

Application Of Load Cell In Weighing Tanks

Strain gauge Load cells are often used to weigh chemical storage tanks because they are non-contacting and non-intrusive yet still provide a very reliable method of weight measurement. As with a truck weigh station, if inventory on a truck is measured by weight instead of by piece, it's much easier to quickly tell if the inventory has changed and what the total weight is.

When used to weigh chemical storage tanks, Load cells are normally connected to a platform built for the tank to sit on. When the tank is placed on this platform or framework, the load changes the cell's resistance. Generally, load cells are used with day tanks and, in some cases, bulk storage tanks. When the tank is ready to be weighed, it is placed on a tank scale. The scale is normally installed on a concrete pad. The basic idea is that the tank is weighed empty and then the scale is zeroed out. Then the chemicals are added and the load cells measure the stress changes. The stress changes can then be converted to measurements such as gallons-per-inch, weight-per-inch, gallons, etc.

