

OXITEC® 5000 ECONOMY
Oxygen Analyser System



ENOTEC



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High Quality that Doesn't Cost the Earth

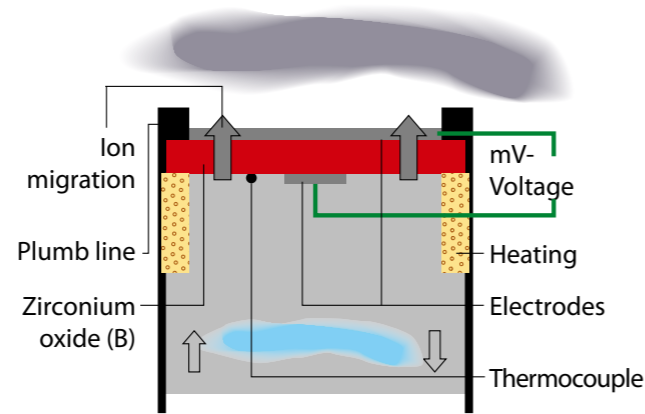
Oxygen Analyser Package for Small to Medium Size Boilers

- High Quality
- Low Cost
- Simple Operation

- Easy Installation
- Factory Calibrated
- 24 Month Warranty

Measuring Principle

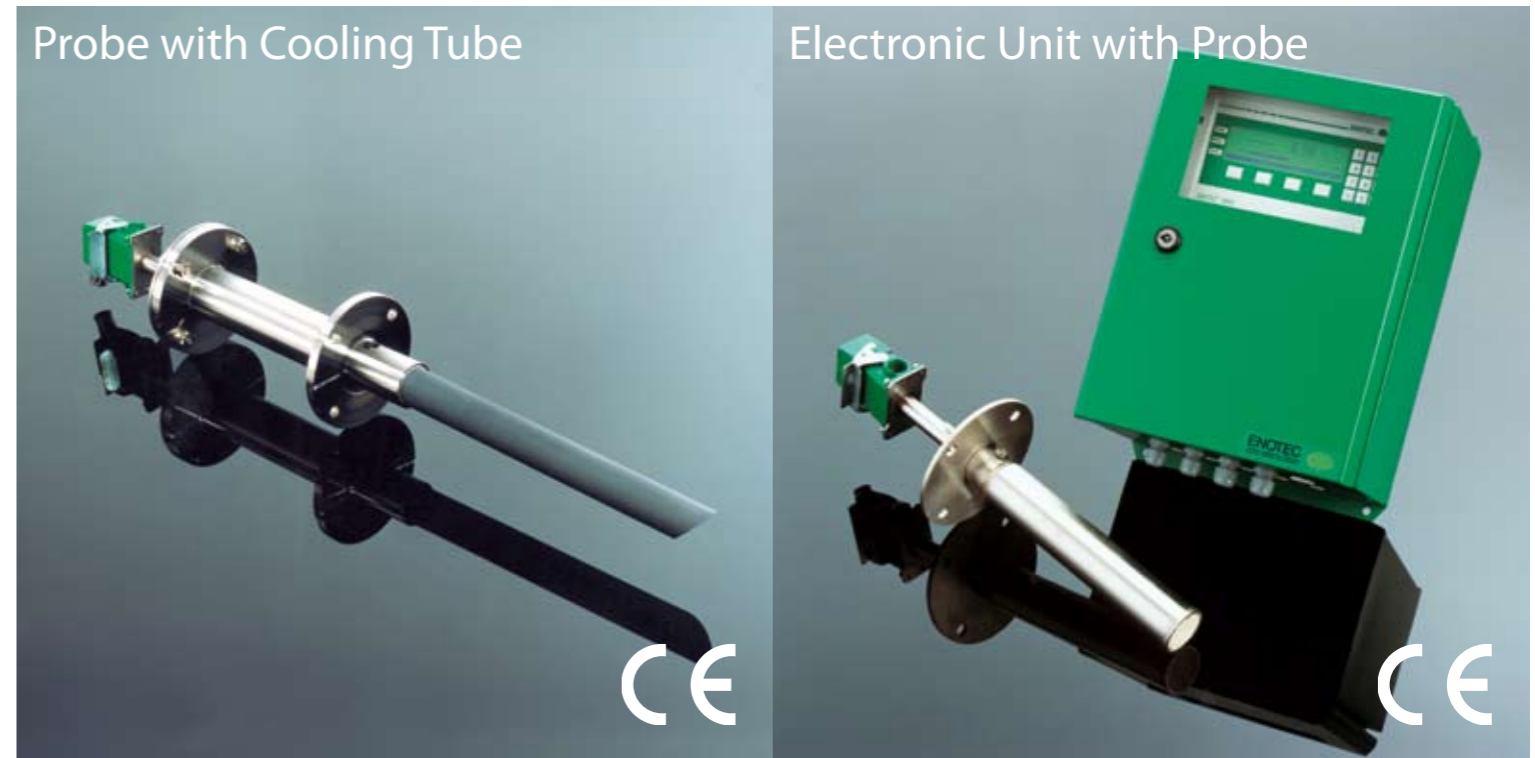
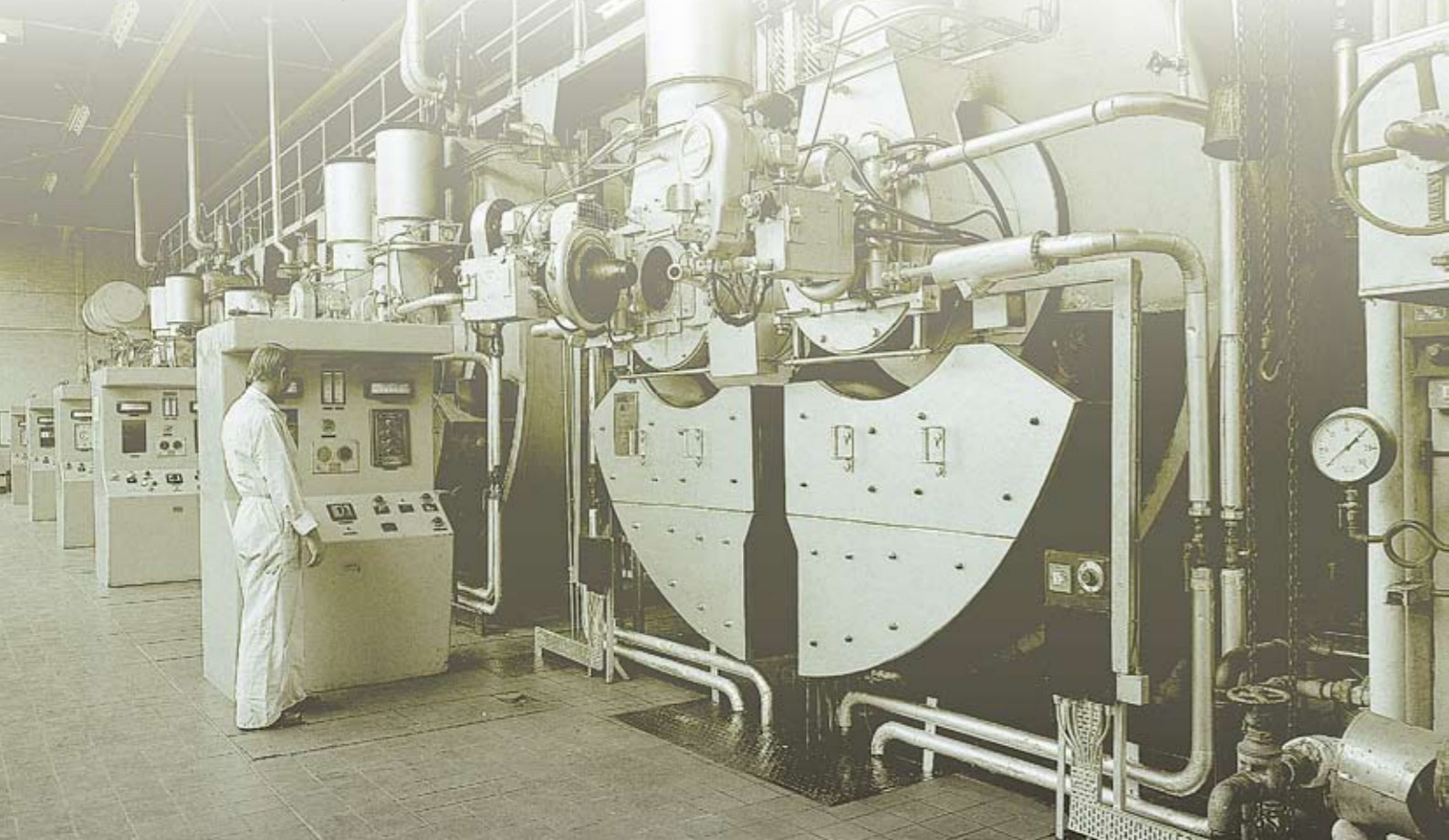
OXITEC® 5000ECONOMY oxygen analysers measure the oxygen content, using a heated zirconium oxide measuring cell (B), directly in the flue gas channel (In Situ). The process gas (A) diffuses through a filter element and "flows" over the measuring gas side of the measuring cell. The reference gas (air) with its known and constant O₂-concentration contacts the cell from the inside (C). At constant temperature a voltage is generated between the two surfaces of the cell, which is a direct measure for the oxygen concentration in the process gas.



