

The Getec 500 Hydrostatic water level systems is an accurate method of measuring settlement. The small cells are easy to install in restricted locations. They are usually installed on bearing columns, walls, slab and tunnel linings to measure settlement. The response time from cell to datalogger is extremely fast. They have a reputation for being reliable and requiring little maintenance. The cells are fitted with a water and air line.

The water line is a complete sealed circuit passing through each cell. A reference cell is situated outside the settlement zone so that it does not move. All movements from cells within the circuit will be referenced to this cell as a change in height.

The air line passes through the cells in a circuit. The air line is left open in an environment which is stable, so that all cells have the same air pressure. If a cell location moves, the difference in pressure is recorded by the capacitive pressure transducer situated between the water and air chambers in the cell. The electrical signal from cell which varies from 4 to 20mA is sent to a databox which then transmits to a site logger that converts the signal to useable units (mm)

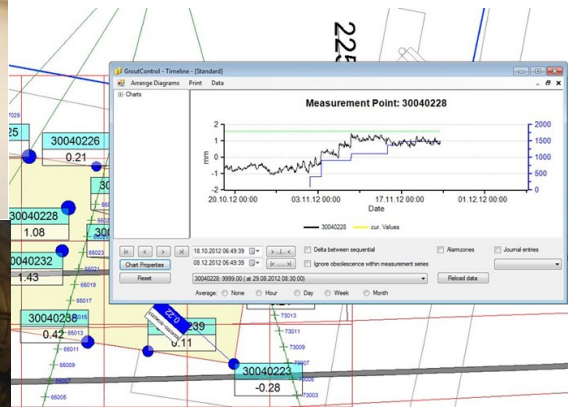
Once the circuit is complete the system is set to zero through software. The change in water pressure is recorded from each cell in the chain and compared with the reference cell. If settlement occurs in one cell location, as the structure moves downwards the water pressure will increase in that cell showing a negative value. If the cell is raised due to heave, the pressure decreases showing a positive value.

Applications

- Structures & Slabs
- Tanks
- Compensation grouting
- Piles
- Bridges
- Tunnels
- Railways
- Escalators
- Embankments

Features

- High precision
- Low Maintenance
- High speed data return
- Cost Effective



Specification

- Range: 200-500mm
- Resolution: 0.02 mm
- Linearity: 0.2 mm
- Stability: 0,2 mm/a
- Temp Range: -20 to 80 °C
- Compensated range: 0.50 °C
- Drift: 0.015mm/ °C
- Linearity: 0.02 mm/ °C

Getec

34 South Molton Street
London
W1K 5RG

T: 02074095201

E: enquiries@getec-uk.com

W: www.getec-uk.com

