Spiral Indicator

Applications

The Model 6005 Spiral Indicator is designed to measure the orientation of the grooves in inclinometer casing at any depth, in and around...

- Landslides
- Unstable Slopes
- Dam Embankments
- Landfills
- Slurry walls
- Caissons
- Piles
- Sheet Piling
- Tunnels



Model 6005 Spiral Indicator.

Overview

The Model 6005 Spiral Indicator is designed to measure the orientation of the grooves in inclinometer casing at any depth. Twisting or spiraling of the casing can occur during installation, especially if the casing is long; also the grooves in inferior extruded casing can become twisted during manufacture.

In use the probe is lowered down the casing with its wheels engaging the casing grooves, pausing at any depth to take a reading. A flux-gate magnetometer inside the probe measures the compass bearing of the wheel assemblies. The compass bearing is displayed on the Model GK-604 and can be stored for later analysis.

Advantages and Limitations

Note that, unlike some spiral indicators, where the orientation of the grooves requires a complete survey of the entire borehole, so that incremental values of twist can be summated, the Model 6005 Spiral indicator can measure the orientation directly at any depth and thus gives the required information much more quickly and accurately.

Due to the magnetic influences caused by steel, the Model 6005 is not suitable for use inside steel casing or near heavy rebar cages.

Technical Specifications

Standard Range	360°
Sensor	Flux gate compass
Output	0.1 to 1.9 VDC
Resolution	0.1°
Repeatability	±0.5°
Total System Accuracy	±1.0°
Temperature Range	−20°C to +65°C
Wheel Base	610 mm
Length × Diameter ¹	686 × 51 mm
Casing Size I.D. ²	59 to 89 mm
Weight (with case)	8 kg
Shock Survival	MIL-STD-810

¹The cable connector adds 150 mm to the length of the probe.

²The probe is designed for use in all standard inclinometer casing up to a maximum diameter of 89 mm.



