

PRINTING TECHNIQUES PLASTIC TUBES



LINHARDT PRINTING TECHNIQUES

HD PRINTING/FLAT PRINTING

For flat printing, the printing and non-printing parts lie on the same level. The common (flat) printing technique is offset printing.

- Printing in 80s raster and higher (200 lpi)
- Colour system for images: Standard 4 colour-print (4C/CMYK) with short inking system
- Special colours: PMS (Pantone), HKS, customer template etc.
- Photorealistic printing possible
- Dot gain: 1% raster printing like 4% (letterpress: 3% printing like ca. 15%)
- Colour variations in 4C in different colour tendencies (CMYK)
- Font or raster tapering in 4C verly unlikely
- Proofing possible



DIGITAL PRINTING

Inkjet printing is one of the digital printing techniques. The printed image is produced by precicely applying or deflecting small ink droplets from printing heads.

- Resolution: 600x600 dpi
- Colour system: 7 colour-print (CMYK + orange, green and purple = 7C) + white
- Photorealistic printing possible
- Proofing possible



DIGITAL COMBINATION PRINTING

With our digital combination printing system it is possible to print in combinations as well as separately.

- Silk screen printing (6 colours flat print)
- Digital printing (8 colours: 7C+white)
- Foiling (overprintable)
- Coating
- Proofing possible



SILK SCREEN PRINTING (FLAT)

The printing plate's image areas are colour permeable, while the non-printing parts are impermeable. The ink is applied with a scraper through a fabric-screen. Even transparent and coloured tubes can be printed opaquely with this technique. Glossy and matt effects are possible.

- Register accuracy colour to colour: ± 0.1 mm
- Proofing: only colour proofing possible
- Special colours: PMS (Pantone), HKS, customer template etc.



OFFSET/LETTERPRESS PRINTING

For letterpress printing, the image areas (= printing parts) are elevated. This way, the colour transmitting cylinders only tone the image areas of the printing plate. The non-printing parts stay free of ink.

- Printing in 54s raster (133 lpi)
- Image buildup mostly with special colours
- No photorealistic printing
- Special colours: PMS (Pantone), HKS, customer template etc.
- Dot gain: 3% raster printing like 15%
- Only light/dark colour variations
- Proofing only conditionally possible



Usual grid width:

- 102 lpi = 40s raster (newspaper print 100 lpi)
- 137 lpi = 54s raster (letterpress print 150 lpi)
- 203 lpi = 80s raster (highgloss products 200 lpi)

SPECIAL FEATURES

LACQUERING/COATING

Coating is mandatory for every tube in order to increase resistance and protection against scratches. The one exception here are screen-imprinted tubes, where the coating can be underlaid.

Glossy, matt and silk-matt low migration lacquers are available.

SHOULDER PRINTING

The tube's shoulder is applied only after printing. This way, the printed tube body can be dragged over the shoulder's border, which avoids a potential disturbing white border.

WHITE BASE

Available for offset printing, HD printing, digital printing and silk screen printing. The white pre-print is made prior to the actual printing on e.g. transparent tubes.

SILVER BASE

Available for offset printing and HD printing. The silver pre-print is made prior to the actual printing and can then be overprinted. A silver base results in a metallic effect.

FOILING

Partial or large-scale foiling which can be overprinted with digital printing. This technique results in high-quality metallic effects in various colours.

HOT FOIL STAMPING

Targeted, partial or large-scale foiling in silver and gold (matt or glossy) or transparent (glossy). The foiling is made after printing. No overprinting possible.

LINHARDT HAMBRÜCKEN

Since 1947, LINHARDT is producing plastic tubes at the production site in Hambrücken.

Thanks to our decade-long experience and constant investments, we are able to offer diverse printing techniques on 8 production lines, in order to imprint tubes with the desired print layout in highest quality.

- HD printing
- Digital printing
- Silk screen printing
- Digital combination printing
- Offset printing
- Labelling
- Lacquering
- Shoulder printing
- White/silver base
- Hot foil stamping
- Foiling

If you have further questions regarding printing techniques or our plastic tubes in general, our printing experts at LINHARDT are always pleased to help you.

Further information
on print data approval
can be found here:



Our data sheet for
plastic tubes can easily
be downloaded here:



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