

### MODEL 4875

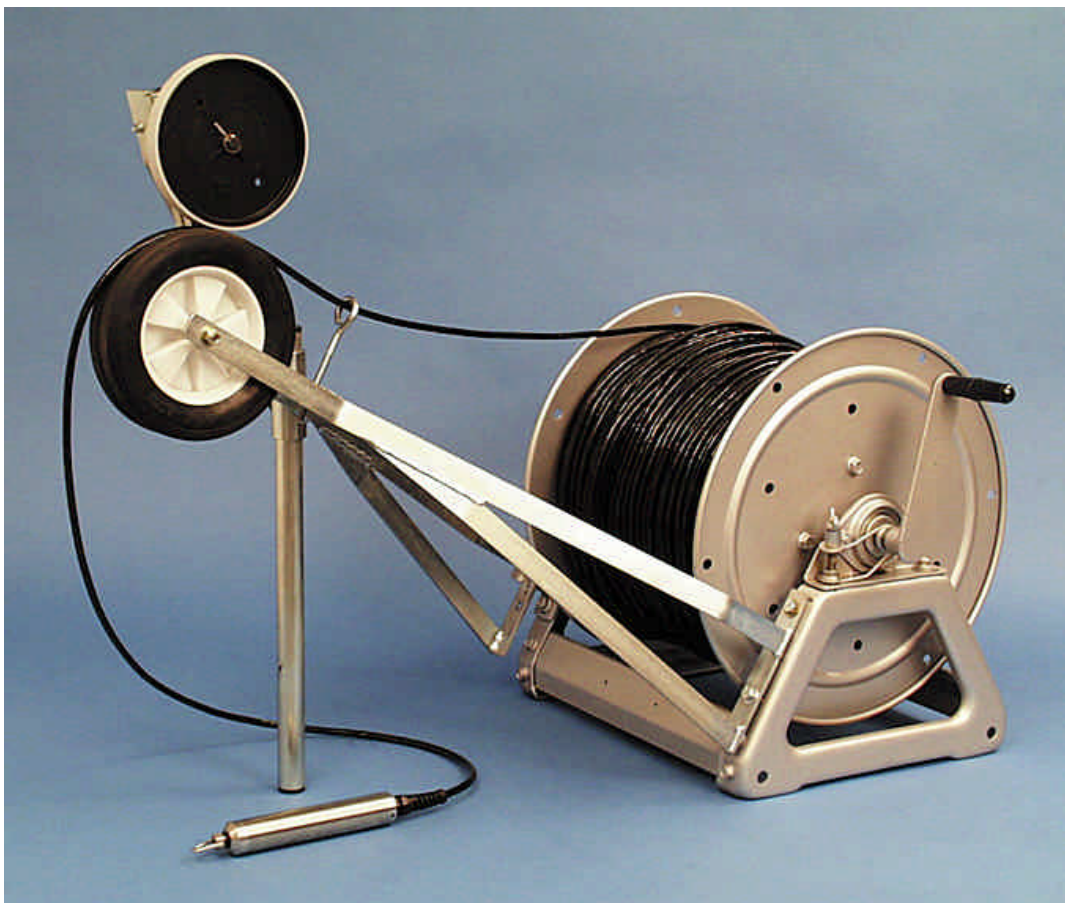
The Geotechnical Systems Australia Pty Ltd **Hydrostatic Profiler** has been designed to measure vertical displacement at intervals along a semi-rigid access tubing.

The consumables are low cost and the measuring instrument can be used on any number of installations.

### APPLICATIONS

Measurement of vertical displacement in

- Embankments
- Tailings dams
- Roads
- Foundations
- Bridge Piers & Abutments



### OPERATION

The measuring instrument consists of an accurate pressure transmitter housed in a probe connected by an electrical cable with an integral vent tube to a manual winch. From the winch the cable is connected via slip rings to the digital readout. The pressure transmitter has automatic temperature compensation and barometric equalisation built in.

