

Instrumented Bottle



Check your bottling machines



Instrumented bottle to measure the capping torque. The mechanical support includes the torque sensor and has been designed according to the bottle shape

Cap torque closing is one of the most important functions of your screw capping machine as customers rely on your quality to manufacture and maintain the end product. The Instrumented bottle is designed to perform cap torque testing on the production line, and so ensure a quality control of your manufacturing batches.

Most of the time cap torque testing is done by unscrewing cap from the bottle, and it is done once the cap is already mounted. This involves inaccurate results as the cap torque test is not performed on the automatic bottle capping equipment directly. In order to answer to this requirement, COM-TEN designs a force and torque bottle gauge able to measure the force applied when the cap is set up on the bottle and the torque during the screwing process. We call them the

instrumented bottle system. It consists of an assembly between a mechanical representation of your bottle and the integration of a force or/and torque sensor.

The instrumented bottle can be disconnected from its display for easy setup on the capping machine before the measurement. The sensor is then re-connected to its display. The capping process can start is process by screwing the cap directly on the instrumented bottle and the measurement are displayed on real time on the display. Both measurements: insertion force or/and maximum torque applied on the cap are shown on the same screen and saved in the memory. The device calculates automatically the mean and standard deviation, thanks to its statistical feature. Collect your data on your computer for further analysis.

Best in-class solution

- > **A custom made** measuring solution to fit your process
- > **Interchangeable mechanic** solution to adapt to all your different bottle size and shape
- > High sampling rate for **repeatable and accurate results**
- > Large and remote display
- > Choice of torque range up to **200 in.lb**

Specifications



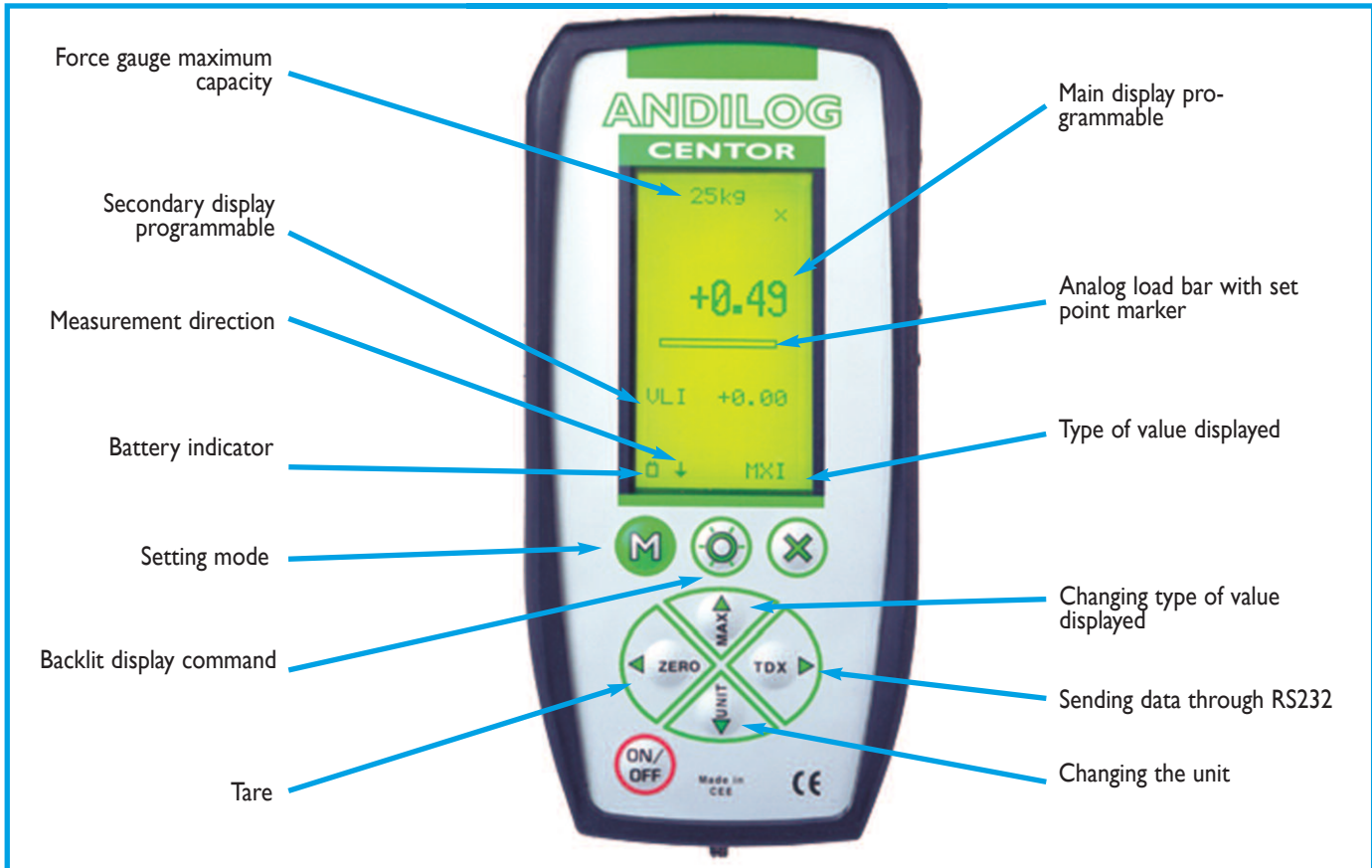
Instrumented bottle to measure the insertion force for champagne capping machine with a force sensor up to 2,000 lb

FEATURES	CENTOR EASY
Accuracy	0,5 % FS
Resolution	1/10,000 FS
Sampling rate	1,000 Hz
Sensor protected from overloads	200% FS
Auto-off	Adjustable from 5 to 15 minutes
Bargraph	✓
Peak in tension and compression	✓
Display peak and current reading	✓
Can be used with a pedal	✓
Tare	✓
Force limit	✓
Average and standard deviation	✓
Memory	100 results
Reversible display	180°
Operates on rechargeable batteries	✓
Operation without recharging	✓
Fast charge	✓
Low battery indicator	✓
Metal casing & Protective elastomer	✓
Threaded fixing holes on the back	✓
RS232 output	Send current reading, peak or minimum
Continuous transmissions	50 values per second
Digimatic output	✓
Analogic output	+/- 1V

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Display indicator example



Custom Made solution



Custom Made solution
Our solutions are designed by our research department in order to provide a unique and accurate product. Mechanical component must be at the exact same shape and dimension as you current bottle to minimize measurement errors. We manufacture bottle that can be use in food or medical applications.

Statics and memory features

Make all your measurements in production or maintenance directly on the force gauge. Not need to be connected to a computer permanently, the Centor Easy stores your results. You can transfer these values for archiving once all your controls and adjustments are made. It calculates in real time over the mean and standard deviation values of your maximum.

MES / ECH	3
OPER	01
Unite	N
STATS	MXI
Nbech	002
Moy	12.33
001	12.334
001	12.332
001	12.331
002	12.335
002	12.334
002	12.330

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ISO 9001:2008 certified