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# A Review on heat transfer label application process.

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**Abstract –** Label is an integral part of a garment that provides vital information to the buyer. The more important aspect about labels is its process of application. In heat transfer label application apart from the fibre, fabric the fusing machine parameters also play a vital role in determining the performance of a label. The Heat transfer presses must be calibrated to appropriate parameters as discussed to ensure a secure and durable label.

***Key Words*:** Label, heat transfer, knitted fabric, garments, quality.

## 1.INTRODUCTION

Label is an important part of a garment. A label is more than just a piece of fabric, which directly communicates with the customer. It's something like that drawing the full attention of the customer. Also describes what the product quality actually is in. on the basis of label, customer decides whether he/ she buys the garments or not. So, a label has a great importance on selling the garment. A garment label is a communicator between the buyer and product. A garment label contains various types of information of that garments, such as buyer name, country of origin, types of fabric, types of yarn, fabric composition, garments size, special instruction about care etc. Without any types of label a garment cannot be sold in the foreign market [1].

There are some circumstances in which fabric garment labels are simply not practical. Swimwear is an example of where an external label would be irritating and inappropriate. A lot of other sportswear falls into the same category. These garments are often tight fitting and come into direct contact with the skin. When combined with sweat and friction through use, fabric labels can feel uncomfortable and cause irritation to the skin. Heat transfer label printing offers an alternative to using fabric labels in a range of clothing, an option that is being taken up by a growing group of manufacturers. These days, heat transfer labels are cropping up in underwear, hats, jeans, shirts, skirts and dresses - in fact anywhere that a traditional fabric label would normally be used [2].

## 2. HEAT TRANSFER

Heat transfer printing takes place in two parts. In the first stage, the design is printed as a negative onto special heat transferable paper. The images and text will appear on the paper as a reverse image as if viewed through a mirror. In the second stage, the transfer is imprinted onto the garment using heat and pressure in a printing press, specially designed for the purpose [2].

In garments manufacturing it's called heat seal or heat transfer label which shows the company's brand logo or other important messages. Heat seal label is very attractive to a customer so its quality should be first class and label attaching process is very sensitive. Label attach by pressure and heat that's why it's called heat transfer Label. Only automatic pneumatic machines which are able to apply transfers piece by piece must be used. Roller transfer press machines and manual presses are not accepted, as they cannot guarantee correct and consistent application. Heat Transfer Presses must have the following features:

- ✓ Pneumatically operated with adjustable time, temperature and pressure.
- ✓ Digital microprocessor controller for time and temperature accuracy.
- ✓ Fingertip controlled operation and programmable print settings.
- ✓ Digital timer, adjustable which shows time countdown on readout, beeps after elapsed time, and resets when handle is raised.
- ✓ Consistent, fully adjustable pneumatically pressure control, with pressure range of at least 0 – 7 bar (0 – 100 psi / 0 – 7 kg / cm2)
- ✓ Working temperature range of at least 70 – 230 C (160 – 455 F)
- ✓ Display Time Range of at least 0 – 180 seconds
- ✓ Head plate should be made of metal and Teflon coated to prevent soiling which could contaminate the garments.
- ✓ Base plate must be made of silicon rubber or can be a fleece platform with sufficient resilience to ensure close alignment with the upper heat press platen. A fleece

platform is recommended to use for the application of 3 dimensional heat transfer.

- ✓ Platen size should be at least 38 x 38 cm (15" x 15 ")
- ✓ Plate should be bigger than artwork.


### 3. PARAMETERS

Parameters that Influence the Fastness of Heat Transfers-

- Temperature
- Pressure
- Time
- Design / placement of artwork
- Quality of glue
- Work requirement before and after heat transfer operation

Heat Seal Transfer Application Procedure and Maintenance Operation Check-

Before any operation refer to the heat transfer specifications from the supplier for detailed application directions i.e. Time & Peel Instruction.

- ✓ Make sure that the machine has been calibrated before operation start.
- ✓ Make sure that the press platens are clean and free of any residue.
- ✓ Start the machine and set the temperature, pressure and time which are given by the Heat Seal Transfer supplier application instructions. Allow correct time to heat for newly start machine (morning and after breaks) before bulk production.
- ✓ Put the fabric panel over the base plate and place the heat transfer on the desired location of the panel.
- ✓ Make sure that the fabric is smooth but not stretched tight.
- ✓ Cover a release paper on top of the fabric to avoid direct contact of the heat platen with the fabric.
- ✓ Activate the press for one application cycle.
- ✓ Some special heat transfer qualities require a second heat pressing process on the reverse side of the fabric. It is crucial to follow exactly the Heat Transfer application instructions.
- ✓ Remove the fabric panel from the press and peel off the transparent backing paper as per the application instructions either immediately while the transfer is still hot or after cooling down.
- ✓ Do not stack panels until they have fully cooled [3].

Perhaps, following all above measures, the problem of fabric shine marks, shrinkage or scorching still exists in apparel industry.

### 3. CONCLUSION

Label is indeed an important part in determining the overall quality of a garment. There are several important features of Heat Transfer Press that influence the quality of the garment. The stability of the label attached is also dependent on various parameters discussed in the paper.

### REFERENCES

1. http://www.garmentsmerchandising.com/different-types-of-label-used-in-garments/
2. https://blog.focuslabel.com/print-labels-using-heat-transfers
3.http://ordnur.com/tag/heat-transfer-quality-check-on-printed-panels/

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