

PF-DETERMINATION (SANDBOX METHOD)

08.01 Sandbox for pF-determination (pF 0 - 2.0)

The standard set for pF-determination pF 0 - 2.0 (0 - 0.1 bar) consists of the sandbox with control panel, suction levelling stand, water supply bottle with stand, filter cloth (140-150 micron), a number of containers synthetic sand, grain size approximately 73 micron and various accessories.

A maximum of 40 soil sample rings can be placed on the sandbox. The samples that are measured are taken using soil sample rings.

These rings usually have a contents of 100 cc.

In addition to the standard set a soil sample ring kit must be available as well as cases with soil sample rings and aluminum soil sample boxes.

For the determination of the pF the laboratory should also be equipped with a balance and a drying oven.

The table on which the instrument is placed should be level and isolated against vibration.

Before measuring of the moisture tension can commence the different parts must be mounted and the drain must be fitted with a filter cloth.

Subsequently the sandbox is filled in the proper manner with water and synthetic sand (the sand should not contain any air- or water pockets). If everything has been executed in accordance with the operating instructions the saturated samples in the soil sample rings can be placed in the sandbox and the moisture tension is determined of the completely saturated sample.

Next subsequently larger suction is applied. Weighing the sample each time after the balance is set again yields the moisture content that goes with each moisture tension.

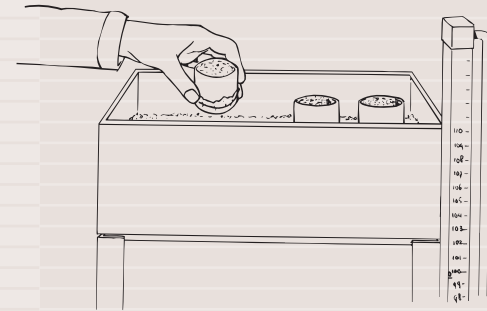
If the sandbox is inundated with water after each test it can remain in operation during several years.

A copper ring prevents algal growth.



P1.80

The soil sample ring with the saturated sample is placed on the prepared sandbox.



BENEFITS

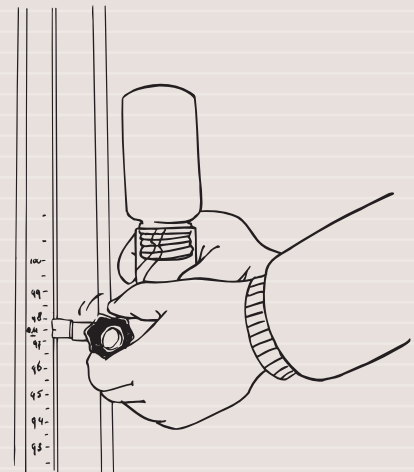
08.01 Sandbox

- Shapes the pF curve for the wettest part
- Uses undisturbed samples 53 or 60 mm
- 40 samples allow large scale research
- Number of samples allow effective averaging
- Set-up can be used over and over for years
- Comprehensive photo manual for easy set-up



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The suction is set.



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