

DEEP HOLE WIRE EXTENSOMETER

MODEL 4020

The Geotechnical Systems Australia Pty Ltd **Deep Hole Subsidence Monitoring System** provides a physical means of measuring the displacement in the zone between workings and the obvious surface displacements. The System features monitoring techniques which are efficient and accurate yet not excessively complex or expensive.

FEATURES

- On-site anchor location decision
- No grouting or drill rod setting
- Full hole shear capacity
- Low cost consumables
- Head Frame easily re-locatable
- Small volume of equipment
- Full borehole ventilation
- Real time data in millimetres
- All components made of or coated with corrosive proof materials



INSTALLATION

The Geotechnical System's Deep Hole Subsidence System operates on the basis of measuring longitudinal movement within a borehole. The versatility of the System means that on-site decisions can be made regarding anchor placement as soon as the borehole logs have been examined. Once the depths at which the anchors will be placed, has been determined, the anchors are then installed. The anchors, simple yet effective, consist of four spring-loaded arms

with heat-treated points. The anchors are attached to a length of wire and then are placed via a pneumatic installation probe within the borehole.

The twist free pneumatic tubing ensures that when the anchor is placed, no twist occurs between the wires, therefore eliminating systematic errors. Each individual anchor/wire is connected at the face to a constant tension pulley at the frame assembly.



GEO TECHNICAL SYSTEMS AUSTRALIA PTY. LTD.

Specialists in Geotechnical Instrumentation

ACN 006 720 887
ABN 28 006 720 887



SPECIFICATION - DEEP HOLE SUBSIDENCE MONITORING SYSTEM - Model 4020

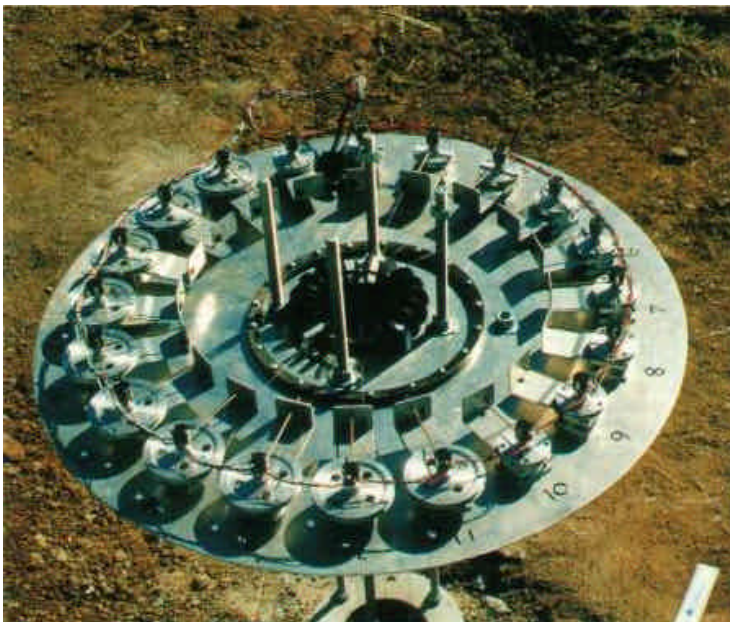
Borehole	Max Depth 500m
Diameter	100 – 300mm
Anchors	Length 110mm Weight 300g
Head Assembly	Diameter 500 - 700mm
Weight	20kg
Wire	Diameter 0.5mm
System Displacement	Ranges 0-1 m, 0-2m, 0-3m
Resolution	0.5mm

OPERATION

Once the anchors are placed and connected to the sensors the system is operational. The System operates on the basis of longitudinal movement within the borehole moving the spring loaded pulleys. The pulley rotational movement is measured using multiturn potentiometers which can then be directly datalogged (Model 9125-1 or Model 9150-1). To ensure constant power supply, a standby battery and solar cell can be attached to the System.

ORDERING INFORMATION

It is advisable to contact the factory for advice before ordering the Geotechnical Systems Deep Hole Subsidence Monitoring System.



Because Geotechnical Systems is continually improving its products and processes, information contained within this brochure is subject to change without notice.

For more information or to discuss your application, contact...

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