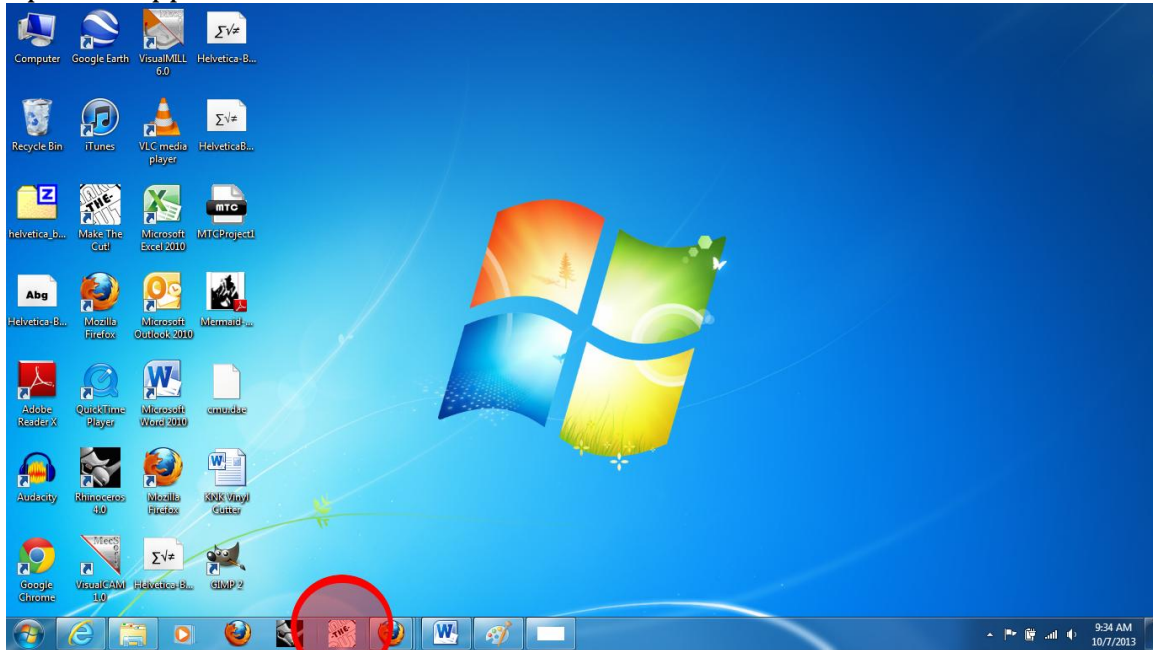Step by step cutting on KNK MAXX

Software
Make the Cut!, a vector designing software rich in functionality, can be used to develop a file for cutting into materials like vinyl and paper. You can also import files from applications like Adobe Illustrator , Corel Draw, Rhino, etc.

This tutorial covers importing vector art and operation of the KNK machine. To learn more about the features in Make the Cut! you can read the online user manual at http://www.iloveknk.com/0um/KNKZing/KNKZingwithMTCUserManual.pdf

Open the application "Make the Cut!"

Once you have a file created/ imported, there are 3 ways to cut files: Knife Blade, WYSIWYG (What you see is what you get), and Printer and Cut. The CSU Fab-Lab promotes that you use the Knife Blade Application

