

Using The Graphing Options

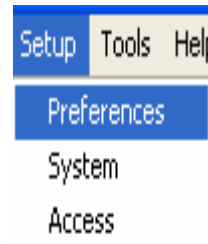
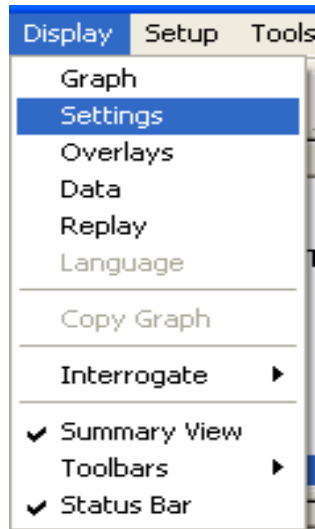


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USING THE GRAPHING OPTIONS

Graphing settings and display options are edited via the 'Preferences' control box.

To access this screen use either 'Display' or 'Setup' drop down menus:



Choose the format of graph. Remember for calculations to work you must make result analysis in Accumulative **Load V Displacement**

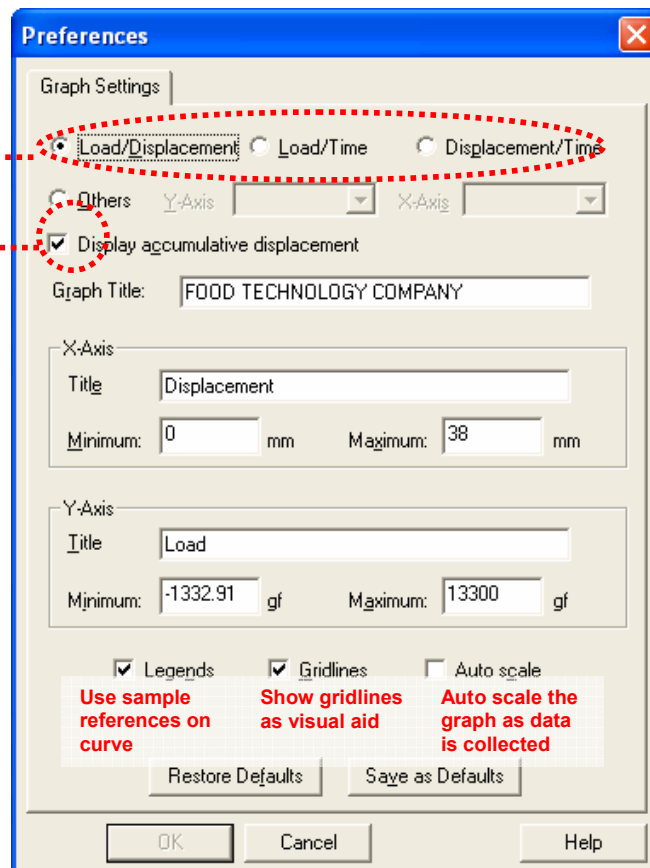
Check the box to display accumulative displacement

Title the graph appropriately for:

- Subject
- X Axis
- Y Axis

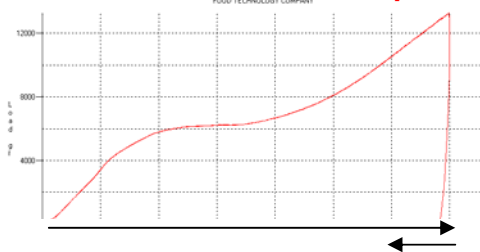
Adjust scaling and trim image displayed

Save preferred format as default or restore original settings



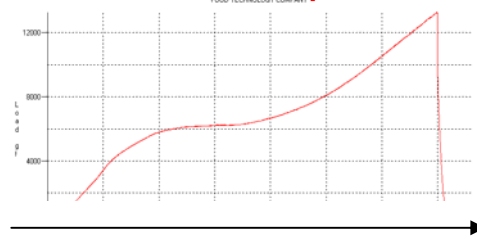
ACCUMULATIVE DISPLACEMENT:

Without Accumulative Displacement



Plots data forward during downward travel. Data from return stroke plotted in reverse direction

With Accumulative Displacement



Plots all data forward. Data from return stroke is added to data from downward travel.

TRACE FORMATS:

Note: When calculating results please use accumulative displacement format.

<p>Load v Displacement</p> <ol style="list-style-type: none"> 1. Applied to both TARGET DISTANCE/% DEFORMATION and TARGET LOAD studies 2. Provides overview to sample <i>elasticity</i> e.g. If material is truly ELASTIC the compression and decompression test profiles will be identical (also applicable in TENSION testing) 3. In VISCO-ELASTIC sample profile difference is dependant upon visco and elastic components e.g. higher elastic component greater the correlation; higher visco component greater the differentiation 	<p>Area is indication of viscous element</p> <p>Highly ELASTIC sample showing almost instant recovery</p> <p>Highly VISCOUS sample exhibiting no recovery and adhesive properties</p>
<p>Displacement v Time</p> <ol style="list-style-type: none"> 1. Used to show constant test conditions e.g. if TARGET DISTANCE is selected all <i>overlays</i> will mirror each other. 2. If TARGET % DEFORMATION is selected graph will reflect different depths penetrated by texture analyser 3. Ideally used with TARGET LOAD studies to determine different penetration depths e.g. softer sample greater travel 4. CREEP COMPLIANCE work where greater distances indicate increased relaxation within sample 	<p>In CREEP studies all overlays will initially be same</p> <p>End DISTANCE is indication of sample HARDNESS</p> <p>@ point of yield distances will vary according to characteristics of sample</p>
<p>Load v Time</p> <ol style="list-style-type: none"> 1. STANDARD graph format 2. Used in Texture Profile Analysis (TPA) 3. TARGET DISTANCE or % DEFORMATION is selected in both COMPRESSION and TENSION modes 4. Peak Loads during test are easily identified 5. STRESS RELAXATION calculations (as target distance is selected) 6. Used with TARGET LOAD work provided no HOLD time is utilised 	<p>Initial Modulus</p> <p>Work input By TMS</p> <p>Fracture (brittle foods only)</p> <p>Hardness</p> <p>Point of probe reversal</p> <p>Work returned by sample e.g. elasticity</p> <p>Adhesive Characteristics (Area and peak -ve force)</p>

ADDING OVERLAYS

Scroll through traces with arrow key and permanently discard unwanted sample files with the wastebasket function

Activate Overlays option from 'DISPLAY' drop down menu

Select graph option from Tool bar

Manipulate the graph view and zoom with analysis tools

A maximum of 8 traces can be overlaid at any one time. Unlimited files can be contained in the 'Result' file. Calculations can be collected and compared but not overlaid graphically

Results	Sample 9	Average	Std. Dev.
MAX LOAD	2975 gf	3517 gf	1402
ENERGY INPUT	202.23 sec.mm	202.	
MODULUS	139.28 gf/mm	126.	
TOTAL ENERGY	32433.85 gf.sec	3775	
Test Started:	10:09 17/01/2006		

TOLERANCE FUNCTION

Use reference file of perfect product

A Tolerance function has been incorporated into Texture Lab Pro. The principle is that a reference result for the 'perfect product' is used as an archive data source (this should be cropped to less than 100 points to reduce analysis time).

Differences as either percentage or load are used to identify pass or fail within the newly corrected data.