



### Mechanical / Hydraulic load cell

#### INTRODUCTION:-

Mechanical / Hydraulic load cell model SME-2240-H is a precision engineered, especially designed for load measuring in coal mine roof support and in civil engineering applications. It is fluid filled and is constructed from stainless steel. It is available in capacities ranging from 250 kN to 2000 kN.



#### DESCRIPTION:-

The model SME- 2240-H Mechanical/ hydraulic load cell is made of a sensitive pressure pad which is formed by joining together two very stiff steel discs at their periphery. The space inside the cell is filled with de-aired fluid. When load is applied to the cell, the pressure on the fluid changes. This change in fluid pressure is used to record the variation in load being applied to the cell with the help of dial gauge.

The load is distributed equally over the loading area of the cell by a thick, load distribution plate.

Load distribution plate can be used both above & below the load cell to ensure an even distribution of load on to the cell. Load distribution plates are not required if adequate distribution & bearing plates have been incorporated into proposed installation arrangement.

#### READOUT:-

The pressure in the load cell is measured by dial pressure gauge directly in Kg or Ton.

#### FEATURES:-

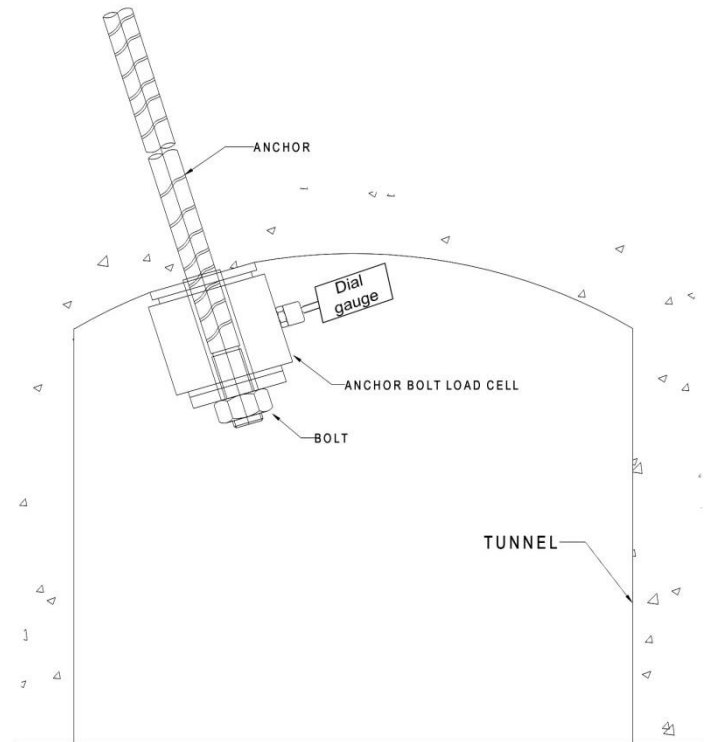
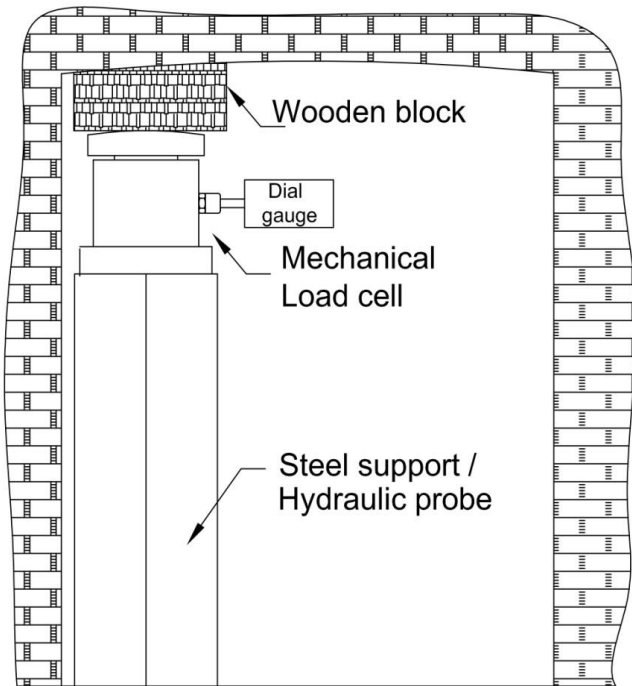
- Rugged, robust & low cost.
- Suitable for hostile & severe environment.
- Easy installation.

#### APPLICATIONS:-

- Determination of load in rock bolts, foundation anchors, soil anchors.
- Determination of roof convergence in underground mines.
- Proof testing & long term performance monitoring of different kind o anchor systems.
- Compressive load measurement between structural members.

### SPECIFICATIONS:-

Capacity	: -	25 KN standard (others on demand)
Overload capacity	: -	120% fs
Temp.	: -	-10 to 55°C
Centre hole	: -	35 mm



### Installation details of Hydraulic Load cell

Due to continuous development program the specification and dimensions are subject to change without notice. Our engineers do undertake the work for development as per the customer's requirement.

## **Sensors & Measurements Enterprises**

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