

FX-TA-10H Entry type texture analyzer

Model: FX-TA-10H

Standards & regulations

Chinese Pharmacopoeia 2020 edition

Comply with current Chinese GMP regulations

National Standard "Food Additive Gelatin" GB6783-2013

National Standard "Medicinal Gelatin Hard Capsule"
GB13731

National Standard "Food Additive Gelatin Kederan Gum"
GB28304-2012

National Standard "Frozen Surimi" GB/T36187-2018

Light Industry Standard "Edible Gelatin" QB/T4087-2010

Agricultural industry standard "Determination of meat
tenderness and shear force determination method"

NY/T1180-2006

AACC 74-09 Bread Hardness Test (American Cereal Chemistry Association)

AOAC (American and European Gel Association)



This texture analyzer can be applied to analysis of gelatin, carrageenan, keratin, frozen surimi gel, agar compound hydrogel, fruits and vegetables, medicines, cosmetics, dairy products, meat products, cereals, oils, and biscuits Physical analysis of baked foods, fillings, candies, jams, and other samples; can accurately quantify the freezing strength, hardness, brittleness, tenderness, elasticity, toughness, cohesion, cohesion, crispness, and chewing of samples Multiple physical properties such as resistance, recovery, tensile strength, rupture strength, shear strength, compressive strength, penetration strength, creep characteristics, relaxation characteristics, etc.

1. Features

1.1 It is a texture analyzer directly controlled by a computer and positioned as a popular teaching type.

1.2 Using a high-definition touch screen as an auxiliary button not only makes it clear and eye-catching, but also convenient for experimentation.

1.3 Equipped with Texture Professional Edition system software. Provide rich parameter settings and precise measurement manipulation, implement fast data collection, and professional data analysis.

1.4 The instrument provides hierarchical permission management: three levels, multiple users, ordinary users can add unlimited times. (username+password login)

1.5 Instrument automatically and unconditionally completes audit tracking records: all traceable measurement results and processes are automatically protected by the system database



2. Applications

2.1 This texture analyzer can be used for physical property analysis of food, pharmacy, biomedicine, dairy products, meat products, cosmetics, gel, candy, fruits and vegetables, jam, and other samples;

2.2 This texture analyzer can quantify the hardness, brittleness, tenderness, viscosity, elasticity, toughness, cohesion, mastication, freezing strength, tensile strength, breaking strength, shear strength, compressive strength, penetration strength, creep characteristics, relaxation characteristics and other physical indicators of the sample.

3. Specifications

3.1 Load force range	0-15 kilograms (0-150 Newton)
3.2 Multiple force sensing elements available	1, 2, 5, 10, 15 kilograms and other
3.3 Load force detection accuracy	better than 0.01%
3.4 Load force analysis accuracy	0.001g
3.5 Deformation displacement range	0~310mm (0~410mm)
3.6 Displacement analysis accuracy	0.001mm
3.7 Detection speed	0.01mm/s~30mm/s
3.8 Speed accuracy	≤+0.1%
3.9 Data acquisition rate	up to 4800 sets per second; After optimal filtering, 200, 500, 1000, and 2000 groups/second can be selected.
3.10 Instrument protection functions	emergency braking, upper and lower limit control, force sensing unit overload protection, and detection data encryption.
3.11 Overall dimensions	L480 * W 330 * H 790mm

3. Test functions

- 3.1 Gel strength test
- 3.2 Single compression test
- 3.3 Surimi gel test
- 3.4 Carrageenan test
- 3.5 Can Tran glue test
- 3.6 Meat tenderness test
- 3.7 Cycle test
- 3.8 Relaxation performance test
- 3.9 Creep performance test
- 3.10 Full texture test
- 3.11 Tensile test
- 3.12 Bend test
- 3.13 Shear test
- 3.14 Puncture test
- 3.15 Custom test
- 3.16 Self calibration



4. Software functions

4.1 Comprehensive experimental mode program editing function; Run, preset, repeat, loop, clear, zero, assign, variable, formula, calculation, playback, comparison, annotation, etc. By editing these program commands, various detection modes can be achieved, various experimental models can be built, and the required experimental data can be obtained.

4.2 Graphic display editing function, the system can display three curves: force time, force distance, and distance time. The curve contains scales, which can be locally scaled or automatically adjusted by the system. It can also annotate key data points and automatically calculate the area of the selected graph field.

4.3 Test playback: The software automatically records the entire process of the test, and can synchronously enable the instrument's built-in recording and photo capture functions (to save important sample verification videos). And provide multi condition intelligent retrieval. Traceable to any period of experiment for data restoration, curve drawing, and synchronous video playback, observing

View and analyze the experimental details of the queried samples.

4.4 The software can simultaneously compare and analyze the function curves and measurement data of 5 experimental results, and provide reports.

4.5 The software has powerful result output function: it can strictly and objectively generate test reports in multiple data formats based on prompts: Excel, Word, PDF, and it supports A4 or A3 output and printing.

4.6 Software has a user-friendly interface: menu bar, toolbar, status bar, display bar, and curve box. The experimental process is clear and the control buttons are convenient and fast.

4.7 The software provides two operating systems, Chinese and English, with one click switching

4.8 software provides more than ten testing methods: single compression, cyclic testing, relaxation testing, creep testing, full texture testing, tensile testing, bending testing, shear testing, puncture testing, freezing strength testing, etc. The system supports custom unlimited addition of test modes.

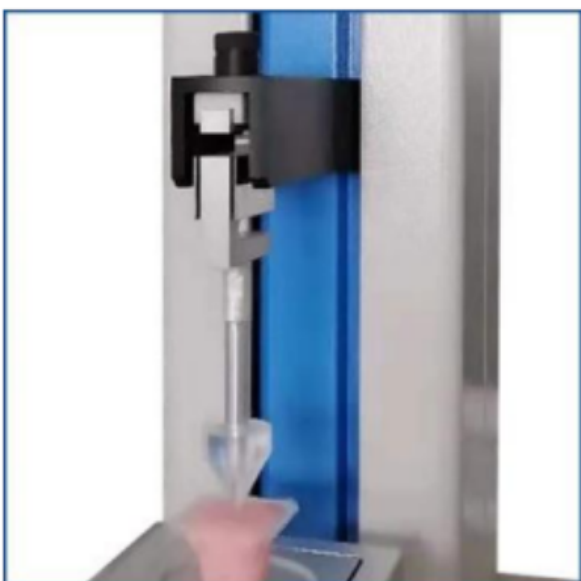
4.9 Software provides a program unit for metrological verification of measurement accuracy, and has functions such as automatic measurement, automatic calibration, and automatic repair.

5. Test probes





Wedge probe, Including 30mm wide upper and lower wedges, with a cutting angle of 30 °, the lower wedge is directly fixed on the base of the tester. The tested products include ham, cheese, and vegetables, and can be used for measuring fracture strength and hardness.



Cone probe,
 30 ° Dia.25mm
 Cone: 45 °Dia.30mm
 Cone: 60 °Dia.30mm
 Suitable for Consistency and Ductility Testing of Soft Solids: butter, mince, cheese, ice cream filling, etc.





Cylindrical DIA12.7 soil 0.010mm, the national standard Food Additive Gelatin GB6783-2013, the standard probe designated by AOAC of the International gel Association, and the British standard gel probe for gel strength test BS757

