

## IS 7320:1974

### Concrete Slump Test Apparatus

**Concrete Slump Test Apparatus** is a standardized equipment used to measure the consistency or workability of freshly mixed concrete. The slump test is crucial for assessing the ease with which concrete can be mixed, transported, and placed in moulds without segregation. This apparatus consists of a slump cone, a base plate, a tamping rod, and a measuring scale.

Key quality parameters expected by consumers include **accuracy, durability, and ease of use**. Accurate slump measurements ensure that the concrete will perform as intended in construction projects, maintaining its desired strength, durability, and finish. Durability is essential since the apparatus is frequently exposed to harsh outdoor conditions and rough handling at construction sites. Furthermore, ease of use ensures that workers, regardless of their experience, can perform the test with minimal effort and reliable results.

Concrete Slump Test Apparatus as per **IS 7320** specifies the design and material requirements of the slump cone and other components. The standard defines the dimensions of the cone, Top diameter: 10 cm, bottom diameter: 20 cm, height: 30 cm. The tamping rod is required to be 16 mm in diameter and 60 cm long, made of a suitable material for repeated use. The standard also emphasizes the **smoothness of the cone's interior surface** to prevent adhesion of concrete, ensuring accurate slump measurements. The mould shall be made of galvanized iron sheet or any other suitable metal not readily attacked by cement paste; Aluminium shall not be used. The metal shall be at least 1.6 mm thick.