

GENERAL > PARTICLE SIZE ANALYSIS

HYDROMETER TEST SET

Code: T251



- Used to determine the distribution of particle sizes of the fine-grained portion of soils. The sedimentation or hydrometer method is used to determine the particle-size distribution (gradation) of the material that is finer than the No. 200 (75-µm) sieve and larger than about 0.2-µm. The test is performed on material passing the No. 10 (2.0-mm) or finer sieve and the results are presented as the mass percent finer versus the log of the particle diameter
- Used to evaluate the fine-grained fraction of a soil with a wide range of particle sizes by combining the sedimentation results with a sieve analysis resulting in the complete gradation curve. The method can also be used when there are no coarse-grained particles or when the gradation of the coarse-grained material is not required or not needed
- The results are used to determine compliance of the particle size distribution with applicable specification requirements and to provide necessary data for control of the production of various products and mixtures
- Set comprises of:



- High-Speed stirrer (not less than 10,000 rpm)
- o Temperature-controlled water bath with water circulating unit
- Sedimentation cylinder (6 ea)
- Soil Hydrometer (151H: 0.995 to 1.038 g/ml)
- Sodium Hexametaphosphate (1 kg)
- Glass beaker (250 ml)

TECHNICAL SPECIFICATIONS

- Digital thermometer and heating elements capable of keeping the bath temperature at or near 20°C as per the requirements
- High Speed Stirrer (min. 10,000 rpm)
- Power Supply: 220 240 V / 50 60 Hz

EQUIPPED WITH

• Heater with Digital Temperature Indicator (PID Controlled)

SUPPLIED WITH

- Set comprises of:
 - High-Speed stirrer (not less than 10,000 rpm)
 - o Temperature-controlled water bath with water circulating unit
 - Sedimentation cylinder (6 ea)
 - o Soil Hydrometer (151H: 0.995 to 1.038 g/ml)
 - Sodium Hexametaphosphate (1 kg)
 - Glass beaker (250 ml)



ACCESSORIES

- End-Over-End Shaker (T-251/EES)
- Soil Hydrometer (152H: -5 to +60 g/lt)
- PC Software:
 - o Draw Particle Size Distribution Curve
 - o Plot Upper and Lower limits for the curve
 - o Unlimited Save / Recall Old Curve Data
 - o Export Data to PFD, JPG, Excel, Text File
 - o ALFA Cloud® Compatible
- ALFA Cloud® Subscription

ORDERING INFORMATION

No	Item	Code
1	HYDROMETER SET	T 251 X00A H
2	SOIL HYDROMETER - 151 H	T 251 P001 H
3	SOIL HYDROMETER - 152 H	T 251 P002 H
4	TEMPERATURE-CONTROLLED HYDROMETER BATH	T 251 P004 U
5	HIGH SPEED STIRRER	T 251 P003 U
6	MECHANICAL END-OVER-END SHAKER	T 251 M001 T
7	MECHANICAL END-OVER-END SHAKER [60 Hz]	T 251 M001 K