

STANDARD MORTAR AIR ENTRAINMENT METER



Standard Mortar Air Entrainment Meter - ToronMAM™ S

ToronMAM™ S is a compact, direct-reading mortar air content meter built for accurate measurement of entrained air in fresh mortar mixes. While most air entrainment meters are designed for full concrete samples, the ToronMAM™ S is purpose-built for mortar testing — featuring a 1-liter stainless steel bowl and a pure 304 stainless steel pressure gauge assembly that delivers precise readings across an air content range of 0% to 20%.

Weighing approximately 3.2 kg, this lightweight instrument is easy to transport and operate on construction sites, masonry projects, and laboratory environments. The ToronMAM™ S mortar air tester offers graduated accuracy performance — $\pm 0.1\%$ for the 0%–6% range and $\pm 0.2\%$ for the 7%–20% range — giving testing teams the confidence to verify mix quality across a wide spectrum of air-entrained mortar applications.

APPLICATIONS

Standard Mortar Air Entrainment Meter - ToronMAM™ S Applications

The ToronMAM™ S mortar air content meter is designed for use across a variety of masonry, plaster, and cementitious mix testing applications:

- Masonry mortar QC: air content verification for Type S, N, and M mortars used in block and brick construction
- Plastering and stucco applications: checking air entrainment in finish coat and base coat mortar mixes
- Grout and self-leveling underlayment: air content testing for specialty cementitious products
- Prepackaged mortar production: plant-level quality control for bagged and bulk mortar products
- Concrete repair mortar: verifying air content in patching compounds and overlay mixes
- Testing laboratories: standardized mortar air content testing for product qualification and compliance
- Research and mix design development: accurate air measurement for mortar formulation studies



FEATURES

Standard Mortar Air Entrainment Meter – ToronMAM™ S Key Features

The ToronMAM™ S mortar air meter offers a focused set of features engineered specifically for accurate, reliable mortar air content testing:

- Purpose-built for mortar testing: 1-liter bowl volume matched to the finer-grained nature of mortar samples
- Direct-reading design: air content percentage read immediately from the gauge, no plotting or calculation needed
- Pure 304 stainless steel pressure gauge: corrosion-resistant, durable, and calibrated for precision performance
- 0.1 MPa operating pressure: appropriate for mortar sample characteristics and consistent with standard test protocols
- Wide measurement range of 0% to 20%: covers low and high air content mortar mixes
- Graduated accuracy: $\pm 0.1\%$ for 0%–6% range, $\pm 0.2\%$ for 7%–20% range
- Lightweight at approximately 3.2 kg: easy to carry and position in field and lab environments
- Compact form factor: suitable for use in confined spaces or on small mortar sample stations

THEORY & METHOD

Theory and Method

The ToronMAM™ S operates on the pressure method for measuring air content in fresh mortar. The mortar sample is placed in the 1-liter sealed bowl, and a controlled air pressure of 0.1 MPa is applied via the pressure gauge assembly. When the equalization valve is opened, the pressure drop caused by the compression of entrained air voids within the mortar is read directly from the calibrated gauge as a percentage of air content.

The direct-reading design of this mortar air meter eliminates the need for manual chart plotting or correction calculations. The 304 stainless steel pressure gauge and bowl construction resists corrosion from mortar mix chemicals and moisture, maintaining long-term measurement accuracy. The instrument's small bowl volume — matched to mortar rather than full aggregate concrete — ensures that the pressure differential is appropriate for the finer-grained material, producing accurate results that would not be achievable with a standard 7-liter concrete air meter.

TECHNICAL SPECIFICATIONS

Standard Mortar Air Entrainment Meter - ToronMAM™ S Technical Specifications

Parameter	Specification
Model	ToronMAM™ S
Bowl Volume	1 L (1,000 mL)
Pressure Gauge Range	0.1 MPa
Pressure Gauge Material	Pure 304 stainless steel
Air Content Range	0% - 20%
Accuracy (0%-6% range)	±0.1%
Accuracy (7%-20% range)	±0.2%
Instrument Weight	Approximately 3.2 kg
Test Type	Direct-reading (pressure method)
Application	Fresh mortar air content testing



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