Knife Blade: The most common setting and what we will be covering in the tutorial.
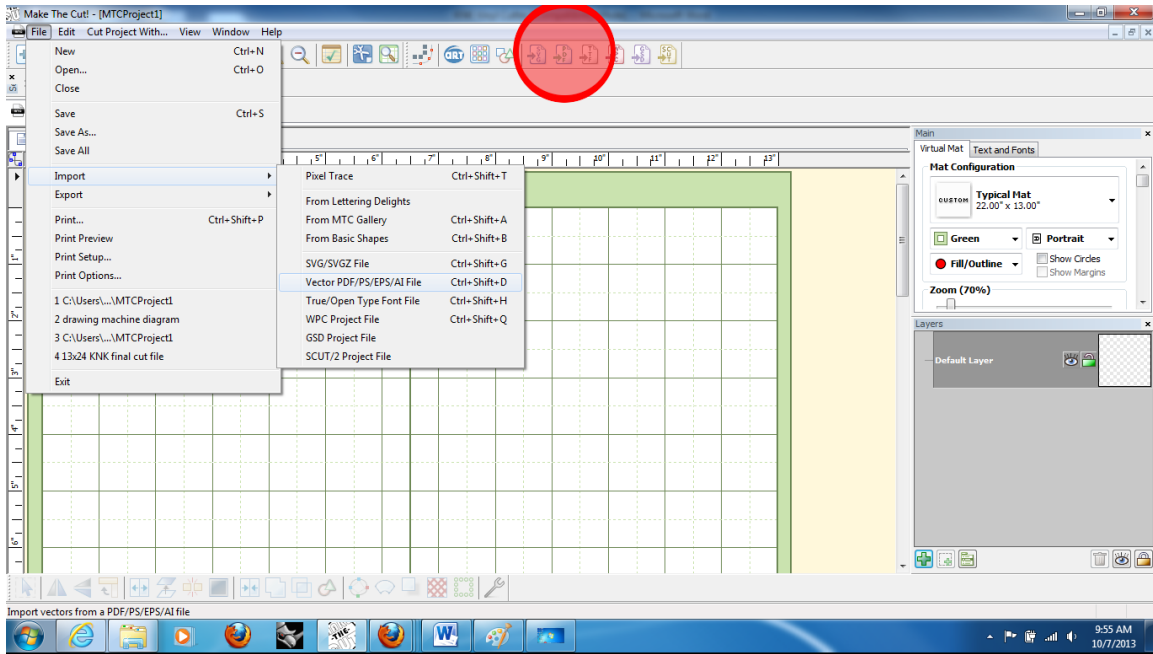
WYSIWYG:
Is an abbreviation for What You See Is What You Get. This is the mode recommended when you need to cut shapes in very specific locations on your material (such as custom cut outs on greeting cards).
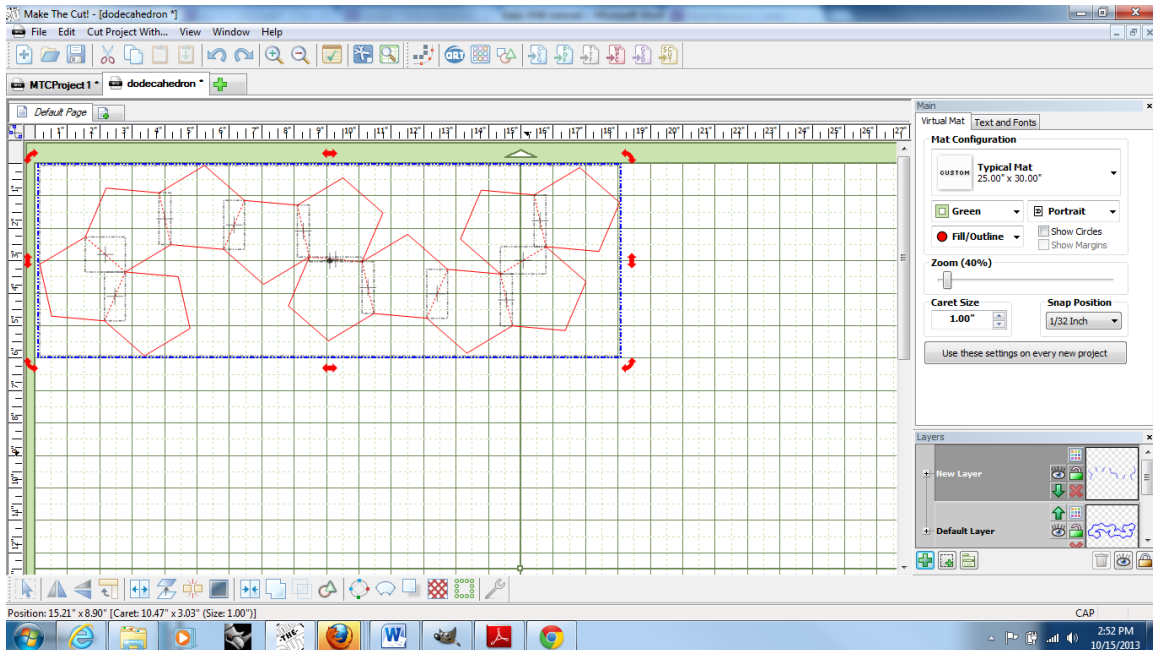
Print and Cut:
This mode uses registration marks to align cut paths to a printed image.

