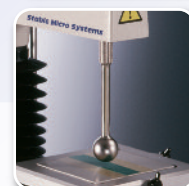
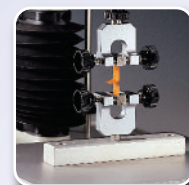


express texture analysis



TA.XTExpress
Texture Analyser

*Entry-level and
QC-based
texture analysis
with touchscreen
interface*



world leading texture analysis

Texture is an important attribute of products in that it affects processing and handling, influences habits, and affects shelf-life and consumer acceptance.

Texture analysis is the mechanical testing of food, cosmetics, pharmaceuticals, adhesives and other consumer products in order to measure their physical properties. Because of its adaptability, texture analysis has become commonplace in many industries to measure a specific or range of characteristics or properties relating to the way a material behaves, breaks, flows, sticks, bends etc.

Measurements can be taken 'on line' or in a laboratory and the results form the foundation of on-going Quality Control procedures at all stages of manufacture, carrying out a wide range of measurements to analyse ingredients, semi-finished goods, packaging and finished products. This information may be used, for example, to determine the effects of raw materials or excipient quality or the adjustment of formulation or processing variables on end product acceptability – whether this is to measure the 'mouth feel' properties of food, the flow properties of creams and pastes, the break or bend of a product or the tackiness of adhesives.

The TA.XTExpress is an entry-level and QC-based texture analysis option when compared to our sophisticated full-featured *Plus* range. It offers cost-effective portable analysis for a wide range of low force applications. With a choice of two dedicated software packages or touchscreen operation, the instrument is easily configured to meet the user's exact requirements. Test profiles are stored for immediate use and the results analysed automatically using either 'in-built' Standards, such as TPA and Bloom or product specific procedures.

The TA.XTExpress Texture Analyser has a 10kg force capacity (with 0.5kg and 5kg optional loadcells) in compression and tension with a measurement resolution of better than 0.1g. It has a speed range of 0.1-10mm/s and a maximum aperture for testing of 210mm.



The Touchscreen Interface: full stand-alone control and display functions

- Calibration, test setup and force measurement procedures
- Security settings for multiple users
- High speed data collection and display of results with print option
- Quick probe positioning
- Operates in multiple languages
- Resistive touchscreen allows use of gloves
- Automatic screen orientation
- Built-in Help text and texture principles animations



Stable Micro Systems' range of instruments can measure and analyse fundamental, empirical and imitative tests covering those relating to texture analysis, materials properties as well as effects of rheology of solid, semi-solid, viscous liquid, powder and granulate materials across a wide range of industries. The list below is a representative selection of physical properties that may be of interest.



Adhesiveness	Extensibility	Break Strength	Hardness	Peel Strength	Brittleness	Consistency
Firmness	Burst Point	Stiffness	Springiness	Fracturability	Tensile Strength	Toughness
Swelling	Disintegration	Spreadability	Cohesion	Friction	Elastic Modulus	Resilience
Tear Strength	Relaxation	Flexibility	Setting/Curing	Tackiness	Compressibility	Puncture Force

TA.XTExpress Texture Analyser

movement limiters

Manually adjustable upper and lower limiters are a safety feature that automatically stops the texture analyser if the switch on the arm touches either limiter.

calibration platform

A platform on which reference weights can be positioned for simple calibration of the installed load cell. All load cells are factory calibrated but may also be calibrated with any weight up to the loadcell capacity installed in the Texture Analyser, to provide optimum accuracy at the force range of specific interest to the user.

loadcell

A transducer fitted in the arm of the Texture Analyser which measures force in compression or tension. Information including capacity, calibration and serial numbers is stored within the loadcell and automatically detected upon installation. This enables rapid, easy and error-free loadcell changing.

sample testing area

This is where the appropriate probe or fixture (*examples shown below*) is attached for sample location and testing.



extrusion



shearing



tension



bending



puncture



compression

- **Easily portable** due to small instrument footprint and manageable weight
- **Large working area** providing superior flexibility of fixture positioning and sample support
- Maximum speed testing capability up to **10mm/s**.
- A minimum speed of **0.1mm/s** permits accurately controlled approach for precise location of the sample surface and the testing of thin or fragile samples.

emergency stop button

Combined with mechanical stops, increases safety.

touchscreen interface

Allows operation of the instrument in stand-alone mode. Calibration, test setup and force measurement procedures performed without the need for PC software.

peripheral attachment

The Touchscreen Interface connects to a port in the back panel. An RS232 link is also available for remote data logging.

firmware upgrades

Electronics (firmware and hardware) for sophisticated control of the instrument are housed in the base of the instrument. New firmware can be downloaded ("flash upgraded") by a quick and simple software interface so that new features can be added to enhance the instrument's capabilities. This allows access to latest developments and improvements even after your initial instrument installation.

pc link

Computer cable connection for software control and analysis, via both USB and RS232. See pages 5-8 for software explanations and options.

world leading attachments and applications

Typical applications – the possibilities are endless...

Many texture analysis tests, such as the Bloom Strength test for gelatin gels, are International Standards, whereas others are recognised as standard tests within an industry, such as Texture Profile Analysis for many food products. To be successful, all of these tests depend upon the integrity of the Texture Analyser and the selection of the correct testing method, the manufacturing precision of the probe or attachment used and the accuracy of the analytical software to provide the results in a clear, concise format. The TA.XTExpress Texture Analyser, with its wealth of application methods and the range of over 200 probes and attachments, is the result of decades of experience in the design and manufacture of this equipment.

