PRINTING – PART XII

REF: TT/ JULY 2021/ WK 4

Common challenges with plastisol ink printing

- **Washing away of prints –** If prints are not properly cured then this issue arises. In that case, curing temperature should be checked and adjusted to recommend one.
- **Lack of opacity –** Lack of opacity means that the color of the substrate is shown through the print. This makes the print look dull. The plastisol prints can be made more opaque by laying a thicker ink deposit on the substrate, print through a lower mesh count and by creating a thicker stencil.
- **Dye migration-**Dye migration occurs when a light color ink is printed on a darker synthetic substrate. The heat in the dryer sublimates the dye in the fabric, turning it into a gas that stains the plastisol ink. An ink which can prevent dye migration should be used. Also the print should be cured at a lower temperature for a longer period of time.
- **Peeling away of print from the substrate -** If prints peel away from the substrate after curing, there are two likely causes. The ink is either under cured or the improper ink has been used for the substrate material.
- **Fibrillation -** Fibrillation occurs when a substrates fibers break through the ink deposit. It causes the print to have a fuzzy, and sometimes faded, look. Fibrillation can be prevented by using a high quality ink and laying down a thicker deposit.
- **Cracked Prints -** Cracked prints are due to under curing.
- **Sticky Prints –** Sticky prints have not been cooled properly before packing. The heat from the dryer causes the ink to cure and form a permanent bond, but if the ink is not given adequate time to cool after curing; prints can stick to everything they touch.

E) Fancy Printing

In addition to conventional and digital printing, there are other printings as well which gives a special or fancy effects to the garment. A few examples are foil print, glitter print, puff print, florescent print etc.

Foil Printing - Foil printing is a specialty printing process which uses heat, pressure and Foil. In foil printing, any pattern is printed with the foil on the fabric for shiny effect. Foil printing has various applications and is increasing in popularity as a method of printing in textile material like T-Shirts, Kurtas, and Upholstery etc.

Foil printing is two-step processes where first screen print is done using an adhesive and then heat transfer the foil over it. The foil is then peeled away to leave a shiny finish.

Fig 1.1 Foil Printing on T-Shirt
Ref: wannaink.com

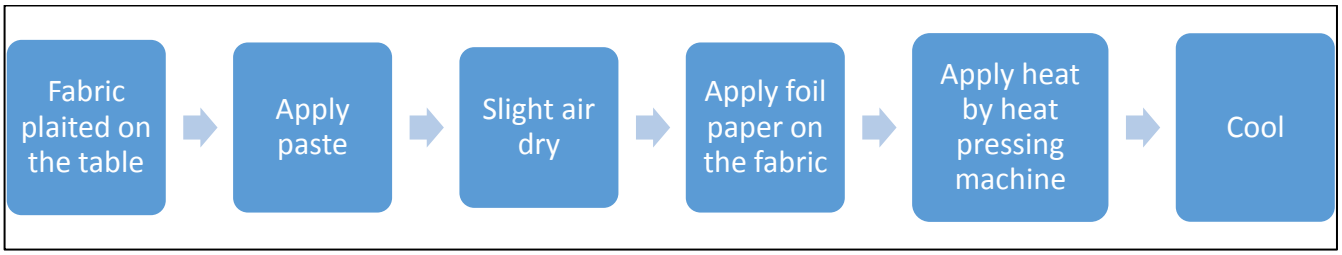

Fig 1.2 Foil Printing process flow chart
Ref: slideshare.net

Foil paper is also called the stamping foil paper. Actually it is not the paper but the detachable foil film on the plastic base. Generally it is PET film of 15 micron thickness, available in widths of 640 or 1500mm. In foil printing, the quality of the adhesive is very important. It is recommended to use better quality adhesives. Cheaper qualities show very poor stretch ability, loss of softness and durability after washes. Another important ingredient in the printing paste is matting agent, which is added to avoid sticking. Proper curing is always recommended to minimize the problem of cracking of prints.

References:

1. https://anatol.com/
2. http://textilefashionstudy.com/
3. https://wannaink.com/
4. https://www.bidbi.co.uk/

…….To be continued……

UNSCRAMBLE THE JUMBLE WORDS
EEPLING
TICKYS
ANFCY
TAMSPING

Last week`s Answers: 1) DENSITY 2) PLASTISOL 3) GRAPHICS 4) CLEAN

Wishing you a great week ahead!

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