Accurate information is critical to improving combustion performance and getting the results you require. Analysis of flue gas at the horizontal furnace exit (nose arch apex) provides the most accurate indication of combustion conditions, prior to any mixing of the gases, which may occur in the convection back-pass. This data is gathered with the use of a HVT (High Velocity Thermocouple) probe.

Using existing furnace observation ports, the HVT Probe can be used to develop a profile of furnace exit combustion characteristics, namely excess oxygen level and flue gas temperature.

According to ICT research, this method is the quickest, most efficient means of documenting the overall combustion process.

**Applications**
- Quantify Furnace Exit Gas Temperatures
- Ascertain Furnace Temperature Profile
- Quantify Furnace Oxygen Level
- Ascertain Furnace Oxygen Profile
- Determine Unit Air In-Leakage (when coupled with boiler backend O2’s)
- Evaluate Potential for Furnace Slagging

**Specifications**
- Diameter: 2”
- Material: 304 Stainless Steel
- Connections: TIG welded
- Probe Length: 12’-20’ (custom lengths available)
- Operating Range 2500°F with type “K” thermocouple & 2700°F with type “W” or “S” thermocouple
- Cooling Water Requirements: 25 – 30 gal/min at a minimum of 80 PSIG
- Aspirating Air Requirements: 60 PSIG