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Garment Finishing and Inspection

Finishing and inspection are the last two major operations in the manufacture of garments before they are bagged or boxed and delivered to the finished goods warehouse. In most factories these two operations are performed by separate departments.

All sample garments also have to be finished and inspected and this is done in the sample room for convenience and because of the close involvement of the designer at each stage. These two processes are vital in the production of sample garments because finishing ensures that the garment is correctly completed in every detail, and inspection verifies that it conforms to the relevant quality standards. In addition, this is the stage when the designer makes the final assessment of whether the sample garment has achieved its planned design objectives and can be approved.

During the finishing and inspection of samples, nothing which concerns the garment technically can be left to chance. Once orders have been taken and production commenced, it could be very expensive for the factory to deal with quality or manufacturing problems which should have been detected and rectified in the sample room.

FINISHING

As the name implies, finishing covers all the operations required to complete a garment. For most garments this process starts after top pressing. The details involved in finishing vary according to garment type but in principle are as described here. *then*

ATTACHING BUTTONS

Attaching buttons has two stages, marking and sewing.

Marking

The hand marking of button positions requires accuracy in four respects:

- (1) For symmetrical garments the button positions have to ensure the overall symmetry of the garment. Some of the important points to observe are:
 - Collar ends and lapel steps on both fronts must be the same distance down from the neck line
 - Pockets have to be at the same height
 - Lateral seams need to be matched across the fronts
 - Darts should start and finish at the same levels.
- (2) The button spacings have to be exact in order to ensure flat laying fronts
- (3) The specified wrap allowance must be observed
- (4) With striped or checked materials, pattern symmetry and alignment are essential.

Sewing

The buttons of classic shirt and blouse samples are generally sewn on during production by automatic button sewers. These machines can be set for specific spacings and the buttons are automatically fed to the button clamp. As factories producing these types of garments mostly work to standard spacings, sewing the buttons on to the occasional sample does not interfere too much with production.

The buttoning of garments when they have been completed is usually performed in the sample room as this is more convenient than using the button sewing machines in the factory. Buttons should not be sewn onto garments which will be subjected to pressure during their top pressing. Apart from leaving an impression of the button on the cloth, there is also every possibility that the button could be broken by the pressure of the pressing machine bucks. Knitted and other garments which are steam finished only can be safely buttoned before top pressing.

LABELS

Labels are of great benefit for the wearer, and an important aspect of finishing sample garments is to ensure that the correct labels are in the right positions. Some labels are attached during the production of the sample, whilst others are sewn on when the garment is being finished. Most companies have a standard specification for the types and positions of labels on their garments.

There are legal requirements for some types of garment labels, such as:

- Flammability of materials used for children's nightwear
- Fibre content, for example 35% cotton-65% polyester

- Garments produced for export have to carry a 'country of origin' label. This is usually inserted on the brand label.

Although there are no legal directives at the time of writing concerning the following labels, most clothing manufacturers use them to provide guidance for the consumer:

- *Care labels* These provide very specific information regarding washing and ironing temperatures, whether or not bleaching agents can be used, and the suitable types of dry cleaning solvents etc.
- *Size labels* These have to be suitable to the country or countries where the garment is to be sold. It is pointless to export garments carrying British or EEC sizing system labels to a country using a totally different sizing nomenclature. Whenever possible, the size labels should be positioned so as to be immediately visible and not necessitate a search on the part of the prospective purchaser.

Irrespective of the number and types of labels used for a garment, they should:

- Be of an acceptable size
- Maintain their legibility after repeated washing or dry cleaning during the normal life of the garment
- Be securely affixed to the garment. It does not do much for the quality image of a garment if labels flap around loosely or fall off after a short period of wear.
- Be easily seen by the consumer, and not hidden away in awkward places.

In factories labels are attached by a variety of machines, ranging from the regular sewing machine to microprocessor controlled machines which hold the memories required to attach different sized labels. (Some of these machines also have an automatic label feed and positioning system which only requires the operator to position the component or garment correctly.)

CLEANING

The last stage of the finishing process is to thoroughly clean the garment of all thread ends and stains. This means that the sample has to be gone over very carefully because nothing gives a worse impression to a buyer than trailing threads or unremoved stains on the inside or outside of the garment.

FINAL TOUCHES

Sample garments often require some hand finishing with steam. A very effective tool for this is the stand-mounted iron shown in Fig. 9.1. The

height and angle of the iron can be adjusted in order to operate it in a static position, or it can be removed and used by hand. A steam brush can be fitted to the iron sole when it is used to remove shine and marks from velours, velvet and other napped cloths.

When the sample garment has been checked for finish it is ready for the final phase of its manufacture - inspection - before it leaves the sample room.



Fig. 9.1. Stand-mounted finishing iron.

