» Exceptional Load Accuracy
Load accuracy of +/- 0.5% down to 1% of load cell value provides a high dynamic range, thereby reducing the number of load cells required to cover the full force range.

» Plug’n’Play YLC load cells
Featuring anti-rotation collars to avoid load train twist and facilitating easy axial alignment

» Large Work Area
180 mm (7.08 in) throat depth for larger specimens and wide range of work tables for flexibility

» Advanced Test Setup
The Windows®7 compatible NEXYGENPlus software features an improved and intuitive User Configurable Test functionality complementing the comprehensive texture analysis test library available

» Application Expertise
An extensive range of jigs, probes and fixtures designed from years of experience. In addition the machine can be fitted with multi-purpose grips for testing the strength and integrity of food packaging.

» Broad Range of Applications
- Bakery
- Cereals
- Confectionary & Snacks
- Dairy
- Fruit & Vegetables
- Gels
- Meat, Poultry & Fish
- Pasta & Rice; Snacks
- Pet Food
- Cosmetics
- Packaging

The TA1 texture analyser is a cost effective, easy to use solution for performing rapid, detailed texture analysis tests on applications up to 1 kN (225 lbf).

The Benefits of Texture Analysis
Texture analysis can highlight quality improvement opportunities throughout the supply chain and the production process. New or alternative ingredients can be compared with existing ingredients. In production, texture analysis is used for the measurement and control of process variations such as temperature, humidity and cooking time.

A texture profile analysis test replicates the effect of two bites on a sample. Lloyd Instruments NEXYGENPlus texture analysis software captures force, distance and time during the test, allowing the calculation of texture critical parameters such as:

- Adhesion Force
- Adhesiveness
- Chewiness
- Cohesiveness
- Firmness
- Fracturability
- Gumminess
- Hardness
- Modulus
- Resilience
- Springiness
- Stringiness

ISO 9001 Manufacturer
Specification Sheet
SS-TA1
NEXYGENPlus is a hub of the Lloyd Instruments materials testing system. This extraordinarily easy to use and flexible software allows the operator to control and monitor all aspects of the system from a single front end, ensuring fast, reliable and powerful testing and data analysis.

**Features**

- Large built-in library of test methods meeting international test standards
- Intuitive User Configurable Test facility
- Video and still capture for visual analysis
- User access settings and data traceability enabling compliance with FDA 21 CFR Part 11
- Built in SPC functionality for continuous monitoring of process parameters such as Cp and Cpk
- Microsoft Office® integration for seamless transfer of data to familiar Windows® packages, Windows® 7 compatible
- Versatile data export facility to LIMS, SPC or data management systems
- Test automation and batch testing

**Multi-lingual**

NEXYGENPlus software is available in the following languages:

- English
- Spanish
- French
- German
- Italian
- Danish
- Turkish
- Chinese
- Russian
- Polish

**Test Creation**

Getting started with NEXYGENPlus is simple, thanks to:

- An extensive built-in library of test methods covering ASTM, DIN, EN, ISO and other standards
- Test wizards for tension, compression, tearing, peeling, friction and flexural tests
- The User Configurable Test facility, ideal for product and component testing, R&D use and specialised testing

**Video and Still Picture Capture**

Whether for advanced sample failure analysis or presentation of test results, video and stills capture is a feature unique to NEXYGENPlus. Video and/or still pictures are synchronised with the stress/strain data and can be replayed or shown at specific points during the test in the graphical display. To utilise these powerful features simply connect your web cam or analogue video camera to your PC.

**Applications Expertise**

Our in-house application experts are available to assist with routine texture analysis queries and discuss your requirements for special applications. Through years of experience we have built an extensive range of jigs, probes and fixtures for food, cosmetics and packaging. We also offer a custom build service for test fixtures.
Technical Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Force Capacity</td>
<td>1000 N (225 lbf)</td>
</tr>
<tr>
<td>Max. Crosshead Travel, Standard Travel (Between the Eye Ends)</td>
<td>500 mm (19.7 in)</td>
</tr>
<tr>
<td>Crosshead Speed Range</td>
<td>0.01-2032 mm/min (0.0004-80 in/min)</td>
</tr>
<tr>
<td>Max. Return Speed</td>
<td>2032 mm/min (80 in/min)</td>
</tr>
<tr>
<td>Speed Accuracy (Unloaded)</td>
<td>+/-0.2% of selected speed from 2% to 100% of max. speed</td>
</tr>
<tr>
<td>Min. Load Resolution (Load Cell Specific)</td>
<td>0.0001N (2.2x10^-5 lbf)</td>
</tr>
<tr>
<td>Load Cell Accuracy</td>
<td>+/-0.5% from 1% to 100% of load cell value</td>
</tr>
<tr>
<td>Extension Resolution</td>
<td>&lt;0.15 microns</td>
</tr>
<tr>
<td>Data Sampling Rate</td>
<td>8kHz</td>
</tr>
<tr>
<td>Distance accuracy</td>
<td>+/-0.2% of reading from 2% to 100% of max. travel</td>
</tr>
<tr>
<td>Load Measuring System</td>
<td>EN ISO 7500:2004, Class 0.5 ASTM E4</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>20% to 85%</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>+5 to 35°C (41 to 95°F)</td>
</tr>
<tr>
<td>Storage Temperature</td>
<td>-17 to 54°C (0 to 130°F)</td>
</tr>
<tr>
<td>Supply Voltage (+/- 10%)</td>
<td>115VAC/230VAC, 50-60Hz</td>
</tr>
<tr>
<td>Max. Power Requirement</td>
<td>150VA</td>
</tr>
</tbody>
</table>

