

CT3™ Texture Analyzer

compression and tension testing for rapid QC analysis

An extensive history and customer input have contributed to the development of the most powerful, low cost, stand-alone Texture Analyzer ever produced. With six test modes (plus calibration check) and a wide choice of accessories, no other texture analyzer has ever done so much without requiring a computer and software!

Standard Test Modes

Normal Test:

a single compression cycle

Hold Time Test:

compress and hold

Cycle Count Test:

compress multiple times

Bloom Test:

gelatin bloom strength test

TPA Test:

texture profile analysis

Tension Test:

tensile testing

Surimi Test:

gel strength

Static Load Test:

calibration check

Texture Loader Software

allows up to ten custom tests and ability to lock parameters

Compression distance

up to 10cm, can accommodate sample up to 22.5cm, almost 9 inches tall. Probe shaft is 8cm from back wall.

Choice of Load Cells

7 measurement ranges up to 50kg

Choice of Base Tables

allows for larger samples and more accessory choices



CT3 with Fixture Base Table and Cylindrical Probe in compression (TPA) mode

What's Included?

Instrument with choice of load cell
Texture Loader Software
USB & Power Cables

What else do I need?

Rotary Base Table, Fixture Base Table (see below) or Adjustable Base Table (p66)
At least one probe or test fixture (p60-64)

Optional Accessories

The CT3 has a wide variety of probes, fixtures and jigs which enable it to be very versatile. AMETEK Brookfield can also custom design a fixture and probe for most applications.

TexturePro CT Software TA-CT-PRO-AY (p59)
Temperature Probe DVP-94Y
Bubble Level TA-LVL
Calibration Weight Set (p59)
Gelatin Bath System for gel conditioning (p57)
Bloom Jar - industry approved TA-GBB-2

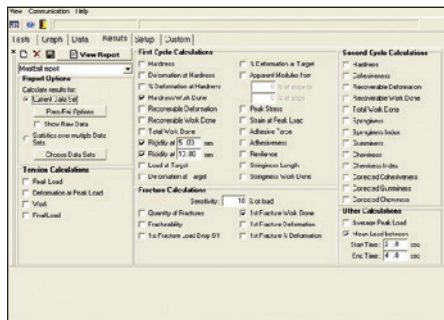
TexturePro CT Software Optional

COLLECT DATA AND PERFORM DETAILED DATA ANALYSIS WITH REAL-TIME GRAPHIC PLOTTING.

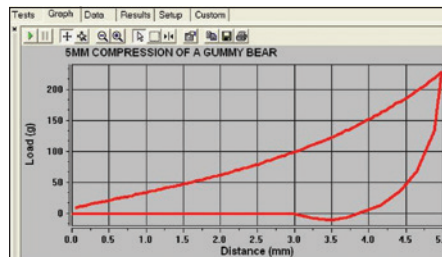
While the CT3 can perform many tests in stand alone mode, use of TexturePro CT Software permits creation of multiple tests and automatic execution without operator involvement.

Easily create custom reports and graphs right from the menu screen.

- Sample identification set-up screen helps new operators quickly get started; test fields outline a variety of parameters
- Intuitive set up for test methods and database file structures in a single window
- Data is captured as a graph and stored in tabular database format
- Advanced data analysis with built-in parameter calculations such as springiness, chewiness, hardness and much more!



Sample Test Set-up



On Screen Live Force Deformation Curve



Tension Mode

provides tensile testing capability

MODEL	Load Range / Resolution*
CT3-100	0-100g/0.01g
CT3-1000	0-1000g/0.10g
CT3-1500	0-1500g/0.20g
CT3-4500	0-4500g/0.50g
CT3-10kg	1-10000g/1.0g
CT3-25kg	1-25000g/2.0g
CT3-50kg	2-50000g/5.0g

g = grams kg = kilograms *Accuracy = ±0.5% Full Scale Range (FSR)

ALL CT3 MODEL SPECIFICATIONS	
Speed:	
Range	0.01-0.1mm/s (increments 0.01mm/s) 0.1 - 10mm/s (increments 0.1mm/s)
Accuracy	±0.1% of setspeed
Position:	
Range	0-101.6mm
Resolution	0.1mm*
Accuracy	0.1mm

mm = millimeter s = seconds
*Resolution 0.01mm when used with TexturePro CT Software



TA-CW-1500C

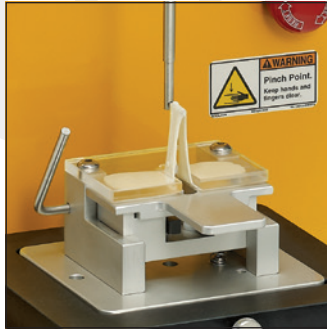
Calibration Weight Set contains a combination of certified weights which may be used to confirm the calibration and linearity of each specific load cell.