The choice of probe or fixture that you use will depend upon the sample's form, the property that you wish to measure or the action that you wish to perform. Fixtures are available to provide the required action of compression, extrusion, cutting, extending or bending on the sample or to support, anchor or deform the sample in a customer-specific way.

The main goal of many texture studies is to devise one or more mechanical tests with the capacity to replace human sensory evaluation as a tool to assess texture. Measurements that yield both fundamental and empirical product characteristics are well developed, whilst wide-ranging imitative test procedures are also becoming increasingly important. Their relevance is in imitating a real-life situation, which permits far simpler data interpretation.



*Typical
real-world
applications
can be emulated
by special
attachments
on a
TA.XTExpress
Texture
Analyser*

No-one can design the solutions to meet your testing challenges like we can...

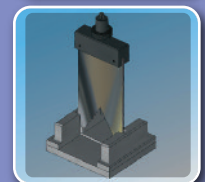
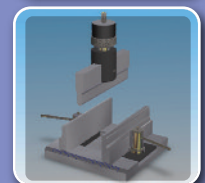
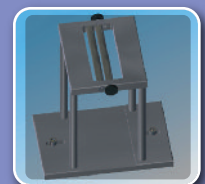
Probes and fixtures are attached to a Texture Analyser to allow a particular action or test to be performed. They are in everyday operation worldwide, testing a wide range of products, materials and properties in both Research and Quality Laboratories, as well as being integrated into many production lines.

Only the finest quality materials and the best quality finishes are used in the manufacture of our probes and attachments; food quality or better Stainless Steels (polished and mirror finish), aerospace quality aluminium alloys (micro finished and hard anodised) and ICI or GE engineering plastics.

Every probe and attachment is rigorously inspected for dimensional accuracy, profile and finish during manufacture, again both during and after assembly and finally before despatch to the customer. Where applicable, optical inspection is also utilised.

Above all, we listen to you, the user, and constantly work to improve our products to suit your requirements. We are always enthusiastic to hear from users with suggestions on how we could improve or extend our range of accessories. In-house mechanical, electronic and software engineers also provide us with the ability to design bespoke probes and fixtures to solve new testing requirements or according to customer specification.

As a Texture Measurement professional, you may notice how frequently the inventions and innovations of Stable Micro Systems are copied by our imitators. However, such imitations often lose the subtlety and elegance of the original design and in all cases lack the application background and development understanding required for successful implementation. That is why, since 2007, all of Stable Micro Systems' original probes and fixtures have been filed as European Community Registered Designs.



Giving you the choice of software to drive your instrument

The TA.XTExpress is controlled by either a keypad or by texture analysis software.

Two software packages are available:



Offers Sophistication and Flexibility

This software package is a project based data recording and analysis package offering flexibility and simplicity of use. Macro and spreadsheet facilities are built-in to aid automated data collection and analysis.



Offers Simplicity

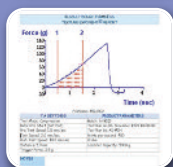
This is the ideal package for users who want to measure standard textural parameters without the need for further post-test analysis or layout.

	<i>Exponent Lite Express</i>	<i>Expression</i>
Projects to manage test and sample protocols with Automated Project Loading	•	
Library of Test Sequences	•	•
Stress-Strain tests and display	•	
TPA and analysis	•	•
Macros for standard analysis	•	
Built-in Quick Calculations	•	•
Results tabulated in spreadsheets	•	
Export captured data and analysis results	•	•
Report printing	•	
Output results to LIMS	•	
Test History Logs	•	•
Education Zone	•	
Language Translation Facility	Via GUI	Sample text file
Software Licensing	Multi-User	1 User

Both software packages provide a graphical user interface with the ability to choose test settings and acquire test data in a real-time graphical display with free download of upgrades throughout the life of your instrument.



EMPLOY YOUR TEXTURE ANALYSER TO:



- Provide an objective quantifiable result which can be archived and retrieved for future viewing



- Assess changes during storage or transportation



- Compare with competitive products



- Assess raw materials or excipients, semi-finished goods, packaging and finished products



- Determine the effects of formulation or processing variables on end product acceptability



- Substantiate your product claims



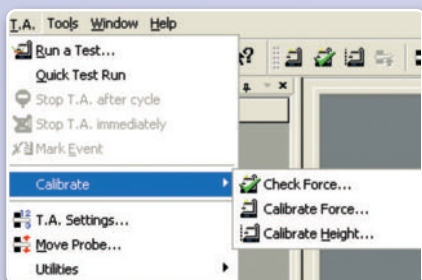
- Determine the physical properties of your 'gold standard' product for future consistent quality control

Exponent Lite Express is a simpler version of the full-featured *Exponent* software. It is designed specifically for the *TA.XTExpress*, to include the testing procedures and analytical solutions of particular importance for those in Quality Assurance. Those users requiring the simpler test and data analysis solutions used in QA or production may prefer to use *Expression*, details of which can be found overleaf.

The primary software features are presented in order of typical use, from instrument calibration to presentation of results.

