

## **Resolution of bitmap images**

## Definition of bitmap

Bitmaps images are exactly what their name says they are: a collection of bits that form an image. The image consists of a matrix of individual dots (or pixels) that all have their own colour (described using bits, the smallest possible units of information for a computer). The unit of measurement used to describe the resolution of images is **DPI** (dots per inch).

## Types of bitmap images

Bitmap images can contain any number of colours but we distinguish between three main categories (see the list below with their description and recommended resolution for each of them).

1. **Line-art** images only contain two colours, usually black and white. Sometimes these images are referred to as bitmaps because a computer has to use only 1 bit (on=black, off=white) to define each pixel.

Recommened resolution: min. 800 dpi.



2. **Grayscale** images contain various shades of grey as well as pure black and white. Recommened resolution: min. 300 dpi.



3. **Full colour** images. The colour information can be described using a number of colour spaces: RGB, CMYK or Lab for instance. Only CMYK colour space is used for print. Recommened resolution: min. 300 dpi.

