



QAQC LAB

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Model 329

QAQC POWDER FLOWABILITY TESTER



OVERVIEW

Powder flowability tester is used to measure the angle of repose and flow rate of powders. Powder angle of repose is part of powder flow test. The angle of repose is the angle of the conical pile produced when a granular sample is poured onto a horizontal surface (test platform).

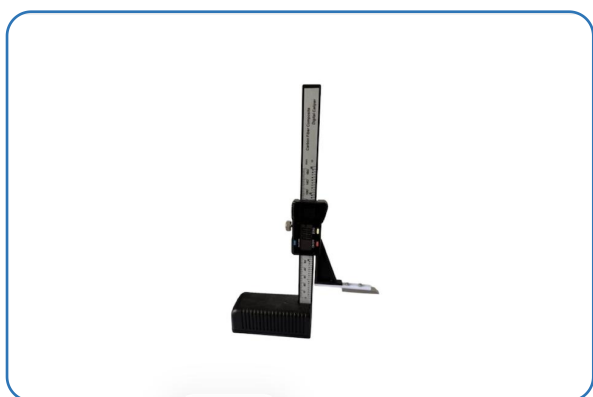
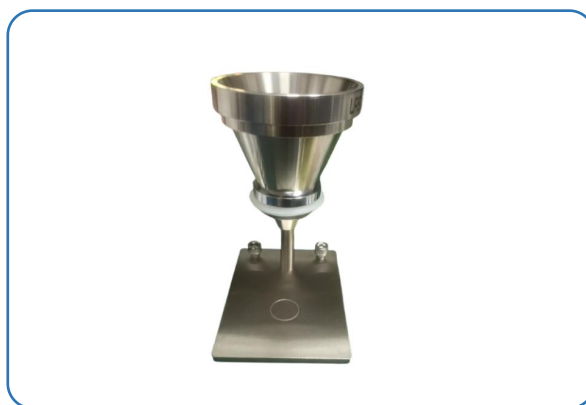
It consists of main funnel, auxiliary funnels, height gauge and test platform.

It features Angle of repose testing, Powder flow rate testing, 3 funnels with different diameter cope with different samples, Automatic calculation from height to angle of repose, Automatic determination on the powder flowability level

It conforms to US Pharmacopoeia Chapter USP 1174

SPECIFICATIONS

- Test method: angle of repose and powder flow rate
- Physical characteristics: angle of repose 0-90 degrees/flow rate/powder flowability
- Test platform diameter: 100 mm;
- Funnel: angle 40 degrees
- Diameter of Nozzles: 10, 15, 25 mm
- Volume 450 ml
Height 150 mm
Flow height: 75 mm
Height gauge accuracy: 0.05 mm
- Result processing mode: automatic calculation and determination
- Result output mode: intelligent software, printout
- Size: 20 x 26 x 40 cm/8kg



PRINCIPLE

Pour sample into the funnel and stir the sample if necessary, the powder produce a cone on the test platform and use a height gage to measure the height of the pile. The tangent of the angle of repose (in degrees) can be determined by reading off the height of the powder cone in mm from the digital display of the height gage and dividing it by 50. Pour quantitative weight of sample to main funnel connected to auxiliary funnel (in different diameter selected as per sample), measure the flow rate of sample when it flow out of the funnel.

Composition: test platform, all stainless steel funnel , agitator, support, electronic height gauge and software

Principle: Angle of Repose measuring method and the funnel method of the European Pharmacopoeia/ ISO flowability test method

Output: Free online computing / optional intelligent software.

Report form: online print / A4 report form

Physical Property to measure: angle of repose/flow rate

The Model 329 is an apparatus of angle of repose usp 1174 used to measure the angle of repose of pharmaceutical powders. Powder angle of repose is part of the powder flow test. Model 329 conforms to US Pharmacopoeia Chapter USP 1174 and European Pharmacopoeia Chapter EP 2.9.36. It also meets ISO 4324 and agricultural fertilizers (ISO 8398).

The angle of repose is the angle of the conical pile produced when a granular sample is poured onto a horizontal surface (test platform). Supplied with free Windows software to obtain the test results in a second.

It consists of a stand, funnel, stirrer, test platform and a digital height gage, having a range of 0-300 mm and an accuracy of 0.05 mm.

Pour sample into the funnel and stir the sample if necessary, the powder produces a cone on the test platform, and uses a digital gage to measure the height of the pile. The tangent of the angle of repose (in degrees) can be determined by reading off the height of the powder cone in mm from the digital display of the height gage and dividing it by 50.

Table EUROPEAN PHARMACOPOEIA 2.9.36-1. – Flow properties and corresponding angles of repose

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- 25-30° Angle of repose corresponds to Excellent flow property
- 31-35° Angle of repose corresponds to Good flow property
- 36-40° Angle of repose corresponds to Fair – aid not needed flow property
- 41-45° Angle of repose corresponds to Passable – may hang up flow property
- 46-55° Angle of repose corresponds to Poor – must agitate, vibrate flow property
- 56-65° Angle of repose corresponds to Very poor flow property
- >66° Angle of repose corresponds to Very, very poor flow property