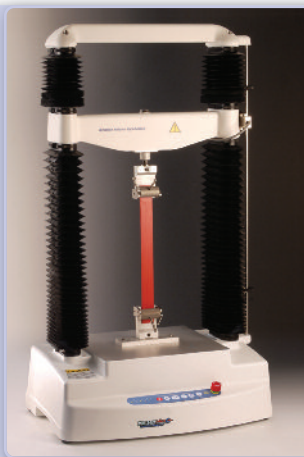


TESTING ATTACHMENTS FOR PHARMACEUTICAL PRODUCTS

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 are also shown which are commonly used in this application area. However, this does not show the complete range of attachments available for the testing of pharmaceutical 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:

Bloom strength: e.g. gelatin gels (according to ISO)

Gel Strength and Gel-Forming Properties: wound dressings, jelly lubricants, contact lenses, soft gel capsules, suppositories

Elasticity & Rupture Force: capsules, breast implants, coronary stents, films

Tablet Strength

Swelling and Disintegration: tablets

Tablet Coating Adhesion

Mucoadhesion

Bioadhesion: transdermal patches, films

Breaking Strength: alginate rafts, bones, hard capsules

Tensile Strength and Elongation: bioadhesive films

Syringeability: aspiration and extraction forces

Consistency: creams

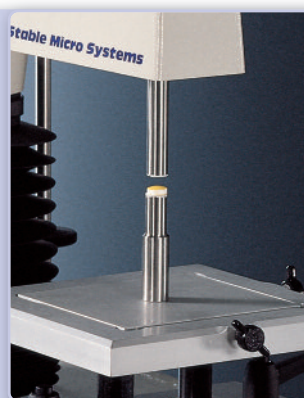
Compressibility: powders, granules, pellets

Adhesiveness: sputum, biogels, dentistry amalgams



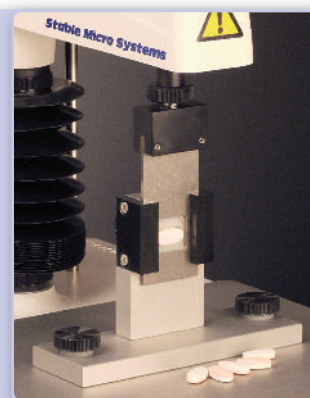
Cylinder Probes

Can be used to assess: granule compressibility; puncture of capsules, gel/tablet strength.



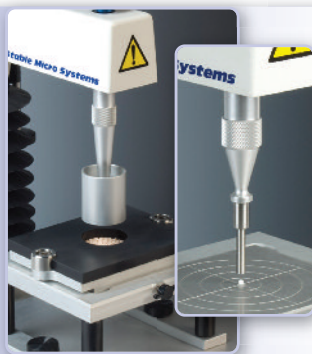
Tablet Coating Adhesion*

This test provides a quantitative measure of the adhesion strength of the coating to the tablet surface. Such a test is useful for studying the consequences of changes in tablet coating formulation variables.



Bilayer Tablet Shear Rig*

This improved rig enables tablet layer separation to be quantified.



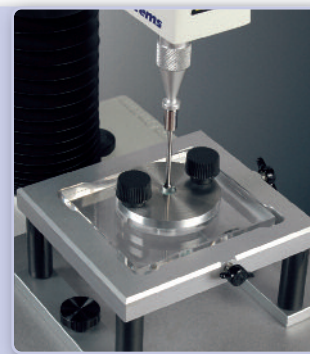
Granule Compaction Rig*

Probes can be used to assess compressibility/fracture strength properties of a single granule or a mono-layer of granules.



Mini 3 Point Bend Rig

Ideally suited to small diameter samples such as tablets. Sample supports can provide a 2mm separation.



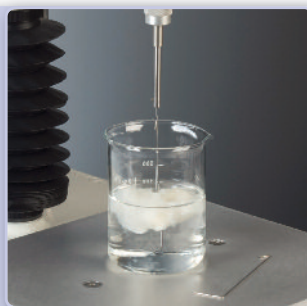
Film Support Rig

Allows testing of thin, film-like products to measure the burst strength, resilience and relaxation properties.



Mucoadhesion Rig

Mucoadhesion measurement of solid dosage forms, semi-solids and even systems which solidify on contact with the target organ can be performed.



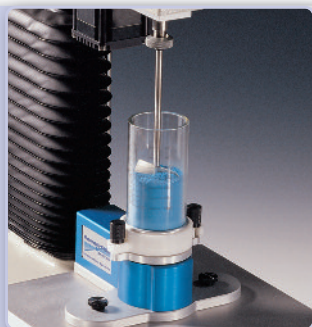
Alginate Raft Hook

Used to assess alginate raft strength according to the British Pharmacopoeia.



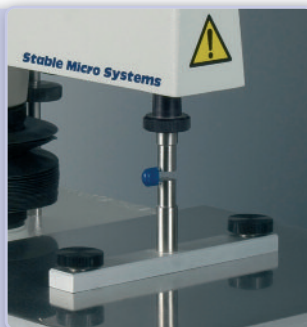
Back/Forward Extrusion Rig

Used to assess the consistency or extrudability of such products as gels, creams and lotions.



Powder Flow Analysis

A Powder Flow Analyser[†] provides a tool for measurement of flow properties such as caking, cohesion, flow speed dependence.



Capsule/Loop Tensile Rig*

This rig measures the force required to split one half of a hard gel capsule. This test highlights elastic stiffness, tensile force and elongation at break point.



Tablet Disintegration Rig*

This rig closely replicates the *in vivo* conditions of the human mouth, enabling manufacturers to examine water absorption and the disintegration of associated particles.

Application Studies are available for the testing of pharmaceutical products using either the TA.XT^{plus} or TA.HD^{plus} texture analysers. In addition, **Scientific Papers** have been published which reference the use of the TA.XT^{plus} and TA.HD^{plus} in the testing of pharmaceutical products. Paper titles and citation details are available on our website.

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