Maintaining Critical Temperature in Multi-Fuel Boilers

Ensuring that steam turbines run at maximum efficiency is directly dependent on the steam's temperature entering the turbine. Higher steam temperatures mean higher efficiency and lower emissions. With a highly controlled temperature, the turbine can produce more power with the same amount of fuel.

For Ultra Super Critical (USC) multi-fuel boiler technology, accurate temperature measurement from 550 to 700°C is essential. Any deviation in temperature can result in higher maintenance, increased risk of a shut-down, and a reduced lifetime. To avoid these issues, turbines use temperature sensors to continually monitor the inlet steam. However, these sensors may drift over time, so regular calibration of them is required. Because the temperature and demand for accuracy are exceptionally high, finding the right piece of equipment to calibrate these sensors is challenging.

RTC Series Calibrators Provide the Perfect Solution

The JOFRA RTC is our most advanced temperature calibrator and features a temperature range of up to 700°C. In addition to its highly accurate internal sensors, users can combine the RTC with the patented DLC system to provide perfect temperature uniformity inside the insert. It also features an advanced simplicity interface, so learning how to use the calibrator takes just minutes.

With an accuracy of ± 0.29°C, stability to ± 0.02°C, and perfect temperature homogeneity in the insert, the RTC with the DLC sensor is the ideal solution to assure these critical turbine temperature sensors are working as intended.