

## Gel Strength Tester (JS-III )

Gel strength test system is mainly used to measure the gel strength of gelatin under the stipulated environment. The gel strength of gelatin is an important indicator to reflect the technological level of gelatin production and control the production quality of gelatin.

**System composition:** ◎ 1 set of JS-III gel strength tester  
 host ◎1 set of HW-III precise constant temperature monitoring cold water tank ◎1 set of ZL-III efficient refrigerating machine

### Applicable standards:

- ◆ National standard *Food Additive Gelatin* GB6783
- ◆ National standard *Hard Capsule of Pharmaceutical Gelatin* GB13731
- ◆ Industrial standard *Pharmaceutical Gelatin* QB2354
- ◆ Industrial standard *Industrial Gelatin* QB/T1995
- ◆ Industrial standard *Bone Gelatin* QB/1996
- ◆ Industrial standard *Photographic Gelatin* QB1997



### Host of gel strength tester Technical indexes:

Meet the requirement for measurement time limit in <i>Pharmacopoeia</i> of Edition 2015	
Computer monitors the press-in depth error of probe to the gelatin surface dynamically.	
Intelligent LCD	
Test range	5-1000Bloomg
Test precision	±0.3%
Resolution	1g
Repeated measurement error	±1 Bloomg
Sampling depth	1-60mm
Stroke error: ≤±0.1mm	
Stroke error of high-speed measurement	≤±0.1mm
Measured value	take Bloom g as the unit
Measured diameter of cylinder	12.700±0.010mm
Standard gel strength bottle	volume=150ml; inner diameter=59mm; height=85mm
Total power	60W
Overall dimensions	L*W*H 260mm*260mm*450mm

### Main features of host of gel strength tester:

- ◆ Intelligent professional model which can meet various complicated measurement requirements of professional staff.
- ◆ High-definition LCD is adopted, users can enjoy intelligent operations according to the screen tips; Chinese character and quantitative index are provided for each operational process.
- ◆ Powerful data processing ability; it can submit the parameters like mean value, final value or peak value of tested gelatin sample for you automatically.
- ◆ It provides four kinds of sampling measurement modes including single-step, maintaining, circulating and automatic, making you operate with higher proficiency.
- ◆ Automatic measurement mode can help you obtain the value of gel strength faster, more accurately and more realistically.
- ◆ The instrument provides presetting of any sampling depth, which facilitate the users to extract the data of various levels of gelatin sample.
- ◆ 5 kinds of sampling speeds; 0.1mm/s, 0.2mm/s, 0.5mm/s, 1mm/s and 2mm/s. High-speed measurement is chosen, the press-in depth error of probe to the gelatin surface will not occur.
- ◆ Sampling depth can be preset arbitrarily (1mm----60mm) .
- ◆ The instrument provides 2 kinds of sampling results, in cooperation with the different test combinations of sampling speed and sampling mode, so as to provide users with final value and peak value.
- ◆ Professional high-precision pressure sensor.
- ◆ High-precision mechanical drive matches with 4-class shockproof design
- ◆ Users can verify the measurement accuracy of instrument itself by themselves. (with standard weight)
- ◆ Automatic correction of non-linear error, automatic fault diagnosis alarm, automatic outrange protection and automatic error correction prompt.
- ◆ Embedded micro printer, standard serial printing, convenient storage of experimental data.

### Thermostatic water tank and refrigerating machine Technical indexes:

Water bath temperature control range	5-60.0℃
Water bath temperature control precision	±0.1℃
Refrigerating time	(30℃→10℃)<40min.
Power supply	220V/50Hz/1200W
Overall dimensions	HW-III(58×44×22)cm <sup>3</sup> ,ZL-III(48×38×29)cm <sup>3</sup>

### Main features:

- Thermostatic water tank and refrigerating machine constitute the precise constant temperature cold bath system.
- Magnetic water pump circulating water flow uniform heat system is adopted, and bath temperature is uniform.
- High-precision temperature sensor has small linear error and high temperature measurement accuracy.
- Full-automatic frequency converting control technology controls the temperature intelligently, with high temperature control precision.
- Refrigerating machine adopts new type compressor with high reliability and high power for refrigeration; the refrigeration speed is fast and noise is small.
- Temperature can be preset at will; the preset value and real-time value can be displayed by time division.