

Civilbuzz

# 16 Surveying Equipment

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Primary Introduction of Surveying Equipment

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## Surveying Equipment

- 1) Chain: Chain is a surveying equipment use for the measuring distance between two checkpoints. Its length may vary.



- 2) Tape: It is used for measuring distance. Tape may be of different types :
  - a. Tailor measuring tape
  - b. Steel measuring tape
  - c. Diameter circumference measuring tape
  - d. Fiberglass Measuring tape



- 3) Ranging Rod: It is the vertical rod which may be made up of wood or steel used to locate the station. It may be circular or square in section.



- 4) Total Station: this is the advanced surveying equipment which can carry nearly most of the surveying operation.



## Surveying Equipment

5) Electronic Distance Meter (EDM) : It is also advanced surveying equipment in which distance between two points is measured electronically.



6) Planimeter : It is used for measuring the surface area of irregular figure.



7) Dumpy Level : It is used for taking the staff reading.



8) Tilting Level : It is used for taking invert staff reading



## Surveying Equipment

9) Auto-level : auto level is used for taking the reading from the long distance and its best part is it is automatic leveled.



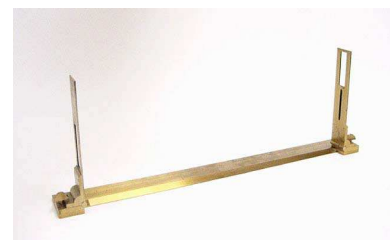
10) Spirit level : It is used for determining the level of the object.



11) Tripod : This is used for fixing dumpy level , tilting level, theodolite , tacheometer and also plane table.



12) Alidade: Alidade is use for drawing line on the plane table representing the original line between the same two station.



## Surveying Equipment

13) Plumb bob : It is used to mark centre



14) Trough Compass: To determine north direction.



15) Theodolite: It is use for the accurate measurement of horizontal and vertical angle.



## Surveying Equipment

16) Tacheometer: It is nothing but transit theodolite fitted with the stadia diaphragm and an analytic lens.

