

Top Ten Issues With Tank and Hopper Performance and Calibration

Take a look at our experts list of the top 10 issues with tank and hopper performance and calibration.

- 1. Rigid piping or other attachments.** In order to weigh properly a tank must be able to move. Rigid connections cause inaccurate weighing that is not repeatable.
- 2. Environmental conditions.** Tank and hopper systems need to be accurately protected from extreme temperatures, moisture, vibration, and corrosive substances. The same factors can affect the ability to conduct accurate and efficient calibrations.
- 3. Wrong equipment for the application.** A number of factors should be considered to ensure optimal weighing performance including selecting the correct load cell capacity and accuracy with the required environmental protection.
- 4. Safety concerns for operating and service personnel.** Trip and fall hazards are common with tank and hopper systems, such as elevated walkways or ladders that are in poor condition.
- 5. Incorrect placement of load cells.** Three point systems are desirable because they tend to be self-leveling, however in general no more than 8 modules should be used.
- 6. No way to hang sufficient weights for testing.** Mounting brackets for hanging test weights should be evenly spaced around the tank.
- 7. Load cell cables not properly routed.** Make sure cables also have sufficient length, and proper shielding.
- 8. Poor access to load cells.** Before calibration each load cell's signal output needs to be measured to ensure an even load distribution. This also complicates routine maintenance, and repairs when necessary.
- 9. Outdated or obsolete equipment.** Downtime can result if an obsolete part fails and adequate back up parts are not readily available.
- 10. Slow build times.** It may not always be practical to apply weights to full capacity. In this case, a build-up method of calibration may be utilized. Although it is very accurate, this method can be time consuming.