GroundProbe®

SLOPE STABILITY RADAR (SSR™)

WITH THE DEVELOPMENT OF THE SLOPE STABILITY RADAR (SSR™) IN 2001, GROUNDPROBE REVOLUTIONISED SAFETY IN MINING

It was the first time that radar was used to monitor and warn of ground movement in open pit mines.

Today, radar is widely accepted as best practice technology for real time warning of wall failures.

CRUCIAL ROLE IN **SLOPE STABILITY** MONITORING

WITH THE ABILITY TO SCAN LARGE AREAS IN MINUTES, AND WITH A HIGH DEGREE OF PRECISION IN DETECTING MOVEMENT, THE SSR™ PLAYS A CRUCIAL ROLE IN SLOPE STABILITY MONITORING:

- Developed to remotely track the movement of slopes in open pit mines
- With no personal risk to operators, alarms warn of accelerating slope movement prior to wall failure
- Allows mines to increase production in high risk areas
- Improves mine planning and design

ADVANCED ANALYSIS CAPABILITIES

THE SSRVIEWER SUITE™ OFFERS ADVANCED ANALYSIS CAPABILITIES TO ASSIST MINES IN DEVELOPING LONGER TERM UNDERSTANDING OF MINE CONDITIONS:

- Advanced analysis tools allow for long term trending and hazard identification
- Reporting tools allow easy data collation, presentation and export to standard mine software for further analysis and reporting
- Photographs of the scan area allow user-friendly identification and interpretation of slope movements
- Wall Continuation Wizard™ allows the restart of a wall folder if the system has to be temporarily moved for blasting or servicing

OPERATIONAL IN EVERY IMAGINABLE MINING TERRAIN & CONDITION

WE HAVE DEPLOYED SSR™ SYSTEMS IN OVER 20 COUNTRIES AND IN HUNDREDS OF MINES AROUND THE WORLD. OUR EXPERIENCE COVERS:

- Inhospitable environments, including altitudes of 5,000m above sea level
- Extremes in weather, including temperatures from -40°C to +55°C
- The harsh results of intense sun, rain, wind, snow and humidity
- Every imaginable mining terrain across all commodity groups

SSR™ AT A GLANCE

OPERATIONAL SPECIFICATIONS:

Angle of view:
Azimuth: 270°
Elevation: 122°

Communications:
Integrated wireless link
or connect to mine network

Operating range:
SSR™-T (0.9m dish) 30m to 1,400m
SSR™-XT (1.8m dish) 30m to 3,500m

Power supply:
In-built 12 Volt DC generator
/ batteries or connect to mine power
(100-250 Volts AC at 50-60 Hz)

Detectable area:

SSR™-T (0.9m dish)

- At 30m detects a 0.5m x 0.5m failure
- At 1,400m detects a 24.4m x 24.4m failure

SSR™-XT (1.8m dish)

- At 30m detects a 0.3m x 0.3m failure
- At 3,500m detects a 30.5m x 30.5m failure

ENVIRONMENTAL:

Altitude: 0 to 5,000m

Humidity: 5% to 99%

Rainfall: 0 to 100 mm/h

Temperature:
Standard kit: -25°C to +60°C
Extreme kit: -40°C to +60°C

Wind gust:
SSR™-T (0.9m dish) up to 120 km/h
SSR™-XT (1.8m dish) up to 88 km/h

Wind speed:
SSR™-T (0.9m dish) up to 190 km/h
SSR™-XT (1.8m dish) up to 160 km/h

THE SSR™ SCANS MINE SLOPES FROM A DISTANCE, WHILE LOOKING DOWN AND ACROSS AT THE OPPOSITE SIDE OF THE PIT