## **Compacting Factor Apparatus**

PC-005; Promat

Compaction factor apparatus consists of trowels, hand scoop (15.2 cm long), a rod of steel or other suitable material (1.6 cm diameter, 61 cm long rounded at one end ) and a balance.



Compacting Factor Apparatus comprises two conical hoppers each with a hinged trap. The trap is operated by a quick release mechanism and allows free flow of the concrete sample. A cylinder is fitted beneath the hoppers. All three parts are mounted on a rigid steel stand. The hoppers and cylinder can be removed from the stand for cleaning and weighing.

The internal surfaces of the hoppers and cylinder are smooth, clean and damp but free from superfluous moisture. The frame placed in a stable position free from vibration or shock. The axes of the hoppers and the cylinder shall all lie on the same vertical line. The two trap doors are closed and the top of the cylinder covered by the two floats.

Compacting Factor Apparatus weighed and the mass of the partially compacted concrete calculated and recorded to the nearest 10 g. The measurement made within 150 seconds of commencing the test

The cylinder is emptied and refilled with concrete from the same sample in such a way as to remove as much entrapped air as possible without significantly reducing the amount of entrained air (if present) and to produce full compaction of the concrete with neither excessive segregation nor laitance. For this purpose, the concrete is placed in six approximately equal layers in the cylinder.











