

## Application Note 99-3

### Test Bottles for TapTone<sup>®</sup> Acoustic Inspection Systems

TapTone now offers Test Bottles for its acoustic inspection systems. The Test Bottle provides a pre-determined acoustic signal to benchmark the machine's performance.

The Test Bottle is designed for steel crown and ROPP closure applications, typically beer bottles.



Model TBL-1, for 12oz. bottle applications.  
Model TBL-2, for quart bottle applications.

### How is the test performed?

The Test Bottle should be adjusted for the same height as the current production bottle. The distance of the head from the crown should be .150" (3.8 mm). The following parameters should also be used when performing this test. These can be stored in product type (10) of the TapTone system for future use:

Gate Time/Delay: .....36/8  
Low/High Cut-off: .....110/450

Disable the rejector. The Test Bottle will need to be removed from the conveyor by hand to avoid damage to the crown/cap. It is crucial the test bottle retains its specified values.

The Test Bottle is then set on the conveyor and allowed to pass the TapTone transducer head. The TapTone system will display the merit value and dB value on the display screen. These values are then compared to the specific values labeled on the Test Bottle.

- The merit value should be within +/- 4
- The dB value should be within +/- 3 dB

If your TapTone system's measured merit value is not the same as the Test Bottle's specified value, the system should be checked. Refer to your TapTone operator manual troubleshooting guide.

If your TapTone system's measured dB value is not the same as the Test Bottle's specified value, the microphone may need to be replaced. Refer to Application Note 99-4 for instructions on microphone replacement.

Note: Be sure the head is properly aligned with the crown to assure proper dB value readings.

#### Test Bottle Features:

- Adjustable height to match actual production.
- Durable body design to withstand normal handling conditions in bottling environment.
- Stainless steel crown/cap.



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TapTone Test Bottles are available for purchase in single and multiple quantities. Special bottle diameter and heights are available upon request.

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