The ECONOX CarboProbe™ ZS Pro probe was developed for very difficult working conditions. It is based on the new ZrO2 C3M electrolyte and offers excellent accuracy for the measurement of carbon potential (%C) and temperature (°C)

The *CarboProbe™ ZS Pro* allows a very precise value of oxygen concentration in an industrial furnace to be obtained.

The zirconia carbon sensor has been used for nearly three decades to control the carbon potential in many carburizing applications.

## KEY FEATURES

- **Patented design for more security in your working area**

- **Swiss quality, gold coated LEMO electrical connector**

- **Designed for difficult working condition**

- **Based on the brand new ZrO$_2$ C3M electrolyte**

- Ideal for use in carburizing, carbonitriding, neutral hardening and gas generator applications.

- Every probe is 100% tested with certification, certificates are enclosed with each probe.

- Response time < 1.0 second

- High reliability of the probe thanks to a simple and effective concept

- Interchangeable with all oxygen probes or carbon sensors.

- Reduces stress on the 4-bore tube, reducing incidents of breakages.

- Can also be supplied with an outer protective ceramic (see picture).

- Low investment resulting in an important improvement of heat treatment

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|---|---|
| **Output** | 0 to 1200 mV |
| **Readout impedance** | % Carbon sensors should be used with controlling, recording and indicating instruments having input impedance of 10 megohms or higher. |
| **Accuracy** | ±0.05 weight percent carbon in normal operating range |
| **Response time** | Less than 1.0 second |
| **Thermocouple** | Type K, S, N or without |
| **Operating Temperature** | 600°C to 1150°C |
| **Mechanical shock** | Resist mild mechanical shock. Handle carefully |
| **Thermal shock** | Please place into hot furnace or remove from hot furnace during 10 minute time interval |
| **Available length (mm)** | 500mm, 650mm, 750mm, 850mm, 1000mm, 1200mm, 1350mm |
| **Reference air** | Uncontaminated dry air at maximum rate of 1-6 l/h |
| **Cleaning air** | Uncontaminated dry air at maximum rate of 300 l/h (see user manual for more cleaning recommendation) |



1: Th+
2: Th−
3: $O_2$−
4: $O_2$+

CONNECTOR FRONT VIEW