



GEOTECHNICAL • MINING • ENVIRONMENTAL

- Established in 1977
- Based in Coquitlam, BC
- 26,000 sq. ft. facility (completed in 1997)
- 50 employees
- International offices in Hong Kong & Malaysia





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Modern Manufacturing

- C.A.D . – Computer Aided Design
- C.A.M. – Computer Aided Manufacturing
- C.N.C. – Computer Numeric Controlled
- High quality at a reasonable cost with timely delivery



International Presence

- World wide distribution
- Major international projects



PRODUCTS: Piezometers

- Pneumatic Piezometers
- Used to measure: pore water pressure
- Applications: dams, landslides, rock cuts
- Installation: boreholes, push-in
- Advantages: low cost, reliability



PRODUCTS: Piezometers

- Vibrating Wire Piezometer
- Used to measure: pore water pressure
- Applications: dams, landslides, rock cuts
- Installation: boreholes, push-in
- Advantages: can be connected to ADAS, reliability



PRODUCTS: Inclinerometers & Tilt Sensors

- Snap Seal Inclinerometer Casing
- Glue & Snap Inclinerometer Casing
- Used to measure: deformation
- Applications: dams, landslides, rock cuts
- Installation: boreholes
- Advantages: snap together joint provides quick assembly; glue & snap has ease of snap joint with extra strength glue provides



PRODUCTS: Inclinometers & Tilt Sensors

- Digital Inclinometer System
- Used to measure: deformation
- Applications: dams, landslides, rock cuts
- Installation: boreholes
- Advantages: portable



PRODUCTS: Inclinometers & Tilt Sensors

- ELS Vertical In-Place Inclinator
- Used to measure: deformation
- Applications: dams, landslides, rock cuts
- Installation: boreholes
- Advantages: can be connected to ADAS



PRODUCTS: Inclinometers & Tilt Sensors

- ELS Tilt Beam System
- Used to measure: tilt
- Applications: buildings, rail tracks, excavations
- Installation: fixed to surface
- Advantages: can provide profile along length of object being measured



PRODUCTS: Inclinometers & Tilt Sensors

- Portable Servo Type Tiltmeter
- Used to measure: tilt
- Applications: buildings, excavations
- Installation: fixed to surface
- Advantages: portable – can be used to monitor many points



PRODUCTS: Extensometers

- Vibrating Wire Crack Meter
- Electrical Crack Meter
- Mechanical (3-D) Crack Meter
- Used to measure: crack extension
- Applications: buildings, dams, excavations
- Installation: fixed to surface
- Advantages: vw & electrical can be connected to ADAS



PRODUCTS: Extensometers

- Tape Extensometer
- Used to measure: tunnel convergence, crack extension
- Applications: tunnels, surface cracks
- Installation: measurement points are fixed to surface
- Advantages: portable



PRODUCTS: Extensometers

- Multiple Point Borehole Extensometer (MPBX)
- Used to measure: extension of rock
- Applications: dams, tunnels
- Installation: boreholes
- Advantages: can be connected to ADAS



PRODUCTS: Load Cells, Stress & Pressure

- Electrical Resistance Gauge Load Cell
- Vibrating Wire Load Cell
- Hydraulic Load Cell
- Used to measure: load on tie back anchors, structural members
- Applications: excavations, bridges
- Installation: fixed in place
- Advantages: can be connected to ADAS



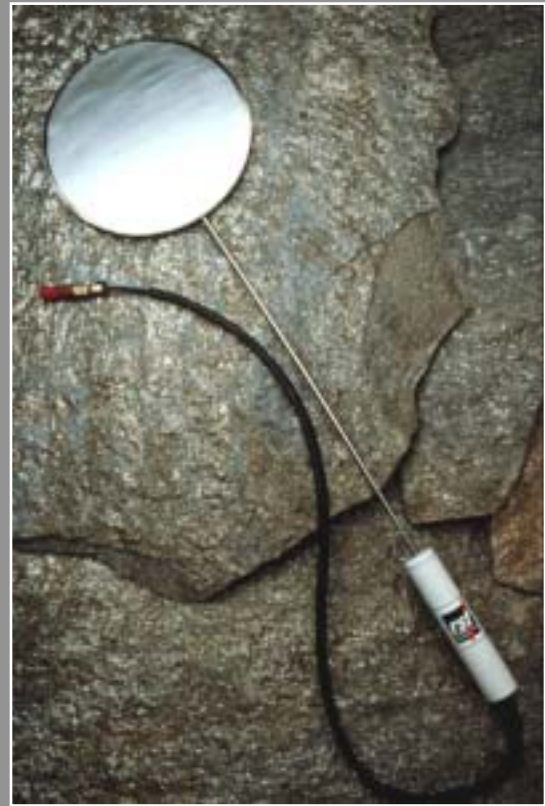
PRODUCTS: Load Cells, Stress & Pressure

- Vibrating Wire Strain Gauge
- Used to measure: strain in structural members or concrete
- Applications: piles, bridges, dams
- Installation: welded to steel or embedded in concrete
- Advantages: can be connected to ADAS



PRODUCTS: Load Cells, Stress & Pressure

- Total Earth Pressure Cell
- Used to measure: total stress/load on structures and soils
- Applications: dams, embankments, retaining walls
- Installation: buried in trench
- Advantages: can be connected to ADAS



PRODUCTS: Load Cells, Stress & Pressure

- Borehole Pressure Cells



PRODUCTS: Settlement Systems

- Magnetic Settlement System
- Liquid Settlement System
- Overflow Settlement System
- Subsurface Settlement/Heave Points
- Used to measure: settlement
- Applications: dams, embankments, fills
- Installation: buried in soil, borehole



