

Installation guide for Silo systems in remote locations

A silo system will typically consist of two compression load cells that are supplied with ten metres of cable and are connected and calibrated to a digital indicator.

The working load limit (WLL) of the compression load cell and the type of indicator will be dependent on the requirements of the silo system and customer.

The silo systems for remote locations are supplied pre-calibrated so there will be no need for a calibration to take place onsite after installation.



Picture of a compression load cell system.



Installation guide

Ensure that a site survey is undertaken so that any work can be carried out safely.

Display installation

Isolate the mains supply to the silo system.

Remove the current enclosure and its display. The JCM silo systems for remote locations are supplied with cabling.

Determine how is best to fit the indicator to the silo, for example, if your new displays is supplied with a wall bracket, this can be fitted to the current plate.

Drill out holes to match the wall bracket.

Install and fit the new displays with new nuts and bolts, these are not supplied by JCM so would need to be sourced locally.

Most new displays are supplied with some glands, here we can re-wire up the mains supply & the load cell cables.

Most display have an IP rating of IP65, so will have good protection from water and sand.

Load cell installation

Remove any bolts that are in place with the current compression load cells and jack up first silo leg using appropriately sized jacking kit, remove current compressive load cell, if present, and install new compressive load cell ensuring the cable faces along with side and not protruding outside the area of the tank. Let down jacking kit slowly so the silo now rests on the new load cell.

Spacers are often used on silo systems to level the silo after installing new silo systems. It is unlikely that the new compression load cells will be the same size of the compression load cells that have been removed.

Measure the height of the currently installed compression load cell and the new compression load cell that is to be installed. Also check the height of any spacer (if any) and if there is a difference between this and the load cell height then prepare flat metal shims in anticipation of inserting them once the load cell is ready to be fitted.

Carry out the same procedure as above for all other, applicable, silo legs.

Run load cell cabling along beams, fixing with beam clamps to ensure there are no trip hazards to the site where the electronics will be situated. Wire cabling into and install electronics.

Switch electronics on and check that the system is working.



Please see some photos below of recent silo installations

