

### Selection of the optimal print procedure

The two procedures we use to print the labels both have their specific advantages and disadvantages. However, basically there is an optimal procedure for every motif.

The silk screen print is predestined for the colour fast depiction of text, lines and surfaces. Due to the thickly applied coating, the colours appear more intensive, stronger and with more brilliance than a depiction in CMYK offset.

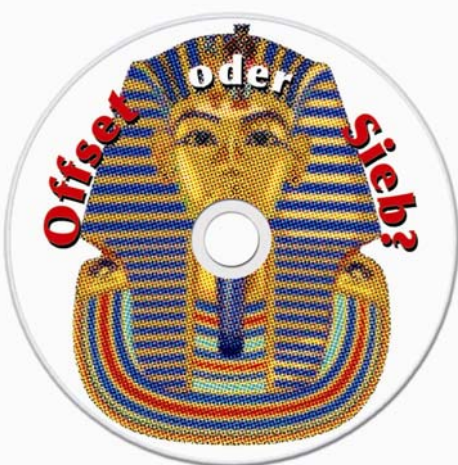


Silk screen with Pantone colours on white



Silk screen with Pantone colours without white

Grid depictions in silk screen print are, of course, also possible. However, process related there is a lower resolution (max. 48 Lines/cm), the tonal shift as described below in vignettted half tone and the danger of a moiré formation in the grid. The moiré, a clearly visible and disturbing, coarse structure pattern, occurs in silk screen due to the interference of the film raster with the screen texture and cannot be 100% avoided.



Silk screen print CMYK with white



Silk screen print CMYK without white

**The offset print** is particularly suitable for the depiction of photo realistic motifs, as it is reproduced with a noticeably higher resolution (max. 80 lines/cm). The finest details can be transmitted; vignettted half tones are evenly and cleanly portrayed.

As the applied colour layer in offset is noticeably lower than in silk screen print, the print result is duller and not as intensive as in silk screen print. This effect can partly be reduced by an additional gloss varnish. Offset print is less suitable for the reproduction of consistent colour areas, due to the thin coating thicknesses, unavoidable, minimal thickness variations in colour profile negatively influence the print result.

For this reason, an intensive black in offset is only conditionally achievable. A black area can, however, be optimised with an underlay of 60% yellow, magenta and cyan.

### Pre-printed white background

Due to the metallic surface of the CD/DVD the effect of the colours deviates to the colours on a white background (e.g. paper). Should the appearance of the CD/DVD comply with a proof or a PDF illustration we recommend in either case a white pre-print.



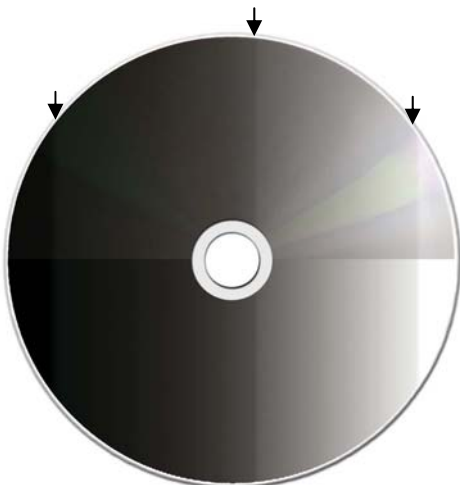
Offset with white



Offset without white

### Vignetted Half Tones

When printing the vignetted half tones in silk screen print, "shifts" in the gradation are inevitable, the so-called tonal shifts (↓). Depending on the grid used, these shifts can appear on 40 - 60% of the area coverage. This effect can be minimized by using a coarse grid (36 – 40 lines/cm). Basically, the offset print is the preferable print method for fine vignetted half tones.



Silk screen print



Offset print