Fluke Calibration 9142, 9143 & 9144 Field Metrology Wells

Maximizing productivity & minimizing costs in the field

The 9142, 9143 and 9144 Series Field Metrology Wells maximize portability, speed, and functionality without compromising measurement quality. Field Metrology Wells are easy to use, lightweight, compact & quick to reach temperature set points, yet they are stable, uniform and accurate. These calibrators cover a wide range of temperature instruments, including RTDs, thermocouples, transmitters and thermal switches. Fluke Calibration's Field Metrology Wells can cool to -25 °C or heat to 660 °C in 15 minutes.

Who will use it?

Job Titles: Instrument Technicians, Quality Assurance Managers, Production Managers and Service Managers
Industries: Process Industry, Power Generation, Transmission and Distribution, Aerospace, Calibration Labs, Pharmaceutical Companies

What do they use it for?

Calibrate temperature sensing devices by generating and accurately measuring a reference temperature.

- RTDs
- Thermocouples
- Temperature transmitters
- Thermal switches

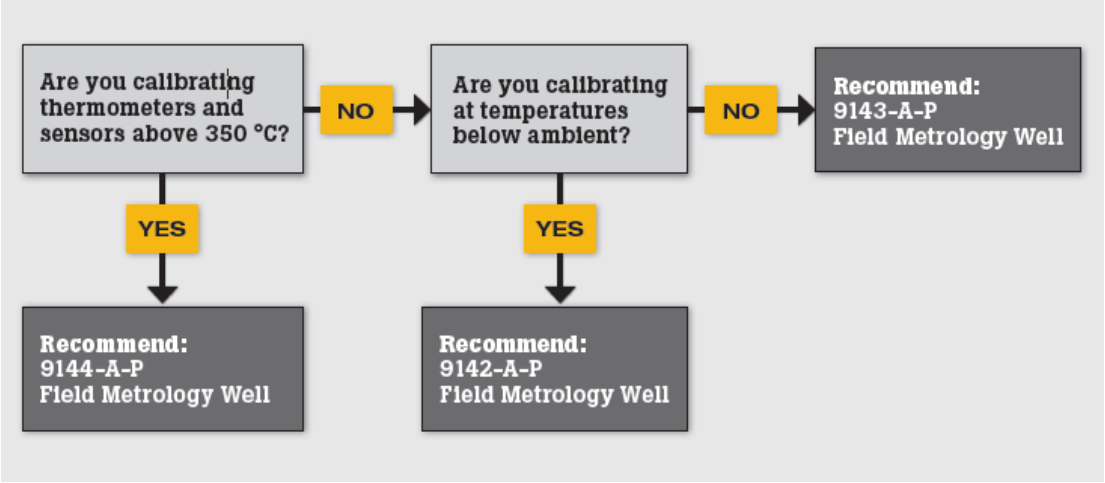
Technicians will carry fewer instruments to the field. The process version eliminates the need for a thermometer readout, DMM for resistance and voltage measurements and a 4-20 mA loop calibrator.
Improve efficiency and reduce operator time using Fluke's 753/754 or Fluke Calibration's 1586A to automate and document calibrations.

Key features

- High performance for industrial environment
- Lightweight, portable & fast turn-key solution with automated calibration routines
- Meets requirements for Class B RTDs
- Cools to -25 °C in 15 minutes and heats to 660 °C in 15 minutes
- Accurate temperature measurements from -25 °C to 660 °C
- Specifications guaranteed to ambient 13 °C to 33 °C
- Available with a variety of inserts, both Standard and Metric. Custom inserts available upon request.

** Field Metrology Wells are available in two versions for maximum speed and portability for the industrial environment. The standard version (pictured on the left) is our best field calibrator, and the process version (pictured on the right) is an all-in-one process calibration tool that reads electronic thermometers, automates calibration, and documents the results.*

Selection logic



- When the need requires greater than display accuracy, recommend adding the 5615-12-A reference PRT to the 914X-P (process option).
- The process versions of Field Metrology Wells have onboard non-volatile memory for documentation of up to 20 tests. Each test can be given a unique alphanumeric ID and will record block temperature, reference temperature, UUT values, error, date, and time. Each test can be easily viewed via the front panel.
- For additional automation and documentation, recommend either the Fluke 754 or 753 with the Drywell Cable Kit for 753/754, item # 2111088

Discovery questions

- Are you measuring temperature?
- What are you doing for calibration and how is that working for you?
  - If outsourcing, do they want to bring in house? (due to delays or quality problems)
  - If only calibrating the transmitter, do they know 75 % of the error comes from the sensor?
  - Are they aware that not calibrating the sensor calls into question any claims of traceability they may have? Could cause problems in an audit.
  - Would you like to calibrate or troubleshoot less frequently?
- What type of sensors are you calibrating?
  - What temperature range and accuracy do you need to address?
  - How long does it routinely take you?
  - Do you have a need for automation/documentation?

Key advantages

- Fluke Calibration 9142, 9143 & 9144 field metrology wells are faster to set point temperatures than the competition including Ametek/Jofra ATC & ITC, Isotech 6-in-1 & Fast-Cal, or GE Druck. 15 minutes to cool to -25 °C or heat to 660 °C
- Includes NVLAP accredited calibration at no additional charge
- Lighter than the competitive models with similar performance.
- Guaranteed specifications over a wide ambient temperature range (13 °C to 33 °C).
- Better probe readout accuracy with process version “P”. Reads transmitters, thermocouples, RTDs & PRTs.
- Fluke is USA country of origin. U.S. based service and factory support. No restrictions for purchase by U.S. government accounts.
- Fluke 914X is a proven product from an established provider. Thousands of 914X models have been sold to customers worldwide in the past 15+ years.

Process option can’t be added after purchase of 914X