Instrument measures powder flow and density

The widespread use of powders in the pharmaceutical industry has led to a proliferation of test methods for measuring powder flow and density.

The BEP2 is an easy-to-use, small-footprint instrument that provides a cost effective method for measuring the flowability of powders as specified in the US Pharmacopoeia Chapter 1174 and European Pharmacopoeia Chapter 2.9.36. It also has applications in measuring the flowability of domestic detergents (ISO 4324) and agricultural fertilizers (ISO 8398, DIN EN 12047).

The angle of repose attachment comprises a 100 mm diameter circular test platform together with a digital height gage, having a range of 0-300 mm and an accuracy of 0.03 mm. The test platform has a protruding outer lip in order to retain a layer of powder upon which the cone is formed. Surplus powder is collected in a tray below the test platform.

For this particular test, the funnel is normally equipped with a special 10 mm i.d. nozzle mounted 75 mm above the test platform. If necessary, the contents may be stirred to assist in the powder flow.

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. The Table below indicates the flow properties associated with corresponding Angles of Repose.

APPLICATIONS:

Pharmaceutical

Powder Coatings

Cosmetics

Chemical

Food and Beverage

Farm and Agricultural

www.gardco.com [1]

Source URL (retrieved on *10/22/2014 - 8:05pm*):
http://www.ecnmag.com/product-releases/2013/10/instrument-measures-powder-flow-and-density

Links:
[1] http://www.gardco.com