

DH Tell-Tales

DUAL HEIGHT TELL TALES

FEATURES

- Fully proven in coal mine tunnels
- Stainless steel reference tube anchor
- Positive stop stabilising fins
- Suitable for 35-50mm holes
- Improved water diverting system
- Corrosion resistant
- High grade stainless steel wire
- Sufficient wire for up to 3m bolts
- Low cost
- Easily installed safety monitoring

APPLICATIONS

Dual Height Tell-Tales are low cost, easily installed safety monitoring devices for indicating tunnel stability. The reflective colour bands indicate roof movement both within and above the reinforced height at a glance. The millimetre scales also allow accurate monitoring of movement trends. Windows software is available from ES&S. For the recording, presentation and analysis of Tell-tale data.

The Mark III Tell-tale has a completely redesigned reference tube and anchor system to ensure in-hole stability and improved water diversion.

The visual dual height Tell-tale has become the industry standard. It provides underground workers with instant information on roof condition and operational management with roof deformation history and advance warning of remedial action requirements.



In many countries, these telltales are installed and read routinely to provide a reliable roof control management system. Tell-tales are installed as mandatory safety devices in UK coal mines. The system is patented in the UK, USA, Australia, China, Poland, and Canada.

Dual height telltales are designed for reinforced rock, providing a differential strata-movement indication based on patented concentric indicators. The two sets of reflective coloured bands indicate roof movement within and above the reinforced height. The millimetre scales also allow accurate monitoring of movement trends. Triple height telltales are designed for use where two different lengths of reinforcement are installed. Windows software, 'Telltale for Windows', is available from ES&S for recording, presentation and analysis of Tell-tale data. Telltales can be supplied with copper or plastic reference tubes including a water-diverting version for wet conditions. Stainless steel spring-anchors and multi-strand suspension cables are used throughout for corrosion protection. A standard range colour-codes and wire-lengths are stocked - others are available to order.

All specifications subject to continuous improvement REV 2009.07

SENSORS

Sentinel Integrity Monitoring Rockbolt

FEATURES

- Easily installed
- Proven & reliable in harsh mining & civil engineering environments
- Suitable for various lengths
- Read using simple strain meter

APPLICATIONS

The Sentinel Integrity Monitoring Rockbolt is a new concept in rockbolting safety. The Sentinel is a modified AT rockbolt which can signal to the Mine Rockbolting Engineer whether it is broken and, if so, where.

Bolt failure can occur due to overloading and/or corrosion and when it occurs it can be difficult to detect. We recommend that a row of Sentinel bolts is placed across the tunnel at regular intervals as substitutes for the standard rockbolts. The exact spacing would depend upon local circumstances.



An installed Sentinel bolt is read by inserting a simple probe connected to an IS strain meter into an environmentally protected sleeved socket at the end of the bolt. The strain meter reading provides a clear indication of the bolt integrity.

The Sentinel has undergone extensive testing prior to release. When used in conjunction with Dual Height Telltales, the Sentinel provides added confidence in the installed rockbolting system.