35.0 METHODS OF PRINTING

Pigment print before washing

35.1 PIGMENT PRINTING

A pigment is an insoluble colour and has no affinity with the fabric unless a binder is used.
If less of the fixing component is added to the dyestuff, part of the pigment will be removed in washing achieving the 'washed-out' or worn look as the bond between the binder & the fibres is broken.

35.2 RESIST PRINTING

Recognised when a white or coloured pattern shows on a darker ground. The fabric is printed with a substance that resists dye, and the fabric is then print-dyed. The dye fixes only where the fabric has not been printed with the resist.

Discharge printed bandana

35.3 DISCHARGE PRINTING

White or coloured pattern shows on a darker ground.
The entire cloth is piece-dyed before the fabric is printed.
'White' discharge printing - Substance containing a discharge agent is printed to remove the dark ground colour from specified areas of the cloth where white designs are required.
See 'Seshoeshoe': Page 139 - 141
'Coloured' discharge printing - The print paste may contain dye not affected by the discharging agent. This immediately replaces the discharged colour with another where it is applied.

Discharge print

35.4 TRANSFER PRINTING

Also known as **sublistatic or sublimination printing.**
Transfer printing cannot be done on natural fibre fabrics.
The method used is either:

With continuous rolls of paper and lengths of polyester, acrylic or cellulose acetate fabric.
With small motifs printed onto a garment panel or on fully-fashioned knitwear.
The design is first printed on paper using **special inks that have no affinity for the paper** - it merely serves as a carrier.

Polyester weft knit substrate

ADVANTAGES OF TRANSFER PRINTING:

Paper can be printed **much faster** than fabric and with very intricate designs.
Print defects can be avoided because the print paper can be inspected prior to the transfer of dye to cloth.
Prints are **clean and bright** because of the absence of post-print processing.

The DISADVANTAGE of transfer printing is that the prints lack penetration on all but light- to mediumweight fabrics.
The transfer paper and fabric are held face to face; and together with some backing paper are through the machine and round a heated roller. Heat from the roller causes the printed inks to move from the paper to the fabric.