INCLINOMETER CASING

Stuart Well Services has been appointed as the European distributor for RST's inclinometer tubing and we now carry extensive stock.

Inclinometer casing is engineered to be assembled quickly and accurately for long and short term monitoring in the most adverse field conditions. It is suitable for installation in boreholes, embankments, piles, set into concrete or attached to structures.

The casing serves as an access tube to guide a MEMS-based inclinometer probe in the two orthogonal directions of measurement. Changes in the output of the probe caused by the deformation of the casing is proportional to the sine of the angle of inclination of the long sensor axis from vertical. These displacements are incrementally summed to provide profiles of total displacement versus depth.

Key to quality inclinometer casing is not only the material, but the quality and shape of the grooves. The inclinometer probe utilises these grooves in the casing to control the azimuth.

RST's inclinometer casing is manufactured from non-recycled virgin ABS resin. While more costly than common PVC resin, ABS is preferred due to superior flexibility, stability and low temperature impact resistance. Using recycled resin degrades the performance of the casing. All casing is machined to ensure the highest quality possible.

SNAP SEAL CASING

Snap Seal is the original O-ring sealed coupling system, which does not require glue, pop rivets, screws or shear wires. This patented innovative system allows casing sections to lock together while maintaining precise groove alignment and high collapse strength. The Snap Seal system is flush coupled for ease of installation in hollow stem augers and casing advancers.

BENEFITS

- Increased safety
- Increased productivity
- High reliability
- High accuracy
- Upgradable

- High precision, machined guide grooves
- Groove spiral tolerance ≤ 0.3 deg./10 ft (3m)
- Easy assembly
- Self-aligning, water and grout tight couplings
- Low temperature, impact and corrosion resistant ABS plastic
- Meets or exceeds all applicable standards
- Compatible with all commercial probe types and in-place inclinometer sensors
- Integral coupling reducer assembly induced spiral by 50% over conventional seperate coupling methods
- Snap Seal integral flush coulings that minimise field installation time
- External key provides visual and tactile confirmation of proper installation

Outside Diameter		Inside Diameter		Length	Weight	Load Test	Collapse Test
mm	inch	mm	inch	m	kg/m	kg	bar
70	2 ¾	59	2.32	1.5 or 3	1.27	738	17.2

INCLINOMETER CASING & ACCESSORIES

The inclinometer casing anchor prevents buoyant uplift of the inclinometer casing during installation. It is affixed to the bottom of the inclinometer casing prior to inserting it into the drill-rod/borehole. As soon as the anchor exits the bottom opening of the drill-rod/borehole, the spring loaded arms of the anchor are automatically extended to grip the borehole wall.

CASING ANCHOR

BOTTOM CAP

TOP CAP

ALIGNMENT TOOL

REPAIR COUPLING

Applications: • Pilings • Subsidence control • Embankment & dam stability • Under large storage tanks • Areas next to large excavations • Landslides and slope stability • Bridge pier, abutments deflection

Description	Part Number
70 mm inclinometer casing 1.5 m long	ICSC205M
70 mm inclinometer casing 3 m long	ICSC210M
Top cap	ICC2TC
Bottom cap	ICSC2BC
Casing anchor	ICSC2CA
Casing anchor with grout cap	ICSC2CG
Repair coupling	ICSC2RC
Alignment tool for coupling	IC1002
ABS solvent cement 250ml with brush applicator	ABSGLUE