

Printing Plates / Blocks

Metal or Polymer Plate?

There is no doubt amongst professionals that the best results achieved in hot foil printing are by using metal printing plates (see image number 1).

Metal plates are usually available in Zinc, Magnesium or Copper. Out of these three types of metal, Magnesium plates are the most popular.

Image number 2 shows an example of 'Polymer Plates'. These are made from a special plastic material designed to withstand 'high temperatures'. The polymer (plastic) coating is mounted onto a very thin piece of metal.

Metal Plates cannot be made in-house whereas polymer plates can be made in-house using a special light box and various other chemicals. We can and have indeed supplied such light boxes for many years for various applications, including the production of polymer hot foil printing plates.

However, we now have now had sufficient feedback from users of such systems spanning over many years and have now decided **not to actively promote** polymer plates for hot foil printing.

Whilst polymer plates are satisfactory for some basic applications (and we had always sold our polymer plate makers in the past on this basis), we however felt from the feedback which we have received from users over a period of time, that the time taken to make polymer plates; and more importantly the **lack of quality** achieved by novices grossly outweighed any benefits one could reasonable expect to achieve from making one's own polymer plates.

Please do bear in mind that we still do sell plate polymer platemakers for various applications (low cost and those with built-in vacuum system) and as a business, we would naturally wish to benefit from selling you a such a system, but not at the expense of the number of drawbacks which could frustrate and hold our customers back.

These are some of the **drawbacks**, and some of theses have been reported to us by those who have been making their own polymer plates:-

A) It can take around 40 minutes to make a polymer plate. Whilst the cost of making a polymer plate might be about £3.00, a high quality metal plate of a similar thickness can be purchased for about £8.00. A thicker and even more durable plate (1/4") would cost around £15.00 for a standard business card size. Could you use 40 minutes of your time more profitably than the 'saving' of £5.00 and whilst being able to achieve a better quality print with a metal plate?



Image Number 1: Magnesium Hot Foil Plate



Image Number 2: Polymer Hot Foil Plate

B) Materials used in making polymer plates have limited shelf life thus potentially leading to wastage.

C) Scrubbing out polymer between and within letters is sometimes difficult (especially when using small typefaces).

D) Incorrect washing/scrubbing of plates or insufficient drying can leading to the plate turning 'milky' and thus letters breaking up (see image number 2).

E) If polymer plate is not fully dried out, then heat is unable to transfer sufficiently through the plate, leading to poor quality foil printing.

F) Polymer plates are good only for between 1500-2000 impressions and will deteriorate if not used for a while. Magnesium plates on the other hand will last for very many years and enable you to print in excess of 50,000 print runs.

G) Printing intricate details or small typefaces is a 'no no' with polymer plates. It is very difficult to get achieve fine print quality with polymer plates.

Please note that some of these problems are experienced by beginners due to their lack of experience, but the majority are very much down to the nature of a plastic (polymer) plate.

When you purchase from us, we will give you details of plate making companies who can make high quality magnesium plates for you and return it to you within 3-4 days via post. Using a Magnesium plate will ensure that you achieve perfect results everytime. Remember, polymer plates are perfect for pad printing as no heat is used in the pad printing process (so there are no heat transfer issues), and the 'etching' is washed out rather than scrubbed out.