

Support Sheet: Recommended AutoCAD Settings

The following is a list of recommended AutoCAD settings for DWG/DXF import into SolidWorks

For successful DWG/DXF import into SolidWorks it is very important that the following settings in AutoCAD be used:

Accuracy

What accuracy should be use in AutoCAD for successful import into SolidWorks?

Solid modeling uses at least 11 decimal places or higher. For 2D work it is recommended to use at least half of that (i.e. 6 decimal places or higher).

Line Properties

Are there any settings for the LINE properties in AutoCAD that are recommended for importing successfully into SolidWorks?

If you are designing in AutoCAD with a Black background please make sure that you choose a different colour for the lines other than White.

Dimensions

What settings should I use so that the dimensions created in AutoCAD can be used as SolidWorks dimensions?

In AutoCAD there is a parameter called Dimasso "dimension associative". The SolidWorks preference is to have Dimasso "dimension associative" = ON.

Scale

What settings should I use so that the DWG/DXF comes in at the right scale?

SolidWorks looks at the AutoCAD dimscale factor to control how large the dimensions will be displayed. In AutoCAD the default is dimscale factor = 1. Any larger scale factor will produce larger dimensions.



For example, if you set the $\text{dimscale} = 5$ the dimensions will be displayed 5 times larger than the default scale size that was in AutoCAD. The SolidWorks preference is to leave the $\text{dimscale factor} = 1$.

Model Space or Paper Space

Should I create my AutoCAD files in Model Space or Paper Space?

SolidWorks preference is to create all AutoCAD files in Model space. If you import a DWG/DXF that was created in paper space SolidWorks would place the imported geometry into a drawing view. An imported DWG/DXF that was created in Model space will be placed on a sheet.

Layers

What recommendations should I follow with respect to AutoCAD layers?

It is very important that you use separate layers for Annotations, Dimensions, Solid Lines, Hidden Lines, Centerlines, Borders and Title Blocks. This way you will have the option hide any layers that you don't need in SolidWorks.

