

Lecture 3.19: IS Test Procedure to find Compressive & Tensile Strength of Concrete, Accepta...

Concrete Technology (DI04006011)

Civil Engineering Department

Lecture Agenda

- 1. IS Test Procedure to find Compressive & Tensile Strength of Concrete, Acceptance Criteria, and Mean Strength & Standard Deviation.
- 2. Summary and Q&A

3.3 IS Test Procedure to find Compressive & ...

- Cubes (150mm) are cast, compacted, and cured for 28 days for compressive strength testing.
- Tested in a Compression Testing Machine (CTM) at a loading rate of 14 N/mm²/minute.
- Acceptance Criteria (IS 456): The average of three specimens determines the strength; variation must be within limits.
- Split Tensile Test: A cylinder is laid horizontally and loaded compressively to failure.
- Mean Strength = Characteristic Strength + (1.65 × Standard Deviation).

Summary

- Recap of the specific material properties and methods discussed.
- Always refer back to the standard IS codes for parameter limits.