Import a vector file **File>Import>Vectore PDF/PS/EPS/AI**
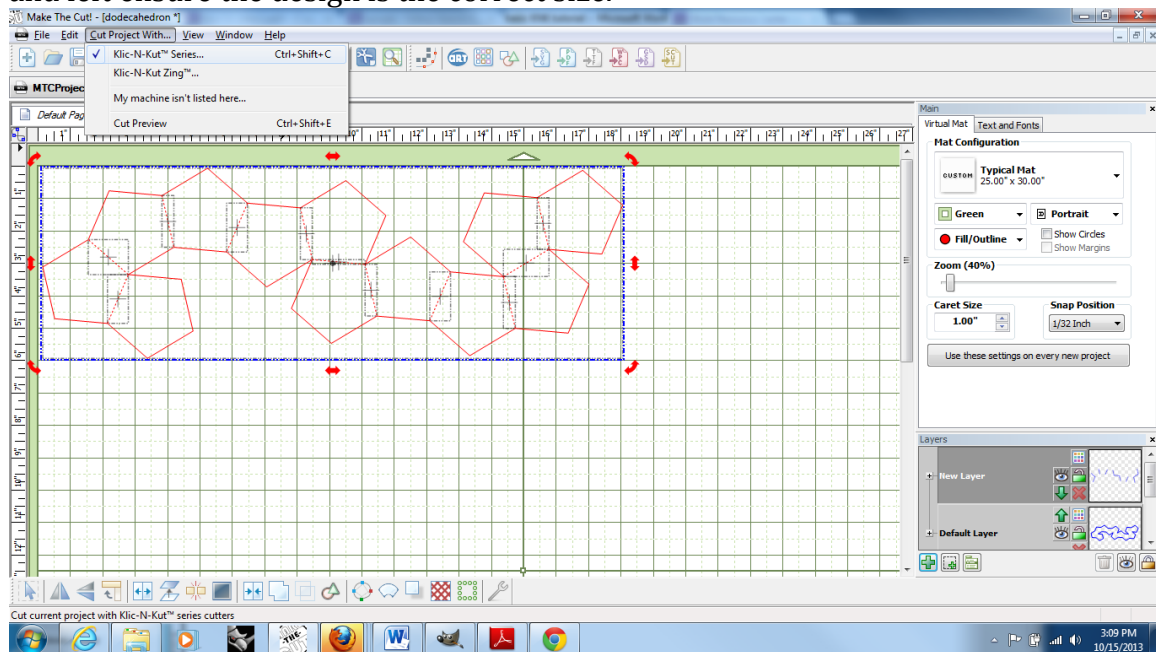or by clicking the pdf icon.

Select your file and click to place it in the workspace.

Once you have your object placed it can be scaled and rotated. Click the object to
reveal different transformation controls.

