



Load Cells – Advice for Mounting and Maintenance

1. The quality of the measuring signal depends mainly on the correct mounting of the load cells and the environmental conditions.
2. Handle the load cells gently and with care. Do not pull the cable.
Avoid impact loads.
3. Prevent overloads.
Make sure that the levelling of the load cells at mounting is correct.
The load distribution should be as balanced as possible.
Avoid and/or limit possible shear forces.
4. To avoid a lift-up (especially with slim and tall outdoor silos) of the construction when forces converse to the direction of force (e. g. wind forces) appear, proper lift-up protection devices must be considered.
5. Protect the load cells from erratic temperature influences (e. g. direct sunlight).
6. Lightning and welding currents endanger the load cells.
Every single load cell should be bridged with a flexible copper earthing strap.
7. Welding activities shall only happen before the mounting of the load cells.
When welding is necessary at a later time, the load cells must be disconnected.
8. Do not cut the load cell cable.
All (screened) signal cables between load cells and weighing electronics shall be laid separate from high voltage current cables and control cables.
Eventually use an armoured steel tube for the load cell signal (connection) cable.
9. Mechanical by-passes of force reduce the measuring accuracy.
Therefore all connections to the scale (e. g. pipes, tubes, etc.) have to be flexible.
10. Keep load cells and connections to the scale clean, remove heavy dirt.
But do not use aggressive cleaning agents. Do not use high-pressure cleaners!
11. In case the load cell is being suspected to be overloaded or with another defect or damage, do the following:
 - 11.1 Disconnect all load cells from the load cell junction box and/or from the weighing electronic.
 - 11.2 Re-connect each single load cell one after the other and check the displayed and/or measured value.
 - 11.3 The load cell with the highest error/discrepancy demands a further examination.

In case of extraordinary mounting conditions, specific environmental conditions, or other technical questions concerning your application, please contact us for further advice.