Calibration and Force Verification

Calibration ensures that measurements made by the Texture Analyser are accurate; *Exponent Lite Express* provides for the calibration of Force, Height and Force verification:

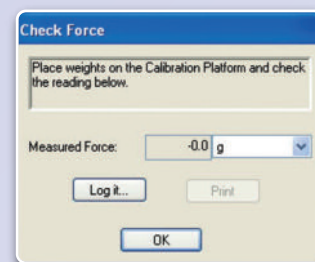


Calibration Options

Calibrate Force: A User calibration is performed with a reference weight.

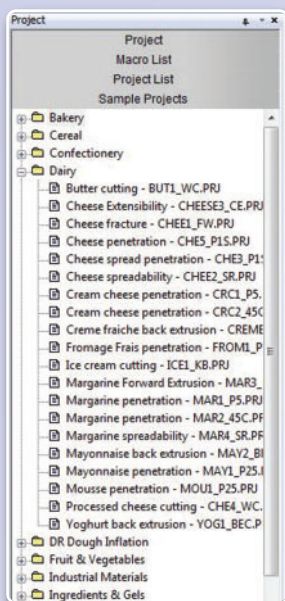
Calibrate Height: Probe height calibration defines the absolute probe position from the base or any reference surface.

Check Force: The value of any weight placed on the calibration platform is displayed to verify that the complete force system is calibrated accurately.



Check Force

Instructing and controlling the Texture Analyser



Projects can be automatically loaded from Help files

Options for specifying the test procedure:

Loading a Test Project:

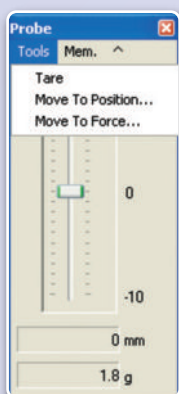
A Project combines all of the components required to initiate a complete test and analysis procedure and is the basis on which a user can centralise all files required for a specific product test. The samples directory contains an ever increasing range of projects from which users can select as a starting point.

Choosing from a Test Library:

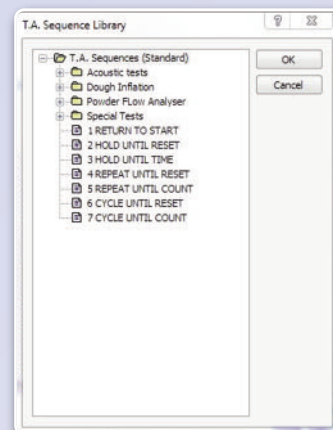
A series of classical Texture Analyser tests are included in tension and compression. A *TA Settings* window is displayed which allows the user to specify such parameters as speed and test distance required for the test procedure. All *TA Settings* parameters have a caption which explains what each parameter does. The settings can be saved as part of a Project for future testing.

Probe Control

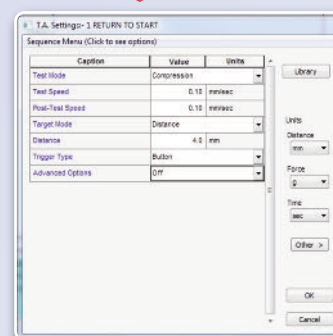
The arm of the texture analyser can be moved up or down at any speed by simply moving the slider handle on the *Move Probe* window. This control also allows movement of the probe to an Absolute or Incremental distance or force at a specified speed. Five probe positions/forces can be programmed and directly recalled for quick probe positioning pre- or post-testing. Live force and position information is also displayed.



Probe Control



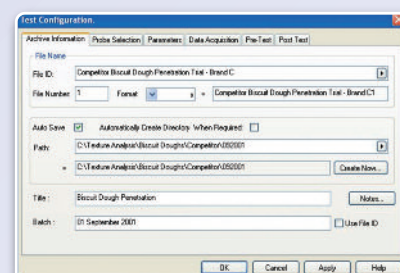
Test Library



Test Settings

Running a Test and collecting data

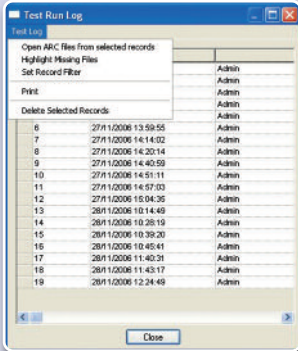
Before testing, a *Run a Test* window allows the input of parameters such as file name or sample batch code. Details about the sample and attachments can also be chosen or inserted for further analysis. Long file names provide the ability to insert more detailed information which is useful when locating the test file for future viewing.



Test Parameters

Data Collection Rate

This is the speed at which data is collected during the test. The ability to collect data at high rate is particularly important when testing products that fracture or require high speed separation such as during the testing of adhesives. During testing, force, distance and time values plus additional peripheral data values if attached, are collected and the real-time data displayed during the test in a *Graph* window. Tabbed graph windows for easy access to all relevant archive file information are present. Graphs can also be copied or exported as .bmp or .jpg. into other Windows applications.



