

- The apparel industry is fashion driven and fashion keeps changing, manufacturing units have to cope with the changing trends. The consumers are now more aware and more demanding with the development of media like television and internet. Along with fashion awareness there is an increase in trend of liking quality products. This is the reason why apparel chains all over the world are focusing more on improving the quality of the product and offering varied range of fashion designs

QUALITY

“the ability of a product or service to meet customer needs”

Quality may be defined as the level of acceptance of goods or services. For the textile and apparel industry , product quality is calculated in terms of quality and standards of fibres, yarns, fabric construction, colour fastness, design and the final finished garments.

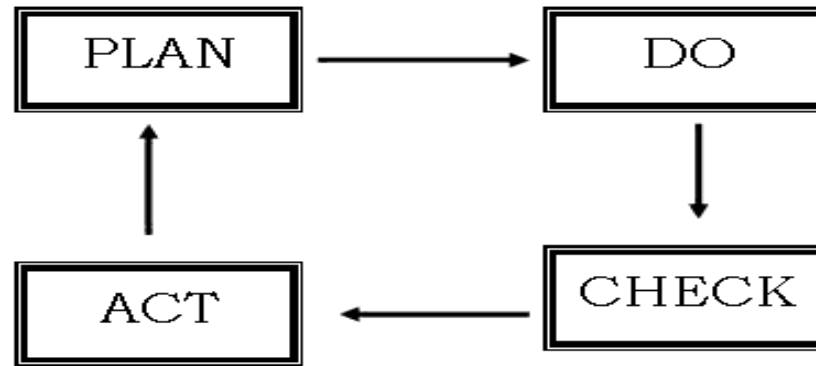
QUALITY CONTROL can be defined as “A part of quality management focused on fulfilling quality requirements.”

OBJECTIVES:-

- To maximize the production of goods within the specified tolerances correctly the first time.
- To achieve a satisfactory design of the fabric in relation to the level of choice in design, styles, colors, suitability of components and fitness of product for the market.

QUALITY ASSURANCE is defined as “A part of quality management focused on providing confidence that quality requirements will be fulfilled.

TOTAL QUALITY MANAGEMENT can accurately be described as a philosophy about quality that suggest for involving everyone in the organization in a quest for quality . Some distinguishing characteristics of TQM are Continual improvement; Customer focus; Organization-wide activity; Employee empowerment; Team approach; Competitive benchmarking; Knowledge of quality control tools; Internal and external customers; and Long term Quality Assurance System of Garments Industry .



Requirements:

The Quality System Requirements are based on the principle of PDCA Cycle.

- 1.Understanding the customers' quality requirements.
- 2.Ensuring proper flow of quality requirements to the QC department
3. Organizing & training quality control department.
- 4.Ensuring proper flow of quality requirements to the Production Department.
- 5.Establishing quality plans, parameters, inspection systems, frequency, sampling techniques, etc..
- 6.Inspection, testing, measurements as per plan.
- 7.Record deviations
- 8.Feed back to Production Department.
- 9.Plan for further improvement.

IMPORTANCE OF QUALITY:

Good quality helps determine a firm's success in a number of ways, and the term quality is not limited to product quality only but it covers over all functions of the firm. And it will help in growth of business because.

1. Quality "ensures superior quality products and services.
2. Quality is essential for customers' satisfaction which eventually leads to customer loyalty.
3. Quality tools help an organization to design and create a product which the customers actually want and desire.
4. Quality ensures increased revenues and higher productivity for the organization.
5. Quality management helps organization to reduce waste and inventory.
6. As the product is perceived to be better value for money, it may command a premium price and will become more price inelastic.
7. Fewer returns and replacements lead to reduced costs.

Methods of Quality Control

- Testing
- Inspection

maximum garment manufacturer apply
inspection method due to high cost of testing
equipment

- Inspection

Inspection may be defined as the visual examination in relation to some standards.

The main objective of the inspection are

1. Detection of defects
2. Correcting the defects and defective garments.

- To inspect garments an integral method named 'Inspection Loop' is used given below –

