



When taking measurements with the inclinometer the value sets are automatically saved from the measuring instrument.

As a rule two series of measurements - we call them "standard" and "reverse" - are always conducted in one measurement setup. To distinguish between the two, A+ is engraved on the inclinometer probe as a marker. For the standard measurement series this marker is aligned with the direction A+ previously laid down in the field. For the reverse series, the probe is then turned through 180 °. The result should be a reading of equal magnitude but with the opposite sign.

With this approach it is possible, on the one hand, to calculate the mean error of each measuring step as the basis for making a correction should the mean error exceed a certain magnitude. On the other hand, it eliminates systematic errors, e. g. of the measuring sensor, by forming a mean value from two measurements with opposite signs.

Most inclinometer measurements are started at the bottom of a borehole, the assumption being that the borehole extends so far into the ground that no displacements take place in its deepest regions. Where this is not the case, measurements can be started at the top of the borehole, but then the absolute amount of displacement can only be determined if the starting point of the borehole is subjected to a geodetic survey.

Depending on the length of the probe, the measurement is taken in steps of 0.5 m or 1.0 m and is presented graphically in the form of a progression over the borehole depth and compared with the previous measurement series. A different form of presentation shows the time-related changes of inclination at select borehole depths (see the following figures).

We can supply the INCAL computer program, which can be run on any IBM-compatible PC, for the evaluation of inclinometer measurements.



PROJEKTNAME: Sondermülldeponie

Messstelle Nr.: I-2

Änderung des Messstreckenverlaufs bezüglich der Messung: 1 vom 08.10.90

——— Messung: 19 vom: 09.02.94 - - - - - Messung: 18 vom: 02.07.93