CT3 Accessories

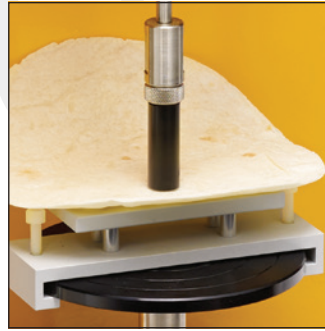
FOR A WIDE RANGE OF TESTS.

While many CT3 accessories have multiple applications, some are particularly useful for specific industries. The following color coded icons are used here to identify these industries.

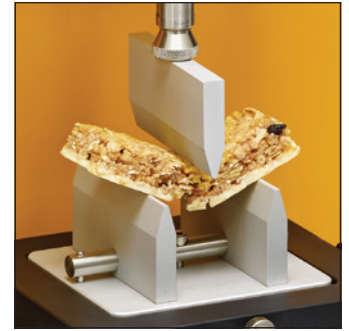
- F** FOODS
- C** COSMETICS
- P** PHARMACEUTICALS
- M** MATERIALS & PACKAGING
- D** DEVICES - MECHANICAL



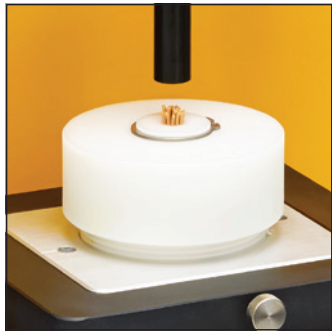
TA-KF F
Kieffer Dough and Gluten Extensibility Fixture quantifies maximum force and distance needed to break sample. Fixture Base Table required.



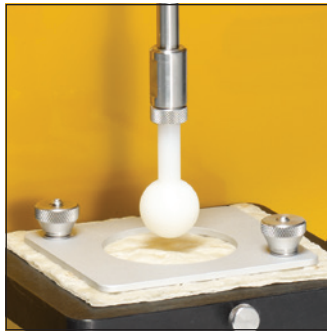
TA-JPA F M
Junior Punch Fixture is for punching through flat samples; 12.7mm max. diameter probe. Hole in fixture is 14mm. Rotary Base Table required.



TA-TPB F
Three Point Bend Fixture is used with TA7 blade from general probe kit. Fixture Base Table required. Small scale version TA-JTPB is available.



TA-DSJ F
Dough Stickiness Fixture is standard test for measuring dough stickiness; important for processing raw dough. Fixture Base Table required.



TA-DE F
Dough Extensibility Fixture for holding sheet of raw dough or flat bread to measure breaking point of stretched sample. Fixture Base Table required.



TA-CTP F
Compression Top Plate for applying uniform compression forces on samples up to 4x6 inches (10x15cm) Fixture Base Table required.



TA-VBJ F
Volodkevich Bite Jaws for testing bite force of meat products using shear cutting-test. Fixture Base Table required.



TA-PTF F M
Pizza Tensile Fixture quantifies cooked pizza firmness by measuring the tensile force and deformation distance to break sample.



TA-FMBRA F
Standard dough pot set for preparing dough samples and measuring dough firmness.



TA-AACC36 F
AACC spec probe for measuring bread firmness and performing texture profile analysis (TPA). Fixture Base Table required.



TA-SBA-WB-1 F
1mm Shear Blades for cutting-shear test: meat, fish, sausage, etc. TA-SBA-WB-3 option for 3mm blades. Fixture Base Table required.



TA-SFF ⓘ

Spaghetti Flexure Fixture quantifies flexure characteristics of uncooked spaghetti and other dry pastas.



