

# **CONSTRUCTION MANAGEMENT**

**Notes by-**

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## Quality Control

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Inspection is determining function of quality. It determines if the raw material or part of finished product is acceptable or rejectable.  
Def<sup>n</sup>:- "Inspection is the process of measuring quality of a product or service in terms of established standards."

\* Objectives of inspection:-

- ① To locate defect in raw matl.
- ② To detect error in manufacturing.
- ③ To take corrective measure to increase quality.
- ④ To detect source of weakness.

\* Functions of inspection:-

- ① Inspection of raw matl.
- ② Inspection of Process.
- ③ Inspection of purchased parts.
- ④ Inspection of finished product.
- ⑤ Tool inspection.

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\* Def<sup>n</sup> of Quality Control:- "It is the mechanism by which products are made to conform to the specifications, determined from safety, appearance etc."

\* Procedure of Quality Control:-

- ① Setting the standard
- ② Appraising of performance (inspection) - "sampling."
- ③ Corrective action
- ④ Planning for improvement

Quality control is industrial technique by means of which products of quality which have uniform acceptance is manufactured.  
Objective of quality control is to make the things right at every stage of manufacturing.

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Methods of Quality Control:-

- ① Inspection
- ② Statistical Quality Control.

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Statistical Quality Control:- (Walter A. Stewart - 1924)  
Walter Stewart prepared "control chart". & used today  
Statistical Quality Control is defined as the method of applying statistical techniques to the collection & analysis of inspection & other data in order to achieve & maintain max. economy in manufacturing process. It is based on application of theory of probability. It controls, maintains & records a data of quality production.

Following are statistical techniques of quality control.

a) Frequency distribution statistical quality control.

MPSC '02 → [Refer RCC Notes: for concrete quality - Probability - i.e. characteristic strength]

b) Control charts.

c) Sampling & acceptance of sampling.

d) Analysis of tolerance.

e) Correlation.

f) Analysis of variance.

"Zero Defect Good" ⇒ Martin - Orlando - USA.

(ZD).

Important constituents of Total Quality Management.

- ① Punctuality.
- ② Customers service.
- ③ Standardisation of work.
- ④ Dedication of work.
- ⑤ Continuous efforts.
- ⑥ ZD - Zero defect programme.
- ⑦ Cleanliness.
- ⑧ Motivation.
- ⑨ Orderliness.