Texture Analyzer

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Tool Type: Mechanical Properties Characterization
Location: Elings Hall 2411
Manufacturer: Stable Micro Systems

Principal Scientist
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About

The Texture Analyzer is located in room 2411 on the second floor of Elings Hall. This tool is capable of measuring virtually any physical product characteristic such as hardness, fracturability, adhesiveness, gel strength, extensibility of your materials. The Texture Analyzer is composed of a load cell and a linear actuator enabling the user to measure and control force and displacement with respect to time.

The Texture Analyzer has several fixtures that enables several material characterization testing techniques such as indentations, uni-axial compression, uni-axial extension, cyclic extension, pure shear, peel test, 3 point bending, and friction experiments.

Detailed Specifications

Force Capacity: 50 kg.f (500N)
Force Resolution: 0.1 g
Load cells: 0.5, 5, 30, 50 kg.f
Speed Range: 0.01 – 40 mm/s
Maximum Aperture: 370 mm/590mm
Distance Resolution: 0.001 mm
Data Acquisition Rate: 2000 pps

Safety Concerns

Common hazards associated with the Texture Analyzer include overheating and flying debris, so wear protective equipment and be very careful when performing hardness tests with hard materials. Pay special attention to how the sample is secured to prevent any flying debris.

Reference Documentation

Texture Analyzer User Manual
