

Guidelines for Tables

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Tables are useful for presenting information clearly and concisely, and enhance the readers' understanding of the information in a document. They typically display numerical data. Text tables display text in a tabular format.

A. Table Structure

Below are typical components of a table:

- *Table Number*: A unique number that identifies each table in a document;
- *Table Title*: A brief description that identifies the information in the table concisely;
- *Headings (column, row)*: A succinct and descriptive title for each group of data in a table;
- *Table Body*: Section of a table that contains the information to be displayed;
- *Notes to Tables*: Additional information needed about an aspect of a table.

Table Number — **Table 1.** Sheet Metal Properties for Gauge 30 — Table title

Metal	Thickness (inches)	Weight Per Area (lb/ft ²)
Steel	0.0120	0.490
Galvanized Steel	0.0157	0.640
Stainless Steel	0.0125	0.520
Aluminum	0.0100	0.141

Headings — Table Body — Notes to Tables

Note: Sheet metal thickness gauge for steel is based on weight 41.82 pounds per square foot per inch of thickness

B. Table Content and Usage

Issue	Advice
Provide clear table title and headings	<ul style="list-style-type: none"> • All tables must have titles and headings that are concise and explanatory of information presented. • Headings must include units of measurements if applicable.
Practice information integrity and efficiency	<ul style="list-style-type: none"> • Table rows or columns must have an organized sequence so that they have an internal logic. It is not always necessary or required to present information in the order it was obtained. • Tables should contain enough information such that the reader should not need to refer to the text to understand the information displayed.
Verify that elements included in the table are relevant to the narrative.	<ul style="list-style-type: none"> • Tables must be discussed in the text with a reference to the table number. • If all elements of a table are not discussed in the text, then an abbreviated table with important table elements is included in the text. The full table should be included in an appendix with a brief note to that effect in the text.

C. Table Format

Component	Specification
<i>Table Number</i>	<ul style="list-style-type: none"> Number tables consecutively through the text with Arabic numerals (1,2,3...) preceded by the word "Table." Capitalize the word "table." Use this number when referring to the table in text.
<i>Table Title</i>	<ul style="list-style-type: none"> Use unique titles for each table in a document. Write table titles directly after or below the table number. Capitalize each word in a table title except the words of, on, in, and, etc. Do not use a period at the end of a table title.
<i>Headings (column, row)</i>	<ul style="list-style-type: none"> Use unique headings for each group of data. Capitalize each word in a heading. Set all headings in bold. Include unit of measurement in headings if applicable. Use abbreviations in headings if necessary and if their meaning is clear to the reader.
<i>Table-Body</i>	<ul style="list-style-type: none"> Capitalize each word if the cells contain text. Be consistent in the number of decimal places within a column and within comparable values elsewhere if information to be displayed can be formatted in this manner. Align each cell content on the decimal point within a column if possible, otherwise, align each cell in the center. Align each cell content on the left or in the center if data consists of text. Leave sufficient space between columns for column data to be distinct. Use symbols to indicate cell with absent data. For example: <ul style="list-style-type: none"> An em dash (—) for "no data available"; A hyphen (-) for "not applicable." Do not use units in the table body (units must appear in the headings).
<i>Notes to Tables</i>	<ul style="list-style-type: none"> Place notes underneath the table. Begin notes under the first column. Begin each note on a new line.
<i>Lines</i>	<ul style="list-style-type: none"> Use lines (horizontal or vertical) only when necessary for clarity Use the following three horizontal lines always: <ul style="list-style-type: none"> Below the title, above column headings; Between the column headings and the body of the table; Bottom of the table. Use a horizontal line above a row of totals.

