A description of the standard ASME format is described at

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BASIC ELEMENTS

The report should contain the following basic elements

Paper Title: The title of the paper should be concise and definitive. The title should be all uppercase, with the exception of units of measure or other specialty terms that are recognized and used in lowercase form.

Author names and affiliations: It is ASME policy that all those who have participated significantly in the technical aspects of a paper be recognized as co-authors or cited in the acknowledgments. Author name should consist of first name, middle initial, last name. The author affiliation should consist of the following, as applicable, in the order noted:

- company or university (institution, college, etc.);
- department name or company division;
- mailing address, including city, state (spelled out), zip code;
- country name;
- phone, fax, and e-mail

Abstract: A short abstract should open the paper. The purposes of an abstract are: to give a clear indication of the objective, scope, and results of the paper so that readers may determine whether the full text will be of particular interest to them; to provide key words and phrases for indexing, abstracting, and retrieval purposes.

The abstract should not attempt to condense the whole subject matter into a few words for quick reading. It should be no more than 200 words. Keywords should be included on a separate line at the end of the abstract text.

Body of paper:

Outline. A proper outline is the framework upon which a good paper is written. In the process of making the outline, ideas are classified and thoughts are ordered into a logical sequence such that by the time the information is ready to be transformed into complete sentences, a good overall mental picture has been formed. In outline form, the sequence of the various items and the progression of thought can easily be adjusted and readjusted until the desired order is obtained; therefore, much writing and rewriting is saved.

Organization. The text should be organized into logical parts or sections. The purpose of the paper, or the author’s aim, should be stated at the beginning so that the reader will have a clear concept of the paper’s objective. This should be followed by a description of the problem, the means of solution, and any other information necessary to properly qualify the
results presented and the conclusions. Finally, the results should be presented in an orderly form, followed by the author’s conclusions.

**Style.** The chief purpose of the work is to convey information to others, many of whom may be less familiar with the general subject than the author. Care should be taken, therefore, to use simple terms and expressions and to make statements as concise as possible. If highly technical terms or phraseology are necessary, they should be adequately explained and defined. The use of the first person and reference to individuals should be made in such a manner as to avoid personal bias. Company names should be mentioned only in the acknowledgments.

All papers should be concise regardless of length. Long quotations should be avoided by referring to sources. Illustrations and tables, where they help clarify the meaning or are necessary to demonstrate results properly, are desirable, but they should be kept to a practicable minimum. Detailed drawings, lengthy test data and calculations, and photographs that may be interesting, but which are not integral to the understanding of the subject, should be omitted.

Equations should be kept to a reasonable minimum, and built-up fractions within sentences should be avoided whenever possible to enhance readability. Papers that fail to conform to these requirements may be returned for revision and/or condensation.

**Originality.** Only original contributions to the engineering literature are accepted for publication. In most cases, this means that the work should incorporate substantial information not previously published. Under certain circumstances, reviews, collations, or analyses of information previously published may be acceptable.

**Accuracy.** It is of the greatest importance that all technical, scientific, and mathematical information contained in the paper be checked with the utmost care. A slight error may result in a serious error on the part of anyone who may later use that information.

**Use of SI Units.** Authors are encouraged to include SI units of measurement in all papers. When U.S. customary units are given preference, the SI equivalent should be provided in parentheses or in a supplementary table. And vice versa, when preference is given to SI units, the U.S. customary units should be provided in parentheses or in a supplementary table.

**Headings.** Headings and subheadings should appear throughout the paper to divide the subject matter into logical parts and to emphasize the major elements and considerations. These headings assist the reader in following the trend of thought and in forming a mental picture of the points of chief importance. Parts or sections may be numbered, if desired, but paragraphs should not be numbered.

**Tabulations and Enumerations.** Where several considerations, conditions, requirements, or other qualifying items are involved in a presentation, it is often advantageous to put them in tabular or enumerative form, one after the other, rather than to run them into the text. This arrangement, in addition to emphasizing the items, creates a graphic impression that aids the reader in accessing the information and in forming an overall picture. It is customary to identify the individual items as (1), (2), (3), etc., or as (a), (b), (c), etc. Although inclusion of such elements makes the text livelier, care should be taken not to use this scheme too frequently, as it can make the reading choppy and invalidate their purpose and usefulness.

**Figures.** All figures (graphs, line drawings, photographs, etc.) should be numbered consecutively and have a caption consisting of the figure number and a brief title or description of the figure. This number should be used when referring to the figure in text. Figures should be referenced within the text as “Fig. 1.” When the reference to a figure begins a sentence, the abbreviation “Fig.” should be spelled out, e.g., “Figure 1.” Figures may be inserted as part of the text, or included on a separate page immediately following or as close as possible to its
first reference—with the exception of those figures included at the end of the paper as an appendix. Since ASME Publishing does not undertake the drafting or redrafting of illustrations, all graphs, line drawings, photographs, etc., must be submitted in a final, ready-to-publish form. This artwork should be clear and sharp and of best available quality. The quality of the artwork in your paper will only be as good as the original supplied.