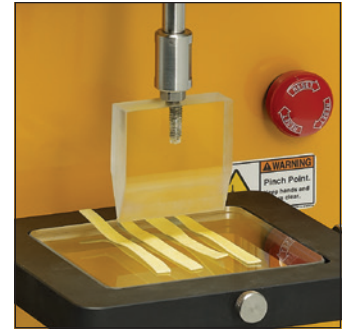
TA-OC-002 ⓘ

Ottawa Cell (447cc) for bulk compression to determine hardness and crispness of cereals, vegetables or fruits. Fixture Base Table required.



TA-PFS ⓘ

Pasta Firmness and Stickiness Fixture measures the firmness and stickiness of uncooked pasta. Fixture Base Table required.



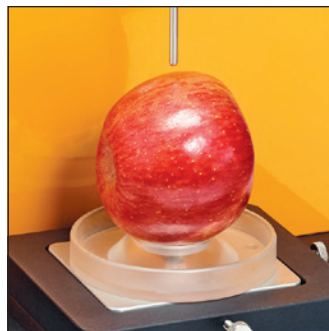
TA-PFS-C ⓘ

Pasta Firmness and Stickiness Fixture measures shear strength when biting pasta and like products. Fixture Base Table required.



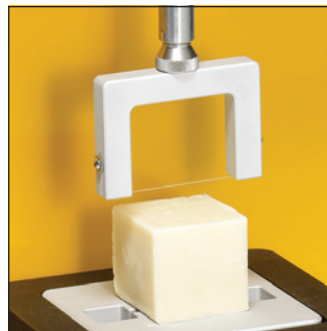
TA-KSC-002 ⓘ

Kramer Shear Cell - Sharp to measure shear force of small composite samples such as grapes, corn and beans. Fixture Base Table required.



TA-CSF ⓘ

Circular Support Fixture provides support for round samples and retains any potential fluid expressed during the test. Fixture Base Table required.



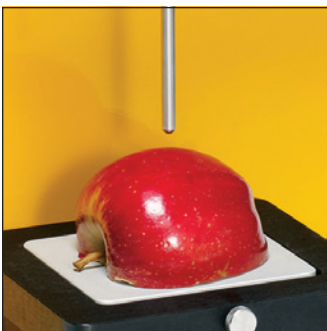
TA-WSP ⓘ

Wire Shear Plate cuts through the sample. Good for products with significant stickiness like cheese and butter. Fixture Base Table required.



TA-CEF ⓘ

Cheese Extensibility Fixture measures the extensibility of molten cheese sample to breaking point.



TA-MTP ⓘ

Magness-Taylor Probes for puncture test to measure hardness of fresh fruit and vegetables. Fixture Base Table required.



TA10 ⓘ

GMIA & GME probe and spec Bloom bottle TA-GBB-2 sold in package of twelve bottles.



TA-MCF ⓘ

The Multiple Chip Fixture is used for testing the penetration or firmness of multiple chips / french fries. Fixture Base Table required.



TA-CJ ⓘ

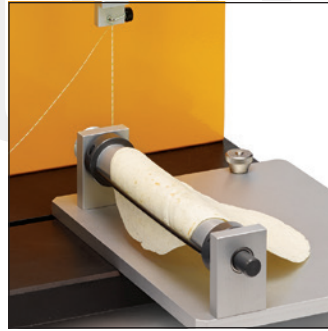
Confectionary Fixture for holding candies and similar products for penetration testing. Fixture Base Table required. Probe not included.

CT3 Accessories

FOR A WIDE RANGE OF TESTS.

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TA-TRF **F**

Tortilla Roll Up Fixture evaluates changes in corn tortilla texture per AACC technical paper by measuring the force to roll up a tortilla.



TA-CKA **F**

Craft Knife Adapter cuts cleanly into and through material with minimum deformation of the sample.



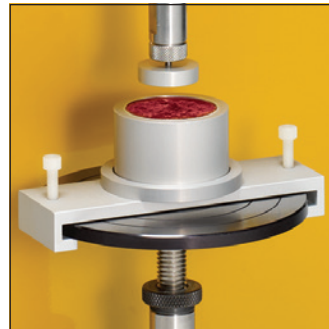
TA-52 MOHRS **F**

Shear Blade used for cutting tests, especially meat, poultry, fish or similar products. Fixture or rotary base table recommended.



