ASME B18.18.2M-1994-SUPPLEMENT

[Supplement of ASME B18.18.2M-1987 (R1993)]

INSPECTION AND QUALITY ASSURANCE FOR HIGH-VOLUME MACHINE ASSEMBLY FASTENERS

AN AMERICAN NATIONAL STANDARD

The American Society of Mechanical Engineers

Date of Issuance: August 30, 1996

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

Supplement
to
ASME/ANSI B18.18.2M-1987(R1993)

The changes listed below apply to ASME/ANSI B18.18.2M-1987(R1993), Inspection and Quality Assurance for High-Volume Machine Assembly Fasteners. The revised Foreword and Roster are included in this Supplement in their entirety.

Page	Location	Change
iii	Foreword	Last paragraph added
v	Roster	Personnel of Subcommittee 18 updated
3	Para. 2.7	Add third sentence, shown in boldface, as follows:

Each lot of fasteners shall be subject to a final inspection. The final inspection is intended to verify lot identification, to check for mechanical property conformance and mixed stock, and to inspect designated characteristics for conformance to related specifications and engineering drawings. **Final inspection of any characteristic may be conducted at any stage of manufacturing provided the characteristic is not subject to change in any further manufacturing or processing operation.** Records of final inspection shall be maintained in accordance with para. 2.4. The requirements are given in Table 1, and destructive test requirements are given in Table 2. Sample sizes are then determined in accordance with Table 3.

FOREWORD

(This Foreword is not part of ASME/ANSI B18.18.2M-1987.)

American National Standards Committee B18 for the standardization of bolts, screws, nuts, rivets, and similar fasteners was organized in March 1922 as Sectional Committee B18 under the aegis of the American Engineering Standards Committee (later the American Standards Association, then the United States of America Standards Institute and, as of October 6, 1969, the American National Standards Institute, Inc.) with the Society of Automotive Engineers and the American Society of Mechanical Engineers as joint sponsors.

Subcommittee 18 of Committee B18 was established in September 1978 to develop a document to cover the quality assurance provisions for internally and externally threaded metric fasteners and accessories or associated parts.

At the March 1979 meeting of Subcommittee 18, it was agreed that the quality assurance document should be circulated for subcommittee consideration as a proposed standard. Subcommittee acceptance of the content ensued and the document was approved by letter ballot to the American National Standards Committee B18 on March 21, 1980.

The standard was subsequently approved by the Secretariat and submitted to the American National Standards Institute for designation as an American National Standard; it was designated ANSI B18.18.2M-1982 and approved on September 14, 1982.

A periodic review of the standard, undertaken by the Subcommittee in 1985, resulted in agreement that the document be revised to allow it to be used for inch as well as metric products. This was done by deleting the word "metric" from the title as well as from each place in the standard where it would inhibit the use of the document for inch as well as metric products. By retaining the "M" in the designator, the standard can be used for both inch and metric products without having to change any references made. A proposal containing these changes, as well as editorial corrections, was prepared and balloted by letter ballot to ASME Committee B18. Following approval by ASME, the proposal was submitted to the American National Standards Institute and designated an American National Standard on January 16, 1987.

In response to requests in 1993, Subcommittee 18 reviewed the standard to address the possibility of performing the "final inspection" in stages through the manufacturing process. This review resulted in Subcommittee approval and issuance of a supplement to ASME B18.18.2M-1987(R1993). This Supplement adds a sentence to paragraph 2.7 that permits final inspection to be performed at any stage of manufacture as long as the characteristics are not subject to subsequent change.

