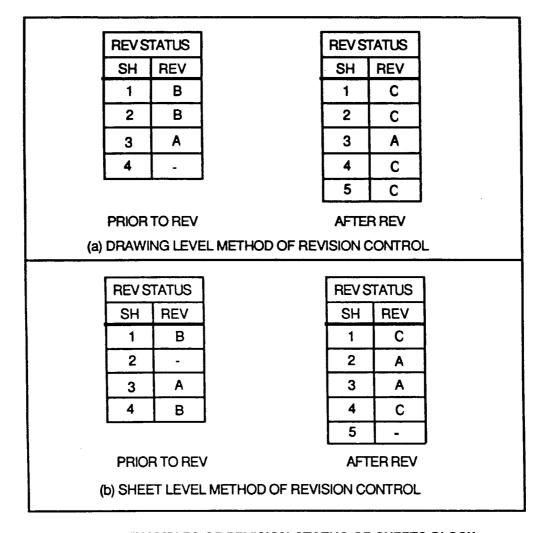


FIG. 8 EXAMPLES OF REVISION STATUS OF SHEETS BLOCK

Status of Sheets block records the revision status of each sheet. All sheets may be identified by the same revision letter without regard to the specific sheet(s) to which the revision applies. Revision Status of Sheets block may be replaced by a notation stating that the revision status of all sheets are the same, such as ALL SHEETS ARE REV A. When this method is used and sheets are added or deleted, drawing sheets shall be numbered in accordance with para. 7.5.

### 7.4.2 Revision Status of Sheets Block Entries.

Whenever a revision is made on any sheet, the revision letter shall be entered on the affected sheet and in the Revision Status of Sheets block.

Use one of the following methods.

- (a) At original release enter a (dash) in the REV column for each sheet.
- (b) Enter the revision letter under which a sheet is added or revised.
- (c) Enter a notation, such as CANC or DEL, when a sheet is canceled.

For example, on a four sheet drawing using the drawing level method of revision control, sheets 2 and 4 are revised and sheet 5 is added. Revision letter assignment will be added to each sheet affected and to sheet 1, which reflects the revision status of the group as a whole. In the Revision Status of Sheets block, sheets 1, 2, and 4 show the new revision letter. Sheet 3 will retain its revision letter status prior to the revision and a new entry for added sheet 5 will show the new revision letter. See Fig. 8 sketch



(a) for an example of a Revision Status of Sheets block. For example, on a four sheet drawing using the sheet level method of revision control, sheets 2 and 4 are revised and sheet 5 is added. Revision letter assignment will be added to each sheet affected and to sheet 1, which reflects the revision status of each sheet. In the Revision Status of Sheets block, sheets 1, 2, and 4 will show a new revision letter. Sheet 3 will retain its revision letter status prior to the revision, and a new entry for added sheet 5 will have a dash in the revision column. See Fig. 8 sketch (b) for an example of a Revisions Status block.

### 7.5 Adding or Deleting Sheets

**7.5.1 Adding Sheets.** Added sheets constitute a change to the drawing and shall be explained in the Revisions History block. For each new sheet, enter the notation THIS SHEET ADDED in the DESCRIPTION column of the new sheet. The Revision Status of Sheets block and Total Number of Sheets block shall be updated accordingly.

Additional sheets inserted between existing sheets shall use one of the following methods.

- (a) Renumber sheets using consecutive whole numbers.
- (b) Number added sheets in a decimal-number sequence; for example, three sheets added between sheets 4 and 5 would be numbered 4.1, 4.2, and 4.3.
- (c) Number added sheets in an alpha-numeric sequence; for example, three sheets added between sheets 4 and 5 would be numbered 4A, 4B, and 4C.

Methods (b) and (c) above shall not be intermixed on the same drawing.

- **7.5.2 Deleting Sheets.** When sheets are deleted, the revision level of sheet 1 shall be advanced to the appropriate revision level, and the specific changes shall be described in the DESCRIPTION column. One of the following methods shall be used.
- (a) Renumber remaining sheets to maintain a consecutive whole numbered sequence. The Revision Status of Sheets block and Total Number of Sheets block shall be updated accordingly.
- (b) Remaining sheets shall not be renumbered. The Revision Status of Sheets block shall be updated by crossing out the revision letter entries of the deleted sheets or replacing the revision letter with the notation CANC or DEL. The Total Number of Sheets block shall be updated accordingly.

NOTE: Any cross references between sheets in the field of the drawing shall be updated when sheets are renumbered or a sheet is deleted.

### 7.6 Sheet or Drawing Cancellation

When it becomes necessary to cancel one or more, but not all sheets of a multisheet drawing, an entire drawing, either single or multisheet or associated documentation, a revision authorization document or a drawing sheet cancellation form or other methodology may be used to purge the canceled data from active status. A Revision History block entry is required on sheet 1 using the next revision letter in sequence for the drawing. The Revision History block shall describe the changes or list the revision authorization document. Accomplish the following additional changes:

- (a) Update the Sheet Number block and the Revision Status of Sheets block on sheet 1 to indicate total number of sheets and describe the changes in the Revision History block.
- (b) A multisheet drawing requires a sheet 1 upon which the Revision Status of Sheets block is maintained. If sheet 1 is canceled, add a new sheet 1 or convert an existing sheet to sheet 1.
- (c) A notation such as CANCELED, shall be placed as near to the Title block as possible and conform to the minimum letter height requirements for drawing titles in accordance with ASME Y14.2M. Other notations such as OBSOLETE or INACTIVE may be used.

