

Texture Analyser TA.XT Plus (Stable Micro Systems)

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Objective

- Texture measurement of chemical products and materials
- Quantification of characteristics, i.e. hardness, adhesiveness, elasticity, rupture force, stiffness, Bloom strength



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Experience

- Mechanical properties of gels
- Dissolving behavior of fouling layers
- Foam stability (whipped cream and similar products)

Principal of Measurement

- The sample is placed on the base of the texture analyzer, on the lower fixture, or held between two fixtures. To test the product or material the arm of the texture analyzer moves down to compress or penetrate the sample, or it moves upwards for tensile testing.

Measuring Range

- Force capacity: 50 kg.f (500 N)
- Force resolution: 0,1 g
- Load cells: 1, 30, 50 kg.f
- Speed range: 0,01 – 40 mm/s
- Range setting: 1 – 295 mm
- Dimensions: 665 x 440 x 280 mm

Measurable parameters

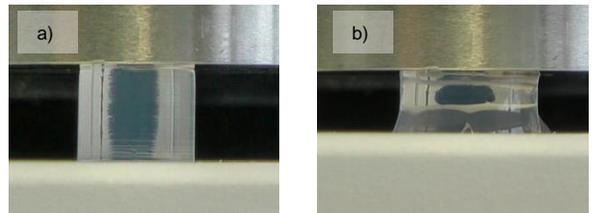
- Cohesion
- Burst point
- Adhesion
- Swelling
- Compressibility

Accessories

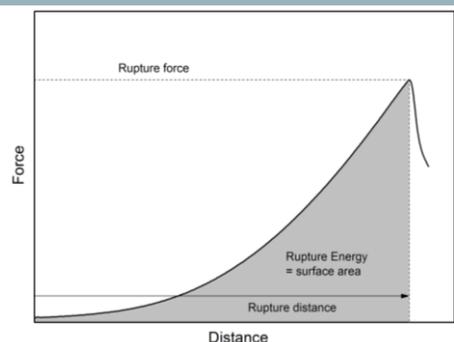
- Automated Linear Indexing System
- Temperature Controlled Peltier Plate
Temperature: 30°C below ambient to +80°C
Dimensions: 110 x 110 mm

Literature

- M. Peleg, *Review: Mechanical properties of dry cellular solid foods;* Food Science and Technology Int. **1997**,3 (4), pp. 227 – 240.



Compression of a cylindrical agar specimen, a) begin, b) rupture



Force-Deformation curve from compression test of agar gel