Production: PACKAGED SLICED BREAD

Objective: Comparison of the softness and springiness of two packaged square loaves of bread

Type of action: Compression

Test setting:

Speed	Test mode	Trigger	Target	Hold
8 mm/s	Strain (c)	50 gf	20%	0 sec

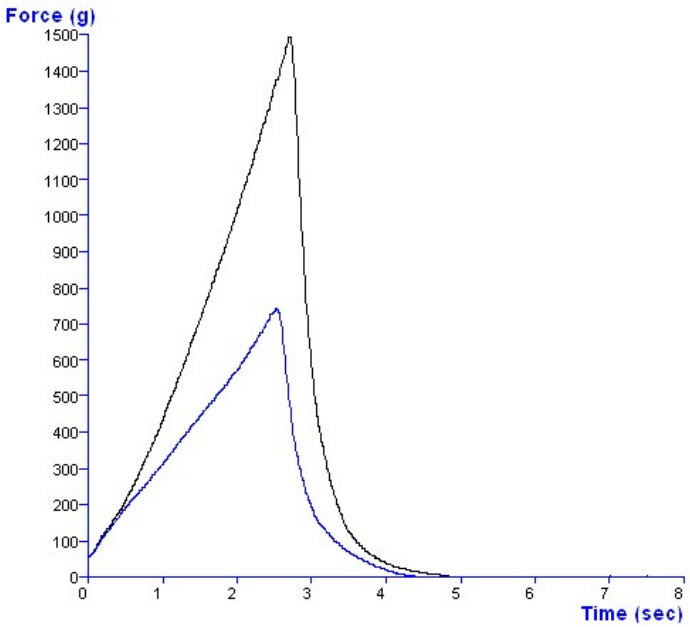
Accessory:

V-shaped toast bread rig, Platform

Test Set-Up:

Screw the probe into the load cell and tighten the bell lock to position the probe. The probe should be aligned parallel to the instrument arm so that the "V" is visible only from looking from either side of the instrument. Position the loaf centrally under the probe, so that the loaf is perpendicular to the instrument arm. Six tests were conducted along the length of each loaf, giving no consideration for slices, the tests were evenly spaced along the length and no test was conducted within 30 mm of the ends of the loaf.

Typical plots:



Texture Analyzer Plot for Two Types of Sliced Packaged Loaf

Observations:
The test begins with the probe moving towards the sample surface at the pre-test speed of 1 mm/sec. When it comes into contact with the specimen surface, the force exerted on the probe by the sample starts to increase. Once the trigger force of 50 g has been reached the instrument increases speed to the test speed of 8 mm/sec and data is recorded. The probe moves to the target strain of 20 % and then returns to the start position at the post-test speed.

Data Analysis:

☒Max Force

☒Springiness

Results

Loaf	Softness (+/- S.D.) (g)	Springiness (+/- S.D.) (%)
A	1227 +/- 182.6	27.01 +/- 1.27
B	720.1 +/- 130.7	29.44 +/- 1.34

Notes:

- The method used in this report could be extended to other types of packaged bread products, including unsliced bread. A modified geometry V-shaped toast bread rig (and consequently a higher capacity load cell) may be required for other types of packaged bread.