

# Command and Feature Comparison between BricsCAD and AutoCAD

- Executive Overview -

There is a local pickup truck dealer in my area that buys and sells “as good as new” used trucks. Their slogan is “If you cannot see the difference, why pay the difference?”.

That is a valid statement.  
Look at the following two images:

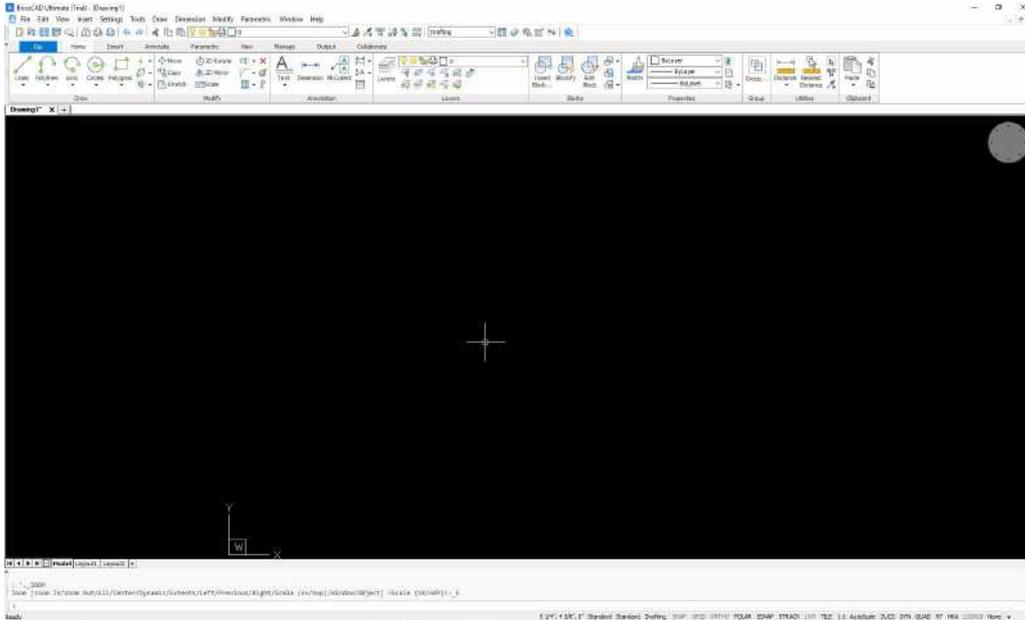


Figure 1 - BricsCAD

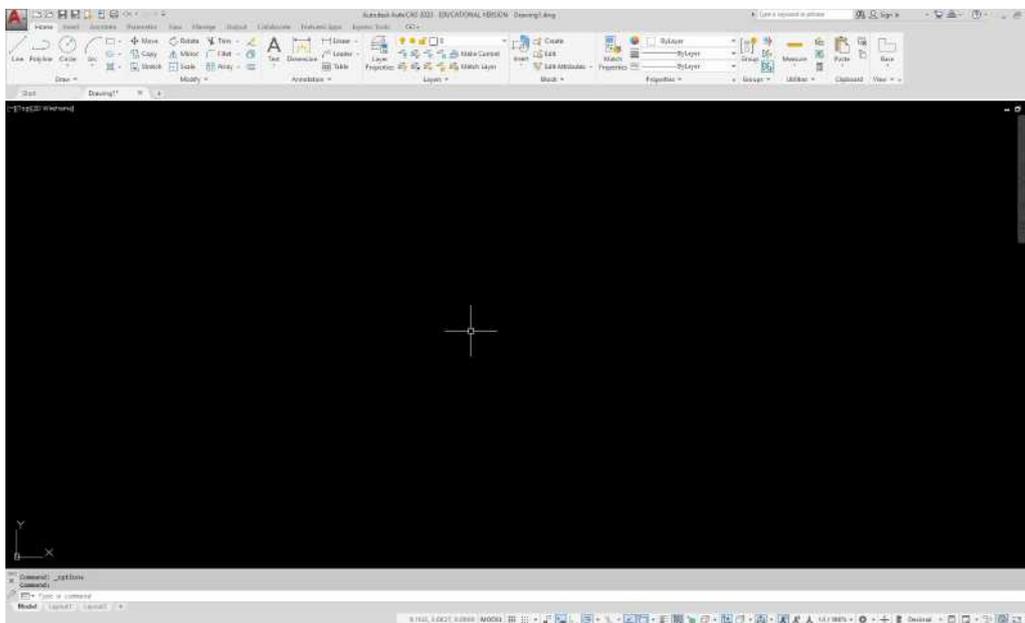


Figure 2 - AutoCAD



The applications are nearly identical in appearance. A casual AutoCAD user would have to look rather closely at his or her screen to determine that BricsCAD and not AutoCAD is the current application. The same could be said for the casual BricsCAD user. The similarities do not end at the initial appearance. This document will look more closely at some of these similarities and differences so as to allow those people responsible for software purchases to make an informed decision.



### Capabilities

Both applications are very good at what it is supposed to do – allow drafting and design personnel to create designs efficiently and document those designs just as efficiently. As I reviewed both applications I could not say that one application was decidedly better than the other application in any and all concepts that I compared.