D. Examples

Example 1:

Poorly Designed Table

Meanings of abbreviated column headings may not be clear to the reader

Table title is not explanatory

Poor organization: Left justified headings combined with right justified data columns reduce clarity

Table 2 Inspection Cost

P	P ₁	N	Sampling Inspection [n, 1+(N-n)p, P ₁ +(N-n)(1-P ₁), I]	No Inspection [N, p, A]	100% Inspection [N, I]
0		1	30	14	0
0.005	0.956	38	270	163	2,250
0.01	0.863	43	603	325	2,250
0.02	0.648	50	1,224	650	2,250
0.03	0.467	52	1,661	975	2,250
0.04	0.334	52	1,936	1,300	2,250
0.05	0.24	50	2,102	1,625	2,250
0.06	0.173	48	2,199	1,950	2,250
0.07	0.126	45	2,253	2,275	2,250
0.08	0.093	45	2,282	2,600	2,250
0.09	0.068	41	2,296	2,925	2,250
0.1	0.05	39	2,300	3,250	2,500

Inconsistent number of decimal places

Poor use of lines

Example 2:

Poorly Designed Table

Headings that are not in bold are difficult to distinguish from table body

Unit of measurement for C_p is not specified

Table 3 Heat Capacity

Compound	Formula	a	b	c	d	C _p
Carbon monoxide	CO	30.87	-0.01285	0.0000027	-0.0000000127	30.49
Water	H ₂ O	32.24	0.001924	0.000016	-0.0000000360	32.3
Carbon dioxide	CO ₂	19.8	0.07344	-0.000056	0.0000000171	21.96
Hydrogen	H ₂	27.14	0.0093	-0.000138	0.0000000765	27.41
Oxygen	O ₂	28.11	-0.0000368	0.000175	-0.000000107	28.11
Nitrogen	N ₂	31.15	-0.0136	0.0000268	-0.0000000117	30.75
Methane	CH ₄	19.25	0.05213	0.000012	-0.0000000113	20.78

Inconsistency in justification of text

Insufficient space between columns data to be distinct

Improved Table

Table 2 Inspection Cost Comparison for Three Inspection Alternatives

SAMPLING INSPECTION GUIDE				INSPECTION COST (\$)	
Proportion Defective in Lot [p]	Probability of Acceptance [P ₁]	Average # Inspected [n]	Sampling Inspection	No Inspection	100% Inspection
0.000	1.000	30	14	0	2,250
0.005	0.956	38	270	163	2,250
0.010	0.863	43	603	325	2,250
0.020	0.648	50	1,224	650	2,250
0.030	0.467	52	1,661	975	2,250
0.040	0.334	52	1,936	1,300	2,250
0.050	0.240	50	2,102	1,625	2,250
0.060	0.173	48	2,199	1,950	2,250
0.070	0.126	45	2,253	2,275	2,250
0.080	0.093	45	2,282	2,600	2,250
0.090	0.068	41	2,296	2,925	2,250
0.100	0.050	39	2,300	3,250	2,500

Note: N = 5,000; A = \$6.50; I = \$0.45

Sampling Inspection = [n, 1+(N-n)p, A, P₁+(N-n)(1-P₁), I]

No Inspection = [N, p, A]

100% Inspection = [N, I]

Detailed information in notes

Sufficient space between columns data to be distinct

Highlighted critical information

Appropriate labeling including units of measurements where applicable

Improved Table

Table 3 Heat Capacity C_p of Selected Compounds

Compound	Formula	a	b	c	d	C _p at T=298K (J/mol)
Water	H ₂ O	32.24	0.001924	1.06x10 ⁻⁵	-3.60x10 ⁻⁹	32.30
Nitrogen	N ₂	31.15	-1.36x10 ⁻²	2.68x10 ⁻⁵	-1.17x10 ⁻⁸	30.75
Carbon monoxide	CO	30.87	-0.01285	2.79x10 ⁻⁵	-1.27x10 ⁻⁸	30.49
Oxygen	O ₂	28.11	-3.68x10 ⁻⁶	1.75x10 ⁻⁵	-1.07x10 ⁻⁸	28.11
Hydrogen	H ₂	27.14	0.0093	-1.38x10 ⁻⁵	7.65x10 ⁻⁹	27.41
Carbon dioxide	CO ₂	19.80	0.07344	-5.60x10 ⁻⁵	1.71x10 ⁻⁸	21.96
Methane	CH ₄	19.25	0.05213	1.20x10 ⁻⁵	-1.13x10 ⁻⁸	20.78

Note: C_p = a + bt + ct² + dt³

Left-centered text cell content

Scientific Notation for very small or very large numbers to enhance readability

Consistent number of decimal places

Table title is concise and explanatory

Effective use of lines to enhance readability