The tubing is placed in a sand bed during the construction process. The tubing is then filled with water and the probe drawn through. Pressure readings are taken at regular intervals. By comparing profiles taken at different times the displacement of the tube can be determined. The reference pins enable the tube profile to be related to a known datum by conventional survey techniques.

The process can be carried out as a two-man operation with one pulling the draw cord through and the other controlling the winch and booking the readings. Alternatively the process can be reduced to a one-man operation by the addition of a return pulley at one end of the access tube. This has the additional benefit of allowing installation in a location where final access is only available at one end of the tube.

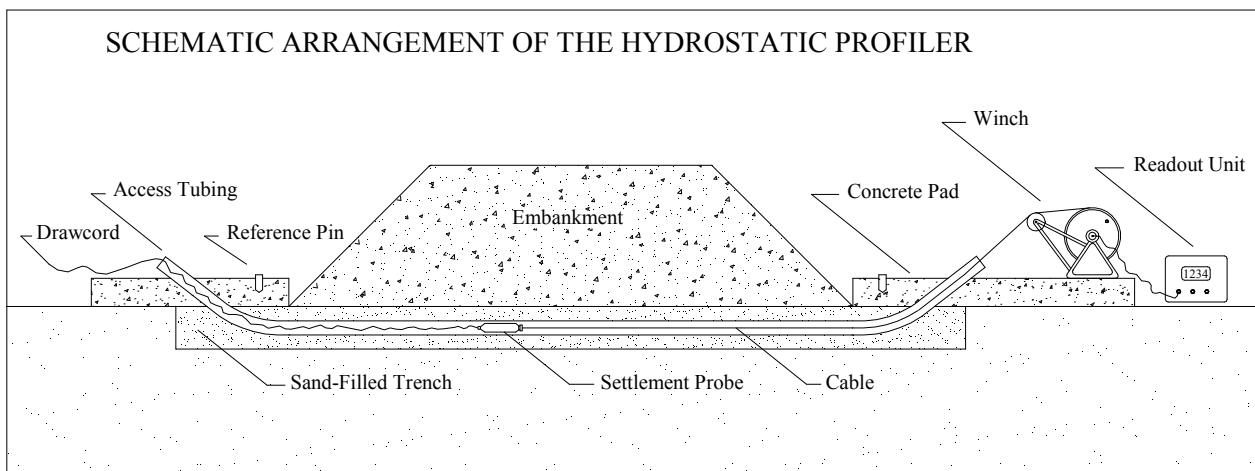
# Hydrostatic Profiler

SPECIFICATION	HYDROSTATIC PROFILER	Model 4875
<b>Transducer Range</b>	0 - 5 or 0 – 10 meters head of water	
<b>Resolution</b>	1.0 or 2.5 millimeters respectively	
<b>Maximum Length of Access Tubing</b>	300 meters	
<b>Access Tubing</b>	Dia. 75 mm Class 12 Polypipe	

## INSTALLATION

The hydrostatic profiler is supplied ready-to-use, the access tubing can be supplied by GSA or sourced locally. Additional load bearing settlement plates can be supplied to ensure the access tubing moves with the soil in soft ground areas such as tailings dams.

The access tubing is laid in the sand bed and the concrete pads cast prior to placement of the embankment or other structure. End caps can be supplied to prevent ingress of debris and vandalism.



## READOUT UNIT Model 4875 - 4

The readout unit is dedicated to the hydrostatic profiler and provides a digital output in millimeters.

## ORDERING INFORMATION

When ordering, please also specify

- Transducer Range (0 - 5m or 0 - 10m)
- Required Cable Length on Profiler Drum (Model 4875-3)
- Length of Nylon Draw Cord (Model 4875-5)
- Length of Access Tubing (Model 4875-7)
- Number of Settlement Plates (Model 4875-8)
- Number of Protective Covers (Model 4875-9)
- Return Pulley (Model 4875-10)