

Bulk firmness of different corn brands



USE

Kramer cell is used for the analysis of multi-particle products such as corn, olives or peas. During the test, thanks to the design of the cell, there is a combination of compression, shearing and extrusion.



METHOD

During the test, 50g of canned drained corn are placed inside the Kramer cell. Firstly, the comb is aligned with the cell. Then a 50mm compression test is launch at 1mm/s. The 500N sensor is used in order to prevent any saturation. A 250N sensor can be used with softer samples.



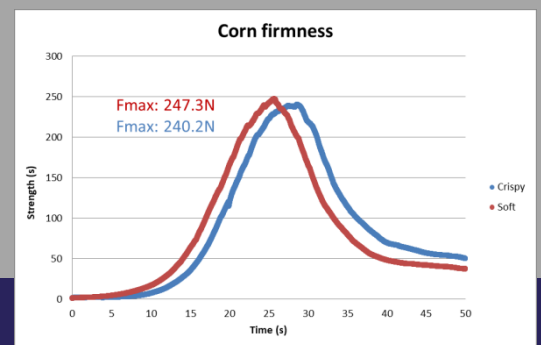
EQUIPEMENT



TX-700



Kramer cell

Software
(optional)

RESULTS

This compression test conducted inside a Kramer cell allows us to characterize the difference in consistency between types of corn.

Maximal strength (F_{max}) can be correlated to the consistency of the product. We can see that there is only a very small difference between the crispy one and the soft one. This apparatus demonstrates its ability to determine the difference between two different samples.

Thanks to the TX-700 equipped with this cell, it becomes easy to compare and rank a wide variety of small and disparate food products such as corn.