Summary: IS 5513: 1996 Specification for VICAT APPARATUS

Vicat's Apparatus is used to find out the consistency, initial setting time, and final setting time of the cement. In the normal consistency test, we have to find out the amount of water to be added to the cement to form a cement paste of normal consistency that is the percentage of water required to make workable cement paste, this is done by using Vicat Apparatus.

The main components of vicat apparatus are needles which are of two types, one for determining initial setting time and second for determining final setting time, Plunger which is used for finding the normal consistency of cement, movable rod carrying indicator capable of moving over a graduated scale and vicat mould in which cement paste is filled. The standard IS 5513 stipulates the requirements for Material of construction for different parts of vicat apparatus, such as needles shall be of hardened and tampered steel, their fitting ends shall be of brass. Plunger shall be of polished brass and vicat mould shall be rigid and shall be provided with non porous glass or stainless steel base plate. The ISS also lays down dimensions and specifies the Mass of different component parts of vicat apparatus including marking requirements of Vicat Apparatus.