



MAGNETIC ANALYSIS CORP.

BULLETIN 4110

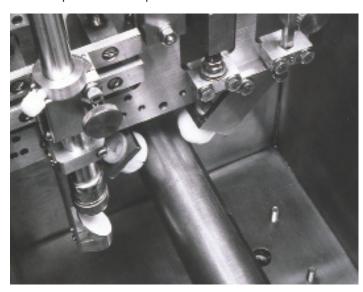
Model 411 Dual-Probe, Air-Loaded Follower

TACTIC™ Model 47, 48 and 49 Followers have performed excellently for many years and will continue to be offered as low cost, precision devices for many applications. Over the years, however, it has become apparent that some additional features would be desirable in an "ideal" follower to provide for:

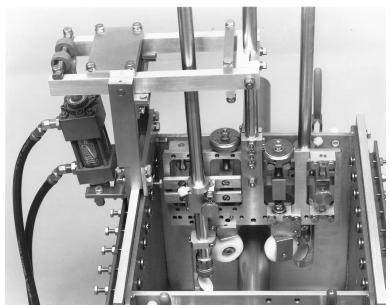
- · Higher speed operation
- · Easier adjustment
- Ready interchangeability of preset plates to minimize change-over time
- Adaptability to coplanar transducers for interlaced, "pitch-catch" and through transmission scan modes.

The MODEL 411 Follower has all of these characteristics and others as described below.

• It uses controllable air pressure to a pneumatic cylinder to provide "massless" loading to increase the RPM which can be followed for a given amount of material displacement due to out-of-straightness. Alternatively it may be used as a conventional gravity-loaded follower when material straightness and test speed do not require the extra pressure.



Model 411 Follower with Ball Transfers



Model 411 Follower with Angulatable Wheels

- It uses a double hinge rather than sliding plate action for greater freedom from "chatter" and binding.
- The calibrated transducer offset dials face up, out of the water, for easy visibility and adjustment.
- It requires only 5 inches (127 mm) of space along the side of the tank and is installed on the same mounting rail as is used for TACTIC™ Model 45-8 and 45-9 fixed positioners. This allows each follower to be located anywhere along the tank and to be easily substituted for fixed positioners when required.
- It may be readily changed in the field to use either balls or wheels to contact the material.
- In addition, it may be field changed to provide offset or opposed transducers, i.e., on opposite sides or on the same side of the plate.
- May be used with right angle transducers, or with straight transducers with right angle adapters or deflectors (shown).

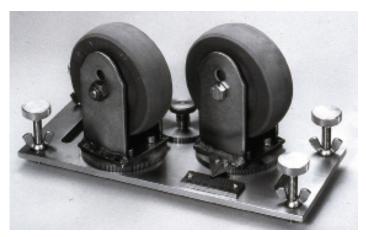
Optional Accessories

The Model 265 Large Wheel Support Pedestal is recommended for use in the test tank to support material being followed by the Model 411. The support afforded by the Model 265 prevents downward deflection of the test material due to follower "riding" pressure and/or material crookedness. Angulation of the two support wheels is coordinated by gearing, is lockable and is indicated from 0 to 30 degrees on a calibrated angle scale. The support wheel plate is adjustable in height and position to match the material feed line determined by the tester drive system.

Various length pivot arms are available to adapt the follower to test tanks of different widths. The pivoted support clamp for the follower plate should be located over the centerline of the tank.

Extension attachments are available to increase the diameter range for which ball followers may be used (in appropriately sized tanks).

A clamping fixture is available to secure the follower plate in a fixed position to the sides of the test tank. This enables the transducer positioners on the plate to be used as "fixed" rather than "following" units. This method may be employed to advantage for occasional testing of material which is too small in diameter or too flexible to be readily followed and is in such small quantities or is tested so infrequently that it is considered impractical to remove the follower and install fixed positioners such as the Model 45-9. (See Bulletin 453.) Such small material should always be supported in the tank by Model 259, or equivalent, Wheeled Support Pedestals.



Model 265 Large Wheel Support Pedestal

The follower may also be supplied without the pneumatic cylinder and controls. This version is designated "Model 41" and may be used for gravity-loaded following on less-rapidly rotating material. "Push" or "pull" spring attachments may easily be added to this model of the follower.

Additional complete follower plate assemblies may be kept on hand to allow presetting of adjustments for certain oftenencountered material sizes. This can significantly decrease set-up time when converting the tester to a size for which a preset plate is available.

Contact us to learn more about the Model 411, Dual-Probe, Air-Loaded Follower and its accessories.