Technical Description

The OXITEC® 5000 ECONOMY oxygen analyser package comprises a probe, interconnecting cable and the microprocessor electronic unit and was developed for use in small to medium size boilers for commercial and industrial applications. All components and materials used have been well proven from ENOTEC's many years experience in large boiler applications, such as in power stations, incinerator plants etc. resulting in long working life and low maintenance. ENOTEC's gold brazing technology ensures a gas-tight sensor which with its

large cell surface area contributes to the increased O₂ measuring accuracy and fast response from the OXITEC® 5000 ECONOMY oxygen analyser package. The microprocessor electronics is contained in a rugged sheet metal housing for direct mounting in the boiler house. The back lit graphic display (LCD) has clear text with keypad selectable language options, providing easy operation for end users in other countries. Installation time is reduced to a minimum with electrical cable connections simplified by use of quick disconnect plug & socket.



Technical Data Probe

Measuring principle: Zirconia oxide sensor
 Max. flue gas temperature: 400 °C / 1400 °C (*with cooling tube)
 Immersion length: 300, 400, 500, 800 mm (400 °C version)
 500, 1000 mm (1400 °C version)
 Material: ss 316 Ti/ss 304 (1.4571 /1.4301)
 Flange: Equal to DN 65 PN6
 Flue gas velocity: max. 25 m/sec
 Pressure: -50 mbar to +50 mbar relative
 Response time: 0,5 sec @ 10 m/sec flue gas velocity
 Electrical connection: Quick disconnect plug & socket
 Protection: IP 65
 Interconnecting cable: 6 m, 12 m, 18 m, 24 m, 30 m, other length on request

For high dust loading (400°C) probes with an immersion depth of 400mm, Display: 500mm and 800mm are available.

* The OXITEC® 5000 Economy System can be used in some selected higher temperature applications to 1400 °C. The Economy System O₂ Alarms is intended and suitable for use in relative clean-gas applications only.

Technical Data Electronic

Construction: Sheet steel housing with window
 Dimensions: 400 mm x 300 mm x 225 mm
 Protection: IP65
 Weight: 5 kg approx.
 Supply voltage: 115 V or 230 V, 50/60 Hz
 Power consumption: 100 - 200 VA (350 VA during start-up)
 Series fused recommended: 10 A
 Ambient temperature: -10 °C to +45 °C
 Immunity from disturbance: according EMV and low-voltage directive 72/73EWG EN 55011 cl.B (1998) EN 61000-6-2 (2001)
 Measuring range: 0 to 99% freely adjustable
 Output: 0/4 to 20 mA, potential free, 500 ohm max. load
 Status signal: System fault, Maintenance
 Display: LCD LED illuminates 240 x 64 points graphic display

Options

Interface: RS 232
 Alarms: 2 separate outputs; each programmable for High or Low O₂ values

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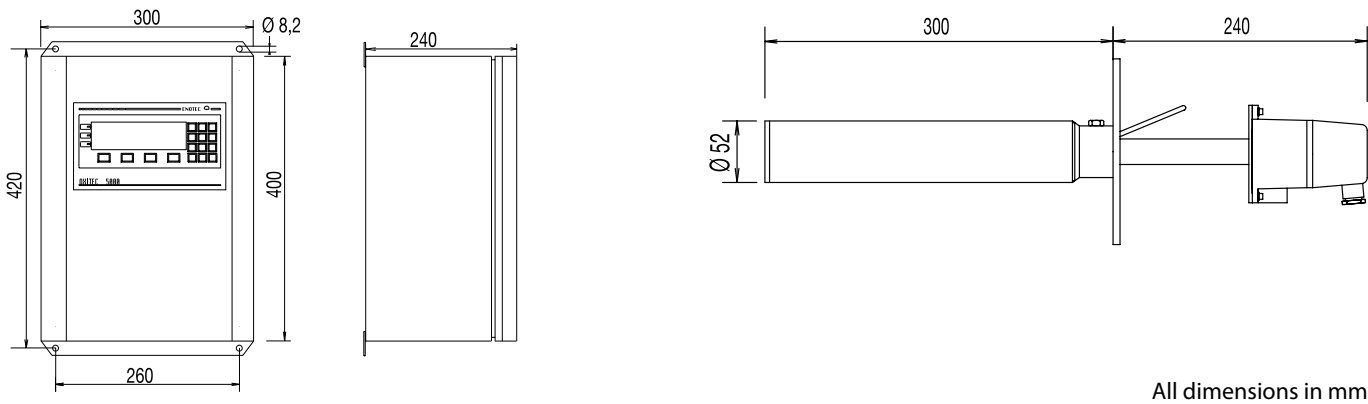


