

How often do I need to calibrate my gas monitor?

This is a controversial subject. OSHA would have you calibrate your gas detector before each use. In practice, our customers come up with their own intervals. If the gas monitor is used infrequently, say once a month, it should be calibrated every time to give you confidence that the unit is going to respond as it should. If your company uses their detection device a few times a week, then our customers have told us they do an occasional bump test and calibrate less often.

This is consistent with information from the president of RKI Instruments, a gas detection manufacturer, who writes in an article for the National Safety Council that folks who “bump test” (subject their gas monitors to the gases they are supposed to detect in order to make sure they will register) before each use, the calibration cycle can be extended to “three to six months for instruments that successfully pass the bump gas test”.

The idea is to make sure the unit is working properly. Gas detection units are used to protect the worker's lives, so it's important to remain vigilant with upkeep and maintenance. While the gas detectors we sell at PK Safety Supply are very stable and are made for real-world work environments, calibration and bump testing with test gas are the only ways to tell the units are really working properly.

Regulatory agencies such as OSHA and ANSI often tell users to follow the manufacturer's recommendations for calibration. But even these can be confusing. For instance, one manufacturer has a 4-gas monitor that provide an on-screen countdown from 180 days, advising users to calibrate every 6 months. However, the same company makes single-gas monitors which are supposed to be self-calibrating and last for two years; yet both the 4-gas and the single-gas monitors use the same sensors.

Add to this discussion the legal implications of the data. For readings to hold up in court as incontrovertible a monitor must calibrate both before and after each test or series of tests, as this is the only way to remove doubt as to the proper functioning of the instrument.

To create an environment of safety, it's important to develop a routine for testing your equipment that your own safety team determines to be adequate for the protection of your workers, and make sure those standards are followed by everyone who uses a gas detector unit.

A final note: a bump test or calibration is highly recommended if an instrument has been potentially damaged or subjected to a severe condition such as sensor poisons, high gas concentrations, very high temperatures, drop or shock, etc.

