

Texture Analyzer

TVT 6700

New - dual Load Cell



Bread



Cookies & Crackers



Dairy



Snack Food

Texture Analysis Made Easy

Texture Analyzer TVT 6700

Evaluation of texture is often based on sensory evaluation and experience. The TVT 6700 texture analyzer is rapid, objective and more sensitive and reproducible than subjective sensory judgement. The TVT 6700 applies controlled conditions of stress or strain to food and other samples to measure a complete texture profile. It accurately measures compressive and tensile force and position over time using standard test modes including single and multiple cycle compression, tensile strength, compress-and-hold, extend-and-hold, fracturability and springback to describe product texture. Data is captured as a graph and stored in separate projects/files for analysis and export to spreadsheet programs. The TVT 6700 texture analyzer is user-friendly, efficient and versatile, with rigs and probes to quantify textural properties of a range of food products and materials.

Features and Benefits

Simple: A single model suits the needs of the food industry.

User friendly: Easy to use, large library of standard starter methods in software.

Objective: Sensitive, accurate and reproducible complete texture profiles.

Powerful software: Comparison graph overlay, customizable analysis and report options, automated statistical calculations, flexible data export to spreadsheet programs, graph export.

Rugged: Robust design suits laboratory and production environments.

Versatile: The TVT 6700 is supplied with two Load Cells. Change between the two in less than a minute. Standard and custom tests for hardness/firmness/softness, fracturability (brittleness), cohesiveness, adhesiveness/stickiness, springiness (elasticity), chewiness, gumminess, stringiness/shortness.

Cost Efficient: Reduce the need for sensory panels.

Applications

Quality control of raw materials, in-process and finished products; formulation and process development; evaluate ingredient and processing changes; monitor changes during storage and transport; imitate chewing and consumer handling.

Accessories

Cylinder probes: Compression, adhesiveness, puncture of solid foods (bread, cake, cookies, breakfast cereals, candy, marshmallows, beans, fruits, vegetables, eggs, cheese, meat).

Compression plates: Compression-extrusion testing of viscous liquids (yoghurt, custards, puddings), irregular shaped products (pasta), gels, fats, fresh & processed beans, fruits, vegetables.

Spherical probes: Compression and penetration of soft products (fish, butter, solid fats).

Conical probes: Compression and penetration of plastic and soft products (spreading of butter).

Knife blades, wires, break probes: Cutting force (shear) and hardness of solid foods (meat, sausage, flat bread, spaghetti, noodles, vegetables) and bending-snapping (cookies, potato chips, fruits, vegetables). Kramer Shear Cell for bulk bite test (crush & shear).

Clamps, roller grips: Tensile strength, stickiness and adhesion (processed meats, dough, cheese, noodles). Also for packaging and packaging materials.

Technical Specifications

Max Product Height: 300 mm

Dimensions (HxWxD), Net Weight: 65x34x44 cm, 24 kg

Load Cells/Force Range: Standard configuration 10 & 50 kg. Optionally select from 5, 10, 20, 30, 50 or 100 kg

Force Resolution: 1 gf (grams-force)

Load Cell Accuracy: <0.03%

Speed Range: 0.1-30.0 mm/sec

Speed Accuracy: 0.03% at 5 mm/sec

Position Accuracy: ± 0.02 mm

Precision (RSD_r*): $\leq 0.5\%$

Power Requirements: 110-240 V, 50 - 60 Hz

Computer Requirements: PC with Windows Vista, Win7 or Win8 operating system, DirectX 8 compatible 3D Graphics card, 1 RS 232 com port, 1 USB com port, 1.6 GHz CPU, 512 Mb RAM, hard disk space for data files (>100Mb recommended).

* Relative Standard Deviation within-instrument repeatability