



IS 14858:2000 Compression Testing Machine used for testing of Concrete and Mortar — Requirements

The **Compression Testing Machine** for testing of Concrete and Mortar is used to measure the **compressive strength of concrete and mortar test specimens** in compression. Compression testing machines are used to measure the load-bearing capacity of a given material i.e to determine the maximum load per unit area material can withstand.

The Compression Testing Machine should be designed to apply a **compressive load at a uniform rate** to the sample until it fails. A standard testing equipment should be capable to give **reproducible and repeatable test results** with the desired level of **accuracy**.

IS 14858:2000 covers requirements of the Compression Testing Machine used for testing of concrete and mortar test specimens in compression. The compression testing machine as specified in this standard is **robust, power operated**, related to the size of the specimen and the expected load, and capable of providing the **requisite rates of loading uniformly, without shock**, using manual or automatic control. The accuracy of the testing machine is such that the percentage of error for the loads within the proposed range of use of the testing machine does not exceed ± 1.0 percent of the indicated load. The machine is provided with **easily read dials or scales or electrical load indicators, with a visual display** and a resettable device which registers the **maximum load** sustained by the specimen. The testing machine is equipped with **machine platens with hardened faces**. The space provided for test specimens is large enough to accommodate, in the readable position, an elastic calibration device which is of sufficient capacity to cover the potential loading range of the testing machine.