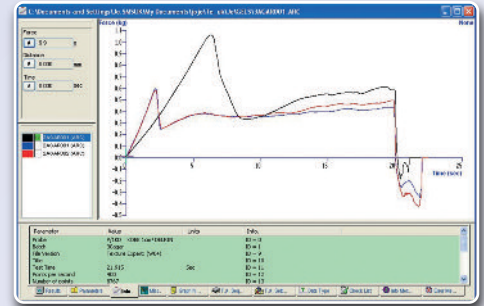
Test History

Test History Database

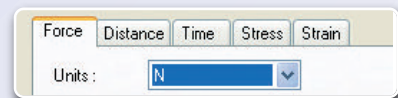
This feature tracks when tests were run and where they have been saved. It also indicates if a file is no longer in the original location i.e. has been moved or deleted.

Axes

The graph axes can be changed to display the data in different X and Y combinations. Logarithmic and second Y axes are also available. Axes preferences can be saved in the Project or simply toggled between with one click on the axis. Metric or Imperial unit choice and the ability to zoom into the graph are also available.



Graphs can be overlaid



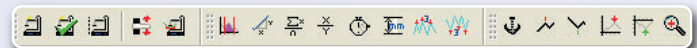
Axes

Data analysis

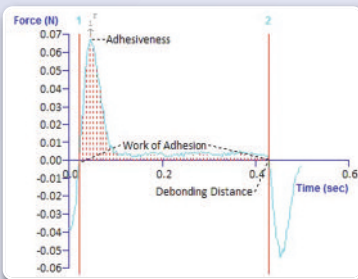
Once data has been collected and is displayed in a graph window it needs to be analysed in order to interpret the results and draw conclusions.

Data Analysis Icons

Icons for the calculations of such parameters as Area, Gradient, Time Difference, Mean, Count Force Peaks etc. are quickly accessible on the tool bar or minimised to only those required by the user via the Customisable Toolbar option.



Icons



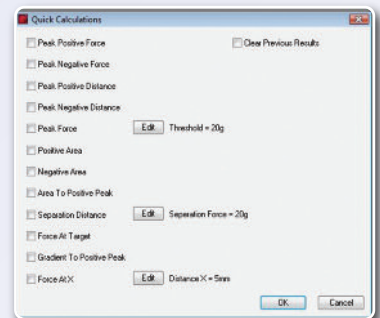
Data Analysis

Data Analysis

The results from manual and automatic analysis are individually displayed.

Macro Window

A *Macro* speeds up and controls repetitive analysis and display. A set of instructions are listed and executed which automatically collect data from the graph. Tests can be automated with either simple or intricate macros which are ideally suited to a production environment. Alternatively, Quick Calculations are a selection of popular calculations that will analyse the data to provide results in just a few steps.



Quick Calculations

Managing results

	A	B	C	D	E	F
1	Test ID	Batch	Area F-T 1-2	Gradient F-T 1-2	Time Difference 1-2	
2			g sec	g/sec	sec	
3			Area F-T 1-2	Gradient F-T 1-2	Time Difference 1-2	
4						
5	Start Batch	tnB513				
6	B513001	tnB513	50.386	50.721	1.005	
7	B513002	tnB513	53.355	50.915	1.023	
8	B513003	tnB513	46.646	43.176	1.040	
9	End Batch	tnB513				
10	Average	tnB513 (F) AVERAGE(BATCH)	50.129	48.271	1.023	
11	SD	tnB513 (F) STDEV(BATCH)	2.745	3.603	0.014	
12	CV	tnB513 (F) STDEV(BATCH)	5.475	7.464	1.397	
13	End of Test Data					

Results

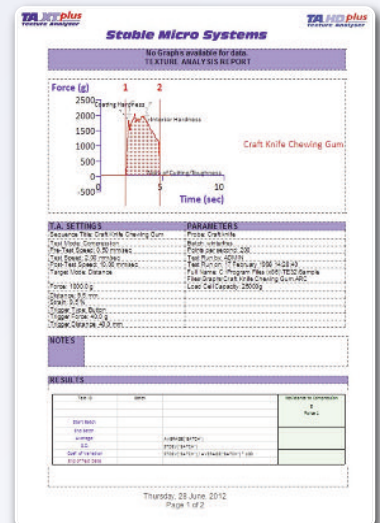
formulae e.g. Standard Deviation, Average etc. Multiple worksheets are available to separate product parameters from results and user data.

Exporting Data

Spreadsheets, text or images can be exported to other Windows applications for further specific manipulation/presentation.

Reports

A *Report* provides the ability to view your graphs, settings and results in a printable format or to distribute them quickly by simply clicking on the 'Mail To' button.



Reports

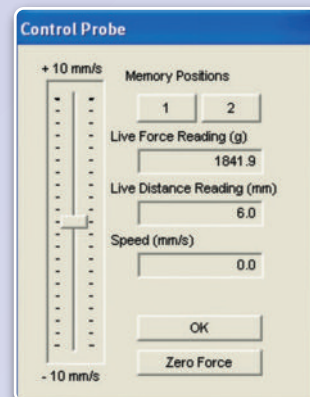
Although straightforward to use, *Expression* software offers the precision for which all Stable Micro Systems Texture Analysers are renowned.

Calibration

Calibration ensures that measurements made by the Texture Analyser are accurate. *Expression* provides for the calibration of Force, Height and verification.

Force calibration is undertaken using a certified calibration weight and Probe Height calibration that defines the absolute position made for the probe being used. This enables two probe positions to be specified. These are ideal, for example, to give accurate positioning of the probe either cleaning or starting a test.

Live force and distance readings are provided for static measurement verification using calibrated weights and gauge blocks.