Tables. All tables should be numbered consecutively and have a caption consisting of the table number and a brief title. This number should be used when referring to the table in text. Tables may be inserted as part of the text, or included on a separate page immediately following or as close as possible to its first reference—with the exception of those tables included at the end of the paper as an appendix.

Mathematics. Equations should be numbered consecutively beginning with (1) to the end of the paper, including any appendices. The number should be enclosed in parentheses (as shown above) and set flush right in the column on the same line as the equation. It is this number that should be used when referring to equations within the text. Equations should be referenced within the text as “Eq. (x).” When the reference to an equation begins a sentence, it should be spelled out, e.g., “Equation (x).” Formulas and equations should be created to clearly distinguish capital letters from lowercase letters. Care should be taken to avoid confusion between the lowercase “l” (el) and the numeral one, or between zero and the lowercase “o.” All subscripts, superscripts, Greek letters, and other symbols should be clearly indicated. In all mathematical expressions and analyses, any symbols (and the units in which they are measured) not previously defined in nomenclature should be explained. If the paper is highly mathematical in nature, it may be advisable to develop equations and formulas in appendices rather than in the body of the paper.

Acknowledgments: Acknowledgements may be made to individuals or institutions not mentioned elsewhere in the paper, who have made an important contribution. This also applies to work completed for a government agency, which requires the inclusion of specific contract numbers or other terms.

Nomenclature: Nomenclature should follow customary usage. The nomenclature list should be in alphabetical order (capital letters first, followed by lowercase letters), followed by any Greek symbols, with subscripts and superscripts last, identified with headings.

References: Within the text, references should be cited in numerical order according to their order of appearance. The numbered reference citation should be enclosed in brackets. In the case of two citations, the numbers should be separated by a comma [1,2]. In the case of more than two reference citations, the numbers should be separated by a dash [5–7].

References to original sources for cited material should be listed together at the end of the paper; footnotes should not be used for this purpose. References should be arranged in numerical order according to their order of appearance within the text.

a) Reference to journal articles and papers in serial publications should include:

- last name of each author followed by their initials
- year of publication
- full title of the cited article in quotes, title capitalization
- full name of the publication in which it appears
- volume number (if any) in boldface (Do not include the abbreviation, “Vol.”)
b) Reference to textbooks and monographs should include:
- last name of each author followed by their initials
- year of publication
- full title of the publication in italics
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c) Reference to individual conference papers, papers in compiled conference proceedings, or any other collection of works by numerous authors should include:
- last name of each author followed by their initials
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- initials followed by last name of editors (if any), followed by the abbreviation, “eds.”
- publisher
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- volume number (if any) in boldface if a single number, include, “Vol.” if part of larger identifier (e.g., “PVP–Vol. 254”)
- inclusive page numbers of the work being cited (include “pp.”)

d) Reference to theses and technical reports should include:
- last name of each author followed by their initials
- year of publication
- full title in quotes, title capitalization
- report number (if any)
- publisher or institution name, city

Appendices: An appendix is an additional section of the paper that may contain explanations or elaborations on the content that are not considered essential to the main body of the paper, but which are helpful to the reader. Such items may include additional calculations, tables, figures, graphs, programming code, other resources, etc. The appendix is not the proper place to collect raw data or other information an author was unable to include in the main body of the paper.

PAPER LAYOUT
General:
- Title, header, paper number, author info, text headings: sans serif typeface (e.g., Helvetica, Arial, Geneva, Univers)
- Text: 9 or 10 pt. Time Roman medium (or equivalent typeface), justified, with single line spacing
• Text Format: 2 columns, 8.5 in. × 11 in.; each column = approx. 3.5 in.
• Margins: 0.5 in. (top: to paper header, bottom: from copyright footer, sides)

**Paper Title:**

• Uppercase
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**Authors:**

• Author name = first name, middle initial, and last name
• Name: 10 pt. boldface sans serif typeface, upper and lower case letters (title case), with 12 pt. leading, centered under the title
• Affiliation: 10 pt. medium sans serif typeface, upper and lower case letters (title case), single line spacing, centered under the name
• Spacing: 2 extra lines separate the first and subsequent authors; last author to abstract, 3 extra lines
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**Footnotes:**

• Numbered consecutively using superscript numbers
• Positioned flush left at the bottom of the column/page in which the first reference appears
• Footnote text should be 8 pt.
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**Equations:**

• Display equations should be set apart from the body of the text and centered. Use two or three line spaces to separate equations from text.
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• No ellipses (dots) from the equation to the equation number, or any punctuation at the end of the equation itself.
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- Includes photographs, graphs, and/or line drawings
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