

CHT-01 Capsule and Softgel Hardness Tester

Application

A softgel is a specialized capsule used for oral medication, containing a liquid fill within a gelatin shell. It is commonly used for vitamins, minerals, and other drugs. The active ingredients are safely enclosed within the capsule, protecting them from the environment. When the consumer takes the capsule, the ingredients are released through crushing, dissolution, and melting, depending on the capsule wall's strength.

To assess the wall's strength, the CHT-01 Capsule and Softgel Hardness Tester performs a penetration or compression test with a 10 mm-diameter or 10mm² surface area cylinder probe. This test determines the film's rupture point, revealing its strength. It also detects weaknesses in the gelatin film or seal during manufacturing, simulating potential burst scenarios during packaging and transportation.

Furthermore, the CHT-01 Capsule and Softgel Hardness Tester quantifies the softgel's elasticity by measuring wall deformation under a specific compressive load. Seal strength is evaluated using a probe larger than the capsule, measuring the force required to break the seal. Additionally, the tester measures the force needed to deform the softgel to a specific level.

Functions

CHT-01 Capsule and Softgel Hardness Tester has below standard programs

Force: to set a force and record the distance until the force is reached.

Peak: to obtain max force in a rupture test.

Distance: to measure the force at a certain distance.

Benefits

- 1. Multi Test programs realize comprehensive analysis of capsule
- 2. Rotating table increases test efficiency
- 3. Automatic statics saves time
- 4. Long and durable service life

Technical Features

- 1. PLC control unit equipped and 7-inch HMI touch screen
- 2. Precision ball screw and stepper motor used
- 3. Variable test speed.
- 4. Multiple fixtures customization available
- 5. Position restrictor and overload protections
- 6. Automatic returning function after test
- 7. Dot matrix type microprinter

Various iiq

single or more test stations are made on demand

Main Parameters	
Test Range	0~200N (Or as required)
Stroke	200mm (without clamp)
Speed	1~300mm/min(or as required)
Displacement Accuracy	0.01mm
Accuracy	0.5% F.S.
Output	Screen, Microprinter, RS232(optional)
Power	110~ 220V 50/60Hz





