

Screen print artwork guide

Screen Print Artwork Guide sheet

The following are some pointers to help you get the most cost effective and efficient results from our screen printing service.

Time was, when screen printing screens were produced on wooden frames and once used were then stored away. These days, the screens are made on aluminium frames, with the screen being made by coating the frame in a photo sensitive emulsion, then exposing it to UV light. The screen is then washed off and only the exposed area remains. Once the screen has been used for the job, it is then washed down and is ready for re-use.



Over the past few years, in many respects, artwork production has become easier with the availability of low cost graphics packages. There has also been a degree of crossover between CAD and graphics packages and we have been able to help a number of our customers exploit this.

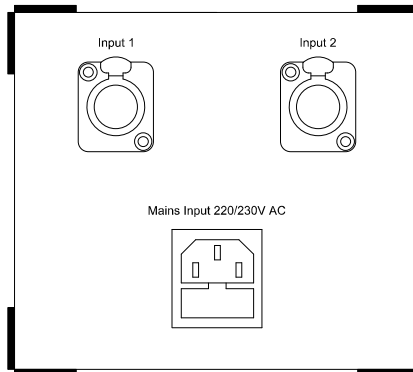
General tips

- If you are providing your own artwork films, these should be 1:1 film positives, with emulsion uppermost. The areas of the film that are to be printed should be completely opaque and not contain any shaded or halftones.
- If you are providing files for artworks for "film production only" we will assume that no work is required on the drawing and that it can be passed directly to the image setter for film production. We can work with files in a number of formats with EPS probably being the most popular.
- If you are providing your artwork in a format such as CorelDraw, don't forget to include any unusual or custom fonts, with the artwork file. Alternatively, it maybe worth considering converting the drawing to curves before sending it, as this will avoid potential problems with fonts.
- In most cases, it is not possible to create master film artworks from colour jpegs or other forms of bit maps, the drawing needs to be vector based.



This diagram illustrates diagonal line magnified several times to show detail.

- It is easy to forget about fold lines when positioning text, especially when it is close to a folded edge, so it may be worth double checking that the text doesn't fall into an area that forms the start of the fold.
- Line up markers are used to align the screen to the work piece during the screening process. Ideally we prefer these to be as shown to the right, with the marker touching (but not overlapping) the panel.
- Just as for mechanical drawings it is really helpful if artworks include a drawing number, name, revision number/level and screen print colours, so that all this information be included on the physical film. Artwork/file names such "panel" or "screen-print" are OK to use once, until the next job comes along, at which point, confusion can creep in.



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There are many situations where it is possible for the artwork to be created within the CAD mechanical drawing, as long as the file can be stored or exported in DXF format (or indeed any other suitable vector format). This has the advantage that the mechanics and screen print information can coexist and it is therefore easy to see if any mechanical changes have an impact on the artwork.

Over a period of time we have developed techniques for converting these files into EPS files, that can then be fed into an image setter. As with any file conversion process, there can be anomalies, so based on our experience, we have drawn up a list of a number of “ground rules”, which should ensure reliable results.

- Everything to go on the film should be on the same CAD layer, including if possible, the drawing name and number, revision level and colours to be used for the screen print. (It is OK to include other layers within the supplied file, as we will turn them off before producing the film).
- All text should be entered as “single line” (as opposed to “multiline”) text.
- The text alignment should be left, centre or right, as opposed to top left, top right, middle centre etc.
- All text that is to be printed should use TrueType fonts.
- AutoCAD uses text Styles. Only one font should be used in each Style. In house, we tend to give the Style the same name as the font, so for example we will create a Style called “Arial” that uses the Arial font. This also applies to bold versions of the same font, so if we require Arial Bold we will set up a separate Style called “Arial Bold”.
- Shapes and logos can be also used but need to be drawn in the CAD package (as opposed to being imported jpgs or similar). The shape out line should be moved to a different layer so that only the fill is on the artwork layer.
- All lines should be polylines of at least 0.2mm thick
- Drawings should be in model space as opposed to paper space.
- Ideally, the drawings should have a scale of 1:1.
- When choosing character heights and font types, consideration should to be given to the finish that is to be used. Font sizes down to 6pt can be used, but care is needed when printing onto spatter or other textured finishes.