Statistical Quality Control (S.Q.C)

It is the application of statistical tools in the manufacturing process for the purpose of quality control. In SQC technique attempt is made to seek out systematic causes of variation as soon as they occur so that the actual variation may be supposed to be due to the granted random causes.

Statistical quality control refers to the use of statistical methods in the monitoring and maintaining of the quality of products and services.

**Basic Categories of Statistical Quality Control (S.Q.C):**

All the tools of SQC are helpful in evaluating the quality of services. SQC uses different tools to analyze quality problem.

Descriptive Statistics

Statistical Process Control (SPC)

Acceptance Sampling

1. Descriptive Statistics:

Descriptive Statistics involves describing quality characteristics and relationships.

2. Statistical process control (SPC):

The application of statistical techniques to determine whether a process is functioning as desired

3. Acceptance Sampling:

The application of statistical techniques to determine whether a population of items should be accepted or rejected based on inspection of a sample of those items.

**Variations of Statistical Quality Control (S.Q.C):**

Allowable or cause variation

Assignable or preventable variation

**Function of Statistical Quality Control (S.Q.C):**

1. Evaluation of quality standards of incoming material, product process and finished goods.
2. Judging the conformity of the process to establish standards taking suitable action , when deviation are noted.
3. Evaluation of optimum quality, obtainable under given condition.
4. Improvement of quality and productivity by process control and experimentation.

**Main purpose of Statistical Quality Control (S.Q.C):**

The main purpose of Statistical Quality Control (S.Q.C) is to divide statistical method for separating allowable variation from preventable variation.

**The Significance of Statistical Quality Control (S.Q.C) in the Textile Industry:**

1. The expected quality of product can be produced and hence customers satisfaction can be achieved which brings higher profit.
2. It is very easy to separate allowable variation from the preventable variation by this.
3. It ensures an early detection of faults in process and hence minimum wastage.
4. With its help one can easily defect the impact of chance in production process in the change in quality.
5. It ensures overall co-ordination.
6. It can be used in the interpretation control chart.