ENGEZER

SOLUÇÕES EM ANÁLISE DE GASES

AQUATEC1000 Analisador de Oxigênio e Vapor d'água

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ENOTEC

GAS SENSING SOLUTIONS SINCE 1980

AQUATEC®

O_2 / H_2O InSitu analyzer for efficient drying processes

EXACT WATER VAPOUR MEASUREMENT

DEVELOPED AND MANUFACTURED IN GERMANY

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ENSitu®
SENSOR TECHNOLOGY

The family of *ENSitu* sensors are engineered by *ENOTEC*'s highly skilled and experienced workforce for maximum durability. *ENOTEC* use only the most robust materials in creating sensors, giving them an operational life span superior to any comparative sensor on the world market.

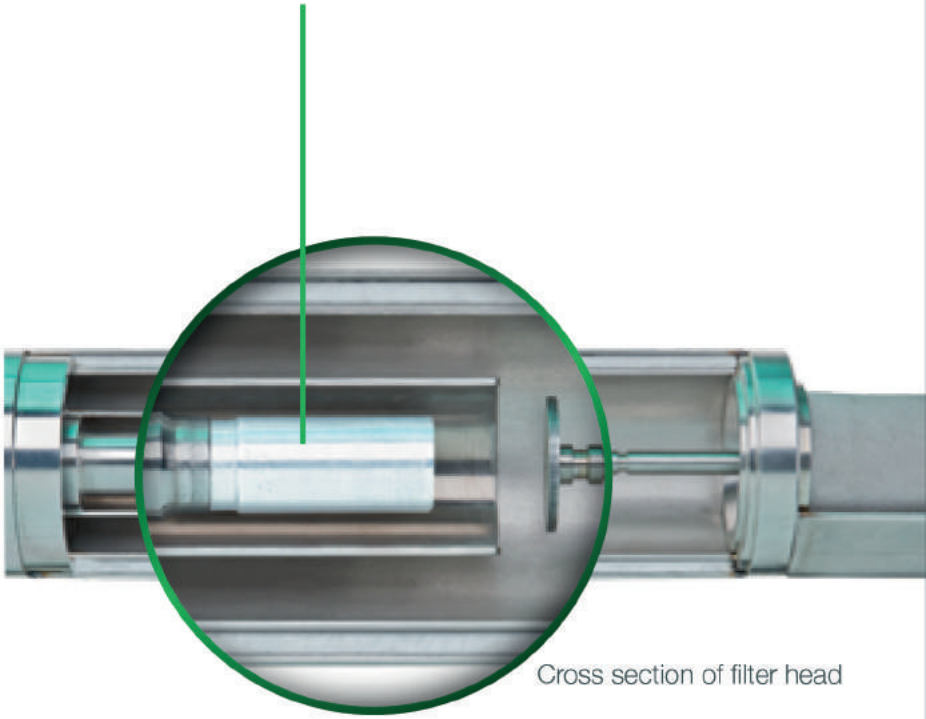
The sensors are leak-proof due to an elaborate *ENOTEC* soldering process, giving them lasting accuracy, reliability and safety.

The *ENSitu* sensors are positioned directly in the drying process at the probe end which allows for a precise, quick and representative measurement. Any fluctuations in the gas composition can be quickly responded to which decreases drying times, resulting in a decrease of energy usage.

ROBUST SENSORS, DESIGNED TO LAST

ENSitu® H_2O

The drying process becomes economical through water vapour measurement.



Cross section of filter head

KES-1322 probe
(immersion depth up to 615mm)

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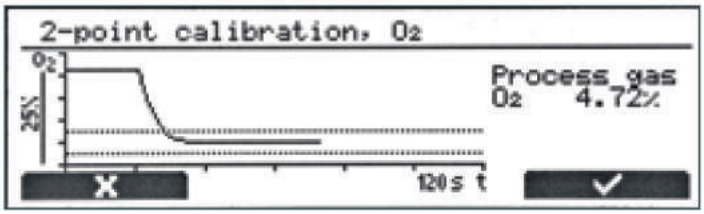
AQUATEC®

WATER VAPOUR ANALYSIS FOR OPTIMAL DRYING RESULTS

AQUATEC measures the effective oxygen content in drying processes of industrial applications. The water vapour concentration is always proportional to amount of the displaced oxygen, so by using an oxygen reference value, the exact water vapour concentration can be calculated. If the atmosphere in which the drying takes place is not ambient air, the oxygen content is measured and analysed before the actual drying takes place.

