

Digital print features

colors

- 7 inking systems in digital printing machines
- Colors are mixed together of cyan, magenta, yellow, black, orange, green, purple
- White is used in combination with transparent and silver laminate (it is also available rasterized)
- Pastel colors and metallic colors can only be simulated
(another possibility for a metallic effect: print it on silver laminate)
- Customized colors should be created in Pantone colors (color fan deck Pantone Solid Coated)
Caution: Pantone colors are reproduced rasterized
Composition of CMYK colors and optionally in combination with orange, green and purple

Solid colors

- 100% of one color: 100% cyan or magenta or yellow or black)
- Caution: Pantone colors are reproduced rasterized; therefore they are no solid colors!
- Optionally we have the possibility to create a specific color to print in solid colors

Grid/ resolution

- Screen width 180 lpi
- 812,8 dpi and 1219,2 dpi

Tolerance: print

- Registration: no deviation
- Overfilling: none

Refinement

- Vanish: glossy or matt
- Foil: glossy or matt
- Hot foil stamping and spot coating

Preparation of the print data

Imposition sheets

- **The whole layout has to be adapted to our imposition sheets**
- The „Front Center Line“ and the „Back Center Line“ are responsible for the correct alignment of the print image!
- The limits for the text area according to the imposition sheet have to be obeyed!
Furthermore you have to pay attention to the area “Text Side Center line” if the text should not run in the side of the tube!
- Background elements can be extended to the edge
- 4 mm of the left layout side (side center line) will be on the backside of the tube (see figure 1)
- **Tactile marks are required and have to be created according to our imposition sheet**
- Length marks are required for the height of the tubes – there has to be a contrast between this color and the remaining color elements in the area above and below the touch mark
- The middle mark is required for the orientation of the caps and the bagger; there has to be a contrast between this color and the remaining color elements in the area left and right of the touch mark
- Optionally, the color of the touch mark has to be changed (see figure 2)

figure 1

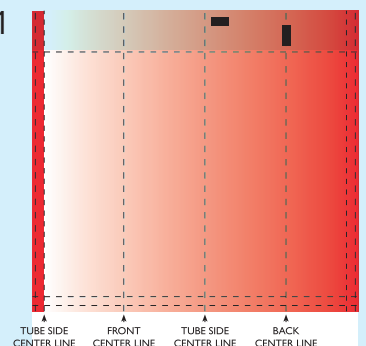
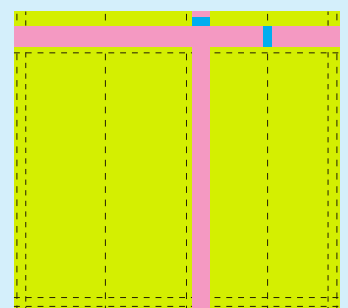


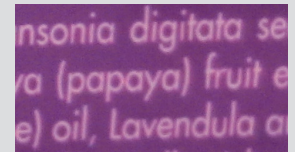
figure 2



Minimum font size

- For **solid colors** without serifs: 1 point=0,375 mm
- Positiv: 0,5mm/ 1,333 pt
- Negativ: 1,0 mm / 2,666 pt, without serifs
- Caution: by usage of a too thin negative font the color may look different (see figure 3, too thin white font looks pink)

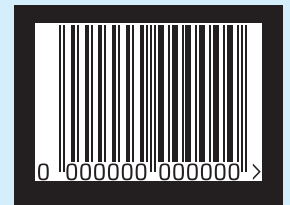
figure 3



EAN-Code

- Size EAN13 at least SC 0 = 29,83 x 20,75 mm (GS1 Austria guidelines)
- Pay always attention to all GS1 guidelines
- EAN in vectors (no image!) and in **solid colors**
- Pay attention to enough whitespace (empty area around the EAN code) to assure readability (see figure 4)
- Our company can create your barcode
- The EAN quality is influenced by the material and the refinement with vanish and foil

figure 4



Important information

- Create data with CMYK colors and special colors with pantone colors
- Images are reproduced faithfully to the image file - if necessary, increase the tonal value!
- Black (K) has to be created – as far as possible – with 0% Cyan, 0% Magenta and 0% yellow
- We prefer PDF documents in printing quality
- We cannot use Word documents, Powerpoint documents, Excel documents or Publisher documents

PDF documents

- **PDF X-4** (settings: create Acrobat Layers, export all Layers)
- Do not select recalculation or compression for the image data – resolution at least 300dpi
- **Embedded fonts**

Open documents

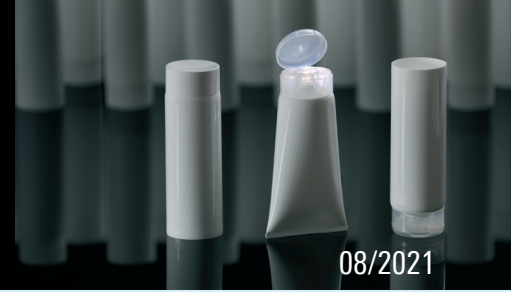
- Adobe Illustrator, Adobe InDesign
- Provide images, resolution at least 300dpi
- Create graphic elements as vector graphics – if possible
- Due to the fact that some font manufacturers have license restrictions, **convert all fonts into paths**

Color sample

- Send proof or color samples promptly
- **Pantone colors are printed according to the Pantone Solid Coated color fan**
- We recommend a hardproof – a digital printing machine prints the hardproof on original material

Printing on transparent or silver laminate

- A white background is necessary by covering elements
- Metallic colors stand in combination with translucent print
- The EAN code and its background have to be white!



Provision of data

Data transmission

- E-Mail: Ms. Kuen: m.kuen@pirlo.com; Ms. Harkam: s.harkam@pirlo.com; Ms. Schreder: k.schreder@pirlo.com
- FTP-Server: If necessary, ask for log-in information

Hot foil stamping

Colors

- Gold, silver, bronze, colored

Lines

- At least 0,16mm thickness positive
- At least 0,21mm thickness negative

Data preparation

- For hot foil stamping – create an extra color
- If the hot foil impression does not extend into the region of the weld, a better processing of the tubes is possible. (this affects the longitudinal seam, the welding of the shoulder and the end-welding)

Tolerance

- Caution: a registration tolerance up to approximately 0,4mm can occur!

Spot coating

Coat

- Matt and shining
- Also available with Iriodin®-pigments

Lines

- At least 1mm thickness

Tolerance

- Caution: a registration tolerance up to approximately 0,4mm can occur!

Imposition sheet

We can provide you the following imposition sheets

- General templates of imposition sheets with info boxes
- A template for data preparation which is adapted to your desired length

Hint: Create your own tube sample

- For optical inspection, you can print out the print image in original size, cut it out and glue it together. To create your tube sample, fold the tube along the „Tube Side Center Lines“ This gives you an additional possibility to control the layout.