

Custom Tooling

We have the capability of accommodating the most unique and unusual container and cap combinations, including odd-shaped containers, pump dispenser closures, non-serrated caps, child-resistant closures and several other non-typical applications. This versatility is what sets Mesa apart from the competition.

Here are just some of the tests we can accommodate:

- Closure Application
- Closure Removal
- Tamper Evident Band Break
- Non-destructive Release
- Strip
- (Roll on Pilfer Proof) ROPP
- Application/Release Angle monitoring
- Container & Closure Thread Fatigue
- Incremental Torque
- Bridge Torque
- 3 in 1 (Thread Break, TEB Break, Strip)
- Continuous Topload Monitoring
- USP Permeation

Our design team will evaluate your specific needs and provide you with a durable, easy-to-use solution that will provide you with consistent and accurate results.

Challenge us with what challenges you in cap torque testing!



Scan for more information

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MesaLabs

Closure Torque Analyzers

for Food, Beverage and Pharmaceutical Industries



Torqo[®] 1600

With its large touchscreen HMI, the Torqo makes computerized torque testing simple, accurate and affordable. There are visual Pass/Fail indicators, numeric and graphical results and digital data output (RS232, USB, Ethernet) to satisfy every data transfer need.

Tooling is available for any threaded closures - including child resistant caps and ROPP closures. Customize to your specific application by adding one of the optional assemblies:

- Beverage clamp (for 2l beverage bottles)
- Quick clamp vise (for fast test cycles)
- Topload (for Child-Resistant closures)
- Guard (for pressurized products)
- Gold Bottle (for quick accuracy verification)
- Petaloid base, Tower riser, Universal chuck, & more!



Torqo & Accessories



ST-H0X and ST-FT 1
Manual Torque Testers

ST-H0X and ST-FT1

The **ST-H0X Series** of Manual Cap Torque Testers are designed to measure application and removal torque of bottle caps up to 50 lbFin [5.65 Nm]. Adjustable posts effectively grip a broad range of container shapes and sizes, while optional flat and adjustable jaws are available for unique container profiles. A rugged aluminum design, and simple, intuitive operation allow for use in laboratory and production environments.

Mesa Labs' **ST-FT1** is a universal handheld torque/force display that, when coupled with the Chuck calibrator adapter, can be used to verify/calibrate chuck capper heads. Cap adapters are easily replaceable to accommodate various chucks. Alternatively, the ST-FT can be used with serrated chuck adapters for the purpose of manual torque testing.

The **Gold Bottle** magnetic torque standard can be used to verify the accuracy and repeatability of manual or automatic torque analyzers. Since the break-away torque is produced by permanent magnets, the value will always be the same unless something has changed within the torque analyzer itself.

ST-120S

The corrosion resistant stainless steel head enclosure and anodized aluminum frame construction makes the ST-120S ideally suited for the most demanding applications, such as testing closure torque at Carbonated Soda Drink (CSD), juice, bleach bottling operations as well as cleanroom environments.

The unit is equipped with anti-bridging, anti-tie down anti-repeat dual actuation safety start switches, but for maximum operator safety, the ST-120S can be also equipped with a full machine guard. Other features include:

- Automated bottle /cap gripping
- Servo drive
- Highly accurate strain gage based transducer
- Infinite chuck rotation
- Quick-change tooling
- Color touchscreen interface



ST-120S & Accessories



ST-INLINE



ST-INLINE

The ST-INLINE is the only fully-automated strain gage based, validation ready bottle cap torque tester / retorquer on the market.

The ST-Inline can be used in slower bottling operations, or for higher speed lines with a gating mechanism used to divert samples from the main line to the ST-Inline tester. Depending on programming and options the ST-Inline can measure the removal torque values then return the bottles to the main line or automatically gate them to a reject lane.

The configurable audio and visual alarm, numeric or graphical display warns the line operator of torque issues.

With the optional topload or floating chucks, the ST-Inline can be also used for CR and TEB testing projects.