

Welding near load cells



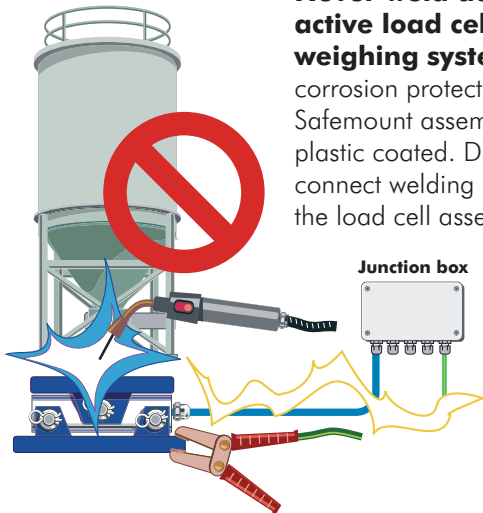
Installations should be planned by a qualified structural engineer.

Each installation is unique, and this document is a general guideline. It should be used in conjunction with standards relevant to the application. Should you require advice on your weighing application, our application engineers will be pleased to advise you on the best solution.

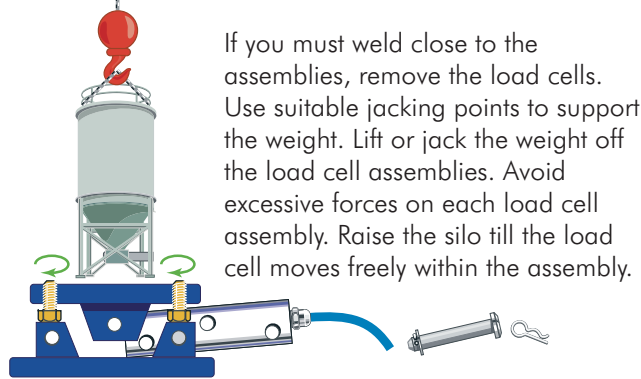
Bolt the load cell assembly in position. Never weld load cell assemblies. To avoid damage to a load cell, when welding on a vessel or silo, take the following precautions.

Inspect the system carefully. Understand all the electrical connections. Ensure that all sensitive equipment is switched off, and disconnected. Protect the load cells and wiring from: heat, mechanical overload, high voltage, high grounding currents, and molten splatter.

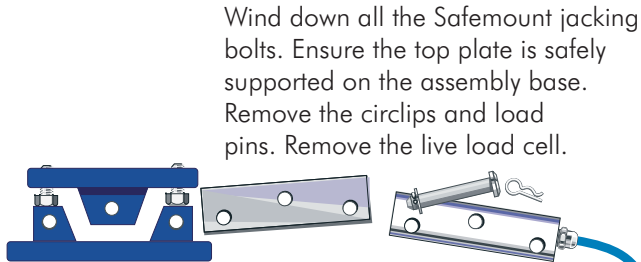
Never weld across an active load cell, or weighing system. For corrosion protection, Safemount assemblies are plastic coated. Do not connect welding ground to the load cell assembly base.



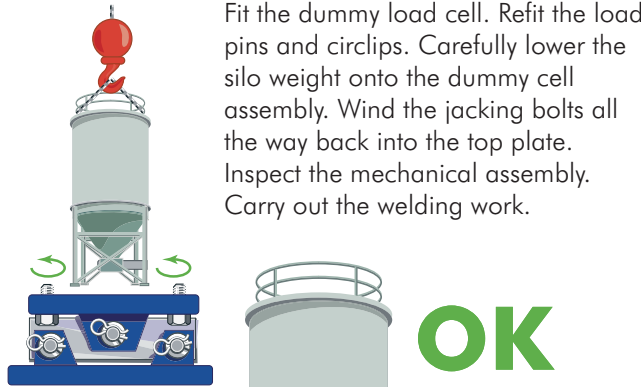
We recommend you remove the load cell and fit dummy load cells for all welding work.



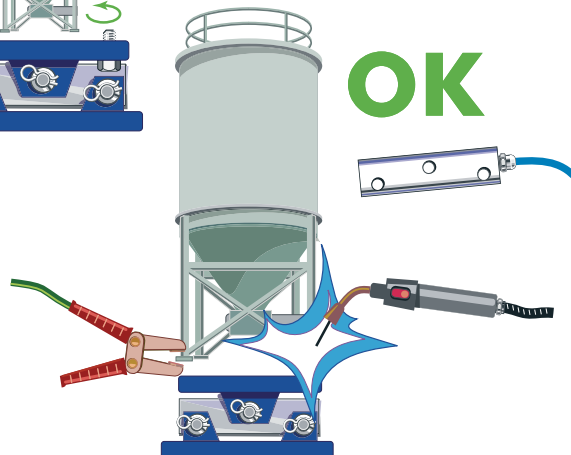
If you must weld close to the assemblies, remove the load cells. Use suitable jacking points to support the weight. Lift or jack the weight off the load cell assemblies. Avoid excessive forces on each load cell assembly. Raise the silo till the load cell moves freely within the assembly.



Wind down all the Safemount jacking bolts. Ensure the top plate is safely supported on the assembly base. Remove the circlips and load pins. Remove the live load cell.



Fit the dummy load cell. Refit the load pins and circlips. Carefully lower the silo weight onto the dummy cell assembly. Wind the jacking bolts all the way back into the top plate. Inspect the mechanical assembly. Carry out the welding work.



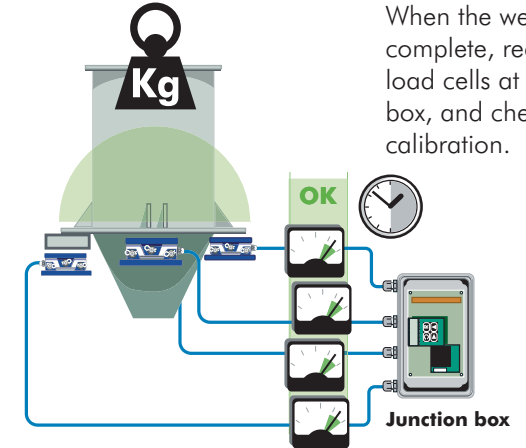
When it is not possible to remove load cells:-



If you are welding on other parts of the silo:

Disconnect the load cells at the junction box. Connect the welding ground to avoid the welding current flowing through load cell assembly.

Protect the load cell assembly from splatter, overheating, and mechanical overload.



When the welding is complete, reconnect the load cells at the junction box, and check the calibration.

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