Please consult this guide for any questions regarding Thermocouples. For further info please call our toll free number listed below. If you need additional information on setting up your Profire system please visit our website for our full selection of troubleshooting guides, quick start guides and product manuals.

**PROBLEM WITH THERMOCOUPLES**

1. **Ensure that both the High Temp and Process thermocouples are connected.**

2. System reading Process TC, ProcTC, HH Thermocouple or ProcHTC

3. Check the thermocouple wiring, ensure that the thermocouples are paired correctly and not reversed.

4. The thermocouple indicated by the system may be faulty. Install a jumper across HighTemp TC+ and HighTemp TC-. Also install a jumper across Process TC+ and Process TC-.

   - Did the error clear?
     - **NO** One of the circuit boards may be faulty
     - **YES** The system is likely reading correctly. Set the meter to read continuity and check that the thermocouples are paired correctly and not reversed.

   - There is likely a problem with the thermocouple or the wiring
     - Verify that there is continuity between the red and yellow for each thermocouple

5. System reading TC’s not equal or TC Mismatch

6. Set a Multi-Meter to read mili-volts DC (mVDC) and measure across HighTemp TC+ and HighTemp TC-.

7. Also measure across Process TC-

   - Are the voltages measured across the two thermocouples within 0.1mVDC?
     - **NO** One of the circuit boards may be faulty
     - **YES** The system is likely out of calibration

   - Re calibrate the HighTemp TC and Process TC
   - If the calibration did not resolve the problem it is possible that one of the circuit boards will need to be replaced

8. There is likely a problem with the thermocouple or the wiring

   - Verify that there is continuity between the red and yellow for each thermocouple