

Fruit Sclerometer Manual

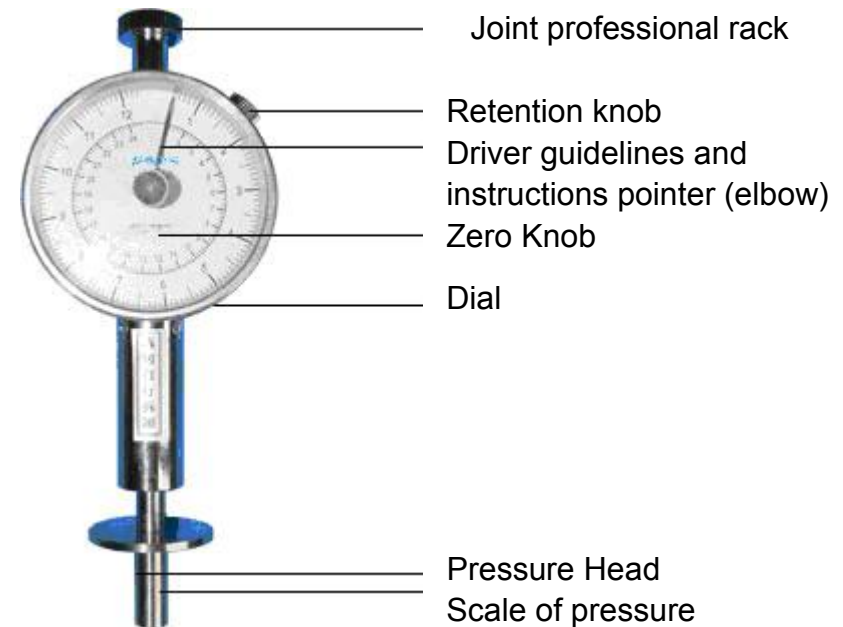
Please carefully read the
instruction before using product

7. Joint top rack is provided for professional inspection sector, with the rack used to components, when connecting, rotate the knob, just revolve the screw and the sleeve is OK.
8. Using more than a year, should open the back cover, pour in some lubricating oil in the main shaft, gear, precious stones eyes, groove-oriented, to improve accuracy and extend the useful life of equipment.
9. The factory has been standardized the calibration, no unauthorized rotating screw nut.

Fruit Sclerometer

I .Functions and Characteristic

The fruit sclerometer (also called fruit hardness tester), this series has GY-1, GY-2, GY-3 three kind of models, use to testing apple, pear, Strawberry, grape's fruit's hardness. It is suitable for the fruit tree scientific research department, the fruits company, the fruit tree farm, unit and so on technical college agriculture colleges and universities, to cultivate the improved variety, the harvest storage, the product transportation and the processing and so on by the fruits hardness. Thus judge fruit's mature degree. This instrument volume small, the weight is light, straight reads the type, carries conveniently, specially is suitable for the scene determination, the result came out direct.



. 1.

II.Principle

The hardness of fruit can express by the unit area (s) could undertake the pressure of dynamometer (N),their specific value is just as the hardness(P).

$$P=N/S$$

P—the hardness value of fruit 10^5Pa or (kg/cm^2)

N—pressure of dynamometer (N) N or (kg)

S—the area of pressure m^2 or (cm^2)

III.Spdcification

Model	GY-1	GY-2	GY-3	
Indication scale	2-15kg/cm ² (×10 ⁵ Pa)	0.5-4kg/cm ² (×10 ⁵ Pa)	0.5-12kg/c m ² (×10 ⁵ Pa)	1-24kg/cm ² (×10 ⁵ Pa)
Pressure Head size	Φ3.5mm	Φ3.5mm	Φ11mm	Φ8mm
Precision	±0.1	±0.02	±0.1	
Insertion Depth	10mm			
Size	140×60×30mm			
Weight	0.3kg			

IV.Instructions

Before measuring: Rotating dial, justify the dial and driven guidelines and the initial alignment of the same scale (GY-1 for the scale of the line 2, GY-2 and GY-3 for the scale of the line

0.5); will raze the be measured fruit about 1 cm^2 the skin.

Measuring: Hold the sclerometer, make the sclerometer perpendicular to the surface, the pressure head insert into the fruit indicators, when the pressure head to the scale of pressure (10 mm),it stops, instructions Objectives of reading instruction is the fruit of hardness, for three average.

Measured:

Rotary knob back to zero, so that indicators reset to the initial scale line.

V.Pay Attentions

1. Retention knob should be loosened before measuring, rotate dial will justify the driven guidelines and the initial alignment of the same scale (straight head), and then rotate retention knob. Check whether the driver instructions pointer is on the right of driver guidelines, if not, should rotate back to zero knob, so that instruction pointer is on the right of driver guidelines,
2. In order to achieve better accuracy, before measuring pressure the pressure head with their hands with full range press 2 to 3 times, so that lubrication.
3. When measuring hardness, should be uniformly slow insertion, can not turn pressure, should not impact measurement.
4. Pressure head fruits should be vertical surface.
5. GY-1 and GY-2 type fruit sclerometer scale units for the outer ring is $\times 10^5\text{ Pa}$, the inner ring scale is kg/cm^2 , GY-3 type, connecting the small pressure head, with inner ting scale readings, connecting big pressure head, with the outer ting scale readings.
6. The instruments and pressure head should be kept clean and after finishing measurement it should be cleaned be cleaned up the juice.