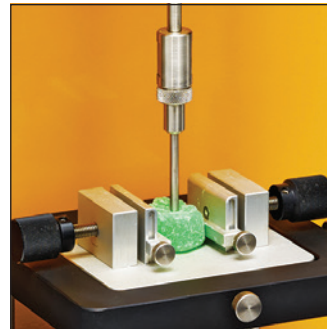
TA-MP **F M**

Mesh Probe quantifies the consistency of products such as mayonnaise and yogurt.



TA-BEC **F M**

Back Extrusion Cell for measuring consistency of applesauce, pudding, yogurt and similar products. Rotary Base Table required.



TA-AVJ **F M**

Adjustable Vice Fixture for holding small samples for puncture test. Good for jelly beans, gum drops, etc. Rotary Base Table required.



TA-JMPA **F P**

Multiple Probe Assembly consisting of nine 3mm probes and base plate designed to hold nine small samples of irregular geometry. Base Table required.



TA-DEC **F C P**

Dual Extrusion Cell for either forward or back extrusion of fruit puree, pudding, yogurt or similar products. Fixture Base Table required.



TA-STF **C P F**

Spread Test Fixture quantifies the spread force of a material. Comes with 1 male cone probe, 5 five samples cups and 1 sample cup holder. Base Table required.



TA-HCF **C**

Hair Combability Fixture measures the effect of hair dye, shampoos and conditioners on the combability of hair.



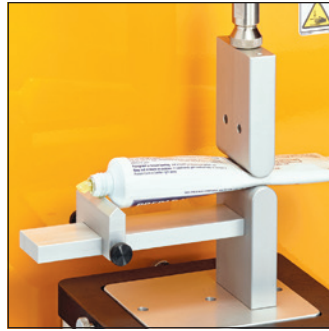
TA-EP **C M**

Eye Pencil Test Fixture measures hardness of cosmetic pencil tips for eye- or lip-lining products and can also be used for artistic type pencil tips. Fixture Base Table required.



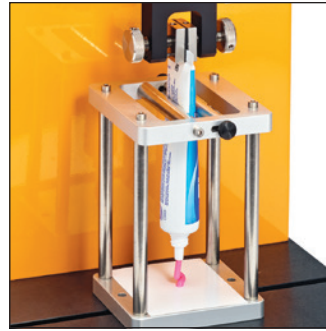
TA-LC C

Lipstick Cantilever Test Fixture allows imitative tests on lipstick and similar products to quantify strength of product. Fixture Base Table required.



TA-TE C P

Tube Extrusion Jig measures the force needed to squeeze cream, paste or ointment out of a tube. Base Table required.



TA-TEF C P

Tube Extrusion Fixture measures continuous extrusion force of tube or sachet samples. Top vice grip included.



TA-MA P

Muco Adhesion Test Fixture Simulates body/temperature conditions and force needed to pull a tablet away from a mucosal surface.



TA-RT P

Raft Tester measures alginate Raft Strength by pulling wire raft hook out of the sample material.



TA-MDI P

Metered Dose Inhaler Fixture measures the push-button force to actuate the inhaler. Fixture Base Table required.



TA-STJ P

Syringe Test Fixture for measuring the force required to push or pull syringe plunger. Important to all syringe markets. Base Table required.



TA-TCA P

Tablet Coating Adhesion Fixture measures the adhesion force of a tablet coating to a tablet. Fixture Base Table required.



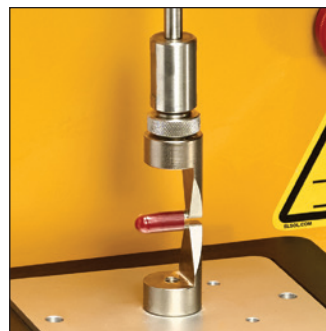
TA-BLS P

Bi-Layer Shear Fixture measures shear strength by cutting a two-part tablet or capsule using a guillotine blade. Fixture Base Table required.



TA-BPS P

Blister Pack Support Fixture is used to measure the force required to remove the tablet from its blister pack. Fixture Base Table required.



TA-CLT P

Capsule Loop Tensile Test Fixture is used to measure the force required to split one half of a hard gel capsule. Fixture Base Table required.

