Jenike Stainless Steel Sifting Segregation Tester

The **Jenike Sifting Segregation Tester** measures the tendency of a powder or granular material to segregate by sifting during inter-particle motion.

Sifting is the most common mechanism to cause particle-size based segregation. It occurs when smaller particles move through a matrix of larger ones, or as more mobile large particles tumble down the surface of a forming pile. Commonly, this occurs during filling or transfer operations when inter-particle motion is enabled, and is more pronounced in free flowing materials with a large range of particle sizes.

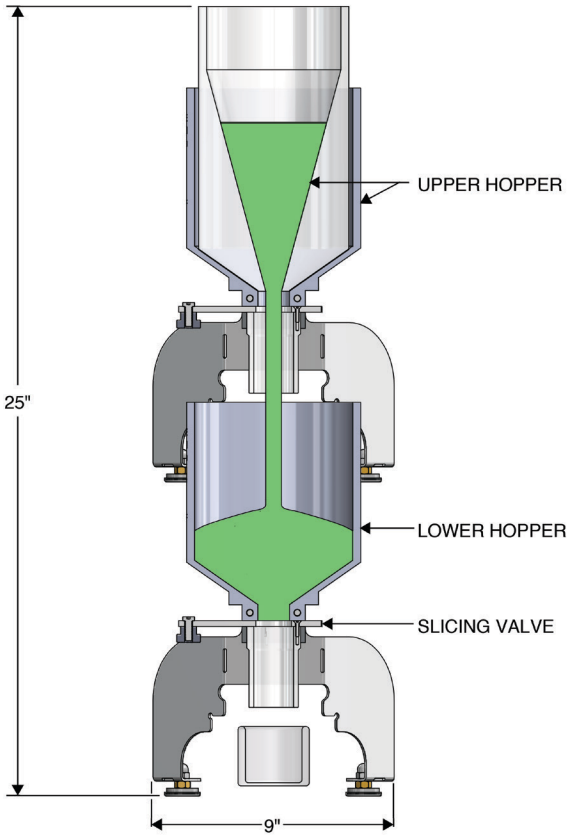
The Sifting Segregation Tester simulates the lateral separation of fine and coarse particles. It provides observable trends through one or multiple fill and discharge cycles and allows users to compare one material or production batch to another utilizing a standardized approach for repeatable, operator-independent results.

General Testing Procedures

The test material is placed into the steep-walled upper hopper of the tester where it discharges into the shallow-walled lower hopper. It then discharges from the lower hopper through a controlled collection valve into jars for analysis.

The collection valve allows users to dispense the test material into multiple jars. It operates in two modes: "Unit Dose" mode which collects approximately 1.8cc of powder per withdrawal, and "Standard Valve Withdrawal" mode which withdraws approximately 55cc. The two modes provide a higher resolution sampling at the start and end of the sample collection, and faster sample withdrawal between.

TEST VARIATION: Recirculate the material until a steady-state is reached. The tester is specially designed to make this procedure easy. By recirculating the material, the signal strength of the material's segregation tendency is intensified, and the initial state of the blend is less critical.



Primary Components

- 1 stainless steel steep-walled upper hopper
- 1 stainless steel shallow-walled lower hopper with slide gate & stainless steel legs
- 1 stainless steel shallow-walled lower hopper with slicing valve
- 24 glass jars & lids for sample collection

Specifications

- 1 Litre sample size max in the upper hopper, 3 mm max particle size
- Stainless steel body parts and legs are very durable and abrasion resistant
- Tester contains 24 glass lids and jars for sample collection
- Height: 25" fully assembled, Width: 9"

The Sifting Segregation Tester is also available in ASTM Standard D6940 compliant acrylic body parts.

Contact us for a quote

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