

Quality control

Introduction : Quality means a level or standard which depends upon four factors i.e. material, machines, manpower and management. Therefore variation in quality in the products produced in a manufacturing process is inevitable. Variation in the quality of manufactured product may be due to assignable causes and chance causes .

(i) Chance causes : The variation due to these causes remains beyond our control and can not be eliminated. No definite cause can be assigned to these variation.

(i) Assignable causes : Assignable causes may be due to numbers of factors such as defective material, negligence of the operator, improper handling of machines and so on. These causes may be identified and eliminated.

Statistical Quality Control : It is a statistical technique which is used in separating the assignable causes from chance causes, so that we may take appropriate action as quickly as possible when assignable causes are present in the system . A process is said to be under controls when only chance causes are present. The statistical quality control may be of two- fold

- (a) Process control: When statistical techniques are employed during manufacturing period for controlling the quality by detecting the systematic causes of variation as soon as they occur then it is called process control. Process control can be achieved by the technique of control charts developed by W A Shewhart.
- (b) Product control: When statistical techniques are employed for controlling the quality of finished product, then it is called product control. It is achieved through sampling inspection plan developed by Dodge and Roming .
- (c)

