

# SuperOx

In situ high temperature oxygen sensor monitors/controls combustion efficiency



## SuperOX Applications

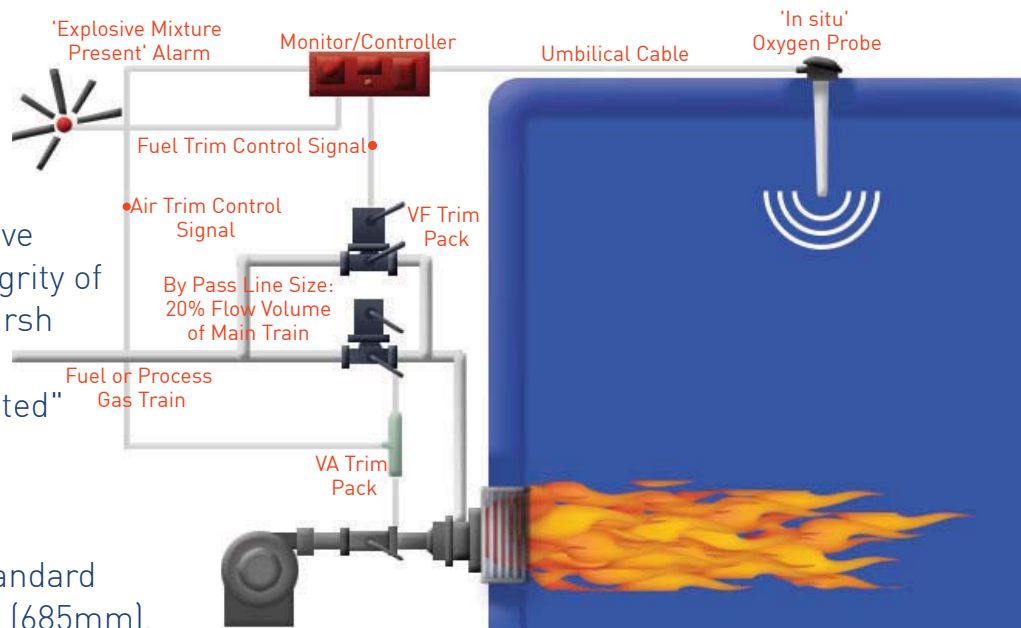
- Direct-fired furnaces (reheat, annealing, tunnel)
- Glass furnaces (side-fired, end-fired, float, container, and fiberglass)
- Power generation - boilers (gas-fired and coal-fired)
- Ceramic and brick kilns
- Petrochemical - after-burners, incinerators, package boilers, sulfur burners

## SuperOX Specifications

- Process variable range: 8.77 E - 23 to 20.9%
- Temperature range: 1150 - 3000°F (650 - 1650°C)
- Sensor impedance: less than 20 K ohms @ 1700°F
- Sensor output: 0 to 1250 mVDC
- Response time: less than 1 second
- Sheath material: 99% Alumina or Silicon Carbide

## SuperOX Benefits

- Field performance can be confirmed using external "verification" port
- Cooling air maintains positive pressure to ensure the integrity of electrical connections in harsh environments
- Outer electrode is not "painted" on the zirconia electrolyte, eliminating the antiquated "boot" design
- Available in a number of standard lengths - 18" (457mm), 27" (685mm), and 36" (915 mm)
- "B", "S", and "R" thermocouples are available



Super **Systems**  
incorporated



INNOVATIVE SOLUTIONS WORLDWIDE

# Combustion Efficiency Solutions



Model 1500 VRO 9120  
Oxygen Control System  
and Video Recorder

Reference  
Air System

Color  
Display

4-20mA  
to PLC

ETHERNET  
TCP/IP

Control  
Output

RS485  
Modbus

Built-In  
Chart Recorder

Description	Sheath Material	Insertion Length	Part Number
SuperOX - "B" T/C	Alumina	18"	1827200
SuperOX - "B" T/C	Silicon Carbide	18"	1837200
SuperOX - "B" T/C	Alumina	26"	1825200
SuperOX - "B" T/C	Silicon Carbide	26"	1835200
SuperOX - "B" T/C	Alumina	30"	1828200
SuperOX - "B" T/C	Silicon Carbide	30"	1838200
SuperOX - "B" T/C	Alumina	36"	1826200
SuperOX - "B" T/C	Silicon Carbide	36"	1836200
9120 PVT & Controller			13518
24 Vdc Power Supply			31135
Digital Display			31286
AC20 Oxygen Controller			31069
Ref Air / Cooling Air	Single Zone		13017
Ref Air / Cooling Air	Dual Zone		13368
Ref Air Only	Dual Zone		13559
Model 1500 VRO			13565



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