



Drawing Board & Beyond

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Craig has used Autodesk software all of his working life starting with AutoCAD R12 16 years ago at Nissan Motor Manufacturing UK Ltd. Now working at Imass Ltd, the UK's number 1 manufacturing reseller, his position of Senior Training Consultant leads him to all areas of the UK to clients with many different industries. Craig spends most of his working week teaching Autodesk Inventor or AutoCAD, but also teaches AutoCAD Mechanical and Autodesk Viz, and is a member of the UK ATC Advisory Board. Craig is married with two daughters, and spends his spare time with his family, watching Newcastle United and playing badminton.

I am a trainer, I teach many different Autodesk Products, ranging from Autosketch all the way upwards, and one thing frustrates me. 3D, yes that's right 3D frustrates me. Now please do not get me wrong I love 3D, given the chance I would never touch 2D again, what frustrates me is people's lack of knowledge of 3D.

Picture the scene, an AutoCAD Update training course, I would estimate 30-40% of students do not even know that AutoCAD has 3D capabilities, and out of the other 70% only 5-10% are actively using those capabilities.

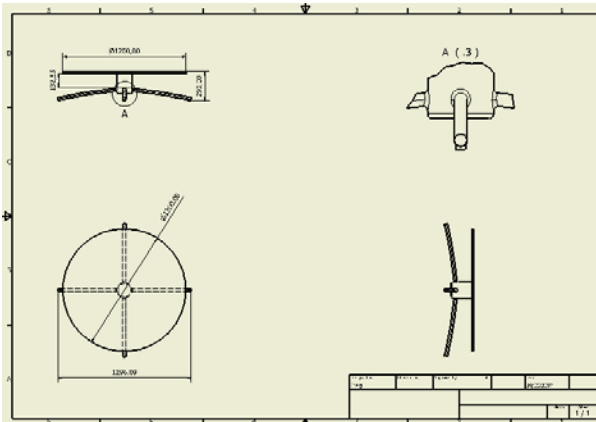
Approximately 25 years ago, the majority of draughts people would be doing their work on a drawing board with a big bit of paper and lots of pencils, would any of you now contemplate going back to a board? I do not think so.

3D is the next logical step after a 2D CAD system, it's easier to understand from a non drawing point of view, it will automatically give you the 2D drawings, I could go on for days preaching about 3D (and I probably will during my tenure on the board of directors).

There are many 3D packages to suit what you may need, my personal favourite is Autodesk Inventor, but there is probably one tailored for you whether that be Inventor, Revit, Max or Civil 3D (the list goes on and on).

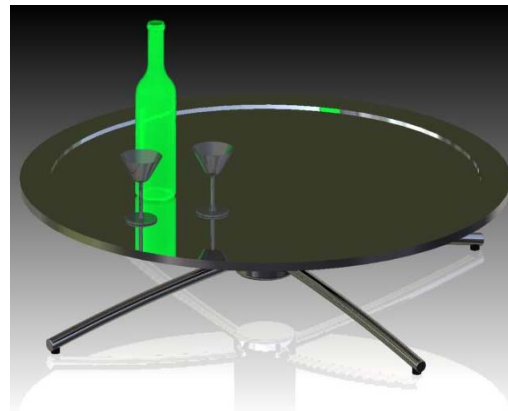
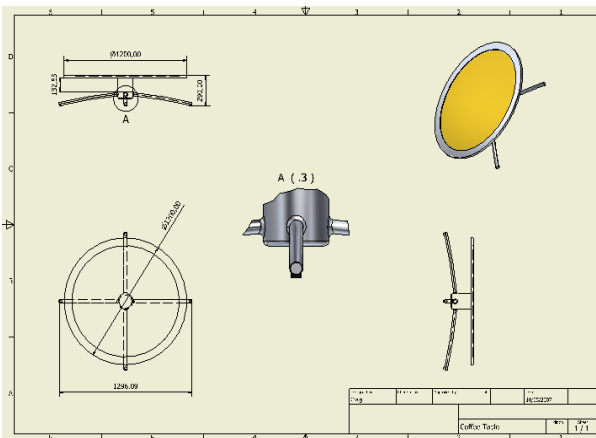
Imagine if you will this scenario; you make coffee tables, and you want to show prospective clients your work. Now at this stage your coffee table is still in design stage so you will not be able to show any prototypes.

At this point in the design process, you would probably only be able to show the drawings that you have produced (this is from the 2D point of view), so below is the kind of drawing you might show.



I have purposefully missed out the isometric view, because how many people do not draw them because they are either too time consuming or too difficult to draw.

Now we will look at the 3D point of view, in addition to the 2D drawing similar to the above drawing, we would be quickly to produce a shaded isometric view and renders to aid the presentation.



How long do you think it would take to produce these extra views??, Well it took 6 minutes extra, and 2 of those minutes were just waiting for my PC to render the file.

In my scenario I have tried to pick a generic subject, we all know what a coffee table is; Inventor (which I used to create the drawings) is more tailored to the mechanical industry whether you make electrical switch cabinets, nuts and bolts, tubing and piping or even cryogenic chambers. However I know of many people using Inventor who make furniture, bathrooms and many many more diverse industries.

I hope you have enjoyed my brief look into the past, present and not the future, I aimed with this article to show that there is another world out there past the pieces of paper and the world is in 3D.

Please feel free to contact me to discuss this article, shoot me down in flames if you so desire, at least then you will be thinking about 3D.

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