

Technical information about foil embossing

File Delivery:

Vector graphics are a must for this type of finish, regardless of which kind of embossing is being applied. Halftone or pixel data cannot be used to create the necessary production tools.

Tools:

Foil stamping tools are generally made out of magnesium. We create a film from the supplied finishing data, which is then used to make the tool. For high print runs or designs that cut into the material surface, the tools are made from more durable brass.

Special Requirements:

Foil stamping occurs off-line (in a separate process after printing has been completed), which means that minor registration tolerances are unavoidable.

Except for a few special foils, the hot stamping foils we use are opaque, which means the embossing data must overprint onto the underlying data. It may not knock-out (the design must continue under the area to be embossed). Otherwise there will be registration problems where unprinted parts or a mismatch of colour show though.

When two bordering design elements, e.g. an image and a background colour, are to be over-stamped, for example, to make a foil frame around an image, the stamping foil data should be positioned so that it centrally covers both border edges (in this case image and colour), as opposed to a position only on one edge.

The minimum width of lines or lettering strokes is 0,3 mm Negatively recessed elements should be at least 0.7 mm deep/wide to avoid tapering of the foil.

The texture of the printing material, e.g. if the foil is stamped on the uncoated side of the board, has an effect on the appearance of the stamp.

Combinations:

Foil stamping can be combined with other finishes such as blind embossing or debossing. We would be happy to advise you about possible combinations.

Restrictions:

A foil stamp cannot be applied on top of UV matte varnish. As the adhesion is insufficient, we recommend using matte laminate instead. A foil stamp can only be applied to UV gloss varnish provided the line/lettering stroke width of is not more than 2 mm. If this limit is exceeded, gloss laminate must be used. The area of stamped foil should not be larger than 70 mm x 70 mm. Otherwise air bubbles may occur during stamping, which could lead to porous surfaces. Bronze particles in printing inks can lead to punctual destruction of the metallic look. Bronze colour tones are therefore not suitable for foil overstamping. Foils should be protected from high levels of humidity as this can trigger off the oxidation process, which leads to the destruction of the foil.

Stamp foils:

Frequently requested foils such as gold and silver are always available. Designer foils may not be in stock and may have varying lead times and minimum order sizes. The required amount should take into consideration initial print runs and possible re-prints.

All technical specifications relate to internal, in-house manufacture. Should you have any further questions that have not been covered here or that need to be covered in greater detail, please get in touch with us.