### 7.7 Drawing Reinstatement

When a canceled drawing or sheet is to be reinstated, complete the Revision History block in accordance with para. 6.1 and the following.

- (a) Remove CANCELED notations applied by para. 7.6 (c).
- (b) Under the applicable revision letter, enter the reinstatement revision information in the Revision History block. This includes the notation DRAWING SHEET REINSTATED. At time of reinstatement, incorporate any applicable, active outstanding revision authorization documents and additional drawing changes in accordance with this Standard. See Fig. 9.
- (c) When a drawing is multisheet, update the Sheet Number block and the Revision Status of Sheets block on sheet 1 to indicate the total number of active sheets and describe the changes in the Revision History block.
- (d) Revise affected areas or other documents, such as parts list, as applicable to reflect the reinstatement.

### 8 ASSOCIATED DOCUMENT REVISIONS

Associated documents are revised in the same manner as for any other revision to a drawing. Associated docu-



REVISION HISTORY					
ZONE	REV	DESCRIPTION	DATE	APPROVED	
-	В	DRAWING SHEET 7 CANCELED	91-01-13	J. Doe	
_	D	DRAWING SHEET 7 REINSTATED	92-04-10	S. Smith	

FIG. 9 DRAWING SHEET REINSTATEMENT

ments may be revised as a separate document. See ASME Y14.34M for associated list preparation requirements.

Associated documents need not be revised for the sole purpose of maintaining a common revision level.

### **RELATED DOCUMENTS**

Abbreviations	
Engineering Drawing and Related Documentation Practices	
Decimal Inch Drawing Sheet Size and Format	
Metric Drawing Sheet Size and Format	Y14.1M-1995
Line Conventions and Lettering	Y14.2M-1992
Multiview and Sectional View Drawings	Y14.3M-1994
Pictorial Drawings	Y14.4M-1989(R1994)
Dimensioning and Tolerancing	Y14.5M-1994
Mathematical Definition of Dimensioning and Tolerancing Principles	Y14.5.1M-1994
Certification of Geometric Dimensioning and Tolerancing Professionals	Y14.5.2-1995
Screw Thread Representation	Y14.6-1978(R1993)
Screw Thread Representation (Metric Supplement)	
Gears and Splines	
Spur, Helical, Double Helical and Racks	
Bevel and Hypoid Gears	
Castings and Forgings	Y14.8M-1996
Mechanical Spring Representation	. Y14.13M-1981(R1992)
Optical Parts	
Types and Applications of Engineering Drawings	
Chassis Frames — Passenger Car and Light Truck — Ground Vehicle Practices	
Associated Lists	
Revision of Engineering Drawings and Associated Documents	
Surface Texture Symbols	
A Structural Language Format for Basic Shape Description	echnical Report 4-1989
Graphic Symbols for:	
Pipe Fittings, Valves, and Piping	
Heating, Ventilating, and Air Conditioning	
Heat Power Apparatus	
Plumbing Fixtures for Diagrams Used in Architecture and Building Construction	
Railroad Maps and Profiles	
Fluid Power Diagrams	
Process Flow Diagrams in Petroleum and Chemical Industries	
Mechanical and Acoustical Elements as Used in Schematic Diagrams	Y32.18-1972(R1993)

The ASME Publications Catalog shows a complete list of all the Standards published by the Society. For a complimentary catalog, or the latest information about our publications, call 1-800-THE-ASME (1-800-843-2763).



### **ASME Services**

ASME is committed to developing and delivering technical information. At ASME's Information Central, we make every effort to answer your questions and expedite your orders. Our representatives are ready to assist you in the following areas:

**ASME Press** Codes & Standards Credit Card Orders IMechE Publications Meetings & Conferences Member Dues Status

Member Services & Benefits Other ASME Programs Payment Inquiries Professional Development Short Courses **Publications** 

**Public Information** Self-Study Courses Shipping Information Subscriptions/Journals/Magazines Symposia Volumes Technical Papers

E-Mail-24 hours

Infocentral

@asme.org

### How can you reach us? It's easier than ever!

There are four options for making inquiries\* or placing orders. Simply mail, phone, fax, or E-mail us and an Information Central representative will handle your request.

Fax-24 hours

973-882-1717

973-882-5155

ASME 22 Law Drive, Box 2900

Fairfield, New Jersey

07007-2900

Mail

Call Toll Free

US & Canada: 800-THE-ASME

(800-843-2763)

Mexico: 95-800-THE-ASME

(95-800-843-2763)

Universal: 973-882-1167

Information Central staff are not permitted to answer inquiries about the technical content of this code or standard. Information as to whether or not technical inquiries are issued to this code or standard is shown on the copyright page. All technical inquiries must be submitted in writing to the staff secretary. Additional procedures for inquiries may be listed within.



