

GLÖTZL Baumeßtechnik

MECHANICAL SETTLEMENT Plumb MSM

Type: MSM 50(75)

Art. No: 84.30



- Robust
- Easily to handle
- Mechanical function
- No electronics
- Easily understand. system
- Low-cost solution
- Can be used in standard inclination meas. tubes

The MSM settlement meter is a pure mechanical measuring instrument with which by means of a device the tube end in measuring tube cords can be scanned in reference to the head point of the measuring tube. It was the intention to develop an instrument very easily to operate which can be used for the recording of settlement in inclination measuring tubes in embankments or borings for which it is sufficient to record settlements with an accuracy of +/-1 mm.

Measuring tubes are used which also can be applied for inclination measurement or simple PVC/ABS- or PE-HD-tubes. For intake of the settlement, the measuring tubes are installed by means of couplings in which the measuring tubes are assembled with the required distance for intake of the settlement.

Measuring tubes are available in lengths of 1, 2 and 3 m. They are delivered with mounted coupling for settlement intake up to 50 mm or optionally 100 mm. The follow-up tube is fixed with 1 up to 4 rivets – dependent on strength – for the installation on site.

The rivets are shearing when a settlement occurs resp. in case of displacement of the measuring tubes so that the shortening or lengthening of the tube tour is absorbed in the couplings. The absorption of the settlement at the coupling can still be reinforced and secured by a settlement ring. When using a plastic tube, a comparative measurement –if required - can be carried out with a metal plate settlement indicator, type MSD, as a provable and independent system.



For measurement, the plumb is led down into the deepest of the bore hole and the first measuring mark is taken as basic length for the following measuring marks. In case of non-stable underground, a geodetic altitude control of the tube head point should generally be done parallelly to each measuring series.

By the position of the scanning lever, the plumb is sliding into the bore hole deepest without remarkable resistance. During the drive upwards resp. during measuring drive, the lever has a blocking effect at the tube coupling and the measuring tape can be tightened for distance reading. The further drive to the following measuring mark is done by lowering of the plumb by approx. 30 cm and quick passing of the mark to be measured.