

## Technical Brief

## **Beware of Bimetallic Coil Tempering**

Bimetal thermometers function using a bimetallic coil made of two different metals that are bonded together. These two metals expand at different rates based on changes in temperature and need to remain flexible to support accurate temperature readings.

Applications such as BBQ grilling, searing and burn-off, pizza ovens, industrial ovens and wood stoves may require operating temperatures that rise above 800°F. Exposure to these high temperatures will temper (harden) the bimetallic coil in the bimetal thermometer stem. Each time the bimetallic coil in the thermometer stem is exposed to extreme heat and then cooled down, it becomes less flexible and therefore less accurate. The bimetal thermometer pointer may stop indicating when the bimetallic coil completely loses its flexibility.

To keep your bimetal thermometer indicating accurately, remove it when you need to operate your equipment at temperatures of 800°F or higher. Tel-Tru and other manufacturers offer bimetal thermometers with temperature ranges as high as 1000°F (550°C); however these models are recommended for continuous operating use only up to 800°F. To keep your bimetal thermometer indicating accurately, exposure to temperatures above 800°F should be done on an intermittent basis only.



To discuss thermometer care feel free to call our experts at 800-232-5335 or visit www.teltru.com