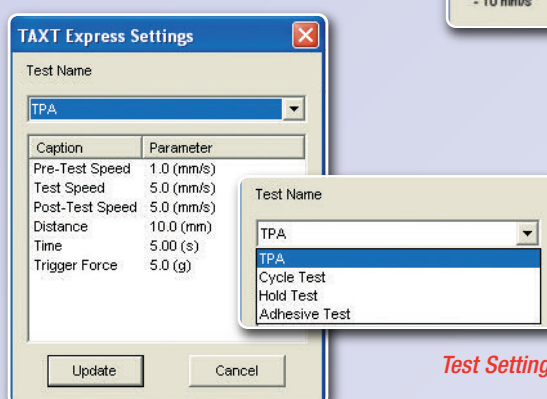
Calibration Options

Controlling the Texture Analyser

Four test types are provided in the *Settings* window, where all the test parameters are selected:

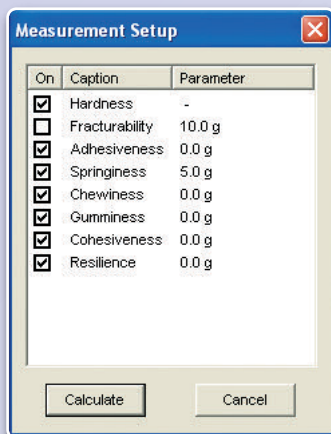
- TPA
- Cycle
- Relaxation
- Adhesion

Post test, measurements are selected from the dedicated *Setup* window and 'Calculate' pressed to obtain the results.



Test Settings

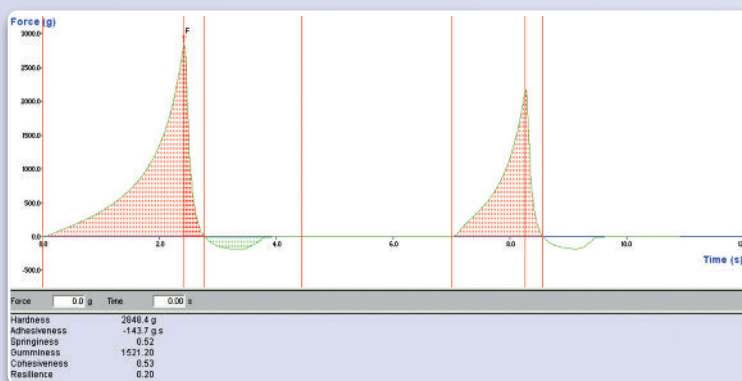
Running tests



Measurement Setup

Texture Profile Analysis

(TPA) is the accepted method of testing food products to give results that correlate well with sensory perception. The measurements that are required are selected from the *Measurement Setup* window. The results are displayed below the graph and also in Table view.

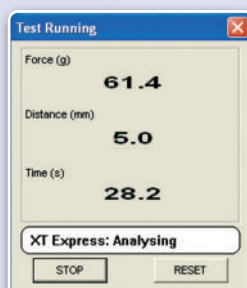


TPA Results in Graph and Table form

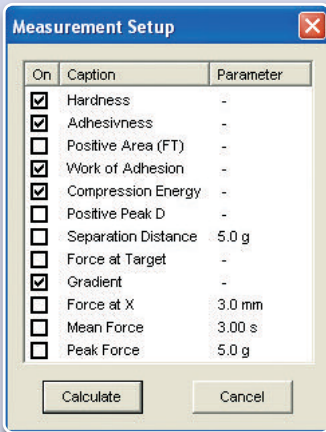
TPA DATABASE.DB								
Test Name	Batch Name	Date and Time	Hardness (g)	Adhesiveness (g.s)	Springiness	Gumminess	Cohesiveness	Resilience
TPA CHEESE1	Cheese	21st August 2007 ...	2848.4	-143.7	0.52	1521.20	0.53	0.20
TPA CHEESE2	Cheese	21st August 2007 ...	2771.7	-154.6	0.50	1511.46	0.55	0.20

Data display

Throughout the test, the instantaneous force, distance and time are displayed in the graph window. The test may be stopped at any time from this window.

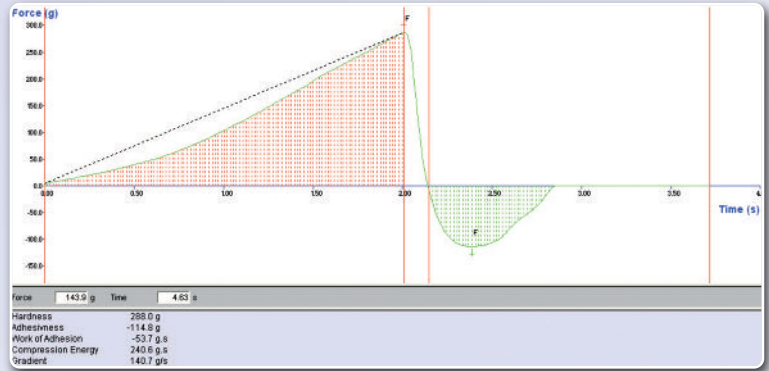


Graph Window Display

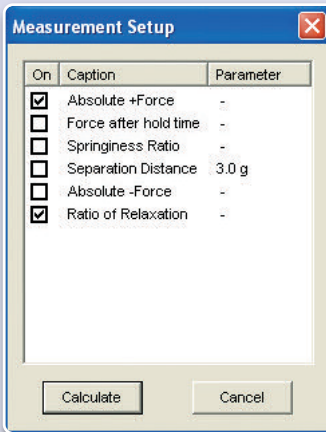


The single **Cycle Test** (often called 'Return to Start') is very useful for penetration, compression and three point bend tests. Results, specified in the *Setup* window, are shown below the graph. The measurements required are simply 'ticked' in the *Measurement Setup* window and 'Calculate' pressed. The results appear on the *Graph* and *Results* windows.

