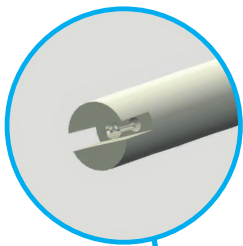
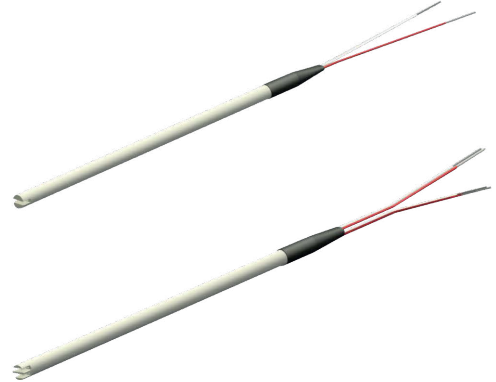
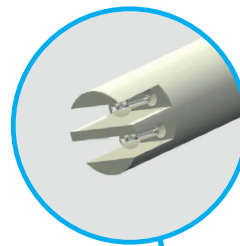


Spike thermocouples for diffusion furnaces

SPS provides spike thermocouples by Conax. These thermocouples are high-precision temperature sensors designed for accurate temperature measurement and control in semiconductor thermal processing. Available in both standard and custom configurations, they deliver the reliability, repeatability, and durability required for diffusion, oxidation, annealing, and other high-temperature furnace applications in semiconductor, photovoltaic, and LED industries.



Single spike thermocouple



Dual spike thermocouple

SINGLE SPIKE THERMOCOUPLES vs. DUAL SPIKE THERMOCOUPLES

Spike thermocouples or torch thermocouples can be ordered as single or dual (two measuring junctions). Dual spike thermocouples are often used for a redundant measurement in the event that one circuit fails. Duals may also be used to track sensor drift. This is accomplished by populating one of the dual circuits with a different calibration wire (typically R, S, or B) than the other circuit. As the thermocouple circuits age, they will drift. Different calibrations will drift at different rates. Comparing the rate of drift differential will give an indication as to the amount of drift the particular dual spike is experiencing, and by extension, the rate of drift for the other spikes. Spike recalibration or replacement decisions may be made based on objective criterion rather than arbitrary time-based maintenance schedules.

DESIGNED FOR VERTICAL & HORIZONTAL FURNACES

Conax manufactures profile thermocouples for both vertical and horizontal furnace systems and offers solutions for many of the industry's leading platforms, including:

- ASM®*
- BTI/Tempress
- MRL
- ATV Technologies
- Centrotherm
- SVCS
- Aviza / SVG / Thermco
- TEL
- Kokusai
- Tystar

*ASM® is a registered trademark of ASM International. Conax Technologies and its products are not affiliated with, endorsed by, or sponsored by ASM International.

Contact us with your requirements. We will happily work with you to find the best configuration!

FLEXIBLE CONFIGURATIONS

Every thermal process has unique requirements. That's why Conax offers both off-the-shelf and fully customized spike thermocouples to meet your specific application. Our engineering team can help develop a solution optimized for your process conditions, equipment, and temperature control requirements.

AVAILABLE THERMOCOUPLE TYPES

Conax profile thermocouples are available in the following calibrations:

- Type B (Pt-Rh)
- Type R (Pt-Rh)
- Type S (Pt-Rh)
- Type K
- Type N

These options allow you to select the thermocouple best suited to your operating temperature, process environment, and accuracy requirements.

PROFILE THERMOCOUPLE CALIBRATIONS

Conax offers Profile Thermocouple calibrations at standard or customer specified temperature intervals. All calibrations are conducted under the guidance of our quality system, certified to ISO 9001 and are performed by comparison techniques as defined in ASTM E220. Conax utilizes primary and secondary standard thermocouples that are traceable to NIST and state-of-the-art equipment with a custom automated process control and data acquisition system.