

Graphic Design, Typesetting, Picture Research, Pre-Press & Print

Preparing material for print layout Common problems and practical solutions

Printing considerations

Print methods

The method you wish to use for printing should be discussed and considered prior to layout of any publication. This choice effects the layout directly and it is expensive for the publisher if the designer has to relayout a publication because the print method chosen makes the initial page design inappropriate.

Some general considerations to take into account are:

Litho or Digital?

The method of printing will be an important cost consideration, depending greatly on the planned 'print run' (ie the number of copies one wishes to produce). Further details on the reasons for the differences in these print pricing structures can be found below. The immediate question is more a practical one – one of making the designer aware of the chosen method so that image settings can be set up to use the appropriate colour spectrum settings, page numbering sets etc.

Binding

This is a key final element of publication production – whether the publication is to be, for instance: *perfect bound* (like a typical book with a 'spine'), *stapled* (using staples – like a typical small magazine finish), or *wiro-bound* (using a combination of holes punched into the collated pages and curved wire – so that the open document pages can be laid flat).

These differing approaches to binding directly effect the space that has to be taken into account when setting the inner edge of the resulting printed pages.

The differing approaches effect what multiple of pages the designer/layout person should be aiming for to achieve a 'printer's multiple' suitable for press-printing – and whether the cover is to be printed separately or an integral cover is planned.

Colour choice

Colour choice makes a huge difference to print costs if one is, for instance, printing many copies of a publication on a litho press. On the other hand if one intends to only print say 100 copies of a publication on a digital press it make no difference in price if the text pages of the document are printed in full-colour, with a limited spot colour or just in greyscale.

It should be an obvious point though that the designer/layout person will need to know one's colour intentions prior to laying out that publication.

Paper choice

Your paper choice – usually a personal quality and/or environmental decision – will also effect the choice of ink use directly and therefore the designer's publication settings. It will also directly effect the quality of the printed material – the design and can only be as good as the material it is printed with.

Print choices can seem bewildering - but they should not be once, a good printer is aware of your needs. They should be able to clarify and assist you as to what options are most appropriate for the budget you have available. Any good designer/layout person will also be able to advise and provide recommendations for quality printer's they will already know. A designer should know the print process to do the work they do - unfortunately this is knowledge has declined as younger designers, working primarily with newer online technologies, have not had the opportunity to learn about print technology on design and related educational courses.

A few notes on Digital v Litho print

Digital printing is a recent and still rapidly changing development of print methods. it opens up the possibility of very short runs of publications – and 'print on demand' opportunities.

Digital Printing is still a developing technology and designers were, rightly, very wary of the wildly varying quality and colour accuracy of Digitally printed material. It is improving rapidly but we have to offer one more word of warning – unfortunately the resulting automation of the process has also led, to an extent, to a de-skilling of the people that operate the machinery – That also effects quality. We strongly recommend time-served printers.

Traditional Litho Printing means that print costs 'per copy' are reduced the more one in printing in a single print run. One is paying for, in effect, the initial expense of 'setting up' the press and of lining up the sererate printing plates. The material costs of ink and paper are, relatively, low – they not the main consideration. Therefore the more you print, the more you spread the initial costs of the print run over an ever greater number of individual copies of that publication.

Digital Printing on the other hand is, to use a limited and generalised but – hopefully – useful analogy, a bit like printing to a large version of one's home inkjet printer. The cost of printing is primarily the material cost. Each individual book will cost the same whether you print one copy or 10,000 copies. The big advantage is that one can, if necessary, print a single book!

What this means practically? – It means very short print runs of a publication are much cheaper to produce on a Digital Press. Long runs are much cheaper (relatively...) to print on a Litho Press. From our experience though, many of our customers fall 'somewhere in between' – 500 copies of a 72 page A5 book can prove to be as expensive using either method.

Where costs, storage and/or likely sales are important issues one should also consider these when making that print choice, of course.