

Texture Analyzer

Stable Micro Systems Texture Analyser



Tool Type: ""

Location: "Elings Hall 2411"

| Supervisor | email |
|--------------------|----------------------|
| Morgan Bates | morganbates@ucsb.edu |
| Juan Manuel Urueña | jmurueña@ucsb.edu |

Description: "Texture Analyzer"

Manufacturer: "Stable Micro Systems"

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.

Training Documentation

[Form 2/3 SOP](#)

Detailed Specifications

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

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

[ta_manual.pdf](#)

From:
<https://bpm-wiki.cnsi.ucsb.edu/dokuwiki/> - NSF BioPACIFIC MIP Wiki

Permanent link:
https://bpm-wiki.cnsi.ucsb.edu/dokuwiki/doku.php?id=texture_analyzer&rev=1635440731

Last update: **2021/10/28 17:05**

