# LinkMotion and Instant Engineer 14:

**After you install LinkMotion software and set up all settings launch Instant Engineer 14 software.**

## Important notes:

**Zero or thinnest line width and No fill are the most important things to remember when you are designing a file for Vector or line output. Line type of output is required by rotary tool machines like engraving, routing, and CNC. Do not fill shapes with bitmaps for any line or vector output. Raster or bitmap fills are used by laser machines. It is important to remove fill when you import scanned files.**

**Solustan's LinkMotion driver tests the primary function of accepting hairlines (vector lines) generated by popular application software packages for job design. It is important for the user to learn the job design software and to make sure that the jobs are properly prepared for successful execution of a job.**

**Do not check Design Using Plate Size feature in LinkMotion Material properties.**

**Solustan's liability is limited to the purchase price of the LinkMotion driver software.**

It is necessary for the user to acquire the application that will be used for the job design. There are many books of various levels available for all these popular applications. This document is simply a guideline to point the user in the right direction. We welcome feedback from our users. Share your findings with us and we will include them here for all users benefit.

Following are helpful details for a user of Instant Engineer design software:

## (1)  How to do the basic setup in Instant Engineer 14 application?

Launch **Instant Engineer 14** application.
When it creates a page you have an option for feet, mm and unitless. We selected **Unitless**.
Go to the **File menu** and select **Page Setup**.
Here click on the button for the **Printer**.
Under printer name select the driver name same as selected in **LinkMotion**.
Click on the button **Properties**.
Make sure to select either **Portrait** or **Landscape** depending on table size you have on your machine.
Click on the **Advance** button.
Under the page size make sure to select **Table size**. You may need to scroll all the way to top or bottom to see the option of Table size.
Click on the **OK** button.
Click on the **OK** button again.
Click on the **OK** button for Page Setup also.
In paper Size, you should see Table Size with your machine's X and Y direction dimensions.
Here in Page Setup, you can declare 0.0 margins for Left, Right, Top and Bottom to get full machine's

Table size.

Click on the **OK** button.

Now you can create your design understanding all the features of this application. This application has Windows standard graphical features as well as some CAD application features.

After you are done with the design, select **Print** from the **File menu**.

In the **Instant Engineer, Print command** dialog box makes sure that you see your **LinkMotion driver name** under the printer name.

In the area, section unchecks the buttons for **Center Drawing** and **fit the paper**.

Now, in the Print Size selection scale should be 1.0 if you want the same size output as what you have designed. If you choose larger scale you need to make sure that it fits on your machine's Table size.

**It is extremely important to place print offset of minimum .0005 for both Horizontal and vertical areas. This application does not allow you to set up a page size same as your machine's table size. It takes your design and places in the top left corner. This is the reason why it is extremely important to have offset values in both directions. If you are doing your own tool offset lines in your design then you may have to place larger print offset values to make sure your design is within your page size (Table size). Print Preview allows you to see your output before you send it to the machine.**

If you go to the **Paper menu** you should see your selected orientation, a paper size to be the same as your Table size and all margins to be 0 (zero).

Select **Type menu** and here deselect **Dimension, Text and Arrow buttons**.

Here Pen width should be always 0.00.

The user can always select Preview button and make sure to view the location of the output in relation to your Table size.

Last part is to click on the **Print button** from the file menu and it should output on your machine.

Using windows True type fonts for the output requires to always check Vector box. It is not necessary to check this box for the raster output.

Color selection should be designed in different layers and make the color selection in layers for proper color selected outputs of LinkMotion.

Printing number of copies is respected by LinkMotion driver. Machine tool goes back to 0, 0 position after each output and starts the next copy.

Some of the fills also work with LinkMotion for the output. We have not done testing for each and every possible output.