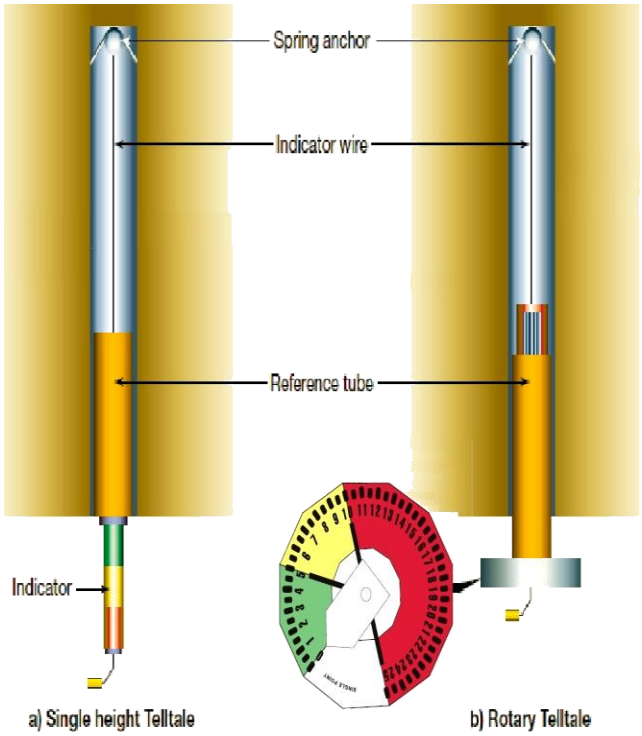
TELLTAIL



INTRODUCTION:

The simplest form of extensometer makes use of a stainless steel spring reference anchor with a tube indicator attached to it by stainless steel wire and visible at the hole mouth. Movement is indicated by colored reflective bands on the indicator, which are progressively covered as movement develops. In mining a simple extensometer such as this is known as a "telltale" because it gives a visual indication of roof movement. Here roof movement is converted to rotation of a pointer around a dial. This has the advantage that small roof movements can be easily read even when the tunnel height approaches 5m The most common form of telltale is the dual-height version.

The device is installed at the same time as the rock bolts into a 5m long roof hole of 27mm-35mm diameter

The dual height telltale uses two concentric indicator tubes attached to spring anchors by stainless steel wire, positioned so that the upper 'A' indicator shows movement within the rock bolted height and the lower 'B' indicator shows movement above the rock bolts.

Dual height telltales are installed into the roof at 20m intervals in all rock bolted tunnels in coal mines and the use of these devices as the basis of a safety monitoring system is generally considered to have been a major factor in the successful conversion of the coal industry to rock bolt support

TYPICAL APPLICATION:

In some area conventional method of roof testing is not possible or convenient .There is no visual indication of how close is the system to ultimate failure.

Under these circumstances, Rotary extensometer if installed will give visual indication to workman regarding the status of roof stability. It is very easy to identify, because of coloring in different shades.

FEATURES

It is useful where the conventional method of roof support testing is not convenient or possible.

Movement of the strata is indicated on the scale with a magnification 1:15.

It gives visual indication to workman regarding the status of roof stability.

Rapid & Simple to install.

Rotary type are useful foe variable depth.

INSTALLATION

Drill the hole upto required height.

Insert anchor of suspension cable to top of hole. Use graduated purpose insertion rods to confirm anchor position. Tug wire to seat anchor.

Keeping the suspension cable under tension, the reference tube can now be inserted into the bottom of hole. The reference tube should be pushed fully into the hole.

Position tube fitted with indicator to the lowest point and crimp ferrule.

Rotate and loosen positioning nut, Rotate 12 sided scale disc and align pointer to zero mark on the scale.

Tighten position nut.

READING

The tell tale is ready for working , movement of bolted roof will be transfer to reference tube.

Pointer position on scale will indicate the strata expansion in mm

GREEN ZONE : 0-5 mm

YELLOW ZONE : 6-10 mm

RED ZONE : 11-25 mm