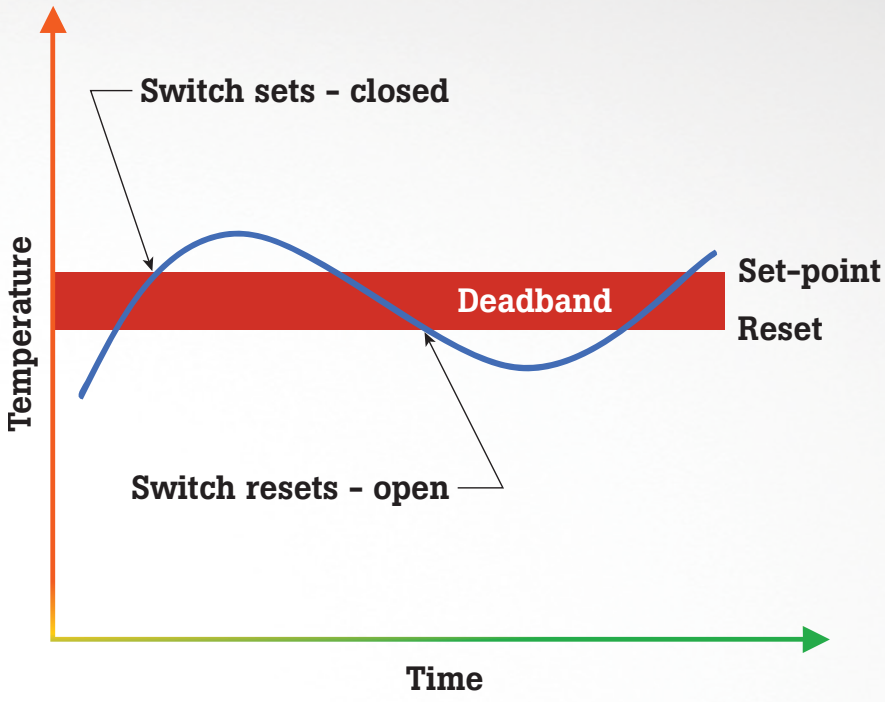

To perform the test:

STEP 1 Isolate the switch from the process.

STEP 2 Fully immerse the switch into a precision temperature source such as a dry-well or bath capable of covering the required temperature range.

STEP 3 Connect the leads of the switch to a digital multimeter or to the switch test inputs of the dry-well.

STEP 4 If using a Metrology Well or Field Metrology Well, increase the temperature to the set point. Continue raising the temperature until the switch changes state and record that temperature.

STEP 5 Decrease the temperature until the switch resets (changes state again) and record the temperature.

STEP 6 Repeat the process as many times as needed, but reduce the ramp rate and target the last measured set point and reset points to verify accuracy and repeatability.

STEP 7 Record the deadband (difference between the set point and the reset point).

TECH TIPS

- Set the scan rate to a low value, i.e. 1.0 °C per minute, for better accuracy.
- If the scan rate is too low, the duration of the test may be longer than necessary.

Additional resources

For more in depth information about this application check out these videos and application notes from Fluke.

914X Field Metrology Wells Video Series

Best practices in temperature calibration

Testing Temperature Switches Using Metrology Wells