

## TESTING ATTACHMENTS FOR DAIRY PRODUCTS

Any of the Stable Micro Systems Texture Analyser range may be used for testing the products listed below. A selection of special attachments and typical measurements which are commonly used in this application area are also shown; however, this does not necessarily show the complete range of attachments available for the testing of dairy products. Test procedures include: compression, puncture/penetration, tension, fracture/bending, extrusion (forward and backward), cutting/shearing.



**TA.XT plusC**  
Texture Analyser



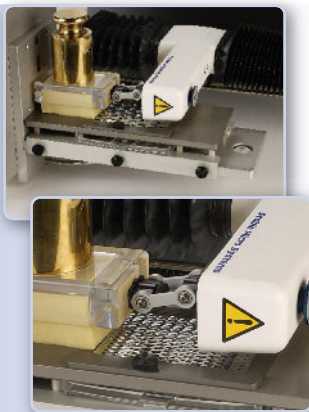
**TA.HD plusC**  
Texture Analyser



**TA.XT ExpressC**  
Texture Analyser

### Typical measurements include:

- **Firmness/hardness:** cheese, margarine, butter, ice cream, frozen yoghurt
- **Consistency:** mayonnaise, cream, yoghurt, milk puddings, mousse, fromage frais, crème fraiche
- **Gel Strength:** gelled dairy desserts, egg white
- **Fracturability:** hard cheeses
- **Spreadability:** table spreads, fats
- **Extensibility/Elasticity/Stretchability:** cheese (molten)
- **Flexibility:** cheese
- **Wire Cutting force:** cheese, butter
- **Shell Strength:** eggs
- **Squeeze Flow Characteristics:** cheese
- **Foam Stability:** whipped dairy desserts
- **Work Softening:** butter, fats
- **Creep Recovery:** fats



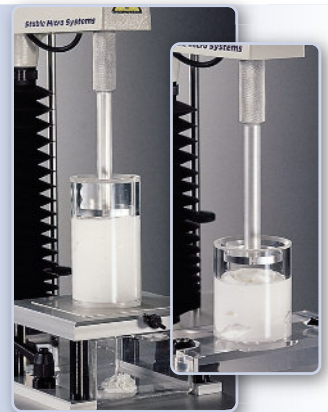
### Cheese Grating Rig

Used to measure the ease of grating of all types of hard cheese.



### TTC Spreadability Rig

Used for the measurement of spreadability of fats, table spreads.



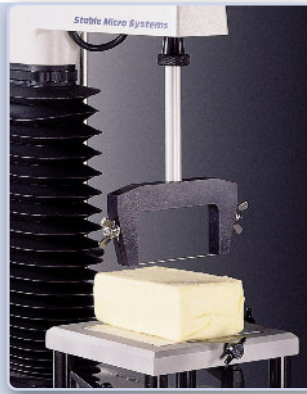
### Forward and Backward Extrusion Rigs

Used to assess the consistency or extrudability of such products as yoghurt, sauces, cream.



### Egg Support Rig

Used to provide stable support for egg penetration/compression tests with the ability to retain any potential fluid expressed during the test.



### Wire Cutter

Used to assess firmness of block forms of butter, margarine, cheese with the aid of a fine wire.



### Fracture Wedges

Can be used to assess fracture/'bite force' of hard cheeses.



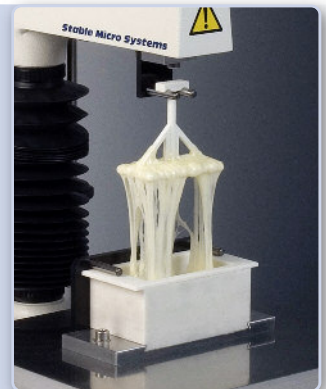
### Cylinder Probe

Can be used in a similar manner as a backward extrusion rig for mayonnaise, mousse consistency determination.



### Multiple Puncture Probe

Particularly suited for the penetration of multiple particulates or non-uniform products to create an averaging effect.



### Cheese Extensibility Rig

Allows the assessment of molten cheese by utilisation of a vessel and fork design.



### Ball Probes

To apply small deformation to cheese to determine firmness.



**Application Studies** are available for the testing of dairy products using either the TA.XT*plus*, TA.HD*plus* or TA.XT*Express* texture analysers.

In addition, **Scientific Papers** have been published which reference the use of the TA.XT*plus*, TA.HD*plus* and TA.XT*Express* in the testing of dairy products.

Paper titles and citation details are available on our website.

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