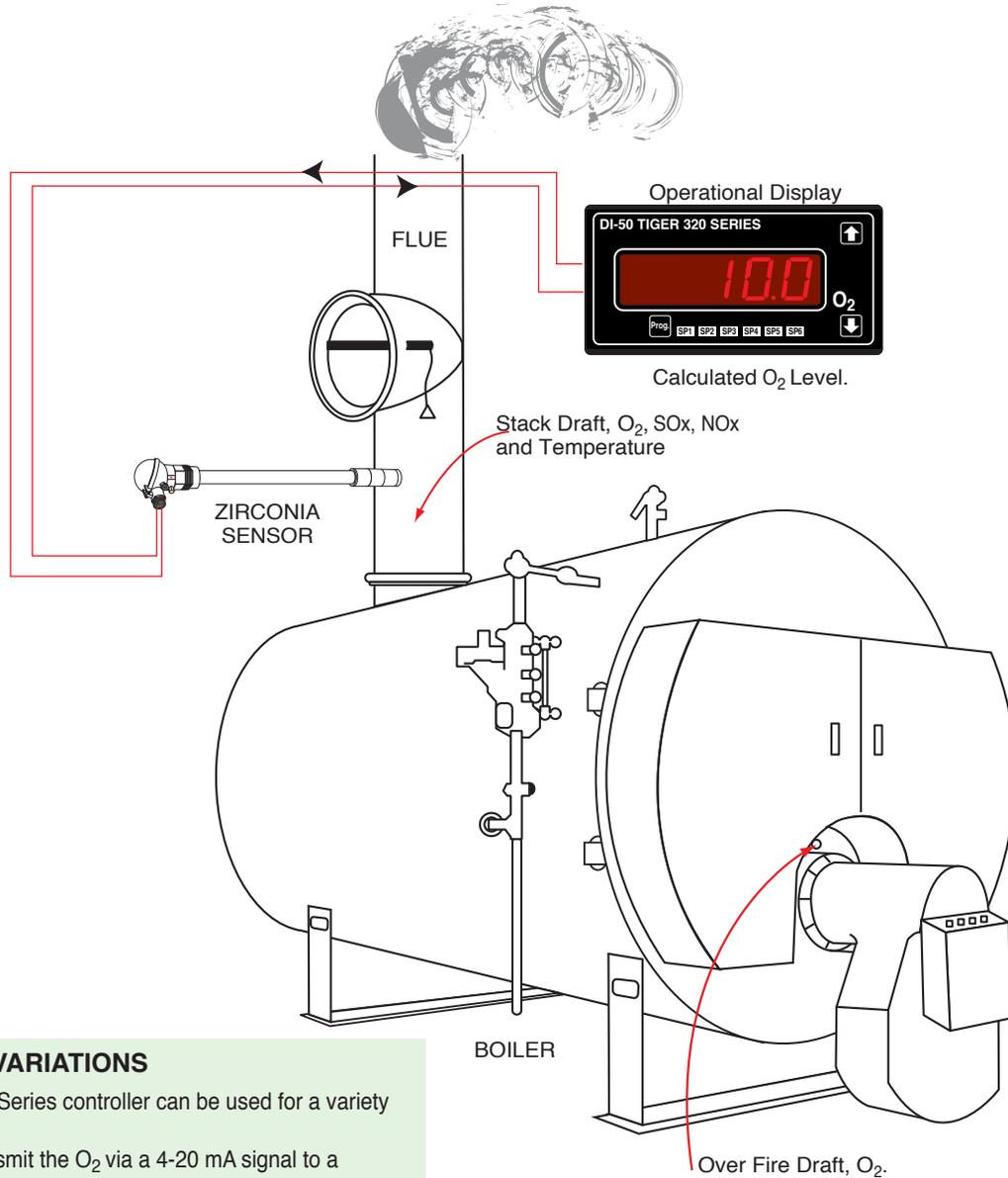


O<sub>2</sub> is an important parameter to measure and control in kilns and furnaces. The diagram below shows the Tiger 320 Series DI-50 controller connected to a Zirconia O<sub>2</sub> sensor with a built-in thermocouple.

The controller calculates the O<sub>2</sub> level from the temperature and mV level of the sensor. The result is then displayed on the controller.

The Tiger provides a reliable, cost-effective solution, enabling even very small boilers to be upgraded to reduce pollution and save on fuel costs.



APPLICATION FUNCTIONS

RELAY OUTPUTS	
TIMERS	
ANALOG OUTPUTS	
SERIAL OUTPUTS	

CALCULATIONS	
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LINEARIZATION	
TEXT MESSAGING	

INPUTS	
ZIRCONIA SENSOR	

VOLTS / DC	
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TEMPERATURE T/C, RTD	
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OPTIONS & VARIATIONS

- The Tiger 320 Series controller can be used for a variety of purposes:
  - To retransmit the O<sub>2</sub> via a 4-20 mA signal to a combustion controller.
  - Act as a safety interlock if the O<sub>2</sub> level becomes dangerous.
  - To control the O<sub>2</sub> by adjusting the air intake into the furnace.
- The Tiger 320 Series controller can also interface to probes that require a heater and provide auto calibration sequencing for probes that have a calibration gas input.

Suggested Ordering Code Options for This Application

Basic Order Codes	Comments
<b>DI-50E-DR-PS1-IDT5</b>	Calculate and display O <sub>2</sub> Level
<b>DI-50R-DR-PS1-IDT5-AIC-OR11</b>	4-20mA output to control combustion. Relays to control air intake