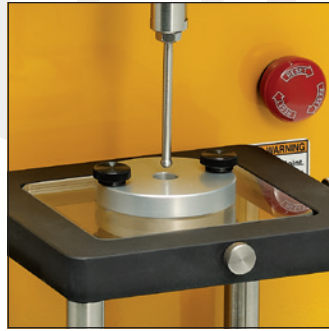


TA-TCF P

Tablet Compression Fixture performs a ring crush test (includes four rings). Bead compression test fixture is also included. Fixture Base Table required.



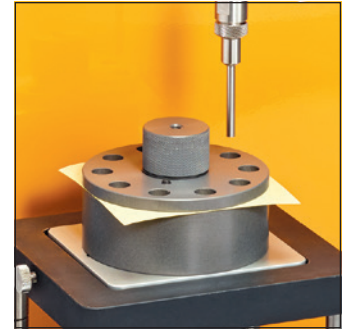
TA-ATT M P
Adhesive Tack Tester for measuring stickiness of pressure sensitive adhesive materials such as tape. Rotary Base Table required.



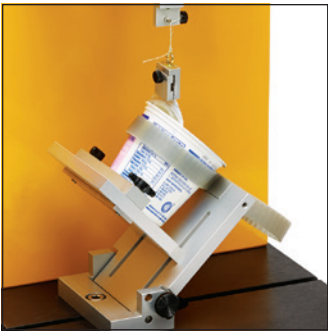
TA-FSF M P
Film Support Fixture for puncture test to measure strength of fine films. Fixture Base Table required.



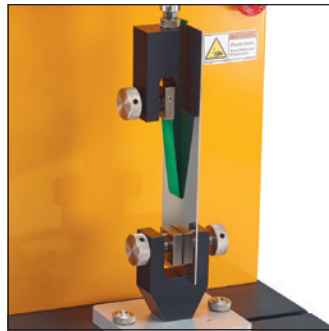
TA-LTT M
Loop Tack Test measures the adhesive strength of pressure sensitive tape and stickers according to ASTM D6195.



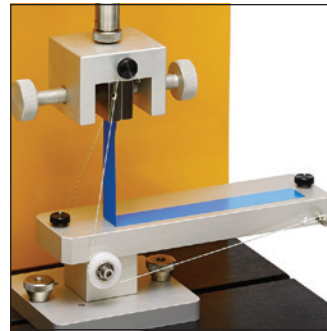
TA-RIF M
Rotary Indexing Fixture measures adhesive force to pull tape off a surface. Multiple tests done on same sample for average value. Fixture Base Table required.



TA-GPJ M
General Peeling Jig measures the adhesive strength needed to remove the lid from a sealed container at 0°, 45°, and 90° angles.



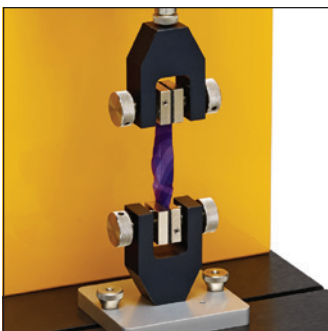
TA-PF180 M
180° Peel Fixture consists of top & bottom grips to measure adhesive strength when pulling tape off rigid surface using force at 180° angle.



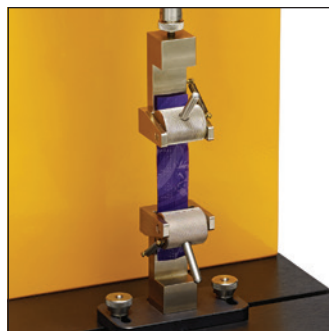
TA-PF90 M
90° Peel Fixture measures the adhesive strength to pull a tape off of a rigid surface using force at a 90° angle.



TA-ATTPT M
Adhesive Test Fixture measures adhesive force of plaster and similar samples. Includes flat cylindrical probe, base plate and top clamp to hold the sample.



TA-DGF M P D
Dual Grip Fixture for tensile testing of thin films or integrity of seals for packaging.



TA-RCA M D
Roller Cam Accessory grips measure the tensile strength and tear characteristics of material such as polymer films.



TA-SFJ M D
Sliding Friction Jig measures the coefficient of friction for packaging materials according to ASTM D1894.



TA11 D
Cylindrical probe TA11 is used to measure the force vs. distance in mechanical springs. TA11: included in TA-P-KIT2 or as a standalone part.