

High definition stope closure monitoring



CL500

ROCKWATCH[®]
LOGGER HD

Why measure stope closure?

Stope closure is a reliable indicator of the state of health of the rock. Changes in closure rates can provide warning of instabilities up to 7 days in advance. This is in addition to the many other reasons, such as data for Codes of Practice, support design and defining geotechnical areas.

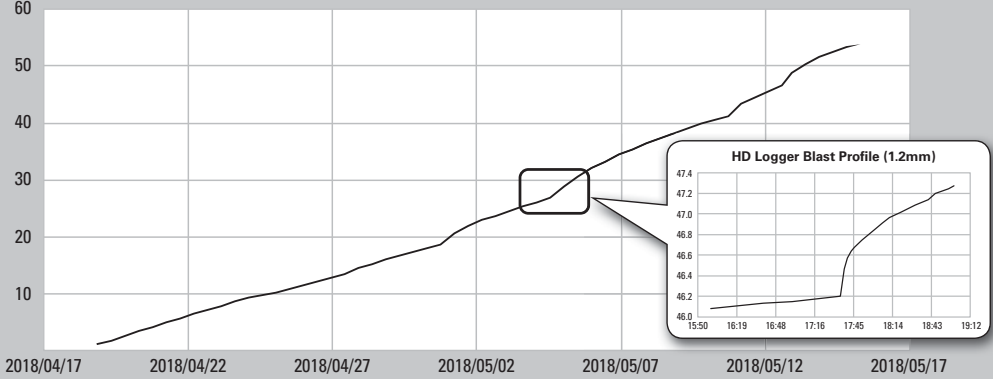
The all new RockWatch HD Closure Logger measures and records stope closure with far greater definition than the current CL408 version.

Key features

- High definition – 10x higher resolution and 5x faster sampling rate.
- 50x more detail makes blast profiles clearly visible, even in very low closure areas.
- Rise is measured in two directions.
- Operational life considerably longer.
- No customised software required.
- Wi-Fi network compatible.
- No risk of data being over-written or lost.
- One Logger size suitable for 1.0 m – 2.4 m.
- Data quality not affected by buckling.
- Download distance now up to 70 m.

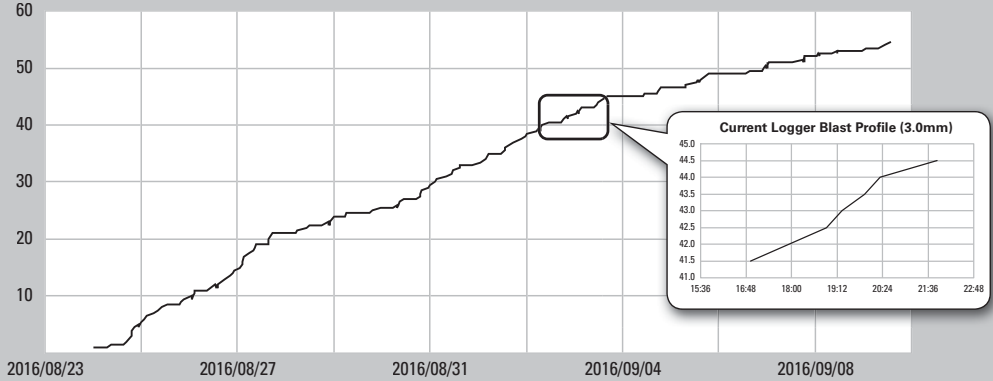
Closure (mm)

New RockWatch HD Closure Logger



Closure (mm)

Current Closure Logger



PARAMETER	VALUE
Resolution	0.05 mm
Sampling rate	1 minute
Max. sampling interval	1 hour
Memory size	526,000 (365 days)
Closure range	600 mm
Stopping width range	1.0 m to 2.4 m using one housing
Max. installation height	3.3 m (due to be increased)
Min. installation height	0.9 m (on special order)
Battery life	Min. 18 months incl. shelf life
Manual verification	Ruler

PARAMETER	VALUE
Disturbance indicator	Yes
Ride measurement	2-axis ride aligned to ruler
Data extraction	Data Grabber
Wi-Fi compatible	Yes
Max. download distance	70 m
Max. number of downloads	60 incremental + 1 full memory
Number of re-installations	Unlimited
Buckling	Data not affected (within limits)
Data reporting software	Generic (TXT format)
IS Certification	In progress

The new DG500 Data Grabber wirelessly extracts data from the Logger from a distance of up to 70m. Once on surface the SD card inside the Grabber is removed and then plugged into any PC to transfer the closure and ride data for reporting and analysis.



CLOSURE ROBOT
The RockWatch product range also includes a Closure Robot. The Robot does not store closure values but emits a LED signal proportional to closure.