**2D Engineering Drawing Tips and Tricks**

**Redundant views:**any view in addition to the minimum 2 views which doesn't give any additional information is considered a redundant view. This also encompass cross-sectional views. Cross sections are used when the part is really complex and with normal views and hidden lines if we cannot show all the features of the part.

**Centerlines:** can be used as a shorthand way of showing duplicate information. For example we can use centrelines to show that our part is symmetric and use symbols such as 2x M8 to show that there are two M8 threads (mirrored across a centreline) this prevents having duplicated dimensions. Also don't forget to put centrelines on all holes.

**Hole positioning:** if you have multiple holes that are positioned angular or symmetrical and you want to duplicate the dimensions you **HAVE** to use specific centerlines (circular or rectangular) find these on page 27 of your handbook and manual insert options of center mark at annotation tab of your drawing file in SolidWorks.

**Redundant dimensions:** Be careful to put adequate dimensions to clearly present your part features, this get tricky when you have centerlines and you repeat one dimension at several views so **recheck and recheck**.

**Threads:** If you have a thread **Do NOT** show the real thread (with pitches). You just need to show the symbol. Moreover use "MIN LG" where it is needed not for every thread, you use it only where you have certain depth of thread in the hole (I.e the thread doesn't fill the entire depth of the hole). Page 34.

**AS1100:** You need to indicate the standard you have used at the bottom right corner of the page (at the top right of the table) by adding a note: AS1100

Always recheck the font size required for each text that you add, page 8 of handbook, specially drawing name and number, and ensure that all text is in CAPITAL LETTERS.

You **should not** show hidden lines or tangent lines on the Isometric view and you **HAVE TO** show them on all other views.

This is not an assembly drawing. So, only one part is allowed.

Be professional! don't use pen

Do not print screen

Use cover sheet

Hope this has been a useful exercise to learn more and get ready to edit your drawings and take them to TAFE to build your pump parts.