Standard Specification for

Flow Table for Use in Tests of Hydraulic Cement

AASHTO Designation: M 152M/M 152-16¹ Release: Group 1 (April 2016) ASTM Designation: C230/C230M-14



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1. SCOPE

1.1. This specification covers requirements for the flow table and accessory apparatus (see Note 1) used in making flow tests for consistency of mortars in tests of hydraulic cement such as, but not limited to, ASTM C1437.

Note 1—To help clarify the design of the flow table and accessory apparatus, see the drawing in Figure 1 (SI units) or Figure 2 (U.S. Customary units). This drawing is for informational purposes only.

- 1.2. The values stated in either SI units or inch-pound units shall be regarded separately as standard. The values stated in each system may not be exact equivalents; therefore, each system must be used independently of the other. Combining values from the two systems may result in nonconformance with the standard. It is permissible to use an inch-pound caliper and mold with an SI flow table or an SI caliper and mold with an inch-pound flow table. It is not permissible to mix an SI mold with an inch-pound caliper or an inch-pound mold with an SI caliper.
- **1.3.** This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. REFERENCED DOCUMENTS

- 2.1. *ASTM Standards*:
 - C1437, Standard Test Method for Flow of Hydraulic Cement Mortar
 - Manual of Cement Testing, Annual Book of ASTM Standards, Volume 04.01

3. FLOW TABLE AND FRAME

3.1. The flow table apparatus shall consist of an integrally cast rigid iron frame and a circular rigid tabletop $255.0 \pm 2.5 \text{ mm} [10 \pm 0.1 \text{ in.}]$ in diameter, with a shaft attached perpendicular to the tabletop by means of a screw thread. The tabletop and shaft with contact shoulder shall be mounted on a frame in such a manner that it can be raised and dropped vertically through the specified height of $12.7 \pm 0.13 \text{ mm} [0.500 \pm 0.005 \text{ in.}]$ for new tables and $12.7 \pm 0.38 \text{ mm} [0.500 \pm 0.015 \text{ in.}]$ for tables in use, by means of a rotated cam. The tabletop shall have a fine machined plane surface, free of blowholes and surface defects. The top shall be scribed with eight equidistant lines 68 mm $[2^{5}/_{8} \text{ in.}]$ long, extending from the outside circumference toward the center of the table. Each line shall end with a scribed arc, 6 mm $[1/_{4} \text{ in.}]$ long, whose center point is