INSPECTION

Inspection is crucial for sample garments because apart from design considerations, there are a number of important factors involved. This is the moment when the sample receives the go or no-go signal and this decision requires some practical considerations on the part of the designer. The principal factors involved are given here.

FITTING QUALITY

There are two basic approaches to fitting quality. The one used may be company policy or may be based more on custom and usage, and this dictates how the sample room has to work. The two approaches are live models and workroom stands:

Live models

Many companies produce samples to fit the men, women or children who will model garments for buyers. This means that the sample room has to produce two patterns for each garment, one for the model and one for production. Although the differences between the two patterns could be slight, models do not have the same build and measurements as the average person and this is an added complication to the sampling procedure. Obviously there are benefits to be gained from the live models approach but making and trying-out two samples is an expensive business.

Workroom stands

Modern workroom stands are constructed according to the results of scientific anthropometric surveys and they embody an accurate combi-

nation of the figuration and measurements of a specific population group. In effect the workroom stand mirrors the targeted potential consumer who generally has different physical characteristics from those of a professional model. For practical and commercial purposes, the workroom stand is the principal criterion for measurements and basic fitting.

There seems to be an obvious answer to the dilemma of live models or workroom stands. Why not use models having the same or very similar measurements to those of the stands used for samples? Unfortunately this is difficult to achieve because the nature of their profession demands that models should have a close resemblance to the concept of an ideal form. This concept is more than somewhat divorced from the realities of commercial sizing.

There is a practical solution to the problem of judging the fitting quality of samples. Sample garments should be made from production patterns for the workroom stand and then checked for ease of movement and fitting quality on the model. This approach does not rule out the possibility of some minor alteration to the sample in order to enhance its appearance on the model. This is of particular significance because changing the measurements and fitting of a model-based pattern to a production pattern can lead to a host of new technical problems which no one really needs.

MEASUREMENTS

An integral part of the inspection of samples is the checking of finished measurements. Whilst measurements do not fully indicate fitting quality, checking is necessary especially if the garment has to conform to a customer's measurement specification.

The checking of garment measurements has to take into account the question of reasonable tolerances which do not have a noticeable influence on the fitting, design and functionality of the garment. Tolerances can be defined as the allowable deviations from standards, and in practical terms this requires a sense of proportion. The deviation of 0.5 cm in the length of a dress which should be 100 cm long is not the same as a deviation of 0.5 cm in the length of a shoulder having an intended length of 12.5 cm. Therefore every deviation should be considered in relation to the planned length or size of the part being measured.

VIEWING THE GARMENT

The most effective method of viewing a sample garment to inspect its detailed and general appearance is to look at it in the same way as the consumer does in a shop, but with a professional eye. This means that the shop situation should be duplicated in the sample room and requires a very simple arrangement.

A full length cheval mirror should be positioned close to a convenient wall, with a workroom stand facing it at a distance of 1.20 m to 1.50 m. The inspector needs to stand behind the stand, look over its shoulder and view the garment in the mirror (Fig. 9.2). The recommended routine is to view the garment in four consecutive stages, revolving the stand through 90° after completing each stage. Start with the front view, follow with the first side view, then the back, and finish with the second side. When viewing, the eyes should move in a tight zigzag pattern from side to side, starting at the neckline and gradually working down to the hem. Good lighting is essential and by using this method very little will escape the eye of an alert inspector.

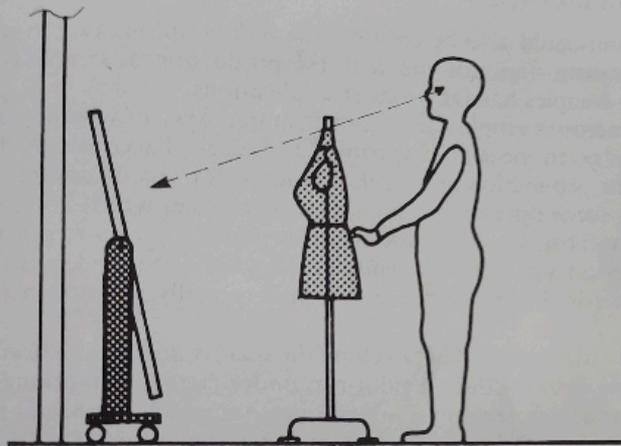


Fig. 9.2. Sample inspection station.

In addition to inspecting the external appearance of a sample, it is no less important to inspect the internal appearance. This inspection is necessary for all types of garments because sewing faults or other errors are easily seen on unlined garments, and stains or damages are very noticeable on linings. Today consumers have increasing demands for garment quality, and inspecting the internal and external appearance of a garment is an integral part of the quality chain which fundamentally starts in the sample room.

QUALITY STANDARDS

The inspection of a sample garment has to be relevant to its price and target market. There is no practical reason to apply stringent quality standards to samples which, if mass produced, will only undergo the most rudimentary of inspection procedures. It is often said that a thing should be done only as well as it needs to be done, and this is very true of