A guide to incorporating figures and tables into technical documents

Technical data is often best presented using visuals, such as figures, tables, or graphs. When displayed properly, visuals can explain things better than text alone and allow the reader to better understand the information.

Guidelines for incorporating figures and tables

➢ Figures and tables need to be numbered sequentially.
   o The first figure that appears is labelled Figure 1.
   o The first table that appears is labelled Table 1.

➢ Graphs, sketches, images, diagrams, etc. are labeled as figures.

➢ Figures and tables should always appear as close to the relevant text as possible.

➢ All figures and tables are labeled using a **descriptive** caption.
   o Captions should be concise but informative.
   o Captions should be descriptive enough to allow a reader who does not read the entire text to gain enough information to grasp what the figure or table is showing.

Not acceptable	Acceptable
Figure 1: Velocity vs. Time.	Figure 1: Average sustained wind velocity at Cape Spear, 2005-2017.
Figure 2: Aerial photograph.	Figure 2: Aerial photograph of dam construction site.
Table 1: Material choices.	Table 1: Comparison of the structural properties of potential material choices used in spar construction.
Table 2: Cost.	Table 2: Breakdown of material and labour costs for the manufacture of the vehicle prototype.

➢ Captions are placed on the top of tables and placed at the bottom of figures.

➢ Visuals that have been copied from someone else's work must be properly cited and referenced to indicate their source. The citation should appear in the caption.

Guidelines for referring to visuals within the text

Before you add a figure or table to a document, you need to make specific reference to it within the <u>preceding</u> text. A figure or table should never appear before the text that refers to it, and you should not include a figure or table that hasn't been introduced or discussed in the text.

Never assume that the reader will make the necessary connections between the text and the visual. When referring to visuals in your text:

➢ Use language that describes what the visual is showing. For example:

- *"As <u>demonstrated</u> by the shape of the plot lines in Figure 1,…"*
- *"As <u>shown</u> in Table 1,…"*
- *"Figure 2 <u>illustrates</u> the relationship between…"*
- *"Table 2 <u>describes</u> the main differences between..."*
- *"There was a high <u>correlation</u> between … (see figure 3)".*
- *"The relationship between … is <u>indicated</u> by Figure 4"*
- *"The photos in figure 5 illustrate the various tools required to…"*

➢ Draw the reader's attention to the information or observations in the visual that you want the reader to notice by describing those features in the text used to introduce the visual. For example, you could refer to the nature of the graph below in several ways, such as:

- *"The sinusoidal nature of the crank velocity is illustrated in Figure 2".*
- *"As shown by the plots in Figure 2, the velocity function for the crank is sinusoidal".*
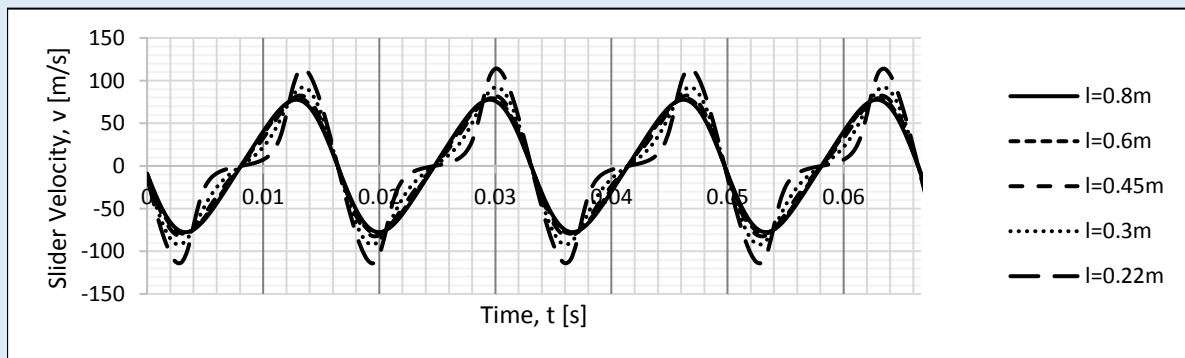- *"The crank velocity function is sinusoidal (see Fig. 2)".*

Figure 1: Slider crank velocity for four rotations.

➢ Always refer to the figure or table by its number. For example, don't say, *"As demonstrated in the table below…"*; refer to the actual figure or table number by saying, *"As demonstrated in Table 2…"*.

➢ It is acceptable to use either "Fig. 1" OR "Figure 1", when referring to a figure but always write out the word "Table".