In knife point mode the cut will always start from the bottom right corner of the design regardless of placement on the virtual mat. It is important to make sure that the design will fit on the sheet of material it is being cut from. Use rulers at the top and left ensure the design is the correct size.
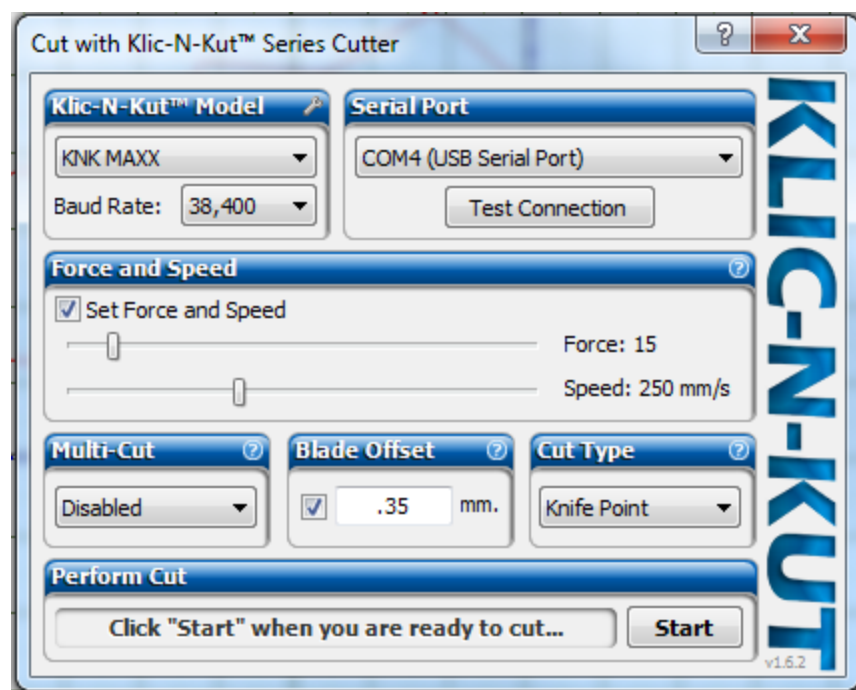

To cut the design go to
Cut Project With…>Klic-N-Kut Series or **Ctrl+Shift+C**

This will bring up the KNK settings window.

The Most important settings for cut quality are force and speed.

Multi-Cut is used for thick material that requires multiple passes.

A chart of recommended setting can be found on the desk top of the KNK laptop.
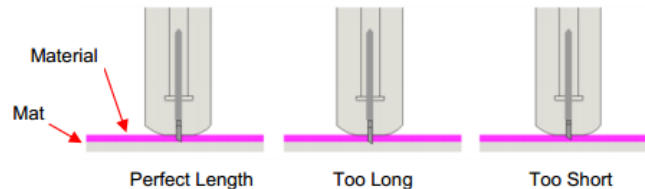
Hardware

The blade height for the KNK is set manually.

Turn the back of the blade holder clockwise to extent the blade and counter clockwise to retract the blade.

Set the Blade Length/Exposure Correctly

- When setting the **blade length/exposure**, hold the blade holder up next to the material before pressing the material to the mat, so that you can more accurately set the length to match the thickness of the material. For really thin materials, like vinyl and paper, just the very tip of the blade will be protruding from the bottom of the blade holder. In fact, you should just barely be able to feel it with your finger and not be able to see it very well, if at all.

- A good way to test your blade length is to fold a piece of the material onto itself and then cut a line into the material by hand, as shown in the video linked in this section. If the blade cannot cut through the material, you will need to extend the blade. If the blade cuts through the material and cuts into the next layer, you need to retract the blade. If the blade cuts through the material but does not nor scratch the layer below, you have the perfect length.

- Having the blade fully extended will <u>never</u> result in better cutting. In fact, it can cause skewing, tearing of the material, damage to the blade, and damage to the mat.

- When conducting the test cut, be sure to check your mat for cut lines after the test. You should be able to set the length to get clean cuts but with no visible markings on the mat. If you do see cut lines in your mat, retract the blade length by turning the top of the blade holder ¼ of a turn counterclockwise. You do not need to remove the blade holder from your KNK! Then repeat your test cut.

Material

Mat

Perfect Length   Too Long   Too Short

(Page 25 from KNK user manual)

After adjusting the setting and blade height run a test cut on your material.

Turn on the KNK Maxx with the toggle switch located by the power cord on the left.
Adhere your material to the sticky mat and lock down with the rollers
Press the Online Button
Use the arrow buttons to navigate to the desired test location
Set the origin with the center button
Press the test button
Inspect the test and adjust settings as needed.

Sometimes the KNK machine interprets files in an unexpected way. It is recommended that you always run a piece of scrap material first.

MAKE THE CUT!