

## TAPlus Texture Analyser for Food Testing Applications

The TAPlus texture analyser is a cost effective, easy to use solution for performing rapid, detailed texture analysis tests on applications up to 102 kgf (1 kN, 225 lbf).

The machine uses interchangeable XLC Series load cells as the measurement device. Tension and compression testing with cycling to load and extension limits are standard features. The machine can be fitted with a selection of specially engineered food texture fixtures, jigs and probes, as well as a range of multi-purpose grips for general applications such as evaluating the strength and integrity of food packaging.

The TAPlus features an innovative design that maximises working space and simplifies operation and maintenance. The large work surface accommodates a broad range of specimen sizes and can be specified with additional optional work platforms for specialised applications.

The TAPlus displays load and extension information on a highly legible LCD console with integral membrane keypad. The machine's control console displays prompts and menus, which guide the user through machine operations. Users can choose from a range of display languages and units.

The machine's performance can be further enhanced when combined with Lloyd Instruments' NEXYGEN™ MT data analysis software. This Windows® based software is easy to use and allows detailed, fully customisable texture analysis tests to be performed, storing and displaying results in graphical and tabular formats.

NEXYGEN™ MT software contains an extensive library of pre-programmed texture analysis test set-ups based on international standards. Results data can be manipulated to produce detailed analytical reports, with the ability to integrate with popular Windows® software packages including Microsoft® Excel and Outlook®.

### Features

- Large working area
  - Flexible work surface configurations
  - 179 mm (7 in) throat for large specimens
- Accurate load measurements with XLC Series load cells
- Intuitive operator interface
  - Menu driven with intelligent prompts
  - Membrane keypad with tactile feedback
  - Highly legible, backlit LCD display
- Motor servo control system
- Flash memory upgradeable
- Full PC integration with NEXYGEN™ MT data analysis software
- Load rate control
- Multi-unit and multi-lingual display options
- Extensive range of texture analysis grips, jigs and probes

### Specifications

Force Capacity:	102 kgf (1 kN, 225 lbf)
Travel: TAPlus	500 mm (19.7 in)
TAPlus-Extended	750 mm (29.5 in)
Crosshead Speed:	0.001-21mm/sec (0.05-1270 mm/min, 0.002 -50 in/min)
Speed Accuracy:	< 0.2% at steady state
Load Cell Accuracy	< 0.5%
Min. Load Resolution:	0.0001 N (load cell specific)
Extension Resolution:	<2 microns
Data Sampling Rate:	8 kHz
Display:	40 character x 4 line back lit LCD
Data Outputs:	RS232
Supply Voltage:	230Vac ±10%, 50-60 Hz Fuse T1AH250V 115Vac ±10%, 50-60 Hz Fuse T2AH250V
Load Measuring System:	Exceeds the requirements of EN ISO 7500:2004, Class 0.5 ASTM E4
Analysis Software:	NEXYGEN™ MT Data Analysis Software and Ondio™ Applications Builder Software (optional)
Weight (Standard Machine):	46 kg (102lb)
Operating Temperature:	5° to 35°C (41° to 95°F)



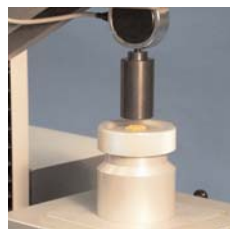
### Specification Sheet

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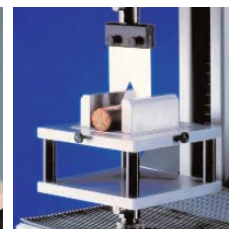
Crisp Fracture Test



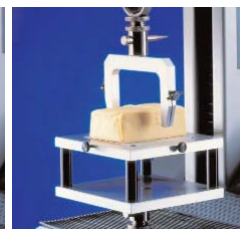
Dough Stickiness Test



Chocolate Shear Test



WarnerBratzler Shear Test



Butter Cutting Shear Test

## Standard Accessories supplied with TAPlus Texture Analyser

Item	Part No	Item	Part No
Base Table Stainless Steel Drip Tray	01/2757 SPK/LFM/0010	12.5 mm (1/2 in) cylinder probe	01/2667