PRODUCTS: Borehole Packers

- Borehole Packers
- Used to: seal boreholes
- Applications: permeability, water sampling
- Installation: boreholes
- Advantages: can be used multiple times

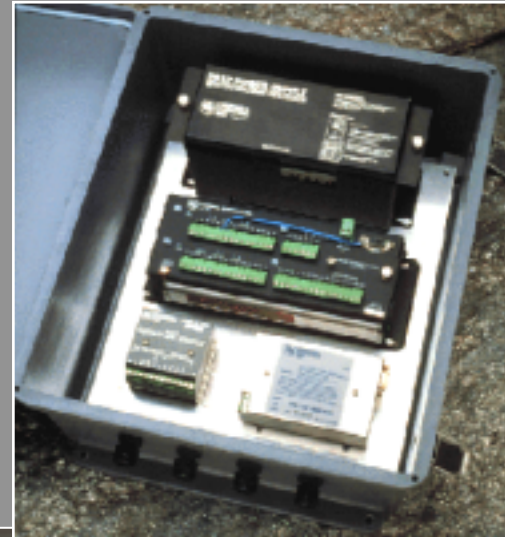




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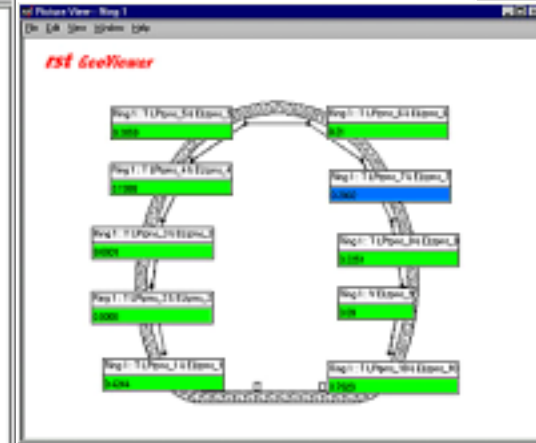
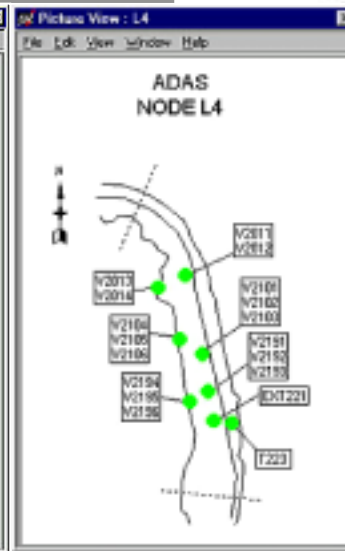
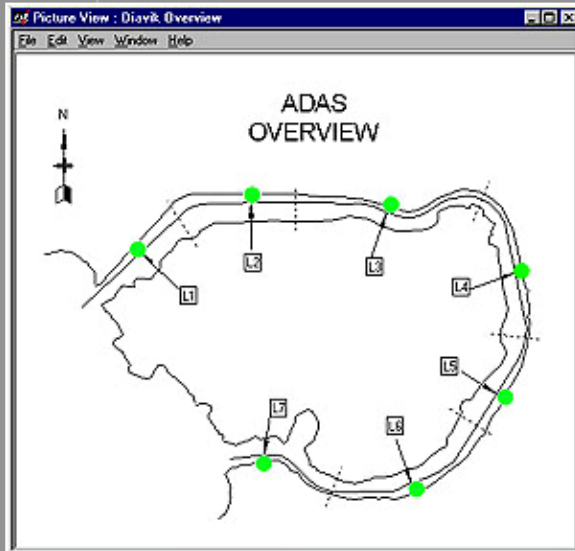
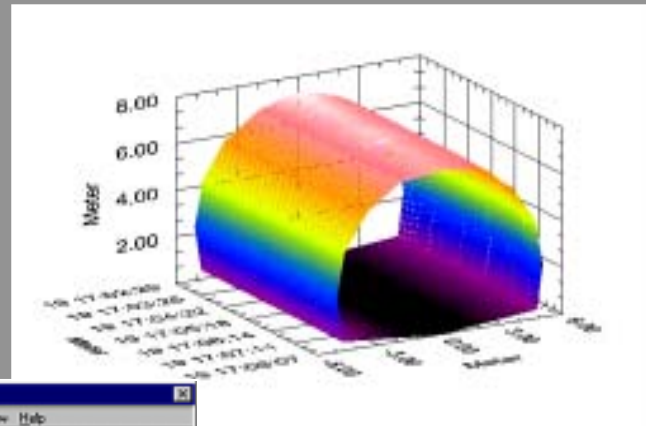
PRODUCTS: Data Acquisition Systems

- CR-10X Data Logger
- Geomation System 2380
- Geomation OutDAQ Series
- Can be configured to monitor a variety of geotechnical instruments
- Data can be retrieved via radio, mobile phone, or satellite



PRODUCTS: Data Acquisition Software

- GeoViewer Software
- Custom designed to organize data and plot results
- Graphically display near real time data and indicate alarm levels



Special Services

- **Technical Assistance & Field Services**

- Selection of instrumentation
- Training
- Installation
- Inspection and troubleshooting
- Supervision
- Modernization and optimization of existing monitoring systems



- **Custom Engineering**

- Custom engineering for site-specific problems
- In-depth technical support is provided
- Customized data acquisition systems



- **Repairs & Calibration**

- Complete repair and calibration services are available



Recent Projects

- WAC Bennett Dam – BC
- Changi Airport – Singapore
- CP Rail - Roger Pass - BC
- Diavik Diamond Mine – NWT
- Kumtor Gold Mine – Kyrgyzstan
- Suncor - AB

