

Head Load Tester

Head Load Sealing Tester for Wine Bottles

Tiedemann offers various test equipment to measure the head forces during the closing of wine and other bottles. The apparatus is shaped so that it can run as a dummy bottle through the sealing process. During the passage the maximum force on the bottle head may be measured.

The maximum deformability by the force gauge and thus the bottle length variation is about 500 microns. All head load tester are very robust and supplied ready for immediate use.

The following standard products have specific bottle diameters, with adjustable bottle lengths and force gauges. If desired they can be adapted to other dimensions and forces to fulfill your specific needs.



**Tiedemann Wine Bottle
Head Load Tester TWP 2**



**Tiedemann Wine Bottle
Head Load Tester TWP 5**

Tiedemann Wine Bottle Head Load Tester TWP

Tiedemann's head load test system is coming with three different probe heads for wine bottle capsules, turning (BVS) and cork stopper. Please specify when ordering the desired closing type. Before entering the dummy in the closing process the force gauge is set for maximum load. In removal from the process, the maximum head force can be read on the bottle's display in Newtons (N).

The height of the dummy bottle is adjustable by screw. The Tiedemann tester TWP is provided with a diameter of 76 mm and a variable height of $315 + / - 20$ mm. It fits to nearly all common wine bottles. The weight of the dummy is 1.8 kg.

The maximum measurable force is determined at the TWP 2 with an analog force ring dynamometer at 2 kN, The maximum load must not exceed 5 kN.

The tester TWP 5 is identical to the listed TWP 2. However, a digital force gauge will replace the analogue ring dynamometer. This provides a measurement range and a maximum load of 5 kN. The measurement error of the TWP testers is $<0.5\%$.

The battery life of the digital tester is 4000 hours with an auto-off after 3 hours. The device can optionally be connected via a USB cable to provide data in seconds to a notebook during loading.

Technical Data

Tiedemann TWP 2/TWP 5: Dummy bottle diameter $d = 76$ mm,
Dummy bottle height $h = 315 + / - 20$ mm

Dummy heads: capsule, turning (BVS), cork

TWP2: analog dynamometer, 2 kN with max load indicator

TWP5: digital dynamometer, 5 kN with max load display,

In cases other dimensions, forces and head shapes are required, please let us know.