## Optional Accessories

Item	Part No	Item	Part No
<b>XLC Series Load Cells</b>		<b>Texture Analysis Fixtures and Test Accessory Kits</b>	
5 N (1.12 lbf)	01/2946	Back Extrusion Cell	01/2760
10 N (2.25 lbf)	01/2360	Butter Cutting Jig	01/2664
20 N (4.5 lbf)	01/2950	Kramer Type Shear Cell	01/2754
50 N (11.25 lbf)	01/2361	Ottawa Forward Extrusion Cell	01/2758
100 N (22.5 lbf)	01/2480	Warner Bratzler Shear Blade Set	01/2767
250 N (56.25 lbf)	01/3048	Spaghetti/Noodle Test Fixture	01/2659
500 N (112.5 lbf)	01/2362	Three Point Bend Food Jig	01/2756
1000 N (225 lbf)	01/2419	Volodkevitch Bite Set	01/2663
<b>Work Tables:</b>		Magnus Taylor Puncture Probe Set	01/3108
Expanded work table (350 x 400 mm) with M6 tapped holes for custom fixings	SPK/LFM/0007	Comparative Dough Stickiness Jig	01/2657
Expanded work table (350 x 400 mm) with 10-32 tapped holes for custom fixings	SPK/LFM/0008	Dough Preparation Set	01/2656
Aluminium T-Slot Table (180 x 340 mm) for adjustable fixings	SPK/LFM/009	Gluten Dough Extensibility Jig	01/2759
<b>Application Software</b>		Crisp Fracture Support Jig	01/2658
NEXYGEN™ MT	40/0658	Knife Edge Probe Set	01/2693
Ondio™ Application Builder Software	40/0683	18-Position Pea/Berry/Bean Test Fixture	01/3195
<b>Texture Analysis Probes</b>		Texture Probe Set	01/1114
Ball Probes (Diameter range 1/4" - 1")		Bakery Accessories Kit	01/2696
Cone Probes (Cone angles 15°-90°)		Confectionery Accessories Kit	01/2698
Cylinder Probes (Diameter range 1/4" - 4")		Dairy Accessories Kit	01/2697
		General Food Probe Kit	01/2695
		Gel Bloom Kit	01/3374

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

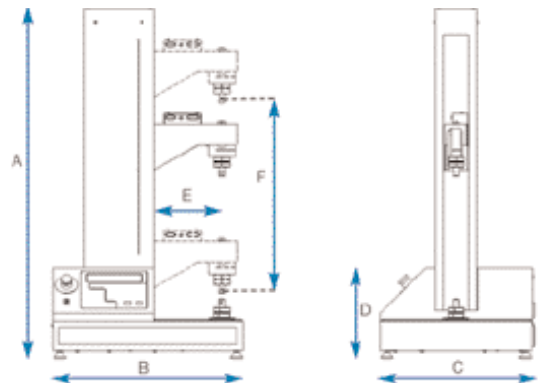
## Ordering Information

Order No. Description

01/TAL	BASE Model Number - 1st to 6th characters Lloyd Instruments TAPlus Texture Analyser				
	S	Travel Length - 7th character Standard, 500 mm (19.7 in)			
		/LX	Measurement Adapter - 8th to 10th characters XLC Load Cell Adapter		
			E	Work Surface - 11th character Stainless Steel Drip Tray	
				Mains Power - 12th to 14th characters	
			/US	120V ac Mains Power	
			/UK	230V ac Mains Power	
			/EU	230V ac Mains Power	
			/CN	230V ac Mains Power	
01/TAL	S	/LX	E	/EU	Sample Order No. (01/TALS/LXE/EU)

Lloyd Instruments TAPlus Texture Analyser with 500 mm (19.7 in) travel and load cell adapter, base table, drip tray and 12.5 mm (1/2 in) cylinder probe. 220V ac power.

## Machine Dimensions



		mm	in
A	Machine Height	923	36.0
B	Machine Width	500	19.7
C	Machine Depth	400	15.7
D	Base Height	105	4.1
E	Throat	179	7.0
F	Max Travel (Standard machine)	500	19.7
F	Max Travel (Extended machine)	750	29.5

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