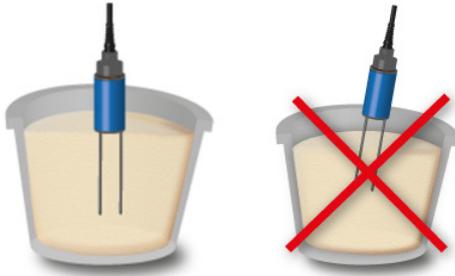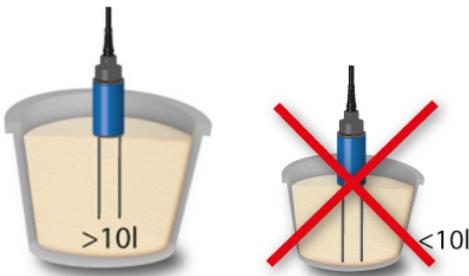# Recommended handling of the Trime-HD2 Set for optimal measurement results

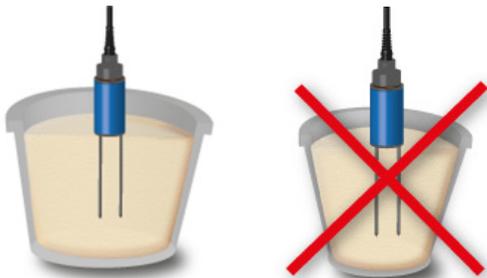*Following requirements has to be fulfilled, to ensure the optimal accuracy of the system:*

- The probe rods has to be covered **completely** by the material to be measured
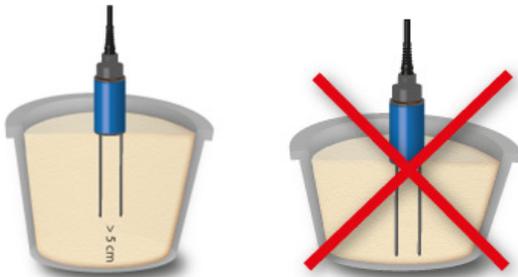

- The bucket has to have a volume of **10 liters or more** and has to be **non-metal**

- The bucket should be as far as possible **cylindrical**

- The **filling depth** of the bucket has to exceed the rod length **by minimum 5cm**

Are the above described requirements fulfilled and the measurements are executed as described below the optimal measurement results can be reached
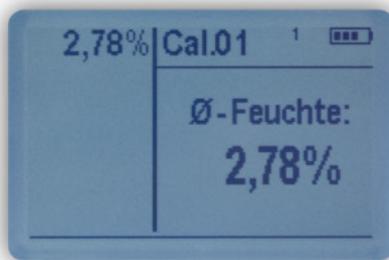
1. Dump the sand sample into the bucket

2. Compact the sand sample by lifting the bucket 5cm and letting it fall down vertically onto a solid base and repeat this procedure 5 times **(if there is still to see a compaction after 5-times repeat this procedure until there is no more compaction to see!)**


3. Insert the probe rods into the sand sample completely, if the probe body reaches the surface of the sand and press until you feel counter pressure of the sand **(neither jiggle nor rotate the probe while inserting!)**
   a. **For gravel and grit also compact the material before inserting the probe, additionally jiggle the bucket while inserting the rods, as the sensor is difficult to insert without, additionally this helps to ensure, that the material is in well contact with the probe rods!)**

4. Measure once with the HD2 handheld device

5. Remove the probe out of the material and jiggle the bucket to loosen up the material

6. Repeat the steps 2. to 4. Twice until you have determined three values
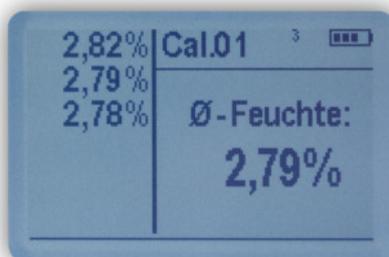
7. Dump the sand sample into another bucket, the measure the sample from the bottom side **(this is especially recommended for gravel and grit and if the sand sample is close to saturation, as in this case it could be possible that the free water is moving through the material to the bottom of the bucket!)**

8. Repeat the steps 2. to 4. three more times until you have determined six values
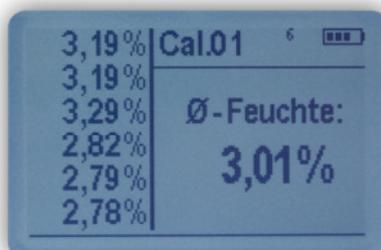
9. The average value out of the six measurements now can be used for your documentation