

53205 / 53205SW Fruit Pressure tester (fruit firmness)



Digital fruit pressure tester mounted on ref. 53205SP table stand

This tool is perfectly fit to detect proper picking maturity and control fruit softening during cold storage. It measures the pressure necessary to force a plunger of specified size into the pulp of fruit.

Preparing samples

About ten days before normal picking time, control pulp firmness, repeat control each 6-7 days for winter pome-fruits, each 2-3 days for summer pome-fruits, and stone fruits. Take samples from several plants and several spots of each plant as a random sample will be more representative of the lot.

A suitable sample will be composed of 15-20 fruits; 2 measures have to be taken on each fruit at opposite sides, at the middle point of each side, after removing 1/2"-3/4" diameter disc of peel.

Hand held measurement

Hold the fruit firmly in the left hand, hold the fruit tester between thumb and forefinger of the right hand, push button-commanded indicator hand, place the plunger against the fruit and press with increasing strength until the plunger tip is penetrated into the pulp up to the notch.

Slow penetration of the plunger is essential. Sharp movements and sudden pressure application may impair your measurements. In order to avoid mistakes and to assure slow penetration of the plunger, make sure that the hand holding the fruit is firm, leaning it on the table, and keep the arm rigid.

Test stand measurement

When make the measurement, the SENSING HEAD along the adapter has to be on a line with measuring fruit.

FEATURES

- 20 Kg, wide capacity, high resolution, high accuracy, high repeatability.
- 3 kind display unit: Kg, LB, Newton.
- Full capacity zero (calibration) control capability.
- Fast/Slow response time push button.
- Positive or reverse display direction select.
- Accessories (plungers) are included.
- Hand held & stand mounted gauges are available.
- Low power consumption gives long battery life.

- Build in low battery indicator.
- Microprocessor circuit & exclusive load cell transducer.
- Over load protection.
- RS-232 computer interface (optional).
- Professional test stand (optional).

SPECIFICATIONS

Display	LCD (Liquid crystal display). 5 digits, 10 mm (0.4") digit size.
Display Direction	Positive or Reverse direction, select by the push button on the front panel.
Function	Compression.
Peak hold	Will freeze the display value of the Peak load.
Calibration	Zero button.
Measure Capacity	20.00 Kg/44.10 LB/196.10 Newton.
Resolution	Kg, LB, Newton.
Min. Display	0.01 Kg/0.01 LB/0.05 Newton.
Accuracy	(0.5%+2 digits), within 23°C.
Unit select	Kg/LB/Newton.
Update time	Fast Approx. 0.2 second Slow Approx. 0.6 second
Over range Indicator	Display show “- - - -” when in over range status.
Overload Capacity	Max. 30 kg.
Zero Control	Max. full capacity.
Circuit	Exclusive microprocessor LSI-circuit.
Full Scale Deflection	Approx. 2.0 mm max.
Power Supply	6x1.5 V AA (UM-3) size battery or DC 9V adapter (not included).
Power Consumption	Approx. DC 24 mA.
Transducer	Exclusive load cell.
Operating Temperature	0°C to 50°C (32°F to 122°F).
Operating Humidity	Less than 80% RH.
Dimension	227x83x39mm (8.9x3.3x1.5 inch).
Weight	551 g (1.2 LB)/with batteries.
Mounting Holes	Mounting holes are provided on the back case, easy stand mounting.
Accessories Included	Operating manual Plungers Carrying case
Simple version	Ref. 53205 – data available only on the display after each measurement
Version with data output	Ref. 53205SW - serial computer interface plus software
Optional accessories	Ref. 53205SP - test stand for table use