

PIPETTE EQUIPMENT

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P1.82

The particle-size distribution is one of the most important physical qualities of a soil. The division of soils (soil classification) is primarily based on particle-size distribution.

When accurately determining the particle size in samples, in addition to the determination using sieves, other methods will need to be applied.

A simple method for the determination of the particle size is the pipette method.

After carbonates, organic substances and possible iron oxide have been removed (because of their binding function) the pipette method is used to determine the fractions of particles smaller than 38 μm .

The method is based on the difference in sedimentation speed between small and large soil particles. The sedimentation of the particles is the result of two opposing forces: gravity and friction resulting

from movement in a fluid medium.

In the pipette method a sample is pipetted at different times and different depths of the suspension of the sample in a measuring cylinder. Time and depth are determined applying the Law of Stokes. The pipetted suspension is condensed and dried and weighing determines the mass ratio of the pipetted fraction.

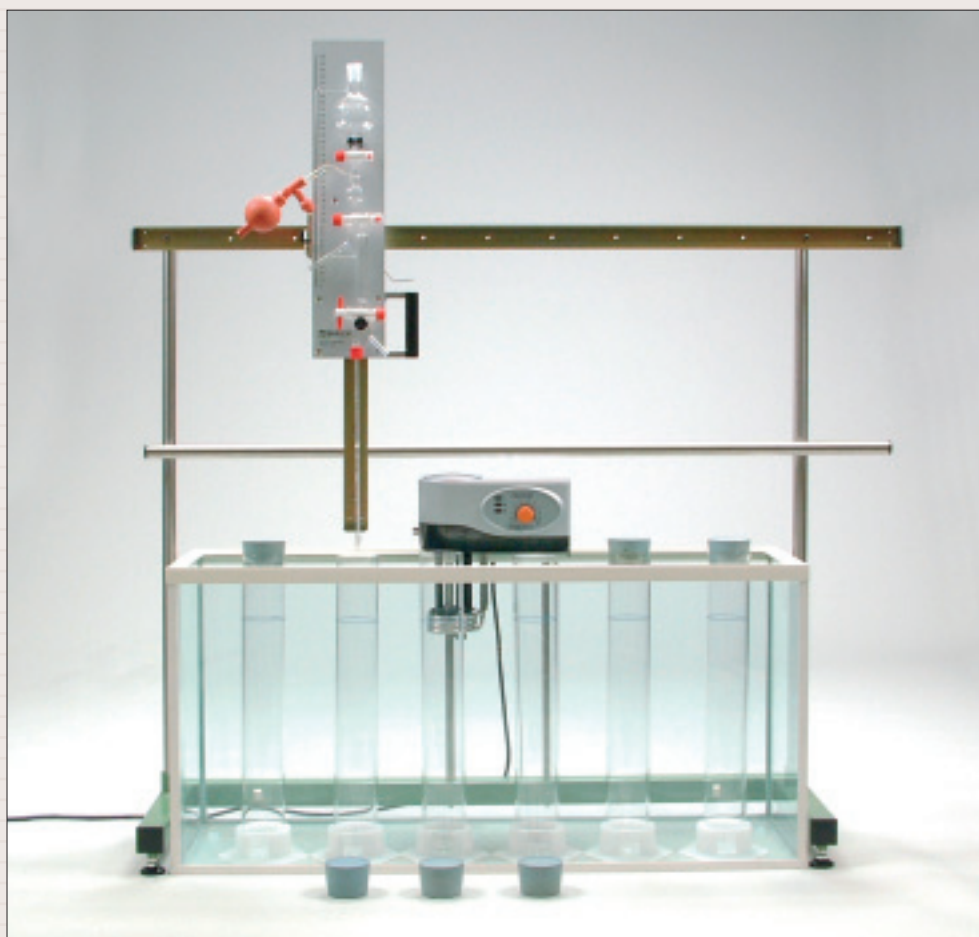
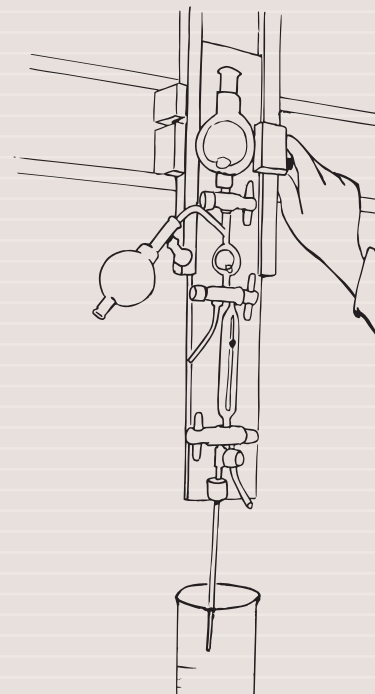
Eijkelkamp Agrisearch Equipment, in cooperation with research institutes, developed two models of pipette apparatus that meet the standards.

08.16.SA Pipette apparatus, table model in accordance with NEN 5753

Using the basic set the fractions of 7 samples can be determined simultaneously.

The pipette apparatus can be placed on a laboratory table.

The pipette holder can be adjusted accurately.



Pipette apparatus, table model