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Sieve Shaker



The commonly used in laboratory to confirm the accuracy of existing specifications of materials

Principle

The Sieve Shaker imparts a circular motion to the material being sieved so that it makes a slow progression over the surface of the sieve.

At the same time a feature of the rapid vertical movement agitates the sample which helps to clear the sieve apertures and avoid them blinding.

The operating time of a sieve shaker is very important for sieve analysis result.

The sieve stack has a range of different aperture sizes, and some are smaller than the nominal and some are larger. The longer the running time for the shaker, the greater chance for larger-than-nominal particles coming through the sieve that are not supposed to. If the stack of sieves has a wide range of aperture sizes, there is likely to be a compounded error.

There are industry standards for sieving operating times for different materials to refer to. However, to determine the correct operating time for a new material, or to confirm the accuracy of existing specifications, the following five steps can help to set up a more accurate operating time.



Demonstration

Step 1. Weigh up the sample needed to be tested and prepare a stack of test sieves and a sieve shaker.

Step 2. Run the sieve shaker for 5 minutes first, and weigh the residue in the pan. Record in column 3 (weight), and calculate the percentage increase in relation to the starting weight.

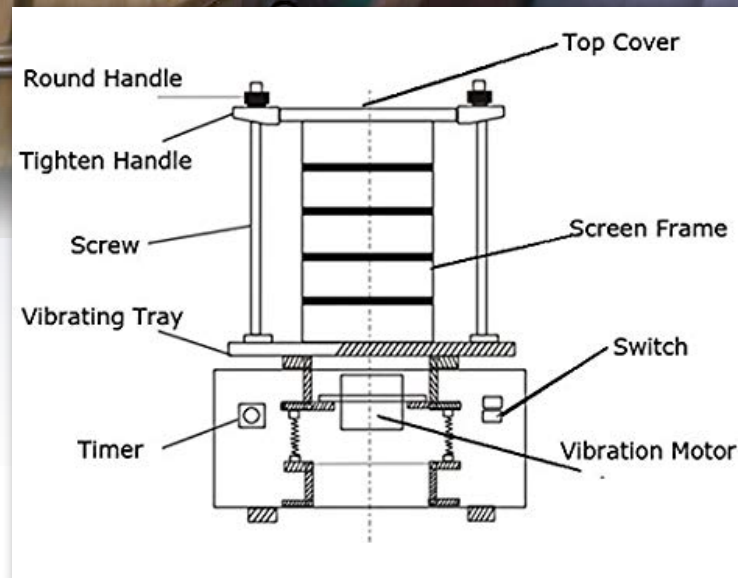
Step 3. Run the sieve shaker for one additional minute, weigh the residue and record the number and increased percentage compared with the 1st test.

Step 4. Repeat Step 3 a few times, and keep recording the data.

Step 5. When the percentage increase drops below to 1%, the total operation time should be recorded and the test completed.

When the change in percentage of sample passing through in the 1 minute period drops to below 1%, the total operating time can be considered a relatively accurate shaking time for subsequent analysis.

Schematic Guide ▶



Technical Specifications

Dimensions	Weight
540x372x1013 mm	75 kg

Main Features

- Sieve capacity: up to twelve 200 mm (8") and up to eight 300 mm (12") sieves plus pan and cover.

Ordering

SL 0145 Sieve Shaker with Time Adjustment, for 200 mm (8") & 300 mm (12") dia. frame sieves

SL 0145-1 Sieve Shaker with Frequency and Time Adjustment, for 200 mm (8") & 300 mm (12") dia. frame sieves



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