

TESTING ATTACHMENTS FOR POWDERS AND GRANULES

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 powders and granules. Test procedures include: compression, puncture/penetration, tension, fracture/bending, extrusion (forward and backward), cutting/shearing.



TA.XT plusC
Texture Analyser



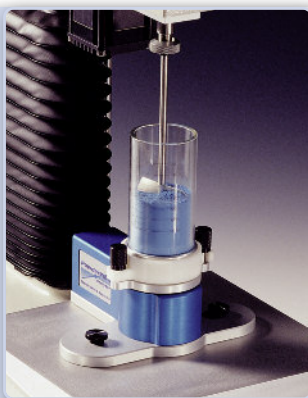
TA.HD plusC
Texture Analyser



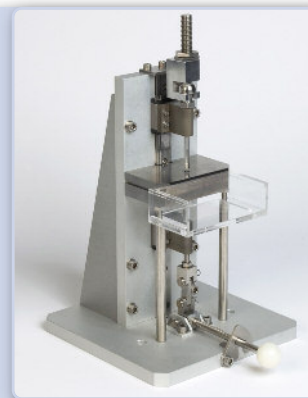
TA.XT ExpressC
Texture Analyser

Typical measurements include:

- Powder Flow Analysis
- Assessment of Powder Cohesion and Bridging
- Assessment of Powder Caking Potential
- Measurement of Powder Flow Speed Dependence
- Unconfined Yield Stress
- Bulk Density
- Powder Compaction and Compressibility
- Granule Compaction to assess compressibility/friability
- Single particle mechanical strength
- Vertical Shear strength



Powder Flow Analyser[†]
Allows the assessment of typical powder issues such as batch and source variation in ingredients, caking during storage/transportation and problems with discharging from hoppers or bins.



High Tolerance Powder Compaction Rig*
Suited to high force applications where the punch/die clearance is critical for the assessment of powder compaction properties.



Low Tolerance Powder Compaction Rig*
Suited to powder compaction applications where the punch/die clearance is less critical.



Granule Compaction Rig*

This test allows the granule/hardness compressibility to be assessed.



Vertical Shear Rig*

For the determination of powder shear strength with minimal operator intervention.



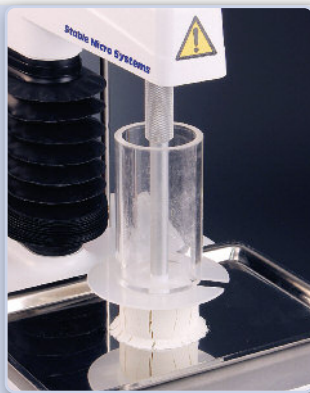
Cylinder Probes

Allow measurement of single particle mechanical strength or progressive swelling of granules/pellets.



Powder Caking and Consolidation Rig

This test allows the assessment of the sample's caking behaviour, after consolidation using the supplied weight.



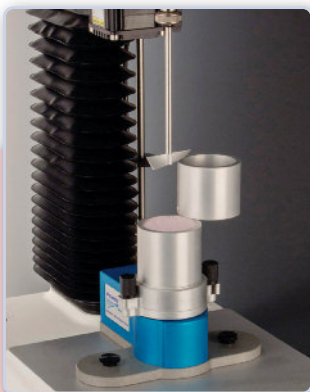
Unconfined Yield Stress

This test allows the measurement of unconfined yield stress with changing consolidation stress.



Indexable Powder Compaction Rig

For lower force compaction applications, this increases sample throughput by enabling a series of tests on a sample.



Application Studies are available for the testing of powders and granules using either the *TA.XTplus*, *TA.HDplus* or *TA.XTExpress* texture analysers.

In addition, **Scientific Papers** have been published which reference the use of the *TA.XTplus*, *TA.HDplus* and *TA.XTExpress* in the testing of powders and granules.

Paper titles and citation details are available on our website.

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