Switching from one application to the other should not have a negative impact on design and documentation production. Almost every tool is identically duplicated in the other application. In the instances where a tool does not behave identically, a user will intuitively discover how the tool is supposed to work.





## Interface

The comparison between the applications was based on examining the tabs, panels, and tools on “ribbon” along the top of the graphics area of the applications. With this aspect of the user interface, there is little difference from one application to the other. A trained user of one application would not have to “go searching” for the same tools in the other application. Observe the following images of the Home tab of the ribbon in each application (the images have been split into two halves so as to be visible in this document):

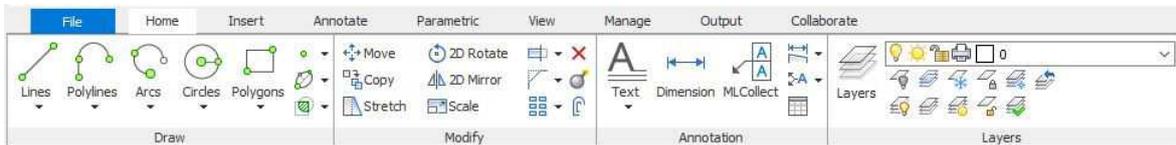


Figure 3 - Left half of the Home tab of the ribbon in BricsCAD

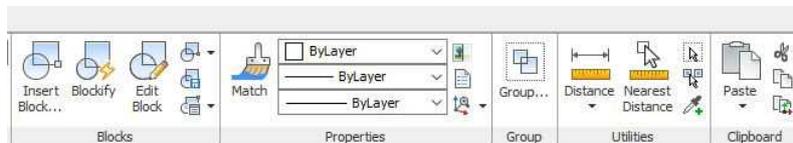


Figure 4 - Right half of the Home tab of the ribbon in BricsCAD

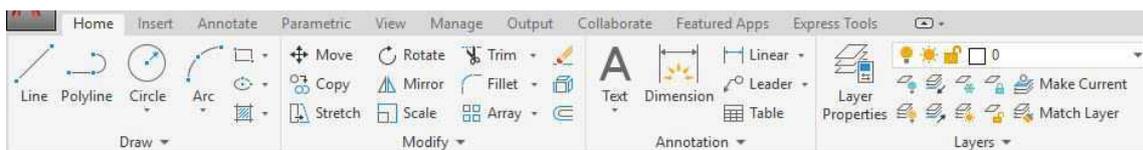


Figure 5 - Left half of the Home tab of the ribbon in AutoCAD



Figure 6 - Right half of the Home tab of the ribbon in AutoCAD



All of the tabs are named identically, though AutoCAD does include a couple additional tabs. All of the panels are named identically on each of the tabs, and all of the tools are located in the same general location on each of the panels.

