



Som-Tek™ Plumb Bob®

ELECTRO-MECHANICAL CONTINUOUS LEVEL MEASUREMENT FOR SOLIDS

FEATURES

- Appropriate for Nearly All Kinds Of Bulk Solids
- Insensitive to:
- Changes in Product Density
- Dust in the Silo
- Changes in Moisture of the Material
- Products that are Inclined to Stick
- Very Simple Installation & Start Up
- Very Accurate Measurement
- Internal Tape Cleaner (Tape Version)
- Variety of Sensor Weights
- Robust Die Cast Housing

OPTIONS

- Available in Rope or Tape
- Spool Piece Mounting Adapters

APPLICATIONS

The **Plumb Bob®** is used for “On Demand” level measurement in silos and vessels. Even precise volumetric measurements and long measuring distances are no problem for the **Plumb Bob®**.

DESCRIPTION

The **Plumb Bob®** is an electro-mechanic level measuring instrument for the continuous measuring of level in hoppers, silos or tanks. This top mounted system is used for monitoring the level in applications such as powders, small grain bulk materials or coarse grain bulk materials. A bob weight is mounted at the end of a measuring rope or tape, which is wrapped on a motor driven rope roller. Upon contact with the bulk material, the bob weight returns and is drawn back to its upper stop position.

The housing is divided into two independent chambers (the rope chamber and the electronic chamber), which are sealed to each other to isolate electronics from the process. Only the rope chamber is in contact to the inside of the silo during the measurement. If the bob weight is in the upper stop position, it seals the opening between the unit and the silo. Pulses are generated during downward movement and the number of pulses can be processed directly in a PLC (programmable logic controller) or a counter .

4-20mA Output: The pulses are internally converted into an analog current signal. The current signal can be adjusted specifically, so it is possible to get a volume-specific signal, fitting to the geometry of the silo. The current signal is updated when the sensor weight touches the bulk material. The measurement starts with an external start—signal (remote—control) with an external “make” contact or an external 24V DC signal. To start automatically at a predetermined period, a programmable internal timer is standard. The measurement is controlled by a microprocessor and starts automatically and is controlled by the internal timer. A comparison between the distance the weight moves downwards, and the distance the weight moves upwards, is done. In case of a deviation, a signal output is activated. This guarantees, that the bob weight is in the upper start position.