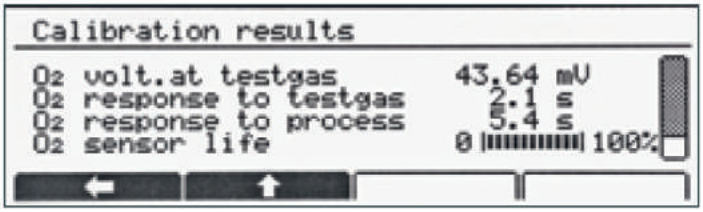
FASTET RESPONSE TIME



HART COMMUNICATION FOUNDATION
FOUNDATION
...and more interfaces available.

Here a 2-point calibration is taking place showing the actual oxygen content (here 4.72% O_2). The fast reaction to process gas after calibration is evident and this speed of measurement is the same when the sensor reacts to changes of the oxygen concentration in the drying process. An immediate regulation in the drying process is thus possible.
If the gas used for drying is not ambient air (20.95% O_2), the oxygen content must be measured as a reference value before the drying process starts. This measurement can also be taken with the *AQUATEC* 1000.

DYNAMICS OF THE PROCESS



Unplanned downtime of the system can be minimized by the self-diagnostic function of the sensor. The function **„O_2 Sensor Life“** informs you of the state of the sensor and informs in advance when a replacement is needed.

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AQUATEC®1000

H_2O AND O_2 ANALYSIS FOR AN EFFICIENT DRYING PROCESS

Drying processes are energy intensive, regardless of whether gypsum is dried or tobacco leaves are cured. A quick and reliable measurement of the drying progress allows one to optimise the drying time and therefore also optimize the energy usage.

The *AQUATEC* 1000 is a H_2O measurement system for all dryer systems with high temperatures and high dust loads.

Regarding the speed of measurement, the *AQUATEC* 1000 measures InSitu, which means that the H_2O sensor is directly in the process and takes a representative measurement. This type of measurement is superior to any extractive measurement.

TECHNICAL DATA

INSERTION DEPTH OF PROBE	up to 615mm
H_2O / O_2 RANGES	ppm to 100% O_2
MEASUREMENT ACCURACY	± 0,2% of measured value
REACTION TIME	0,5s (process flow velocity > 10m/sec.)
AMBIENT TEMPERATURE	-40°C to 80°C (probe) -20°C to 55°C (electronic unit)
INTERFACE	HART, FIELDBUS, RS485 MODBUS RTU, RS232
IP CODE	probe - IP65 electronic unit - IP66

BE SAFE – CHOOSE ENOTEC

SME 53 electronic unit
and KES-1322 probe
(immersion depth up to 615mm)

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AQUATEC®2000

ANALYSE O_2 AND HUMIDITY IN COMBUSTIBLE GASES

The patented *AQUATEC* 2000 is the only InSitu O_2/H_2O analyzer in combination with emissions analyzer systems for all types of combustion.

This versatile system implements 19" racks which makes it economical to incorporate additional measuring instruments; e.g. in conjunction with an NDIR analyzer, measurement of nitrogen monoxide, carbon monoxide, carbon dioxide and sulfur dioxide.

TECHNICAL DATA

INSERTION DEPTH OF PROBE	up to 3682mm
H_2O / O_2 RANGES	ppm to 100% O_2
MEASUREMENT ACCURACY	± 0,2% of measured value
REACTION TIME	0,5s (process flow velocity > 10m/sec.)
PROCESS GAS TEMPERATURE	up to 800°C up to 1400°C (with cooling protection tube)
AMBIENT TEMPERATURE	-40°C to 80°C (probe) 5°C to 40°C (cabinet)
INTERFACE	HART, FIELDBUS, RS485 MODBUS RTU, RS232
IP CODE	probe - IP65 electronic unit - IP54

Whether for emissions measurements, detection of tube leakages (which may cause subsequent damage) or for measuring moisture and oxygen content in flue gas with temperatures of up to 1400°C, the *AQUATEC* 2000 has proven to be a highly capable analyzer system.

PATENTED MOISTURE ANALYZER SYSTEM

AQUATEC 2000 system

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AQUATEC®

DRYING DONE EFFICIENTLY

Alterations and errors reserved.

Caso queira adaptar este produto a suas necessidades usando um sistema de condicionamento, uma automação ou formando um produto, contate:

COMERCIAL@ENGEZER.COM.BR

**para mais informações ou preços*

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