

Model 312 Apparent Density of Powders

Ver. 312E 25.2.12

Model 312 covers a procedure for determining the apparent density of both free and non-free-flowing powders, premixes, and blended mixes.

It is produced stringently in accordance with international standard ASTM B 703 and ASTM B855.

This test method consists of slowly sliding a bushing partially filled with powder over a hole in a hardened steel block, collecting and weighing the powder, and calculating its apparent density.



- What does it include?

Steel Block, Bushing, Sample Spoon and Brush.

- What is the application?

Model 312 is used to determine the density of any powder or mix, whether or not the powder has flow characteristics.

- What is the difference between Model 312 and other methods?

The values obtained on powders are approximately 0.2 g/cm³ higher than those obtained with the [Hall, Test Method B 212](#); [Carney, Test Method B 417](#); or [Scott, Test Method B 329](#), instruments.

Place the steel block on a sheet of paper. Place the bushing on the steel block, on either side of the hole. Fill the bushing slowly and carefully to three-quarters of its height with powder. With downward pressure on the bushing, slowly slide the bushing toward the hole while twisting it. Stop, and again with downward pressure on the bushing, slide it straight back over the hole to its starting position. Remove the steel block from the paper. Transfer the paper to a balance and weigh. Calculate the density.