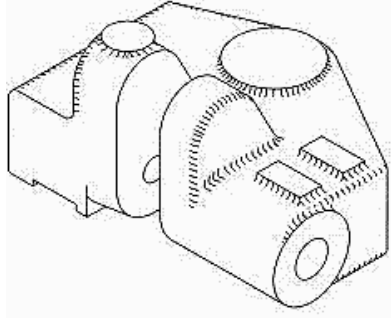


Facet REMOVAL in AutoCAD



There are several ways to remove the tessellation and isolines of facet meshes of AutoCAD 2004 and above, to create a silhouette model of a surface or solid model.

- One option is to view the model in a pictorial viewport and Explode the model and manually go in and Erase the undesirable lines. If you opt to do this, be prepared to devote some time to the task. SAVE THE ILLUSTRATION IN A FILE NAME OTHER THAN THE ORIGINAL SO AS NOT TO DESTROY THE 3-D MODEL!
- A second option is to use a combination of an AutoCAD command and system variable setting as follows:

The 3DCONFIG command provides a command line interface to the 3D graphics system's configuration settings. This command option offers an obvious set of options of [Adaptive degradation/Dynamic tessellation/Render options/ Geometry/ acceLeration/eXit] <Adaptive degradation>:

The 3DCONFIG command offers an undocumented set of advanced options at this point by entering a “V” for “adVanced”. This hidden feature offers a second set of options as: [Redraw on window expose/Cache viewport draw geometry/ Display lists/Fast hidden line only/Pixel Deviation/eXit] When the “Fast hidden line only option” is activated, isolines and tessellation lines are removed from the viewing screen. This will have no affect on the plotting of hard copy though.

The system variable (SETVAR) for the Display Silhouette (DISPSILH) will plot hard copy with isolines and tessellation lines removed. This command needs to be set to “1” for plotting hard copy and “0” for plotting soft copy such as DWF files.

- A third option is to use AutoCAD’s Render command’s Hidden option.

Attention may also need to be given to the Mview command’s Hideplot option. AutoCAD will remove hidden lines from viewports at plot time after using the Mview command from Paper Space back to Model Space. To do this, enter Paper Space and use the MVIEW command’s HIDEPLOT option and select the viewport you desire to remove the isolines and tessellation lines from. You will need to make sure the viewport is unfrozen and turned on if it is on its own layer prior to executing this command. Don’t forget to check the PLOT command’s “Hide Paper Space Objects” option before plotting!

AutoCAD 2007 and 2008 offer a “Snapshot” feature to frame a view of a model from a specific viewing point.