


ANSI/ISO/ASQC A3534-1-1993

# AMERICAN NATIONAL STANDARD

## *Statistics—Vocabulary and Symbols— Probability and General Statistical Terms*



AMERICAN SOCIETY FOR QUALITY CONTROL  
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## ***Statistics—Vocabulary and Symbols— Probability and General Statistical Terms***

*Prepared by  
American Society for Quality Control Standards Committee  
for  
American National Standards Committee Z-1 on Quality Assurance*

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# Foreword

(This foreword is not part of American National Standard ANSI/ISO/ASQC A3534-1-1993, *Statistics—Vocabulary and Symbols—Probability and General Statistical Terms*.)

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and nongovernmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75% of the member bodies casting a vote.

International Standard ISO 3534-1 was prepared by Technical Committee ISO/TC 69, *Applications of statistical methods*, Subcommittee SC 1, *Terminology and symbols*.

This first edition, together with ISO 3534-2, cancels and replaces ISO 3534:1977, which has been technically revised.

ISO 3534 consists of the following three parts, under the general title *Statistics—Vocabulary and symbols*:

—Part 1: *Probability and general statistical terms*

—Part 2: *Statistical quality control*

—Part 3: *Design of experiments*

The United States Technical Advisory Group (TAG) to ISO/TC 69 is active in all of the activities of this committee. It seeks to ensure that all standards written by ISO/TC 69 are consistent with United States' interests. This is done by representative membership on the U.S. TAG, by circulating drafts of proposed standards widely in the United States for comment, and by ensuring that these comments are considered by the appropriate ISO/TC 69 working group. By these means, most new or revised International Standards can be adopted readily as American National Standards. Although there are editorial changes to incorporate American language usage and spelling, the American National Standards are equivalent to the corresponding ISO standards. To demonstrate this equivalence, the numerical designation of the American National Standards is the same numerical designation as the corresponding International Standard with a prefix such as A, in this case A3534-1.

Annex A forms an integral part of ANSI/ISO/ASQC A3534-1-1993.

The first editions of ANSI/ISO/ASQC A3534-1-1993 and ANSI/ISO/ASQC A3534-2-1993 serve as partial replacement for ANSI/ASQC A1, *Definitions, Symbols, Formulas, and Tables for Control Charts* and ANSI/ASQC A2, *Terms, Symbols, and Definitions for Acceptance Sampling*, which have been withdrawn.

Comments concerning this standard will be welcome and considered in future standards development and revision. They should be sent to the Standards Administrator, American Society for Quality Control, 611 East Wisconsin Avenue, Milwaukee, Wisconsin 53202.

**STATISTICS—VOCABULARY AND SYMBOLS—  
PROBABILITY AND GENERAL STATISTICAL TERMS**

**SCOPE**

ANSI/ISO/ASQC A3534-1-1993 defines probability and general statistical terms which may be used in the drafting of other American National Standards. In addition, it defines symbols for a limited number of these terms.

The terms are classified under the following main headings:

- Terms used in the theory of probability
- General statistical terms

—General terms relating to observations and test results

—General terms relating to methods of sampling.

The entries in ANSI/ISO/ASQC A3534-1-1993 are arranged analytically and an alphabetical index is provided.

Annex A gives a list of symbols and abbreviations used in ANSI/ISO/ASQC A3534-1-1993.