Cycle Test

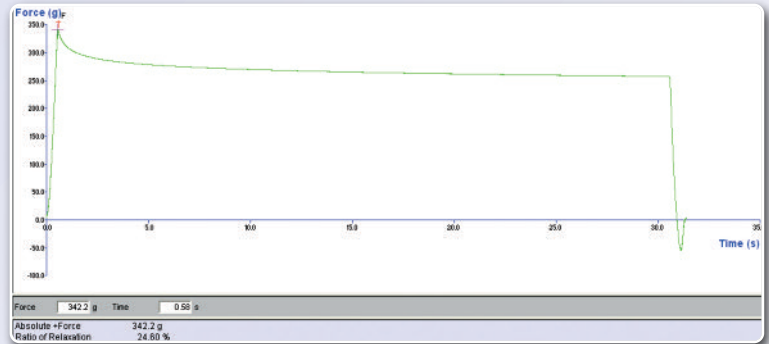


Test Name	Batch Name	Date and Time	Hardness (g)	Adhesiveness (g)	Work of Adhesion (g.s)	Compression Energy (g.s)	Gradient (g/s)
Cheese1	Cheese	21st August 2007 12:21	288.0	-114.8	-53.7	240.6	140.7

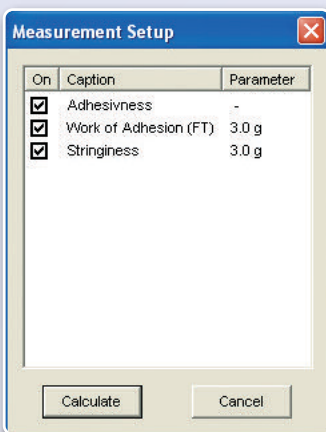


The **Relaxation Test** examines visco-elastic properties and is mainly used to assess staling characteristics. The product is compressed to a defined force and the distance then held constant. The force is then recorded for a defined time.

Relaxation Test

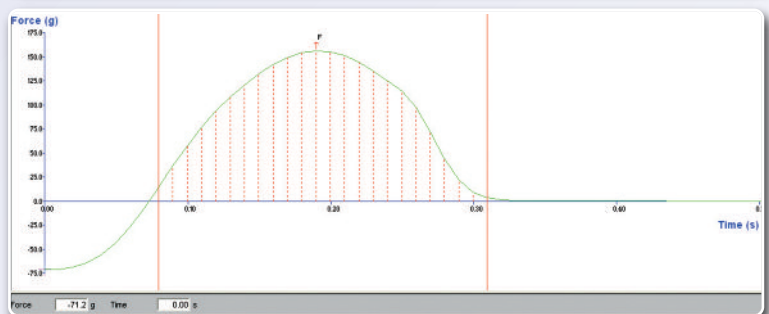


Test Name	Batch Name	Date and Time	Hardness (g)	Adhesiveness (g)	Ratio of Relaxation (%)
TPA EXPRESS15	Jelly	30th May 2007 ...	342.2	-55.5	24.60



The **Adhesion Test** measures the stickiness of the surface of food products such as dough and pasta. It also determines the 'tack' or 'quick stick' of PSA tapes and similar products.

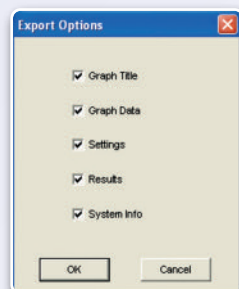
Adhesion Test



Test Name	Batch Name	Date and Time	Hardness (g)	Adhesiveness (g)	Ratio of Relaxation (%)
Cheese1	Cheese	21st August 2007 11:59	315.3	-233.7	90.88
Cheese2	Cheese	21st August 2007 12:07	363.4	-225.7	90.01
Cheese3	Cheese	21st August 2007 12:10	365.5	-248.6	92.24
Average			354.7	-236.0	90.37
Std Dev			35.9	11.6	1.15
C.O.V.			10.1	4.9	1.26

Exporting data

The exported file is in a format that is supported by most spreadsheet programs and comprises of user selected elements.



	A	B	C	D	E	F	G	H	I
1	Test Name	Batch Name	Hardness (g)	Adhesiveness	Springiness	Chewiness	Gumminess	Cohesiveness	Resilience
2	TPA EXPRESS1	Frankfurter	2865	-1.2	0.96	723.08	754.8	0.26	0.11
3	TPA EXPRESS2	Frankfurter	3101.5	-10.3	0.94	627.97	664.96	0.21	0.09
4	TPA EXPRESS3	Frankfurter	3040	-2.1	1	852.27	856.51	0.28	0.13

Export to spreadsheet

No-one knows more about Texture Analysis than we do... introducing the Education Zone (Exponent Lite Express only).