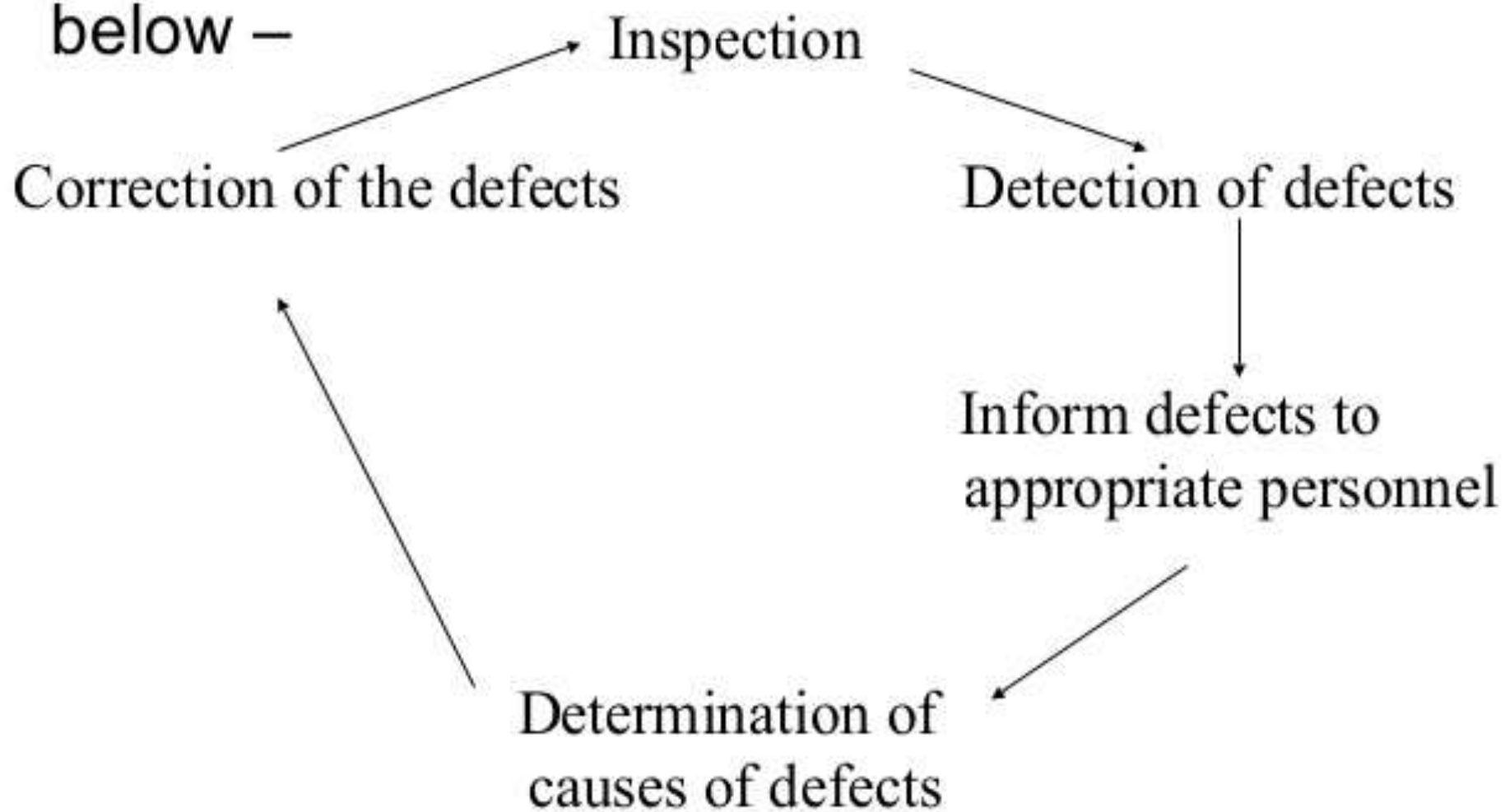


Fig: Inspection Loop.

Steps of inspection in garment industry

- Raw material inspection (accessories and fabric)
- In process inspection
- Final inspection

Raw material inspection

- Shade and appearance correct jacquard pattern correct, absence of bareness
- Width normal
- Check fabric for faults and stains
- Fabric weights per square meter
- Blank weight per dozen to be within tolerance of specification

Sewing thread inspection

- a. Thread construction – to know about thread construction the following should be tested-
 - Thread count
 - Thread ply
 - Number of twist thread
 - Thread balance
 - Thread tenacity
 - Thread elongation

b. Sew ability

- The sewing ability of thread is called sew ability. During sew ability test the following quality of thread should be tested –
- Imperfection
- Finish
- Package density
- Winding
- yardage

Quality of zipper:

- Measuring zipper dimension
- Top and bottom stops should be secured
- Uniform in colour
- Slider should ride freely but not so free
- Slider lock must be secured
- Durability of finish of zipper chain to laundering or dye cleaning
- Colour fastness to zipper to light, crocking and laundering

In – process inspection

Sewing Checks

- Stitches per cm. and thread run – in ratio checked to be within tolerance of specification.
- Evenness, balance and correct bight, no stitching missed.
- No cracking and laddering
- absence of skip stitching.

Final Inspection

- Shade correct and not varying from one part of garment to another.
- Cut is correct –e.g. neck, collar and sleeves balanced, pockets correct.
- Measurement with intolerance of specification, weight correct.
- Appearance correct , pattern matching.
- Seam finished correctly, absence of miss stitching., cracking and laddering.
- Accessories correctly applied and working.
- Absence of fabric faults and stains.
- Correct labelling.

Recovery inspection

- Check weather remedial works satisfactory.
- Check on volume of work successfully recovered.
- Avoidance of work recycling.

Product Tests

- Colour fastness to agreed agencies: (e.g. washing, rubbing, perspiration, lights) - checked and on-going continuity cards generated, showing rating, checked against specification.
- Stability:
- Shrinkage, and extension recovery where needed - to be within tolerance of specification
- Endurance:
- Abrasion, pilling or snagging - tested where needed. Rating checked against specification
- Flammability:

Performance rating in appropriate test checked against specification.