Lists of CAD programs free to download.

Several CAD programs are free to download and use. Sometimes they are limited trial versions, but also free open source projects. These open source projects are the most interesting because they are full functional and, in some cases, real professional. Watch out what the purpose is of the program: More graphical 3D animation and rendering or more technical. Follow the link:

https://www.scan2cad.com/cad/14-top-free-cad-packages/ https://windowsreport.com/free-3d-design-software/ http://www.craftsmanspace.com/free-software/free-3d-cad-software.html

Finding files

There are many CAD files to find on the internet. Productions tools, spare parts, toys, DIY things, etc.

Before you start looking at those files, first download an appropriate reader of the files, this can be one of the above mentioned CAD programs. Notice that it is not always possible to translate one file format to another. It is wise to start with some study of 3d CAD design in order to understand the difference between NURBS and Polygon Meshes.

3D print files mostly are .STL files. If you want to send those files to a service provider for printing and you want to print in high resolution, those files can be very large. Better is to use an original CAD format, STEP or IGES are widely used. When you really want to send a STL file per mail you have to compress it. In that case, a good tool for this is the program Minimagics from Materialise:

<u>http://www.materialise.com/en/software/minimagics</u> After registering, you can download the free software. With this software you can view and compress STL-files. (they hope you will buy the very good, but expensive professional program Magics which is a perfect STL-based pre-production software. We use this for checking and repairing the files before sending them to the printer = not for the designer so also not for you)

Places to find a lot of different files: https://www.thingiverse.com/ https://grabcad.com/

3D printing magazines

Information/magazines professional 3D printing https://www.tctmagazine.com/ http://3dprintingindustry.com/ https://www.additivemanufacturing.media/

In most countries you will find good magazines in your native language. Just Google for that.

3D printing Fairs

Most important professional 3D printing fair: <u>https://www.mesago.de/en/formnext/home.htm</u> On Formnext, Frankfurt - Germany, all world players are present, you will manage to get through within one day. In the past this was the Euromold fair <u>http://euromold.com/</u> This fair has lost a lot of importance. I heard that for professional visitors it wasn't really interesting anymore.

All over the World there are a lot of interesting more or less local fairs and congresses like the TCT events. If in your neighborhood, this can be very interesting. Sometimes they pretend to be a world fair. Best solution is to watch the list of exhibitors. If the large players are all present, you can bet that it is an international trade fair. Look for: 3D-systems, EOS, Objet, HP, Voxeljet, Stratasys, Envisiontec, Concept laser.

If you see only names as: MakerBot, Ultimaker, Aurora, Formlabs and so on, it is most likely that you have to deal with a fair for hobbyists.

More information

In general, you can Google along for more 3D printing info and find a lot of interesting information. The 3D printing community is very much web-based, so if it exists, you will find it on the web.

It was a pleasure for me to participate in Combois again.

If any further questions, don't hesitate to contact me at klauss@tentron.nl

May 2018

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