

## DEFINITION OF QUALITY CONTROL & QUALITY ASSURANCE

**Quality Control (QC)** is a system of routine technical activities, to measure and control the quality of the inventory as it is being developed. The QC system is designed to:

- (i) Provide routine and consistent checks to ensure data integrity, correctness, and completeness;
- (ii) Identify and address errors and omissions;
- (ii) Document and archive inventory material and record all QC activities.

QC activities include general methods such as accuracy checks on data acquisition and calculations and the use of approved standardised procedures for emission calculations, measurements, estimating uncertainties, archiving information and reporting. Higher tier QC activities include technical reviews of source categories, activity and emission factor data, and methods.

**Quality Assurance (QA)** activities include a planned system of review procedures conducted by personnel not directly involved in the inventory compilation/development process. Reviews, preferably by independent third parties, should be performed upon a finalised inventory following the implementation of QC procedures. Reviews verify that data quality objectives were met, ensure that the inventory represents the best possible estimates of emissions and sinks given the current state of scientific knowledge and data available, and support the effectiveness of the QC programme.

Quality assurance has a defined cycle called PDCA cycle or Deming cycle. The phases of this cycle are:

- Plan
- Do
- Check
- Act



## IMPORTANCE OF QUALITY ASSURANCE AND QUALITY CONTROL IN APPAREL INDUSTRY

1. **Reduces Cost and Waste-** Having quality assurance in place is especially helpful to small businesses. It allows them to reduce extra costs that come with retesting, replacing and reselling faulty goods. When customers aren't satisfied with an industry's products, the backlash can damage the company's reputation, and negatively affect future products and even

the entire company. Quality assurance might also save a industry's money in legal expenses, especially if its product isn't up to industry standards.

2. **Increased Customer Satisfaction-** The quality assurance system improves the quality of products and services, which increases customer satisfaction. Customer satisfaction leads to-

- ✓ Repeat business,
- ✓ Customer referrals,
- ✓ Increased sales,
- ✓ Increased Profits.

3. **Time Efficiency-** A quality assurance team can reduce the amount of inspections required in a manufacturing organization. The quality assurance team is separate from the production group, and can therefore be objective in identifying time-wasting areas during production. They also ensure that production workers don't use valuable production time to inspect or evaluate the production system.

4. **Maintain Quality control standards-**The national regulatory quality certification and international quality Programmes like ISO 9000 series lay down the broad quality parameters based on which companies maintain the export quality in the garment and apparel industry. Some of the main considerations for garment manufacturers and exporters is mentioned in the diagram-

5. **Fulfill demands and expectations of customers-**Quality assurance helps a company meet its clients' demands and expectations. High quality builds trust with your customers, which, in turn, makes you competitive in the market. It saves costs and fixes issues before problems become larger, and it helps to set and maintain quality standards by preventing problems to begin with.

6. **Finding defects-** Quality assurance plays very important role in finding defects in garments and textiles. The following examples can be classed as defects within garments and textiles:

- Different shades within the same garment
- Fabric defects
- Exposed notches
- Loose or hanging threads
- Pulled or loose yarn
- Holes
- Defective stitches
- Stains

7. **Ensure Pre-Production Quality Control-** Quality assurance ensures pre-production quality control. In pre-production quality control, each component of garment is tested before assembling. Closure, interlinings, sewing threads and other design elements are tested for their quality and durability. Fabric with too many defects or closure that does not work properly can be detected prior to construction, which saves time and money in the long run.



S/L	Comparison	Quality Assurance	Quality Control
01	<b>Definition</b>	Quality assurance is a continuous set of process where monitoring on <b>process production</b> .	Quality control is a technical process where confirming product quality and standard.
02	<b>Responsibility</b>	Quality assurance is the responsibility of the whole team.	Quality control is the <b>responsibility</b> only quality team.
03	<b>Activity</b>	Quality assurance can easily find out process <b>faults or error</b> . On the other hand QC process can't find out whole results. Therefore, this process is known as low level activity.	Here, to find out correct error or mistake for need more examination. Therefore, this process is known as high level activity.
04	<b>Aim</b>	The main aim of QA is preventing production defect.	The main aim of QA is identify <b>production defect</b> .
05	<b>Start point</b>	Quality assurance started before production.	Quality control is started after production.
06	<b>Process</b>	Quality assurance is process of verification.	Quality control is process of Validation.
07	<b>Controlling</b>	Quality assurance controlling the <b>required quality</b> .	Quality control controlling in time of production.
08	<b>Method</b>	Quality assurance is the method of managing for quality.	Quality control is the method of verify the quality up to output.

09	<b>Time consuming</b>	Quality assurance is not measured as a time consuming activity.	Quality control is <b>measured</b> as a time consuming activity.
10	<b>Tool</b>	Quality assurance is considered as an executive tool.	Quality control is considered as a corrective tool.

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