ASME STANDARDS COMMITTEE B18
Standardization of Bolts, Nuts, Rivets, Screws, Washers, and Similar Fasteners

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

OFFICERS

J. B. Levy, *Chairman*
H. W. Ellison, *Vice Chairman*
E. Schwartz, *Vice Chairman*
R. W. McGinnis, *Secretary*

COMMITTEE PERSONNEL

AMERICAN SOCIETY OF AGRICULTURAL ENGINEERS
E. R. Friesth, Don E. Williams Co., Rock Island, Illinois

AMERICAN SOCIETY OF MECHANICAL ENGINEERS
A. R. Machell, Webster, New York
K. E. McCullough, SPS Technologies Inc., Newtown, Pennsylvania

ENGINE MANUFACTURERS ASSOCIATION
G. A. Russ, Cummins Engine Co., Columbus, Indiana

FARM & INDUSTRIAL EQUIPMENT INSTITUTE
D. A. Clever, Deere & Co., Moline, Illinois

HAND TOOL INSTITUTE
R. B. Wright, Wright Tool Co., Barberton, Ohio

INDUSTRIAL FASTENERS INSTITUTE
D. J. Broomfield, Illinois Tool Works Inc., Elgin, Illinois
D. A. Garrison, Russell, Burdsall & Ward Corp., Rock Falls, Illinois
R. M. Harris, Bethlehem Steel Corp., Lebanon, Pennsylvania
D. Littel, Greensburg, Pennsylvania
J. C. McMurray, *Alternate,* Russell, Burdsall & Ward Inc., Cleveland, Ohio
J. S. Orlando, Bethlehem Steel Corp., Lebanon, Pennsylvania
E. Sterling, Emhart Corp., Cambellsville, Kentucky
J. A. Trilling, Holo-Krome Co., West Hartford, Connecticut
S. Vass, Lake Erie Screw Corp., Cleveland, Ohio
C. J. Wilson, Industrial Fasteners Institute, Cleveland, Ohio

METAL CUTTING TOOL INSTITUTE
D. Emanuelli, TRW-Greenfield Tap & Die, Greenfield, Massachusetts

NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
J. B. Levy, General Electric Co., Schenectady, New York
W. F. Montavon, *Alternate,* National Electrical Manufacturers Association, Washington, D.C.
F. F. Weingruber, Westinghouse Electric Corp., Pittsburgh, Pennsylvania

NATIONAL FASTENERS DISTRIBUTORS ASSOCIATION
J. F. Sullivan, Accurate Fasteners, Inc., South Boston, Massachusetts

SOCIETY OF AUTOMOTIVE ENGINEERS
H. W. Ellison, General Motors Corp., Warren, Michigan
R. S. Piotrowski, Mack Trucks Inc., Allentown, Pennsylvania

TUBULAR & MACHINE INSTITUTE
R. M. Byrne, Trade Association Management Inc., Tarrytown, New York
J. G. Zeratsky, National Rivet & Manufacturing Co., Waupun, Wisconsin

U. S. DEPARTMENT OF THE ARMY
M. E. Taylor, U. S. Army Armament, Munitions & Chemical Command, Dover, New Jersey
A. Herskovitz, *Alternate,* U. S. Army Armament, Munitions & Chemical Command, Dover, New Jersey
J. E. Long, *Alternate,* U. S. Army Tank Command, Warren, Michigan

U. S. DEPARTMENT OF DEFENSE
E. Schwartz, Defense Industrial Supply Center, Philadelphia, Pennsylvania
L. Pieninck, *Alternate,* Defense Industrial Supply Center, Philadelphia, Pennsylvania

U. S. DEPARTMENT OF THE NAVY
J. E. Hass, Department of the Navy, Washington, D.C.
M. S. Orysh, *Alternate,* Department of the Navy, Philadelphia, Pennsylvania

INDIVIDUAL MEMBERS
A. R. Breed, Lakewood, Ohio
R. A. Flor, Chrysler Corp., Detroit, Michigan
G. A. Gobb, Ford Motor Co., Dearborn, Michigan
F. E. Graves, F. E. Graves Associates, Fairfield, Connecticut
J. J. Naesset, Clark Equipment Co., Battle Creek, Michigan

SUBCOMMITTEE 18 — INSPECTION AND QUALITY CONTROL

P. D. Korsmo, *Chair,* Consultant
J. A. Buda, SPS Technologies
S. J. Cole, Product Risk Reduction, Inc.
J. Greenslade, Greenslade & Co.
M. Levinson, ITW Shakeproof
A. D. McCrindle, Stelco Fasteners Ltd.
K. E. McCullough, Consultant
D. F. Sharp, J&M Turner Inc.