

Colour Balance

The specimen pictures on page 19 have clearly shown the effect of equal dot gain for the matching of halftone images. It was also stated that differences of dot gain in the primary colours cyan, magenta and yellow can in certain circumstances have a very disturbing effect as colour cast. The colour balance patch of the PMS Print Control Strip shows such differences very sensitively and it is therefore suitable for rapid, general control, especially during the production run.

Cases 1-6, shown on this page, include for comparison the colour balance in ideal conditions. In Cases 1 and 2, the balances certainly approximate to neutral grey in their reproduction, but with divergent brightness. The dot gain values of cyan, magenta and yellow, though close together, are on the whole too low (Case 2) or too high (Case 1). In the other cases, 3-6, there is evident colour cast, caused by relatively small dot-gain differences of about 4% in the middle tone. It is not always easy to identify the basic cause. For example, the yellow cast in Case 3 may have been brought about not only through excessive dot gain in the yellow but also through too low values in the cyan or the magenta. More precise information can here be obtained only by means of measurement with the densitometer.

Where the colour balance patches diverge clearly from the original, this also applies to the subject, though the differences are generally less. Lighter tones react less sensitively than darker ones.



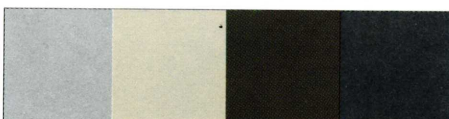
Case 1



Original



Case 2



Case 3



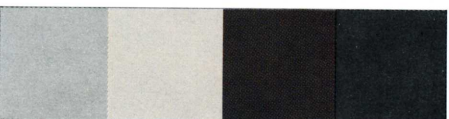
Original



Case 4



Case 5



Original



Case 6