Help files are available to guide you through your testing and analysis and provide the background support material you need to get the best from your instrument.

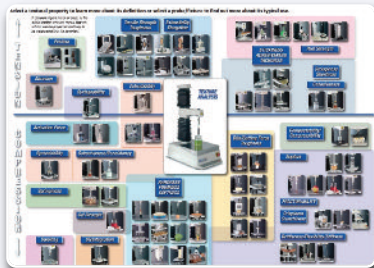
Probe and Fixture Guide

Our existing range of probes and fixtures are shown and their set-up and testing instructions explained with links to relevant application studies and video clips to demonstrate the device in action.



Which property do you wish to measure?

Examples of different ways to measure a specific textural property, the fixtures to use and the typical regions of a curve to analyse to obtain your relevant parameters.



Application Studies

Starting point test procedures and projects available to automatically load in Exponent Lite – grouped by product type. No-one knows more about how to measure texture than we do – so challenge us!



If you prefer the standard approach

A selection of methods that are suited to using a Texture Analyser according to a Standard.

Do you wish to measure more than Force?

An explanation of additional measurements that can be collected and displayed in Exponent to provide more than just a measurement of Force if necessary.



Data Analysis Techniques

Guidance on understanding the ways to analyse your curves and the calculation options available to you. The range of data analysis techniques is unmatched anywhere in the world.



Providing an Education

If you are new to Texture Analysis, you may need a background understanding of its principles.

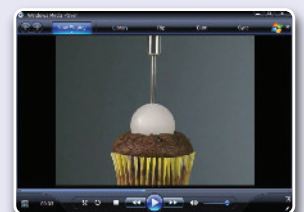
Tutorials

These are written to guide new users through basic procedures of using the software step-by-step. They can also be printed out for ease of viewing.



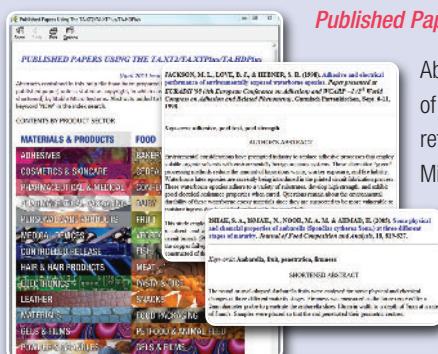
Online Video Clip Library

Available online, a comprehensive collection of video clips demonstrates various tests or fixture arrangements. You may also include these in presentations – be our guest!



Keeping you connected

The opening screen of Exponent Lite will provide connection to us – once again extending our service to you in a multitude of ways throughout the life of your instrument.

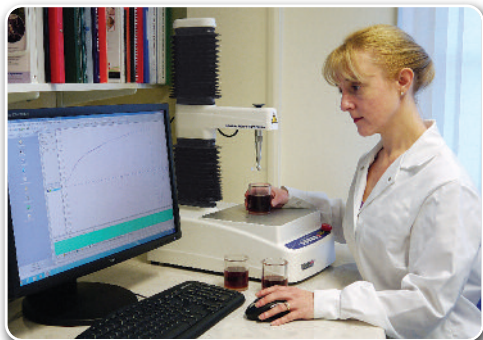


Published Papers

Abstracts and citations of papers published that refer to the use of Stable Micro Systems' Texture Analysers. Read about other users' experiences and their collected data.



Unrivalled application and technical support



FREE technical support throughout the life of your instrument

Application Studies

Our Application Studies library is perhaps of primary importance to you. These studies demonstrate a viable test method for a wide range of specific products, and also act as an ideal starting point for studying similar products. Detailed reports present typical results and interpretation.

Test methods can be chosen by **Product Type**, by **Probe/Fixture** available, by **Textural/Physical property** or according to a **Standard Method**.

Stable Micro Systems are totally dedicated to scientific texture analysis. Our range of Texture Analysers is internationally recognised as the 'complete' instrument and your passport to the advancing world of texture analysis.

At Stable Micro Systems we do not just manufacture texture analysers; we strive to provide our users with continual information to enhance their instrument understanding and increase the background knowledge available to them. Through our continued co-operation with universities and research establishments involved in texture analysis, and our in-house product testing and method development laboratory, we aim to provide you with the most up to date applications information and to offer you the most comprehensive range of attachments and analytical techniques available.

As well as offering a design service for new attachments, users benefit from free software updates and a dedicated applications support team that will endeavour to exceed your expectations.

Our software is written in-house, giving us the ability to rapidly add required features suggested by our users, providing unmatched, continuously enhanced software, dedicated to texture analysis. We constantly strive for improvement and pride ourselves on our quality of customer support throughout the world.

Our customer satisfaction speaks for itself

Our simple to use philosophy has benefitted users engaged in activities ranging from routine product quality assurance to fundamental research.



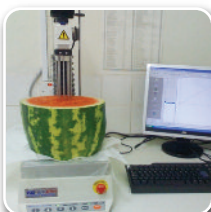
Multiple instrument set-up at the Danish Technical University



Gel testing at Leatherhead Research



Lipstick testing at the London College of Fashion



Melon testing at the Agricultural Research Institute in Cyprus



The Food Technology Centre in Anglesey, UK – assessing physical characteristics of food products



Worldwide in-depth support from Stable Micro Systems. Not available elsewhere.



