

Hand-Operated Cement Mortar Flow Table

Operating Manual

Civil Engineering Test Equipment

Intended use

Determining the flow (workability and consistency) of hydraulic cement mortar by measuring the spread of a moulded sample after the table is dropped a set number of times.

Intended users

Trained construction materials testing, quality control and teaching laboratory personnel; students under supervision.

Read this manual completely before first use and keep it with the product. This document provides general operating, care and safety guidance. Where the product is supplied with manufacturer labeling or instructions, those take precedence. For questions, a replacement copy, or a digital copy of this manual, email sales@scimedstore.com.

1. Safety

Safety warnings and cautions

- Wear gloves and eye protection when handling cement mortar. Wet cement is alkaline and can cause skin burns and eye injury.
- Avoid breathing cement dust when weighing and mixing dry materials.
- Mount or place the table on a firm, level base so it cannot tip or move during dropping.
- Keep fingers clear of the table top and cam mechanism while turning the crank.
- Do not lift the table by the table top.
- Wash skin that contacts mortar promptly with clean water.

2. Package contents

- Flow table with stand
- Mortar mould
- Tamper
- Brush
- Manual

Check contents on receipt. Report missing or damaged items to sales@scimedstore.com within 48 hours of delivery.

3. Specifications

Table top diameter	250 mm +/- 2.5 mm
Table top material	Brass
Drop distance	12 mm, cam controlled
Cam	Ground and hardened steel
Table reinforcement	Equally spaced ribs
Stand	Rigid steel
Mortar mould	100 mm base diameter x 50 mm high
Operation	Hand-operated crank
Test methods (per listing)	IS 5512, IS 4031 Part 6, ASTM C230, ASTM C1437, EN 459-2

4. Unpacking and setup

- 1 Unpack and check all parts against the package contents list.
- 2 Place the flow table on a rigid, level bench or base and secure it if your test standard requires.
- 3 Check that the table top is level.
- 4 Turn the crank slowly and check that the table rises and drops smoothly through its full drop.
- 5 Clean the table top and the mould and wipe them with a damp cloth before each test.

5. Operation

Flow test

- 1 Center the mould on the dry, clean table top.
- 2 Fill the mould with freshly mixed mortar in layers, tamping each layer as specified in your test standard.
- 3 Strike off the top level with the mould rim using a straightedge and clean the table around the mould.
- 4 Lift the mould straight up, away from the mortar.
- 5 Turn the crank immediately to drop the table the number of times and at the rate given in your test standard.
- 6 Measure the spread diameter of the mortar along the number of lines required by your standard.
- 7 Calculate flow according to your test standard and record the result.

6. Cleaning and disinfection

- Remove mortar from the table top, mould and tamper immediately after the test, before it hardens.
- Wash parts with water and a soft brush. Do not scratch the brass table top.
- Dry all parts thoroughly. Apply a light film of oil to the cam and other steel moving parts to prevent rust.

7. Maintenance and storage

- Store in a clean, dry place, covered to keep dust and grit off the table top and cam.
- Keep the cam and shaft lightly lubricated and free of mortar.
- Check the drop height and table top diameter periodically against your test standard.
- Check that the table top is not dented or warped; replace damaged parts.

8. Troubleshooting

Problem	Likely cause	What to do
Table does not drop the full distance	Mortar or dirt on shaft or cam	Clean and lubricate the shaft and cam.
Crank stiff	Lack of lubrication or rust	Clean and oil the moving parts.
Uneven spread	Table not level or mould lifted unevenly	Level the table and lift the mould straight up.
Results not repeatable	Inconsistent dropping rate or tamping	Follow the rate and tamping procedure in your standard.
Table rocks during test	Base not firm or not secured	Move to a rigid base and secure the stand.

9. Disposal

- Allow mortar waste to harden and dispose of it as construction waste in accordance with local regulations.
- Dispose of metal parts in accordance with local regulations.

10. Warranty and support

Products are covered by SciMed's standard warranty (12 months from purchase unless a different period is stated on your invoice). Warranty terms: scimedstore.com/pages/warranty.

Support, spare parts and additional copies of this manual: sales@scimedstore.com. Please include your order number and a photo of the product or issue.

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