

SIEVE SHAKER



1 Application

- To check the fineness i.e. average grain size number of the dried sand sample.

2 Description

- The equipment consists of vibrating mechanism so as to shake the sand sample for desired time period, 10 nos. sieves set with lid & receiving pan, mechanical timer to set the cycle time & clamping springs to clamp the sieve set during test.

3 Pre setting

- Place the equipment on the rubber pad supplied to withstand for vibration.
- Connect the equipment to 230 V single phase A.C. supply.
- Ensure the sequence of the sieves in the set as per the table.

4 Operation

- Take 100 gms of dried sand sample in top sieve, put the lid, clamp the sieve set on vibrating mechanism by clamping springs & put the timer for desired time (average recommended cycle time is 10 minutes).
- After completion of set time period the vibration will stop, remove the sieve set, weigh the sand grains collected on each sieve on weighing scale with least count of 10 mg.
- Calculate the fineness number of the sand sample by following table-

IS Sieve size In Micron	Weight of sand (collected (B))	% Retained (C)= B	Multiplication factor (D)	Product (E= C X D)
1700			5	
850			10	
600			20	
425			30	
300			40	
212			50	
150			70	
106			100	
75			140	
53			200	
RECEIVING PAN			300	
Total (b)			Total (c)	
c (Total of C)				
Fineness No. = -----				
b (Total of B)				

Precautions

- Do not rotate the timer in anticlockwise direction as it may damage the same.
- Use soft brush to clean the sieves & do not apply the force while cleaning as excess force may damage the sieve cloth.