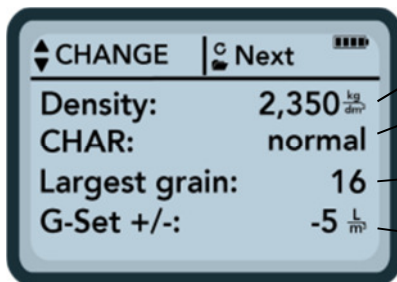


# Instruction Sheet for SONO-WZ

Enter the following four parameter into the SONO-DIS:



**Raw Density**, take the value from the vibrating table test.

**Characteristic of the recipe** with fine, coarse, normal or gap graded.

**Largest grain size** 8, 16 or 32mm

**General-Set**: when using rock with e.g. max. 15 liter/m<sup>3</sup> core water, adjust only 1/3 of this core water content. e.g. 15:3 = **- 5 Liter/m<sup>3</sup>** (take the minus sign !)  
 If the recipe provides 3 liter concrete plasticizer, than add the amount of this 3 liter to the core water to come to the complete G-Set:  
 e.g. - 5 Liter value for core water plus -3 Liter plasticizer:  
 G-Set complete: **- 8 Liter/m<sup>3</sup>**

## Measurement procedure for stiff concretes with lower slump values



The probe head should be placed inside the concrete with a slight angle, at the edge of the bucket in position 1. Compress the concrete by several knockings at the bucket with the foot, that there are no air-gaps at the probe's surface. Start the measurement by pressing the start button. For every new measurement cycle: Remove the SONO-WZ probe, prick in the probe at a different place around the edge of the bucket, shifted by 70 to 90 deg. and perform a further single measurement after compressing by several knockings at the bucket.

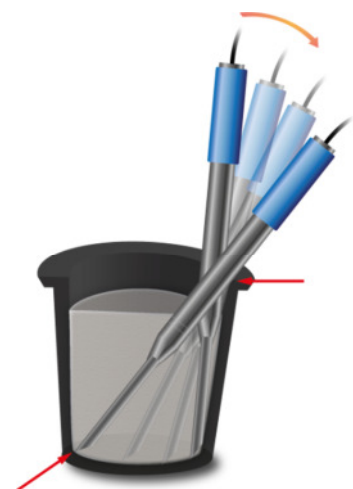


**Use a standard 10-12 liter plastic bucket (no metal bucket!)**

**Never prick twice at the same place in the bucket !**

## Measurement procedure for liquid concretes with higher slump values

- 1) Fill the bucket with only two third of the volume.
  - 2) Insert the SONO-WZ probe inside the concrete, with a slight angle, at the edge of the bucket in position 1.
  - 3) Press the probe tip with the black ceramic window in front side, slowly and diagonally to the opposite side of the bottom of the bucket, so that the handle of the probe lies on the edge of the bucket. This ensures that a representative concrete mixture lies on the probe's surface.
- Carry out this procedure several times, whereby the insertion of the probe at the edge of the bucket should be shifted by 70 to 90 degree.



**Please consider:** Concretes which do not comply with standards can tend to bleed. Such concretes are difficult to measure with SONO-WZ (but also with kiln drying test) and therefore it can come to measurement deviations.

## The 4 control keys of SONO-DIS:

**„UP“**  
Back to previous menu item or setting

**„DOWN“**

- Go to next menu item or setting
- Deleting the value memory.

**„Measurement/Activate“**

- Shutting SONO-DIS ON/OFF → press 1second
- Perform measurement → press shortly
- Selection of a menu item → press shortly
- Storing a setting → press shortly

**„Settings“**

- Conclude Settings by pressing this button longer than 1 second
- Leave Menu Item by short pressing

## Measurement Mode and Display:

Set new parameters

Shortly depressing: clear last measurement value.

Longer depressing: clear complete measurement series.

**Conductivity**: a valuable cement parameter

**Standard Deviation**:  
With StdDev >0,5 more single measurements are necessary!  
**The higher the number of single measurement cycles, the higher the measurement accuracy!**

Residual accumulator capacity

**Effective water content**

Last measured value (can be cleared)

Number of measurements