All systems conform to relevant EU standards and are CE marked. On site verification as per ASTM E4 and ISO 7500-1 recommended.

Dimensions & Weight

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Height (standard travel) 1001 mm (39.4 in)</td>
</tr>
<tr>
<td>B</td>
<td>Width (excluding console) 460 mm (18.1 in)</td>
</tr>
<tr>
<td>C</td>
<td>Depth               557 mm (21.9 in)</td>
</tr>
<tr>
<td>D</td>
<td>Base Height         108 mm (4.3 in)</td>
</tr>
<tr>
<td>E</td>
<td>Throat Depth        180 mm (7.1 in)</td>
</tr>
<tr>
<td></td>
<td>Weight (standard travel) 52 kg (115 lb)</td>
</tr>
</tbody>
</table>

Ordering Information

<table>
<thead>
<tr>
<th>Order number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TA1</td>
<td>TA1</td>
</tr>
<tr>
<td>S</td>
<td>Model</td>
</tr>
<tr>
<td>H</td>
<td>Operation</td>
</tr>
<tr>
<td>C</td>
<td>Power</td>
</tr>
<tr>
<td>115V</td>
<td>US Power Cord</td>
</tr>
<tr>
<td>230V</td>
<td>UK and Euro Power Cord</td>
</tr>
<tr>
<td>230V - CNAU</td>
<td>China and Australian Power Cord</td>
</tr>
<tr>
<td>TA1 S C 230V</td>
<td>TA1, Standard Travel, Main Console, UK and Euro Power Cord</td>
</tr>
</tbody>
</table>

Penetration test with peltier system able to generate temperature from 5°C to 80°C.
Standard Accessories

- Base table
- Cylinder probe 12.5 mm (0.5 in)
- Stainless Steel Tray

Optional Accessories

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No</th>
</tr>
</thead>
<tbody>
<tr>
<td>YLC Series Load Cell 5 N (1.12 lbf)</td>
<td>01/3871 - 5N</td>
</tr>
<tr>
<td>YLC Series Load Cell 10 N (2.25 lbf)</td>
<td>01/3872 - 10N</td>
</tr>
<tr>
<td>YLC Series Load Cell 20 N (4.5 lbf)</td>
<td>01/3873 - 20N</td>
</tr>
<tr>
<td>YLC Series Load Cell 50 N (11.25 lbf)</td>
<td>01/3874 - 50N</td>
</tr>
<tr>
<td>YLC Series Load Cell 100 N (22.5 lbf)</td>
<td>01/3875 - 100N</td>
</tr>
<tr>
<td>YLC Series Load Cell 250 N (56.25 lbf)</td>
<td>01/3876 - 250N</td>
</tr>
<tr>
<td>YLC Series Load Cell 500 N (112.5 lbf)</td>
<td>01/3877 - 500N</td>
</tr>
<tr>
<td>YLC Series Load Cell 1000 N (225 lbf)</td>
<td>01/3878 - 1000N</td>
</tr>
</tbody>
</table>

Texture Analysis Probes

- Ball Probes (Diameter range 1/4" - 1")
- Cone Probes (Cone angles 15° - 90°)
- Cylinder Probes (Diameter range 1/4" - 4")

Texture Analysis Fixtures and Test Accessory Kits

- Back Extrusion Cell
- Butter Cutting Jig
- Kramer Type Shear Cell
- Ottawa Forward Extrusion Cell
- Warner Bratzler Shear Blade Set
- Spaghetti/Noodle Test Fixture
- Three Point Bend Food Jig
- Voelkewitch Bite Set
- Magnus Taylor Puncture Probe Set
- Comparative Dough Stickiness Jig
- Dough Preparation Set
- Gluten Dough Extensibility Jig
- Crisp Fracture Support Jig
- Knife Edge Probe Set
- 18-Position Pea/Berry/Bean Test Fixture
- Texture Probe Set
- Bakery Accessories Kit
- Confectionery Accessories Kit
- Dairy Accessories Kit
- General Food Probe Kit
- Gel Bloom Kit

For further information on any of our fixtures or our special fixture design service, please contact Lloyd Instruments.