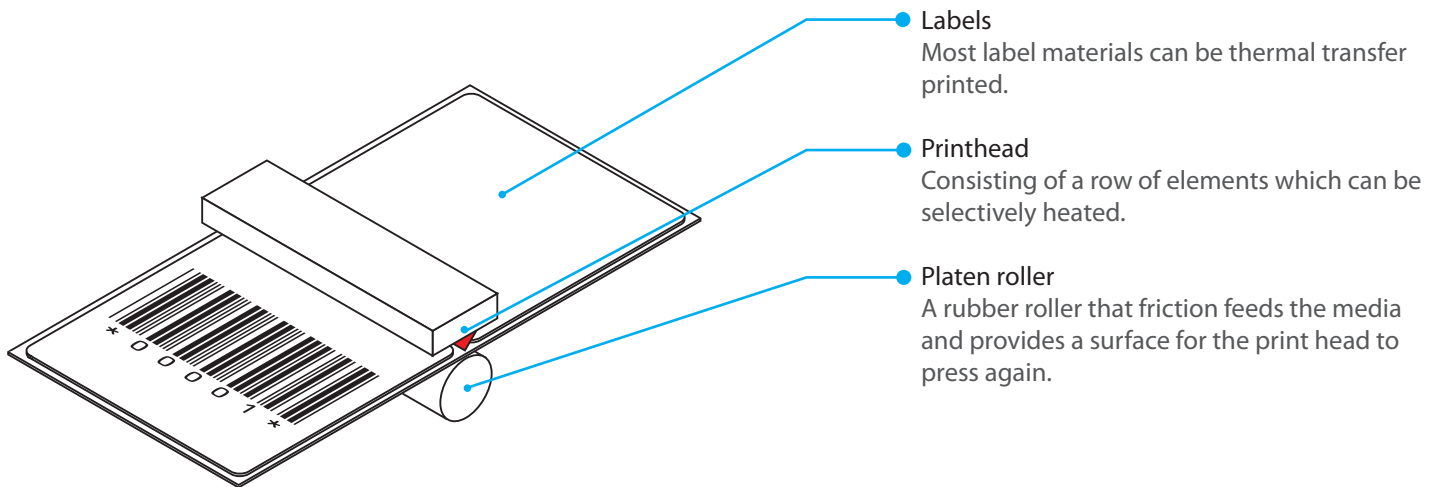


# Direct Thermal Printing



## The Direct Thermal Printing Process

The direct thermal printing process works by the selective heating of elements in a print head to apply heat to a thermosensitive material which turns black when it comes into contact with heat. The change of colour isn't reversed when the heat source is removed.

## Print Quality & Maximising Print Head Life

Aside from using a good quality direct thermal material, the key considerations in achieving the desired print quality are temperature, speed and pressure. If speed is increased the heat or darkness setting will normally need to be increased. If the speed is decreased the heat setting can be decreased. Print head pressure needs to be sufficient to allow the heat from the print head to be effectively conducted to the substrate. It also needs to be balanced across the label to ensure that the darkness of the print is even.

Print heads are a consumable item. The print head is made up of elements which are heated individually to produce the printed image. It is these elements which fail. When elements fail a line of missing print can be seen running down the length of the label.

You can achieve maximum life from your print head by ensuring that you run at the lowest temperature and pressure setting that produce the required print quality.

## Print Head Maintenance

The print head should be cleaned after each media change to minimise the build up of residue on the print head.