Production: CORN TORTILLA CHIPS

Objective: Measure chip breaking force

Type of action: Penetration test

Test setting:

Speed	Test mode	Trigger	Target	Hold
1 mm/s	Distance (c)	10 gf	6 mm	0 sec

Accessory:

Potato chips crispness rig, Platform

Data Analysis:

☒Max Force

Results

The maximum peak force (as well as the distance, if desired) are recorded and the average and standard deviation are calculated.

Notes:

- This method is from a collection of procedures for testing the texture of common bakery products with the Texture Analyzer. These procedures have been developed by and are used at the American Institute of Baking's Experimental Bakery Lab in Manhattan, Kansas.
- It is the philosophy of the researchers at the AIB to have extremely flexible protocols for texture testing. Bakery products come in every imaginable type and shape, so meaningful textural comparisons must account for the different product geometries. These test procedures typically manage differences in geometry by reducing the products' size to a common denominator.
- Generally, the objective of most of these tests is to measure the firmness and shelf life of a baked product. Since the bulk of these protocols address sample handling, they can and should be modified slightly if the test objective is different (eg springiness, cohesiveness, resilience, etc).
- These protocols are simply starting places for developing test methods which are suitable for your own products. A researcher should be comfortable modifying the sample handling protocols, test speeds and distances to accommodate any specific purposes.
- The Noise emitted during this test can be measured and analysed using an Acoustic Envelope Detector.

The above curve was produced from plain dough biscuits, tested at 20C.