Intelligent Tablet Hardness Tester YD-5S

I. Model Introduction:

My company research and development, the production of YD-5s intelligent tablet hardness instrument for professional grade tablet hardness measurement instrument; with 5N ~ 350N ~ 500N measurement range, 2mm ~ 40mm ~ 60mm large diameter inclusive capacity. More 0.01N high precision, but also can infinitely adjust the rate of tablet pressing, at the same time with real-time display of the load with the time change of the measurement characteristics of the curve; standard with the system management privileges + measurement audit trail; USB mass storage export. Hardware selection of embedded ARM 'Cortex-M7' core processor, with ultra-strong performance of the mechanics of the A/D module chip, to ensure high-speed acquisition of measurement data, non-destructive processing. For professional users to provide reliable and accurate measurement results.

II.The system configuration requirements

2.1 YD-5S Intelligent Tablet Hardness Tester ---1 set
2.2 Standard fragment collection box---1 piece
2.3 Brush---1pc

III.Working conditions

3.1 Power supply voltage: 220V; frequency: 50HZ;
3.2 Environmental conditions: 0 ℃ ~ 40 ℃ relative humidity 20% ~ 80%, no condensation in the indoor air environment.

IV.The technical indicators and characteristics

4.1 Instrument screen characteristics: 7-inch high-definition touch screen, interactive intelligent control. One-key switching between Chinese and English operating systems.
4.2 Real-time accurate mapping: measuring characteristic curve of pressing force, displacement and time function. (Curve with scale, automatic zoom in and zoom out. Intuitive description of the sample crushing force (hardness), brittleness, toughness, crushing power, and other physical indicators)
4.3 Three levels of authority management: user name + password login
4.4 Audit trail records: can be queried by date or entry, selective printing or all print.
4.5 Measurement data storage: with USB mass storage and export: automatically record all the measurement process and results. Support historical data query.
4.6 Printing content: sample name, identification, batch number, measurement method, measurement results, inspector, date, time .....

4.7 Automatic calibration accuracy function: the instrument is equipped with measurement accuracy checking interface, the checking result is directly displayed on the screen, if it is judged that a certain item is out of tolerance, it can press the auto-correction key to automatically complete the calibration and save it in the system (the calibration accuracy is 0.01 Nm).

Hardness measuring range	5N-350N(35Kg) and 5N-500N(50Kg).
Hardness display accuracy	0.01N
Measuring accuracy error	≤±1%rdg±5dgt
Measuring diameter range	2mm~40mm and 2mm~60mm (for effervescent tablets).
Adjustment range of pressing rate	0.1mm/s~5mm/s (infinitely adjustable).
Speed adjustment resolution	0.1mm/s
Speed accuracy error	±1% of the setting accuracy
Overall dimensions	length 520mm width 320mm height 170mm
Weight	14.3Kg

4.15 Three measurement modes

①Single slice totalisation; ②Continuous decrement (measuring slice)

②Continuously decreasing (the maximum number of measuring slices 200 slices)

③Preset grouping (maximum 10 groups, each group 1-20 pieces)

4.16 Unit of measurement: Newton-N, Kgf (touch the screen to achieve unit conversion)

4.17 Output: RS232 serial print interface, USB serial port

4.18 Embedded ARM 'Cortex-M7' core processor, with the super performance of the mechanics of the A/D module chip, to ensure high-speed acquisition of measurement data lossless processing. Provide reliable and accurate measurement results for professional users.

4.19 Cumulative pressing mode provides pause and successive work touch keys, convenient to observe and analyse the specimen rupture process curve at any time.

4.20 Real-time display: current date and time, pressure, number of tablets, speed, average value, maximum value, minimum value, variance, standard deviation.

4.21 Provide Chinese and English input interface for inputting Chinese characters, numbers and English, and editing specimen name, number and operator's name:

4.22 Calculate the retraction stroke automatically and compress the test duty cycle to improve the working efficiency.

4.23 Provide one-key switching between Chinese and English operation interface.

V. Applicable standards:

5.1 JB/T20104-2007

5.2 Comply with the current GMP regulations