BS DIN EN ISO 9001
 Certificate: FM 52247



Dimensions of the electronic equipment and standard probe

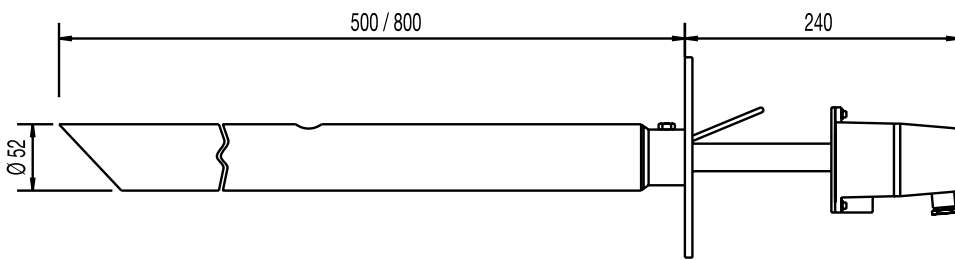
Sheet steel housing Standard probe 400 °C



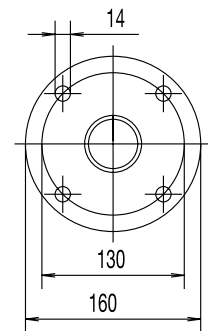
All dimensions in mm

ECONOMY probes

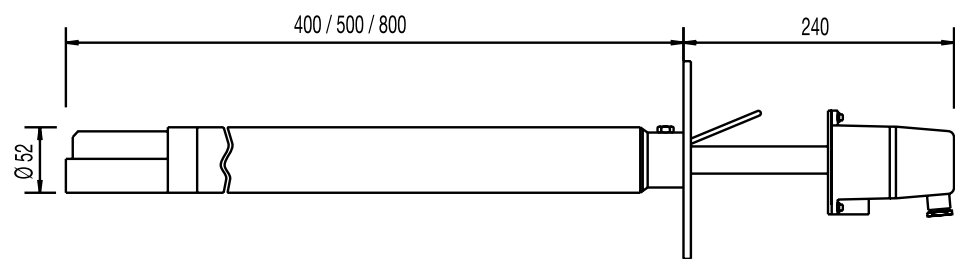
with Extended Filter Head 400 °C



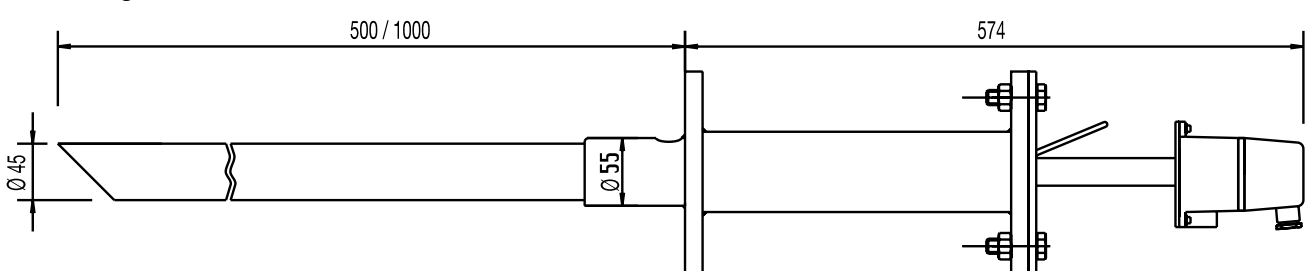
Flange according to DN65PN6



for High Dust Application 400 °C



with Cooling Tube 1400 °C



All dimensions in mm

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