The BricsCAD panels appear more organized than the panels in AutoCAD. AutoCAD locates some of the less often used tools on a “hidden” panel extension under the panel title bar, requiring two mouse clicks to activate the tool. There is no organization as to what commands are located on this panel extension. These tools are also usually unlabeled icons. The user is forced to remember which commands are on this panel extension and what the icon actually looks like. While BricsCAD also has tools that require two clicks to activate, these commands are located within an appropriately grouped together series of commands on a “fly-out”. For example, in BricsCAD to get to the DIVIDE tool (which places points equally spaced along a selected object), a user selects the drop down arrow next to the POINT tool on the Draw panel. A fly-out appears that has the labeled DIVIDE tool, along with other POINT-related tools. In AutoCAD, a user must remember that the DIVIDE tool is on the panel extension, then remember what the icon looks like for the DIVIDE tool. If the user cannot recall what the icon for the DIVIDE tool looks like, the user can pause and hover on a tool until the tool tip appears. This is not an efficient means of tool access, until the user repeats the sequence often enough to more easily recall the procedure.

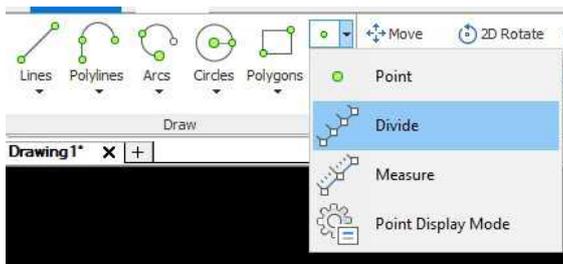


Figure 7 - Activating the DIVIDE in BricsCAD

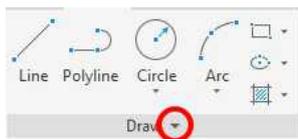


Figure 8 - Activating the DIVIDE tool in AutoCAD - first step



Figure 9 - Activating the DIVIDE tool in AutoCAD - second step

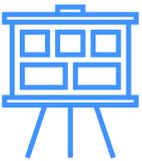




## Customization

The macro language used in BricsCAD is identical to that used in AutoCAD. Customized User Interface (CUI) files created in AutoCAD can be imported into BricsCAD.

LISP files created in AutoCAD can be loaded and used in BricsCAD. BricsCAD has its BricsCAD Lisp editor, just as AutoCAD does. Startup routines (ACAD.lsp, ACADDOC.lsp) created in AutoCAD can be imported and implanted in BricsCAD – basically the files just need to be renamed. BricsCAD supports VBA, just as AutoCAD does.



## Training New Users / Migrating Existing Users

Training new users in the use of BricsCAD is, of course, the same as training new users to use AutoCAD. Perhaps BricsCAD can be a little easier for a new user to “pick up” because the interface seems more organized. Experienced AutoCAD users will easily migrate to BricsCAD. Anything that can be done in AutoCAD can be done in BricsCAD – though some tools might be located in a slightly different location.

Some ways of working with BricsCAD rather than AutoCAD will take a little “getting used to”. Accessing tool options is a little different in BricsCAD vs. AutoCAD. For example, when wanting to access command options while using the line tool in AutoCAD the user can right click with the mouse to make a shortcut menu appear.

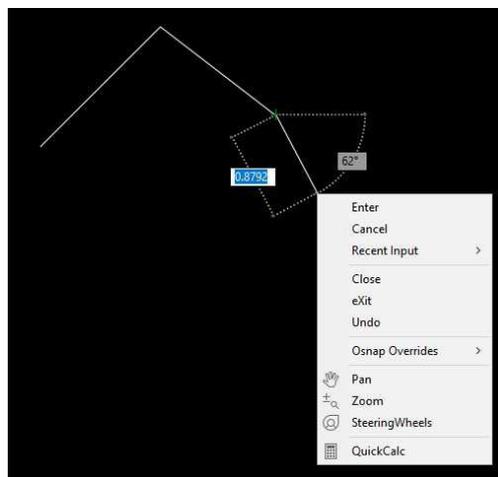


Figure 11 - Line tool options, always visible on edge of screen



When wanting to access command options while using the line tool in BricsCAD the options for the tool are already on the right hand edge of the screen. Additionally, BricsCAD provides other options such as Angle, Length, and Follow in that shortcut menu. AutoCAD has similar ways of accessing these options, but BricsCAD allows for quicker access to these options.

### **Conclusion:**

BricsCAD is an extremely viable option when considering CAD software.

A trained user base can easily migrate to the new platform. New users can be trained more easily on a user interface that is more organized. Existing customization and programs can be implemented easily. There appears to be no downside if a switch to a new CAD application is being considered.