

EUROX OXYGEN SENSOR *EpRox 900-FH**

for Fuel Gas/Air-premixes (e.g. forehearth / feeder-heating)

The heated, extractive Oxygen Sensor is based on a Zirconia cell and is measuring the real O₂ content of **fuel gas/air-premixes** by an "ideal, stoichiometric combustion" i.e. the measured oxygen content equals the flue gas after an "ideal burner" as well.

Note: All of the free O₂ content in the measuring gas is reacting with all oxidable components until equilibrium and always the **free remaining oxygen** content is indicated.

+

Benefits:

- real oxygen values due to a real combustion of the premix
- supplies LAMBDA-values of **oxidizing** and **reducing** atmospheres
- fluctuations of the calorific values will be determined and balanced automatically
- reduces danger of discoloration or bubbles of the glass in the forehearths
- allows controlled near-stoichiometric combustion
- energy saving of up to 10% and more to be expected
- comfortable operation from the control room
- no longer laborious and imprecise periodical adjustments in the field
- economical multiple sampling of up to 9 combustion zones with one unit only



!

Highlights:

- **exclusive** high operating temperature of **900°C** of the **Zirconium** cell (common cells operate up to 750 °C only) warrants a complete and **fast catalytic** transformation of the gas-air-premixes
- "elpro" EUROX Electrode Protection: electrode protected by the patented **active ceramic diffusion block**
- high cell stability and chemical resistance due to **solid non-aging** platinum alloy electrodes (**no Pt-pastes**)
- **reliable electrode contacts by spring forces** in an unique way
- **shortest response times** (t₉₅) of some 30 Seconds only (Dew meters: t₉₅ = ± 2 h)
- **elaborated stabilized measuring gas flow** even at varying flow resistances
- **low flow sensitivity:** a deviation of ± 5 l/h (max. ± 10 l/h) at recommended 30 l/h measuring gas flow leads only to comparable minor influence
- **rugged heating coil**, vastly oversized components, low voltage heating, PID-controlled
- **no sooting** at reducing atmospheres even over long times
- **offset-free thermodynamical calculations** enabled by the unique measuring cell balance
- **high capacity, low dead space filter** with **high separation efficiency**

*FH: Forehearth / Feeder-heating