## Application manual No. 104

**Production:** DRAUGHT ALE (Foam Strength)

**Objective:** Comparison of foam strength of three types of draught ale

**Type of action:** Compression test

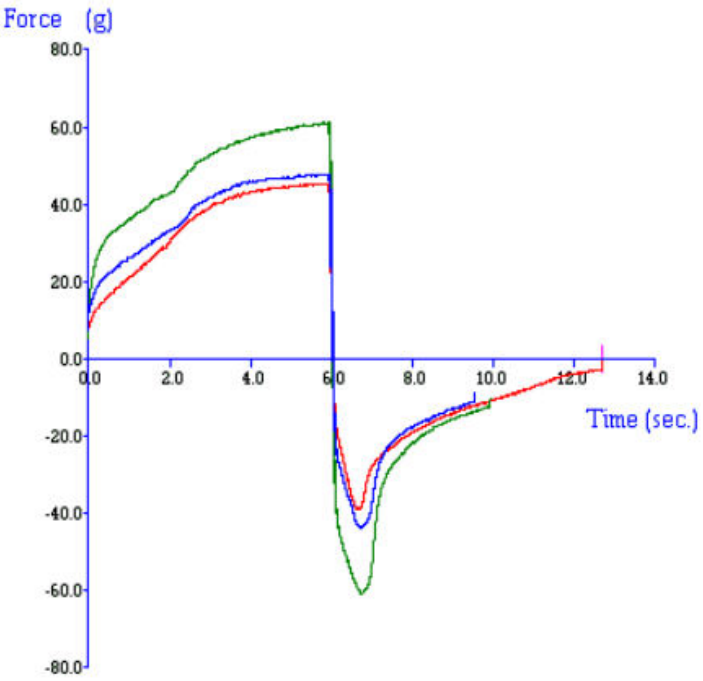
**Test mode settings:**

| Speed | Test mode | Trigger | Target | Hold |
|---|---|---|---|---|
| 0.5 mm/s | Distance (c) | 5 gf | 3 mm | 0 sec |

**Accessory:**
ϕ 75 mm compression plate, Platform

**Test Set-Up**:
Position the glass centrally under the cylinder probe and allow the ale to settle for 2 minutes. Commence the penetration test.

**Typical plots:**




The above curves were produced from 3 different draught ales, poured into a glass at a 45 angle, and tested at 5C.

**Observations**:
After a trigger force of 3g is attained the probe then proceeds to penetrate into the foam to a depth of 3mm. During this penetration the force is shown to gradually increase as penetration continues. The force at 0.5mm penetration gives an indication of the strength of the foam.

**Data Analysis:**
☒Cursor mark by user find force at 0.5 mm

**Results**

| Sample | Force at 0.5 mm 'Foam Strength' (+/- S.D.) (g) |
|---|---|
| A | 19.9 +/- 1.1 |
| B | 24.9 +/- 2.4 |
| C | 34.1 +/- 1.6 |

**Notes**:

- The results for this type of test normally show very good reproducibility. However this is only true when the sample is set in a position which allows the formation of a flat surface. Failure to test on a flat surface causes differing test contact areas and hence produces erroneous results.
- May be used to count 120secs from when the sample is placed under the probe to when the test should commence. This ensures that each sample settles for the sample length of time prior to testing.
- The test may be modified to penetrate further into the sample, however in order to make comparisons between tests, the distance must remain constant.