

Production: CHEWING GUM STICKS

Objective: Measurement of the hardness and resistance of chewing gum sticks to bend/flex
(Hardness part)

Type of action: Penetration test

Test setting:

Speed	Test mode	Trigger	Target	Hold
1 mm/s	Distance (c)	5 gf	15 mm	0 sec

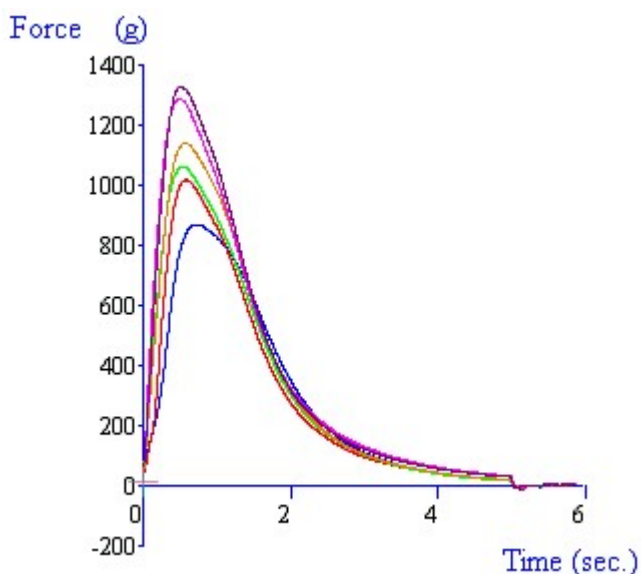
Accessory:

φ2 mm cylinder probe, Platform

Test Set-Up:

The holed plate was secured onto the Heavy Duty Platform and the 2mm cylinder probe attached to the load cell. The Heavy Duty Platform was manoeuvred and locked in a position that enabled the probe to penetrate the holed plate centrally. The sample was removed from its packaging and placed centrally over the supports just prior to testing at 20C.

Typical plots:



Data Analysis:

☒ Max Force

Results

Sample	Mean Max. Force 'Hardness' (+/-S.D.) (g)
A	1114.3 +/- 157.3

Notes:

- Storage, packaging and handling of the sample before testing are considered variable conditions under which the samples are tested. These conditions should be identified and kept constant for comparison purposes.
- When attempting to optimise test settings it is suggested that the first tests are performed on the hardest samples to anticipate the maximum testing range required and ensure that the force capacity allows testing of all future samples.