ONLINE TESTING ADVICE SERVICE

We would like to help you to get the most from your Texture Analyser by enabling direct contact to our in-house application laboratory from which useful testing advice can be given confidentially and free of charge. We are confident that our laboratory services demonstrate our commitment to the 'complete' system philosophy.



SOFTWARE TROUBLESHOOTING

Often customers have a requirement to train new staff and, coupled with the rapid advancement in computers and their operating systems, customers have the need to call us for technical advice. Our team of Software development and support engineers are available to troubleshoot your software problems.



MACRO / SEQUENCE WRITING SERVICE

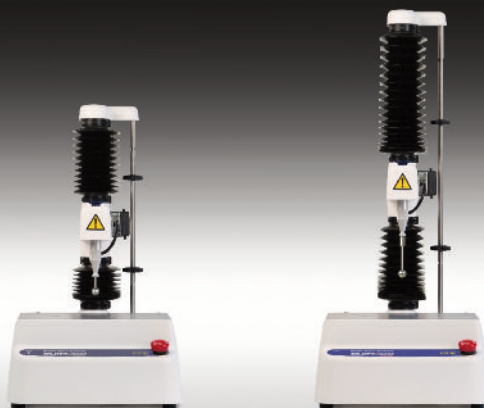
If you would like us to help you to write a macro or special sequence for your Texture Analyser, our online form will enable you to supply us with your bespoke analysis requirements.



WORLDWIDE SALES / TECHNICAL SUPPORT

Handpicked distributors are specifically trained to meet your testing and analysis needs.

technical specification



**24 month
warranty**

includes Touchscreen Interface	TA.XT <i>Express</i> 490	TA.XT <i>Express</i> 650
Force Capacity	10kg.f	10kg.f
Displayed Force Resolution	0.1g	0.1g
Loadcells	0.5kg, 5kg, 10kg	0.5kg, 5kg, 10kg
(directly interchangeable by the user)	Loadcells may be user calibrated using a precision weight.	
Loadcell Accuracy	0.5% of reading down to 1% of loadcell capacity	
Speed Range	0.1-10mm/s	0.1-10mm/s
Speed Accuracy	Better than 0.1%	Better than 0.1%
Maximum Aperture	210mm	370mm
Sample Testing Area	247 x 228mm	247 x 228mm
Distance Resolution	0.1mm	0.1mm
Net Weight	13.0kg	14.9kg
Dimensions	540 x 280 x 490mm	540 x 280 x 650mm
Software Data Acquisition Rate	0.1-400pps	0.1-400pps
Touchscreen Data Acquisition Rate	400pps	400pps
Touchscreen Operation Languages	22 languages available (English, French, German, Italian, Spanish, Portuguese, Dutch, Danish, Hungarian, Czech, Norwegian, Turkish, Polish, Russian, Romanian, Serbian, Brazilian, Thai, Chinese, Korean, Japanese, Taiwanese)	
Touchscreen Locking	Yes	
Test Modes	Compression and Tension	
Test Types	Repeat, Cycle, Hold, Return to Start, Adhesive, TPA. Apply Distance or Apply Force options	
Measuring Units	g, mm, s (Metric) or lb, in, s (Imperial)	
Pre-Test Speed and Distance	Ability to set quick positioning markers for sample throughput efficiency	
Operating Environment	0°C - 40°C. Laboratory conditions. Dust and splash resistant	
PC Interface	Interface to PC through a standard USB port	
Power Supply	Universal mains input voltage (battery powered option available)	
Firmware Updates	FLASH update of firmware via PC	
Overload Protection	Automatic overload protection for operator safety and load cell protection. Data safeguarded in the event of overload	
RS485 Link	Available for remote data logging	
Attachments included	A 20mm probe adapter is included for probe/fixture attachment	
Attachment Options	Unrivalled range of probes and fixtures for sample testing. Design facility to manufacture bespoke probes and fixtures.	
RECOMMENDED PC SPECIFICATION:		
	EXPRESSION	EXPONENT LITE EXPRESS
	• 2GHz CPU • 4Gb RAM • SVGA Graphics (800 x 600 x 256 colours) • 500Mb of free hard disc space • CD-ROM (or better) • Windows 2000, XP, Vista, Windows 7 • RS232 port @ 115,200 baud/USB • Mouse • Sound card* • Internet access for updating purposes* • Printer*	• 1.2 GHz modern Intel Multicore CPU or AMD equivalent • 4Gb RAM or more • 1024 x 768 x 24 bit graphics • 1Gb of free hard disk space (5Gb if video installed) • DVD-ROM • Windows XP (SP3), Vista, 7, 8, 8.1 and 10 • RS232 port @ 115,200 baud (if connected to TA.XT<i>plus</i>) or USB 2.0 • Mouse • Sound card* • Internet access for updating purposes* • Printer*

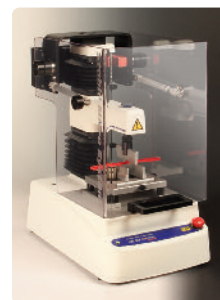


**OPTION:
SAFETY SCREEN**

When fitted to a Texture Analyser, tests will only operate when this screen is closed, providing maximum safety to the operator. It also ensures protection from projectiles when testing brittle samples to destruction.



* Optional



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Stable Micro Systems
innovation • education • application

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